



# SUMMARY REGISTRATION DOCUMENT 2014/15

## MESSAGE OF THE CHAIRMAN

2

5

39

71

173

174

178

182

186

187

188

191

DESCRIPTION OF GROUP ACTIVITIES A CAFR
Transaction to sell the Energy businesses to General Electric
Alstom Transport
Discontinued operations
Alstom Thermal Power
Alstom Renewable Power

# MANAGEMENT REPORT ON CONSOLIDATED FINANCIAL STATEMENTS FISCAL YEAR 2014/15 @AFR

Alstom Grid

FISCAL YEAR 2014/15 APAFR	49
Main events of fiscal year 2014/15	50
General comments on activity and results	54
Outlook	55
Operational analysis	56
Operating and financing review	61

# **FINANCIAL INFORMATION** SAFR Consolidated financial statements

Consolidated financial statements	72
Statutory Accounts	148

RISK FACTORS AFR Risks in relation to the economic environment and Group activities Operating risks Financial risks Risks in relation to acquisitions, disposals and other external growth operations Risks in relation to the transactions contemplated with general electric Legal and tax risks Risk management policy and insurance

١		
	CORPORATE GOVERNANCE	193
	Chairman's report 🕀	194
	Executive Committee	238
	Statutory Auditors' report prepared in accordance with Article L. 225-235 of the French Commercial Code on the report prepared by the Chairman of the Board	
	of ALSTOM JAFR	239
	Interrete of the offering and one down	

Interests of the officers and employees	
in the share capital	240
Related-party agreements and commitments	248
Statutory Auditors 🕀	249

251

SUSTAINABLE DEVELOPMENT: ALSTOM'S SOCIAL RESPONSIBILITY AND INNOVATION

Alstom's contribution to sustainable development	252
Innovation	268
Environmental performance	270
Social performance	280
Relationships with external stakeholders	296
Methodology	305
Synthesis of indicators/key figures 2014/15	307
Report by one of the Statutory Auditors, appointed as an independent third party, on the consolidated environmental, labour and social information	
presented in the management report	310
Table of Compulsory CSR Information 🕀	313

# ADDITIONAL INFORMATION 315

Information on the Group and the holding Compar	ny <b>316</b>
Information on the share capital ${}^{igodot AFR}$	323
Simplified organisation chart as of 31 March 201	.5 337
Information on the Annual Financial Report	338
Information on the Registration Document ${}^{\oplus {\sf A}{\sf I}}$	<b>R</b> 339
Table of reconciliation	340

The Content of the Annual Financial Report is identified in the summary table with the help of the pictogram



Société anonyme with share capital €2,169,293,924 3, avenue André Malraux – 92300 Levallois-Perret – RCS: 389 058 447 Nanterre

# REGISTRATION DOCUMENT 2014/15

# ANNUAL FINANCIAL REPORT





The original French version of this Registration Document was filed with the *Autorité des marchés financiers* (AMF) on 21 May 2015 in accordance with Article 212-13 of its General Regulation.

It may be used in connection with an offering of securities if it is supplemented by a prospectus ("note d'opération") for which the AMF has issued a visa.

This document has been prepared by the issuer under the responsability of its signatories.

This Registration Document includes all elements of the Annual Financial Report specified by Article L. 451-1-2 of the *Code monétaire et financier* and Article 222-3 of the AMF's General Regulation. A table of reconciliation is provided on page 340.

This Registration Document is available on our website:

www.alstom.com.

# MESSAGE OF THE **CHAIRMAN** PATRICK KRON – Chairman and Chief Executive Officer



# How would you describe Alstom results in fiscal year 2014/15?

It should be noted that these results are presented differently from previous years. Indeed, international accounting standards require that the discontinued energy operations – those corresponding to Thermal Power, Renewable Power and Grid – are separated from continued operations – those of Transport.

Alstom delivered a very strong commercial performance in its Transport activity in 2014/15, booking a record level of orders over  $\epsilon$ 10 billion, resulting in a more than  $\epsilon$ 28 billion backlog corresponding to four and a half years of sales. We have set a solid base for growth in emerging markets with contracts in South Africa, Qatar, Australia or Mexico and we have strengthened our positions in our traditional markets. We achieved our 2014/15 targets with sales up 7% on a like-for-like basis while the operating margin improved from 4.7% to 5.2%, benefiting from good project execution and the strict implementation of our performance plan.

Following a very negative trend of the free cash flow during the first half, the situation improved in the second half, even if it remains negative for the full fiscal year.

Globally, we have achieved the targets we set for this fiscal year.

# Following these good results in Transport activity, what does the future of Alstom look like?

These results underline the strengths of Alstom focused on its Transport activities. Alstom is a world leader. It enjoys a growing market, led by urbanisation and environmental priorities. It benefits from global footprint and it is able to carry out major infrastructure projects, as illustrated by the  $\epsilon 4$  billion contract signed in South Africa.

Alstom will be reinforced with the acquisition of General Electric signalling and will benefit from financial strength as a result of the transaction with General Electric, since two thirds of the proceeds will be used to consolidate Alstom's balance sheet and make it debt-free.

This is why we can confirm with these annual results our medium term guidance: an organic sales growth over 5% per year, a gradual improvement of the operating margin in the 5-7% range and a free cash flow in line with net income.

The strategy remains unchanged:

- seize growth opportunities thanks to our innovation and investment policy;
- continue efforts to improve our performance and to reduce our costs in a very competitive market.

#### What is the status of the project with General Electric? Can you give an update on the next steps towards the closing?

The project with General Electric is progressing. Key milestones were reached at the end of 2014. Consultation process with work councils was completed, the master agreement and all the related documentation were signed between Alstom and General Electric, the French Foreign Investment authorisation was obtained and, on 19 December 2014, the shareholders approved the transaction by a majority of 99.2%.

Competition and regulatory authorisations processes are underway. General Electric and Alstom are actively working to complete the process and achieve a closing in the coming months. After completion of the transaction, we plan to call a Shareholders' Meeting to vote on the amount of cash proceeds to be distributed to shareholders. Alstom achieved its targets and the project with General Electric is moving ahead







# DESCRIPTION OF GROUP ACTIVITIES

#### TRANSACTION TO SELL THE ENERGY BUSINESSES **TO GENERAL ELECTRIC** 6 ALSTOM TRANSPORT 6 Industry characteristics 6 Competitive position 9 Strategy 9 Offering 10 Research and development 16 DISCONTINUED OPERATIONS 19 ALSTOM THERMAL POWER 19 Industry characteristics 19 Competitive position 22 Offering 22 Research and development 29 ALSTOM RENEWABLE POWER 30 Industry characteristics 30 Competitive position 33 Offering 33 Research and development 37 ALSTOM GRID 39 Industry characteristics 39 Competitive position 41 Offering 41 Research and development 45

The Content of the Annual Financial Report is identified in the summary table with the help of the pictogram

ALSTOM – REGISTRATION DOCUMENT 2014/15 5

# TRANSACTION TO SELL THE ENERGY BUSINESSES TO GENERAL ELECTRIC

On 20 June 2014, Alstom's Board of Directors unanimously recommended the offer from General Electric to acquire Alstom's Energy businesses (Thermal Power, Renewable Power and Grid activities, as well as corporate and shared services) and to set up three alliances under the form of joint-ventures in some of these activities. After completion of this operation, the Group will focus on its rail transportation activities.

In this context, Thermal Power, Renewable Power and Grid activities were classified as Discontinued Operations.

# ALSTOM TRANSPORT

Alstom Transport is one of the global leaders in rail transport equipment, systems, services and signalling for urban, suburban, regional and main line passenger transportation, as well as for freight transportation. It benefits from a growing market with solid fundamentals, driven by economic growth, growing urbanisation, environmental concerns and public spending. In this context, Transport has been able to develop both a local and global presence that distinguishes it from many of its competitors, while providing it with a real sense of proximity to its clients and greater industrial flexibility. Its products, which constitute one of the most complete and integrated product offerings on the market today, together with its position as a technological leader, place Alstom in a unique position through which it is able to benefit from the worldwide growth of the rail transport market. Lastly, in order to generate profitable growth, Transport focuses on operational excellence and continuous efforts toward improvement.

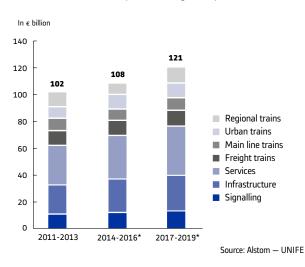
# INDUSTRY CHARACTERISTICS

### Main markets

#### Market evolution

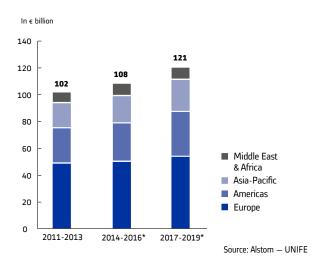
According to UNIFE (Union of European Rail Industries, Union des industries ferroviaires européennes), the annual accessible worldwide market for the 2011-2013 period is estimated at  $\in$ 102 billion. This market should grow to reach an annual average of  $\in$ 121 billion over the 2017-2019 period, which corresponds to an average annual growth rate of +2.8% (source: 2014 UNIFE Report).

#### MARKET PER PRODUCT (annual average value)



\* Forecasted data

#### MARKET PER REGION (annual average value)



#### \* Forecasted data.

The European market, which is the leading accessible railway market in the world, should experience slower growth and rise from €49 billion to €54 billion per year from 2011-2013 to 2017-2019, which corresponds to an average annual growth rate of +1.7%. The situation remains quite heterogeneous from one country to another. Germany represents the largest market and should stabilise around €8.3 billion per year. The French market remains attractive, driven by investments in urban and intercity transportation projects, especially as a result of projects to improve infrastructure and urban transportation systems, of which the "Le Grand Paris" programme is the most significant example. In addition, sizeable renewal and expansion investments are expected. As such, the French market is expected to grow from €5 billion to €6.2 billion per year from 2011-2013 to 2017-2019, which corresponds to an average annual growth rate of +3.5%. The United Kingdom's market should exceed €5.7 billion per year in 2017-2019, with major urban and regional projects. Investments continue to be made in regional segments in the Benelux and Scandinavian countries. Southern economies such as Spain are beginning to grow again now that the impact of the financial crisis has subsided. In Eastern Europe, Poland remains the leading market with over €2 billion per year in 2017-2019. Signalling projects should be launched in Norway, Spain, United Kingdom and Benelux, and integrated solutions projects are expected in Denmark, Finland and Eastern Europe (thanks, in particular, to European Union financing). More generally, opportunities in the market for services are expected due to the modernisation and maintenance of trains that are already in operation, and to the opening of new services markets, particularly in Greece and Spain. The market growth for the Commonwealth of Independent States (CIS) will be associated with long-term investments in Russia in order to renew and renovate its fleet of locomotives and urban transportation systems, as well as its signalling systems and services. Other CIS countries such as Kazakhstan will also contribute to the region growth over next years. Globally CIS market should reach approximately €13 billion per year in 2017-2019.

Americas is the second largest region representing €26 billion per year in 2011-2013. It is expected to grow to over €33 billion in 2017-2019 at +4% growth per year. In North America, freight transportation is historically significant and represents approximately 70% of the local market, which should grow from  $\notin 22$  billion to  $\notin 27$  billion per year from 2011-2013 to 2017-2019. The passenger transportation segment should remain a vehicle for growth, in particular with urban transportation focusing on Light Rail Vehicle (LRV), metros and signalling. High-speed train projects should also be developed (for example with Amtrak). More generally, opportunities in terms of maintenance services and renovations are expected. Although less significant in terms of volume, the Latin American market, dominated by Brazil, should continue to grow and is expected to reach nearly  $\notin 7$  billion per year by 2017-2019. Demand for integrated solutions is in full expansion in several countries of this region.

At the current accessible level of  $\epsilon$ 19 billion, the **Asia-Pacific market** should grow again after a slowdown of investments in China to reach  $\epsilon$ 24 billion in 2017-2019. The Indian market should double in 2017-2019 as compared with 2011-2013, driven by several integrated solution urban transportation projects and investments in mainline infrastructure. Other countries in the region, such as Australia, Thailand and South Korea, should experience significant growth, driven by both urban and mainline transportation projects.

Middle East and Africa market should continue to grow and reach over  $\epsilon$ 9 billion per year in 2017-2019. Growth should be fuelled mainly by several integrated solution urban transportation projects in Saudi Arabia, Qatar, Israel and the United Arab Emirates, as well as the continuation of investments in South Africa. In addition, Algeria and Egypt are active in railway networks projects.

### Market drivers

In the long run, the main factors that have a positive effect on the evolution of the rail transportation market are associated with the economic and demographic growth in emerging countries, which creates a growing demand for infrastructure, trains (especially for integrated solutions) and signalling in these countries. Mature markets, on the other hand, are mainly supported by projects aimed at updating and modernising existing infrastructure, as well as by growing environmental concerns.

#### Demographic growth and urbanisation

The combination of both economic and demographic growth should entice a growing number of people to live in cities. By 2050, world population should exceed 9 billion inhabitants, of which nearly 70% will reside in urban areas (source: UNFPA, United Nations Population Fund). This trend towards urbanisation should be particularly strong in China, India and in the developing countries of Africa and Latin America.

This development triggers the growing saturation of airports, roads and existing railway infrastructure. In this situation, railways typically offer the easiest, safest and cleanest solution as a real and competitive alternative to road or air transportation.

Additionally, in developed countries, the population should be encouraged to leave behind individual methods of transportation such as the car and to favour public transportation, such as metros and tramways. This change will be supported *via* the active promotion of public transportation which is cheaper, more sustainable and more mindful of the environment. Therefore, people responsible for urban planning and development as well as urban populations themselves will be required

Moreover, the extension of suburban zones should promote this urban growth and require transportation solutions that are adapted to these areas. Innovations allowing to reduce the environmental impacts in urban zones, such as noise and pollution, as well as improving the energy efficiency of these transportation methods should then become major priorities.

The growing urbanisation should also lead to extending transportation networks that connect big cities to smaller ones. In this respect, it has already been proven that the high-speed train is both much safer and consumes less energy than other transportation modes (source: CE Delft). An increase in high-speed lines and the renewal of train fleets should take place in both mature and emerging markets, while the creation of new networks will create additional opportunities.

#### **Environmental concerns**

Greenhouse gas emissions, impact of air pollution on public health, climate change, recycling, recovery, energy efficiency and noise constitute some of the most significant environmental and sustainable development concerns currently voiced by populations and politicians. Based on these criteria, rail transportation offers higher performance levels than other transportation modes, which should have a positive impact on the evolution of the rail transportation market. However, some challenges will have to be faced in these various sectors in order to meet ambitious emission reduction goals within set time frames. In addition, if concerns regarding these matters are significant in mature markets, they are gradually gaining more clout in emerging countries.

The White Paper of the European Union advocate for a reduction of greenhouse gas emissions by 80% to 95% below 1990 levels by 2050. Transportation, which represents approximately 25% of these emissions, must contribute to this reduction. Among the set goals for transportation by 2050, the following should be noted:

- 60% reduction in emissions as compared with 1990 levels;
- 30% of road freight (for distances higher than 300 kilometres) must become rail freight and/or maritime freight by 2025;
- over 50% of intercity passenger transportation via rail by 2050;
- no more standard internal combustion engine cars by 2050.

On a global scale, the 2012 Rio Conference planned that, over the course of 10 years, \$175 billion would be allocated towards the development of urban public transportation. More recently, in September 2014, the International Railway Association, (UIC: *Union internationale des chemins de fer*), representing 240 members on six continents, presented the UIC Low Carbon Rail Transport Challenge. This initiative responds to the United Nations Secretary General's call to bring bold pledges to

the Climate Summit. The 2050 targets focus on reducing final energy consumption and average  $CO_2$  emissions from train operations by respectively 60% and 75%, relative to a 1990 baseline (source: UIC). Alstom supports this initiative and contributes to the objectives by developing and delivering railway solutions which are ever more energy efficient and attractive.

#### Economic growth

Over the recent years, the global economy has experienced turbulence that has slowed down growth and increased public deficits. However the worldwide Gross Domestic Product (GDP) growth should remain positive: c. +4% per year forecasted between 2014 and 2020. GDP growth is driven by emerging regions such as China, India and South-East Asia (c. +6% per year) as well as Middle East/Africa (c. +5% per year) while advanced economies such as the Euro Zone and the USA are expected to experience a more moderate growth around +2.5% per year (source: IMF).

Besides, the rail transport industry has not significantly been affected by the latest economic downturn. Mainline passenger traffic in China and India has grown steadily +7% per year from 2007 to 2013 (source: Indian Railways; China Railway Corporation). In Europe, mainline passenger traffic has increased by +1.2% per year between 2007 and 2013 (source: Eurostat). Indeed, while the European growth remains behind emerging regions' growth, the tradition of public transport is strong and pushes operators to renew or renovate their fleets, contributing to the overall regular growth of the sector. In the future, world passenger traffic should grow by 4.8% per year until 2020 (source: *SCI Verkehr*).

#### Public funding and investment plan

Despite short-term budgetary constraints, the railway industry remains strategic, with investment plans throughout the world:

- Indian Railways has recently announced its plan to invest €120 billion over the next five years (2015-2019), with the objective to increase daily passenger carrying capacity from 21 million to 30 million, to increase track length by 20%, and to grow annual freight carrying capacity from 1 billion to 1.5 billion tonnes (source: Indian Railways).
- By 2020, China will expand its urban rail transportation network by 6,000 kilometres, with a total investment of approximately €400 billion (source: *Global Times*).
- By 2025, Brazil intends to invest over €60 billion to expand its rail transportation network by 10,000 kilometres (source: Railway Technology).
- In Europe, the "Connecting Europe Facility" initiative allocates €26 billion in investments in transportation infrastructure, notably in railway infrastructure and signalling systems between 2014 and 2020 (source: European Commission).
- Public-Private Partnerships (PPP) have been established in Europe, India and Brazil, in particular.

(1) Intermodal transportation corresponds to the use of several methods of transportation over the course of a single trip.

# **COMPETITIVE POSITION**

By relying on its extensive experience, Alstom Transport offers a wide range of railway products, services and solutions which it produces and sells worldwide thanks to its complete commercial and industrial geographic market coverage. Transport is among the leaders in all the major segments of the railway industry: urban and main line transportation, signalling, services and integrated solutions (source: Alstom). In addition, Alstom Transport has reinforced its international presence through partnerships and joint ventures, in particular in the CIS and, more recently, in South Africa, which provide it with a competitive advantage in new high-growth zones.

Alstom has a large variety of competitors in the railway industry: acting globally or locally and covering part of or the entire portfolio. Among which Bombardier offers a similar range of products and services and is also present on an international scale. Siemens is another competitor in

# STRATEGY

Alstom Transport has devised a strategy based on several principles that it intends to apply to each of its geographic markets, thus guaranteeing close proximity to its customers.

### GROWTH: Optimise its worldwide and local presence close to customer

With a flexible industrial approach, Alstom Transport is uniquely positioned to tap global demand and respond to its customers' needs.

Transport plans to develop the presence of its commercial and industrial sites while adapting them to each of the regions in which it operates. As such, by reinforcing its local base close to customers, Transport's strategy is to benefit from the growth potential in each of these local markets. In this way, Alstom believes it can take advantage of more competitive pricing in all its local markets. This presence also enables Transport to benefit from the sharing of experiences as well as synergies for certain technologies that meet specific local needs ("winterisation", "tropicalisation", etc.).

By offering solutions that are constantly better adapted to local specificities, Transport believes it can penetrate new growing markets. Transport considers that entertaining ever stronger local relationships with its customers promotes proximity. In addition, Alstom Transport limits its costs of expansion associated with its local development by adapting its approach to work directly or *via* partnerships (joint ventures, etc.).

Lastly, the establishment of new engineering centres outside Europe and the installation of new production sites must enable Transport to significantly reduce both its engineering costs and its production costs while maintaining its level of excellence. Its production platforms throughout the world should benefit from the planned improvement of its operating network, structured around centres of excellence. the rail transportation market, and is particularly reliant on its powerful presence in its domestic market.

Some manufacturers with a less diversified portfolio of products and industrial sites that are more geographically concentrated (CAF, PESA, Rotem, Skoda, Stadler, Thales, etc.) are also in competition with Alstom Transport in specific market segments, such as trains or signalling.

In addition, some Japanese groups (such as Kawasaki, Mitsubishi and Toshiba) are also present in certain markets outside Japan, but to a lesser extent. Hitachi is investing in the signalling and train operations of Finmeccanica (Ansaldo STS and Ansaldo Breda) to become a global player.

The Chinese manufacturers CNR and CSR, who recently announced their merger, mainly benefit from the development of their significant domestic market, yet are expressing international ambitions.

### PRODUCT PORTFOLIO: Accelerate the transition toward a fully integrated range of solutions

Alstom Transport intends to increase the level of carryover toward its "Systems", "Services" and "Signalling" business activities and, therefore, offer solutions that are even more innovative in order to continue to differentiate itself from its competitors. Through its "Services" business activity, Transport plans to strengthen its relationship with its customers. Focusing on these business activities will also be a means of increasing profitability.

Since Alstom Transport already has a complete range of business activities, the determining strategy will be to develop train offers bundled with services or integrated solution offers. Transport intends to be prepared to accommodate all levels of integration its customers may seek by offering a full range of options – from a simple product offer, the offer of solutions integrated within a single market segment, the bundled offer of solutions for two market segments, up to the fully integrated solutions offer. With the help of adapted and innovative integration offers and the ability to propose customised solutions, Transport will have a significant competitive advantage in meeting the growing demand for integration. Alstom plans to develop its maintenance contracts linked to products by relying on its experience in optimising lifecycle costs.

9

# **TECHNOLOGY:** Relying on innovation as a key differentiating factor

Alstom Transport's strategy is to set itself even further apart from its competitors by relying on its technological innovations. The aim of this strategy is to win particularly complex and profitable project bids and to make penetration into these markets even more difficult for competitors. The technological innovations developed by Alstom Transport will particularly take into account environmental considerations, which will be at the heart of the challenges it will have to face.

More generally, Alstom plans to invest in technologies that improve its competitiveness and to concentrate new developments on lowering the lifecycle costs of its solutions. The goal of this strategy is to be able to offer more competitive pricing and increase profitability.

In order to preserve this technological leadership, Alstom Transport plans to maintain its current level of investment in R&D and to promote cooperation not only internally, but also with its suppliers and customers.

### OPERATIONAL EXCELLENCE: Ensure flawless execution in a demanding global environment

In a growing competitive and increasingly demanding environment, Alstom Transport's goal is to keep its operational performance a priority.

Transport intends to continue to improve the efficiency of its sites, both individually and overall, and to focus completely on satisfying its customers by guaranteeing flawless execution and by making the reliability of its products a key element of its offer.

In addition, Transport will continue to establish centres of excellence in order to develop its know-how with respect to the skills and products essential for the whole Sector. Transport intends to benefit from economies of scale through this all-inclusive approach to products.

Alstom's operational excellence is based on the implementation of Alstom's "d2e" performance plan ("Dedicated to Excellence"), the goal of which is to improve the competitiveness of its offer and to further perfect its project execution. The goal of this strategy is to focus on reducing costs, increasing productivity, and generally improving competitiveness in order to ensure high and sustainable profit margins of the whole range.

### CORPORATE SOCIAL RESPONSIBILITY: Contributing to a sustainable world

Transport supports the Group's Corporate Social Responsibility policy by designing and delivering global, efficient and sustainable railway systems that benefit everyone they serve: operators, authorities, passengers and communities.

It commits to reducing the environmental footprint of its operations and sites and to ensuring safety and health for its employees and contractors everywhere it operates. It also strives to maximise its environmental and societal benefits by reinforcing collaboration with customers and suppliers in sustainability fields, particularly the energy efficiency of railway systems.

Transport contributes to the modal shift from road to more environmentally-friendly transport means by developing competitive and attractive railway solutions through:

- innovation for energy-efficient and high environmental performance trains, smart railway systems and value-added services;
- eco-design to improve the environmental performance of solutions over their entire lifecycle which contributes to reduce related cost and reinforces attractiveness.

To learn more about Transport's contribution to sustainable development, please refer to Chapter 6 of this document.

# OFFERING

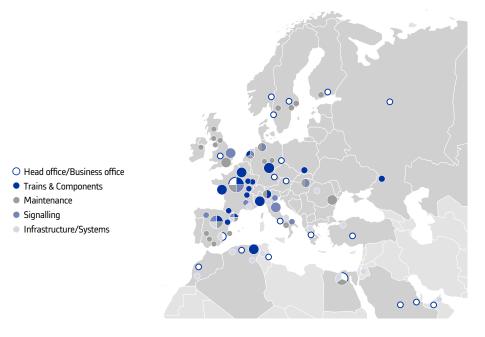
Alstom Transport designs solutions that are very diverse and adapted to the cities, regions and countries they serve. Its organisational structure covers the entire world and relies on a network of offices, engineering centres and manufacturing sites, warehouses and maintenance centres, which guarantees the smooth and uninterrupted supply of these various solutions.

Thanks to its global network and its strong local presence worldwide, Transport is able to competitively meet the demand of its customers throughout the world, while working in increasingly demanding local environments. The proximity to manufacturing sites allows for the precise monitoring of changes in customer needs and the ability to respond quickly. With approximately twenty alliances covering numerous business activities (trains, locomotives, components, systems, services and signalling) in Europe, the Middle East/Africa, Asia and CIS countries, Alstom Transport has built a solid, efficient and well-established network of partners. These alliances, which are mostly joint-ventures but also include strategic and commercial partnerships, enable Alstom to meet its customers' growing demand for a local presence, while developing adapted products.

#### MAIN BUSINESS OFFICES AND INDUSTRIAL SITES OF ALSTOM TRANSPORT



MAIN BUSINESS OFFICES AND INDUSTRIAL SITES IN FRANCE, EUROPE, MIDDLE EAST/AFRICA AND CIS



Source: Alstom

With respect to the transportation of passengers by rail throughout the world, Alstom Transport's range of products covers all market segments, from tramways to very high-speed trains and offers its customers tailor-made solutions, based on standardised platforms. Transport portfolio includes trains, systems (including infrastructure), services and signalling.

### **Trains**

#### Tramways

In the past 15 years, over 1,900 tramways in the CITADIS<sup>™</sup> range of products have been sold throughout the world. The CITADIS<sup>™</sup> range of products is a tramway market reference, as shown through its vast portfolio of customers. Alstom is No.1 in tramway integrated solutions projects in the world. CITADIS<sup>™</sup> offers a complete range of solutions allowing for an adapted response to urban and suburban transportation needs. Since 2000, 6 billion passengers have been transported and 500 million kilometres have been travelled.

The CITADIS<sup>™</sup> family of products is compatible with existing networks. Tramways are easily introduced in any urban landscape, offer great accessibility and can reach speeds from 50 to 80 km/h. In addition, CITADIS<sup>™</sup> also offers a new autonomous catenary-free solution, whether *via* a ground level power supply (or APS<sup>™</sup>), batteries guaranteeing enough charge to handle short distances or supercapacitors. The development of the CITADIS<sup>™</sup> XO5 takes into account new demands expressed by its customers (improved comfort, reliability, lower maintenance costs, larger driving range, and speed).

The CITADIS<sup>™</sup> products rely on a range of widely tested standardised components and are highly customisable, as they can accommodate cars of 22 to 43 meters in length. The CITADIS<sup>™</sup> products can be included in the integrated solutions offered by Alstom.

#### Light Rail Vehicle (LRV)

Transport breaks down its Light Rail Vehicle (LRV) offer into two products: the CITADIS Dualis<sup>™</sup> tram-train, able to travel on both urban networks and regional lines (200 ordered as part of a framework agreement) and the CITADIS Spirit<sup>™</sup>, a Light Rail Vehicle for the North American market (first contract in Ottawa for 34 trains).

LRVs rely on a range of standardised components that enable Alstom Transport to take advantage of this growing demand. These vehicles are as flexible and light as a CITADIS<sup>™</sup>. When deployed on a rail network, they easily take the form of a regional train, transporting passengers at speeds nearing 100 km/h. They offer integrated solution opportunities.

#### Metros

Relying on a hundred years' experience in the metro industry, Alstom developed METROPOLIS<sup>™</sup>, of which over 4,500 metro cars have been sold to more than 20 international cities. The fact that the METROPOLIS<sup>™</sup> range of products is highly customisable, with multiple units from two to more than six cars and widths ranging from 2.7 to 3.2 meters, allows operators to find a solution for all transport capacity needs.

The METROPOLIS<sup>™</sup> range of products was designed with three goals in mind: proposing a large range of configurations and options, maximising passenger comfort and security, and optimising the efficiency of the operation in terms of lifecycle costs and energy consumptions. The standardisation of METROPOLIS<sup>™</sup> sub-systems (in particular, the traction and the bogie motor) guarantees high level of reliability, permit easier access to equipment and, as a result, simpler maintenance.

Alstom metros can be manufactured in seven factories worldwide, all with the same industrial standards, including the new Chennai factory in India.

#### Suburban and regional trains

Over the past 30 years, Alstom has developed experience in the market for regional and suburban trains, selling over 5,500 of these worldwide.

The X'TRAPOLIS<sup>™</sup> range of products meets suburban and regional transportation demand resulting from the development of outlying urban areas. X'TRAPOLIS<sup>™</sup> is a high capacity train (up to 30,000 passengers per hour and per direction) and reaches 120 km/h at top speed. These trains can take various forms including, in particular, double-deck versions, with added information equipment or interior surveillance equipment. Close to 1,000 cars have been sold and can be found in Australia, Chile and shortly, in South Africa.

The CORADIA<sup>™</sup> range of regional trains offers a varied fleet of trains that can easily be used according to different configurations, whether in terms of their motorisation (electric, diesel or bi-modal), their architecture (single or double-deck), or their number of cars (two to seven). More than 1,200 regional trains in this range of products are currently in circulation in nine European countries and in Canada. For each operator, Alstom's regional range of products offers an adapted technical configuration: from the CORADIA<sup>™</sup> Lint<sup>™</sup> (diesel, sold to over 14 customers in Germany, the Netherlands, Denmark and Canada), to the winterised CORADIA<sup>™</sup> Nordic able to withstand extremely low temperatures, to both the CORADIA<sup>™</sup> Continental and the Meridian<sup>™</sup> (electric), the CORADIA<sup>™</sup> Duplex<sup>™</sup> and the CORADIA<sup>™</sup> Polyvalent<sup>™</sup>, which is particularly customisable.

The components and parts used in the entire CORADIA<sup>™</sup> range of products are standard, guaranteeing perfect control over maintenance and costs, whereas the interiors are customisable and can be reconfigured based on specific operational needs. X'TRAPOLIS<sup>™</sup> and CORADIA<sup>™</sup> are products whose design and production are very complex and require an especially strict choice of suppliers. Operators can choose train sets of 27 to 81 meters in length, taking advantage of the range's many modular configurations.

#### High-speed and very high-speed trains

The PENDOLINO<sup>TM</sup> is designed to travel at top speeds of 250 km/h on both high-speed and conventional lines. It operates under extreme weather conditions (from +45° to -45°C). It can also come equipped with Tiltronix<sup>TM</sup>, Alstom's tilting technology, which enables the train to tilt by up to eight degrees in curves and still run at 250 km/h, thereby allowing it to travel 30-35% faster than conventional trains.

Alstom Transport currently has 630 very high-speed trains in service throughout the world. The range of products relies on two flagship products that represent the culmination of 35 years of expertise: the Euroduplex<sup>TM</sup> and the AGV<sup>TM</sup> (Automotrice Grande Vitesse).

Euroduplex<sup>™</sup> is the only double-deck very high-speed train on the market, able to carry 1,268 passengers maximum at speeds of 320 km/h. Designed for interoperability, it offers signalling equipment that is compatible with multiple networks and is equipped with traction systems that are suited to several different electrical voltages – as a result, it is able to cross European borders smoothly.

The AGV<sup>™</sup> is designed to travel at commercial speeds of up to 350 km/h. It is the only very high-speed train to combine articulated architecture and distributed power, as opposed to simply powering the front or rear drive wheels. As a result, the AGV<sup>™</sup> offers excellent operating costs in terms of energy and maintenance due, in particular, to investments aimed at reducing AGV<sup>™</sup>'s mass and energy consumption (10-15% reduction). The AGV<sup>™</sup> can recover the energy lost during braking and returns it to the electric power grid (up to 8 MW), which makes it a particularly environmentally friendly transportation method.

Worldwide, one out of three trains in service today running at 200 km/h or more uses Alstom technology.

#### Locomotives

The manufacturing of locomotives for the purpose of passenger or freight transportation is at the heart of Alstom Transport's historical business activities and expertise. With over 2,000 locomotives sold throughout the world, for the past decade PRIMA<sup>™</sup> has provided a response that is well adapted to operators' demands.

Fully compatible with the ERTMS (European Rail Traffic Management System) and ETCS (European Train Control System) signalling systems, PRIMA<sup>™</sup> locomotives can cross borders with ease and operate on every freight corridor in Europe, as well as being able to run on any of four power supply voltages (25 kV, 15 kV, 3,000 V and 1,500 V). They are equipped with an independent traction system on each axle that reduces the risk of downtime due to immobilisation.

Alstom Transport and TMH have combined forces to co-develop and co-produce an electric passenger locomotive known as the EP20, inspired by the PRIMA<sup>™</sup> locomotive, specifically designed for the CIS, and able to run in extreme weather conditions (temperatures as low as -50°C). Its design was entrusted to TRtrans, an engineering company founded in December 2010 and co-owned by TMH and Alstom Transport. The design and manufacturing process takes place at the TMH site of Novocherkassk, in southern Russia. The Kazakh version of the EP20 (the KZ4AT) is manufactured and assembled in a factory in Astana (Kazakhstan) that opened in October 2012.

Since 2012, Alstom has been developing a hybrid locomotive, known as the H3, which answers environmental concerns by reducing the noise level, emission of pollutants and energy consumption.

#### Components

For all its trains, Alstom controls each aspect of technological development, design, production, testing and quality control, relying on a network of partners and subcontractors. Some strategic mechanical, electric and electronic components of the bogies, motors, and traction systems are designed, developed and manufactured internally. They are the result of several decades' experience acquired by Alstom Transport's engineers, and are installed in all Alstom equipment, from tramways to very high-speed trains (from 70 km/h to 350 km/h). Currently, with the exception of a few specific projects (for example, the Montreal metro) as well as the Chinese market, these components are not sold separately by Alstom.

Control over the entire manufacturing process for these critical components is a key asset in Alstom's offer of complete train systems, and one that is acknowledged by its numerous customers. It is one of the market segments that benefits from powerful innovations. The use of permanent magnet motors, specifically designed for the latest generation of very high-speed trains, is a recent example of this power to innovate, together with the ongoing developments in traction systems through the use of Silicon Carbide technology (SiC).

### Systems

#### Infrastructures

Alstom Transport offers infrastructure solutions that are adapted to a wide array of standards. It contributes its experience and project management skills in two main areas: electrification and track work.

Transport designs and installs electrification and power supply systems and, in particular, sub-stations and ground power supply systems for tramway lines (APS<sup>™</sup>). Alstom also develops innovative and distinctive solutions such as HESOP<sup>™</sup> (Harmonic and Energy Saving Optimiser), a high-performance system able to recover energy lost during braking and feed it back into the grid (up to 99% energy recovery rate). This system is particularly well adapted to urban transportation needs, allowing for a better optimisation of energy supply systems and an overall reduction in energy consumption. Over 110 sub-stations have been sold worldwide.

Alstom also offers solutions for the automatic installation of tracks (APPITRACK<sup>M</sup>) or the concrete slab track for main lines (NBT<sup>M</sup>).

These infrastructure solutions make it easier to incorporate products within integrated solutions.

#### Integrated solutions

In addition, Alstom Transport combines all the know-how accumulated by a multi-specialised train manufacturer in order to offer integrated systems able to manage every aspect of a railway system (trains, signalling, infrastructure and maintenance). Alstom offers these solutions both in the urban transportation market (tramway or metro) and in the main line transportation market. Acting as the leader or partner in a consortium, Alstom directs or participates in the management of these projects, which are carried out in the context of contracts known as "design, construction, operation and maintenance" or of public-private partnerships. The management of these projects includes the design, manufacturing (excluding civil works) and, as a result, any associated risks, in particular, the availability of work sites affecting the timeline for execution, entry into commercial service and the maintenance schedule, as well as the financial, administrative and technical coordination of the project. As of end of 2014/15 fiscal year, Alstom is managing numerous ongoing integrated solutions projects.

Axonis<sup>™</sup> is one of the integrated solutions offered by Alstom for certain market segments, developed in partnership with a subsidiary of the Bouygues group for civil works. Axonis<sup>™</sup> is a light metro system that meets the demands of cities in search of solutions that can be installed quickly and easily, while providing an optimum lifecycle cost. Able to transport up to 45,000 passengers per hour and per direction, Axonis<sup>™</sup> relies on standard sub-systems and interfaces that make future system extensions or updates easier to apply and install.

#### Services

Whether they are public or private rail operators, fleet managers or maintenance specialists, Alstom is there to assist its customers for the entire lifecycle of their products by offering a range of personalised services, be it for their trains, infrastructure or railway traffic control systems. The goal is to guarantee a complete, safe and optimal management of railway train – whether it was or not manufactured by Alstom – and equipment throughout their cycle of use.

The Services activity enables Alstom to further strengthen its relationship with its customers and to better evaluate their needs and expectations.

#### Maintenance

Transport is responsible for the maintenance of over 8,200 cars in approximately 120 warehouses throughout the world. Maintenance contracts are in place for periods that can vary from 5 to 30 years. Alstom Transport's know-how with respect to the maintenance of railway train is widely recognised, and approximately 20% of the equipment maintained by Transport was initially manufactured by other market players in the railway industry (source: Alstom).

#### Modernisation

Transport provides a range of services that also includes modernisation, which is key to extending the life of railway train (it is possible to achieve 15 additional years of operation) and systems, but also to improve performance, particularly regarding energy consumption (up to 35% less), which results in reduced lifecycle costs, and also improves the passenger environment. For those operators with the industrial means to complete their projects internally, Alstom makes modernisation studies, manages the industrial process, and delivers the equipment and parts to the company in charge of the assembly. Otherwise, in addition to the design work and delivery of kits, Alstom Transport is also able to lead the entire project by taking charge of the industrialisation aspects of the modernisation. This offer includes all the necessary testing and a commitment regarding the delivery schedule.

#### Parts and repairs

Transport offers a flexible range of services, from a one-time purchase *via* a spare parts catalogue (over 600,000 references for spare parts, all of which comply with the specifications of their original manufacturers) to leading the integrated management of spare parts, which includes a plan for maintenance and revision work. Alstom relies on a global network of five "hubs" dedicated to providing critical spare parts and 13 repair workshops throughout the world. A web portal, PARTSFOLIO<sup>™</sup>, was developed to facilitate transactions and the monitoring of orders.

#### Support services

Support services include the training of personnel by 150 experts, in particular train drivers, technical assistance for the management of the lifecycle of products, fleet control, and the management of obsolescence. Today, Alstom provides its technical expertise, in particular, to a fleet that includes over 1,800 trains, and it remotely manages over 700 trains throughout the world. Transport has launched a "Services customer web portal" to strengthen its proximity with its customers: ordering spare parts, training offers and Alstom's technical expertise are directly available to them through this portal. Although this business activity does not currently generate significant revenues, it offers the benefit of creating closer ties with clients and, in doing so, building long-term relationships.

### Signalling

Alstom provides operators and infrastructure managers the means to ensure the safe and smooth transportation of passengers or merchandise, thereby optimising the efficiency of urban or main line networks. It supplies railway operators and infrastructure managers with control and information systems as well as onboard and on-track equipment that guarantee the effectiveness and safety of the use of products, on the one hand, as well as ensure that passengers are informed and comfortable, on the other hand.

Alstom's offer is focused on two separate segments of the market: main line networks and urban networks – for which Transport offers complete and integrated solutions, which are customisable, based on the needs of its customers. In addition, it also offers passenger security solutions, and control centres for network management.

The development of signalling activity enables Alstom to meet the growing demand for integration expressed by its customers. At the same time, it makes every effort to reduce costs associated with this business by relying increasingly on outsourcing its electronic systems production and by establishing engineering centres in new regions, such as in Bangalore, India. In order to optimise its development efforts, Transport's signalling products and solutions rely on shared processes.

#### Mainline networks

As part of its range of products for mainline networks, Alstom offers both onboard and on-track products (interlocking and trackside equipment) and solutions (automated control system, control centre). Transport also offers its own solutions with respect to signalling and track control, such as the Smartlock<sup>™</sup> interlocking system or its Smartway<sup>™</sup> signalling products, which are also sold independently of its ATLAS<sup>™</sup> integrated offers.

#### Smartlock<sup>™</sup> and Smartway<sup>™</sup>

Compatible with the main signalling standards in existence today, Smartlock<sup>™</sup> and Smartway<sup>™</sup> are considered high-quality solutions recognized for their versatility. At the global level, 25 countries are currently utilising the technologies developed by Transport.

Based on the overall level of network traffic, Smartlock<sup>™</sup> interlocking systems will allow – or not – a train to continue its journey when it crosses a given point machine by following a safe itinerary that avoids all risks of conflict with other trains' itineraries, whether on urban, freight, or main line networks. They are interfaced with onboard control systems and control centres. With over 1,500 installations, the safety and reliability of this new generation of Smartlock<sup>™</sup> electronic interlocking systems can be viewed as being particularly proven.

Smartway<sup>™</sup> is a range of standard track signalling equipment that includes track circuits (detection of trains per section of track, in order to ensure traffic safety) and switch position motor control (ability to lead trains toward any given track).

Smartway<sup>™</sup> products are versatile, and can be installed on urban lines, freight lines, high-density main lines, and high-speed lines, as well as in stations, on less used tracks, level crossings, or evacuation zones. They are interfaced with onboard control systems and control centres.

#### **ATLAS<sup>™</sup>** solution

The new ETCS/ERTMS standard (European Train Control System/ European Rail Traffic Management System) for railway network interoperability is intended to impose a single signalling system shared by all the countries in the European Union. Having played a key role in defining these ETCS/ERTMS standards, Alstom Transport's answer to these challenges can be found in its ATLAS<sup>™</sup> offering, which is a complete solution that integrates all of the network's data in order to automatically adapt the speed and distance between trains, including whenever the train crosses borders. ATLAS<sup>™</sup> enables onboard equipment to remain connected to the integrated control system, which is constantly liaising and exchanging information with the network's trackside equipment and interlocking systems. The ETCS/ERTMS standard has now been adopted by rail operators for different types of rail operations from suburban to very high speed rail and by operators from many countries outside Europe. Alstom has enriched in consequence its ATLAS™ solution with the ATLAS<sup>™</sup> 400 solution for low density lines and ATLAS<sup>™</sup> 500 solution for high density rail traffic.

ATLAS<sup>™</sup> solutions are now deployed in 23 countries and on 1,800 trains in full commercial services comprising more than 100 different train types.

#### Urban networks

Network congestion, security, environmental pollution, and the lack of adequate mobility solutions are the main challenges that urban transportation must face. One of the keys to solving these issues is increasing urban transportation capacity by improving signalling systems. For over 70 years, Alstom has been addressing such urban challenges, which is why it constantly upgrades its CBTC signalling system (Communication-Based Train Control), its most proven signalling system to date. As part of its range of products for urban networks, Alstom Transport offers both onboard and on-track products (interlocking and trackside equipment) and solutions (automated control system, control centre).

Transport equips a number of the world's major cities and its CBTC solutions represent approximately 25% of CBTC solutions deployed worldwide. In addition, it has also developed a significant presence in China, particularly *via* its CASCO joint venture.

#### **URBALIS™** solution

 $\mathsf{URBALIS}^{\mathsf{M}}$  is available in over 50 metro lines throughout the world and installed on nearly 630 kilometres of track.

In its URBALIS<sup>™</sup> product line, Alstom offers URBALIS<sup>™</sup> 400 and URBALIS<sup>™</sup> Fluence, which are two CBTC solutions that rely on the same technological base. This base is upgraded on a regular basis and meets the criteria for the highest level of safety endorsed by official independent authorities.

- URBALIS<sup>™</sup> 400 is an ideal CBTC solution for urban transit operators aiming to maximise performance and capacity, while requiring standard interlocking systems for operational needs.
- URBALIS<sup>™</sup> Fluence is the first train-centric CBTC. This innovative solution simplifies the complex route setting and interlocking functions, merging them completely into CBTC.

The URBALIS<sup>™</sup> integrated offer also relies on Smartlock<sup>™</sup> interlocking systems and Smartway<sup>™</sup> signalling products developed by Transport.

#### Network and passenger monitoring and surveillance systems

As the need for more efficient rail network operation increases as a result of an effort to optimize the use of assets, operators need a system that is able to provide a fully integrated monitoring and control system for all operational (train movement control, incident management, resource allocation) and functional (static in-station or onboard functions) elements of the network. This system must be easily customizable to rapidly take into account the operator's structure and operation procedures.

Alstom Transport's solutions focus on passenger safety and the management of information intended for them. With over 80 control centres located throughout the world, Alstom is one of the few market players that benefits from a sufficient amount of credibility and experience to lead projects that involve the management of several lines.

#### Iconis<sup>™</sup> control centre

Iconis<sup>™</sup> control centre oversees and monitors all aspects of the network. It simultaneously coordinates various operational functions and traffic management *via* Iconis<sup>™</sup> ATS (Automatic Train Supervision) for urban automated train supervision, *via* Iconis<sup>™</sup> CTC (Centralised Traffic Control) for main lines, and *via* Iconis<sup>™</sup> SCADA for infrastructure surveillance, in interaction with interlocking and automated train control (ATC) sub-systems. The Iconis<sup>™</sup> automated control system guarantees train adherence to schedules, the automatic optimisation of routes, and conflict-free resource utilisation. It provides network operators with a general view of the status of network traffic and enables them to interact directly with the system at that level. Iconis<sup>™</sup> can take various forms: from a simple autonomous post for an independent station to several hundreds of interconnected servers and operator workstations, able to manage an entire network.

#### Passenger information and entertainment

Rail operators have to satisfy ever-growing expectations from passengers wishing to utilise their travel time productively. Modern means of communication can contribute to meeting this need by making real-time information as well as on-board audio and video entertainment available.

Alstom uses the latest real-time Information and Communication Technologies (ICT). The system architecture integrates public address, intercom, passenger information, infotainment, seat reservation displays, Internet connectivity, etc.

Alstom Transport's passenger information and entertainment system (PACIS<sup>™</sup>) covers all types of needs for trains, stations, and control centres, ranging from public announcements to making onboard Internet available, for all Alstom's range of railway train products.

# RESEARCH AND DEVELOPMENT

Alstom Transport continues to invest in innovative technologies for each of its areas of activity. Alstom is famed for the development of new-generation trains, components and cutting-edge signalling products and solutions, as well as for innovative services and systems activities. All these R&D efforts are directed towards two priority objectives: addressing the needs of the customers and passengers as well as taking into account the environmental and sustainability impact of its offers. Alstom is committed to contributing to the environmental performance of rail systems, focusing on lower energy consumption (motor efficiency, weight reduction, new materials or recovery of braking energy), reduced internal and external noises and limited global impact throughout its product lifecycle. The main R&D programmes of Alstom Transport are presented hereafter.

#### Security

Protecting passengers and their belongings from any potential security threats is a central focus for Alstom. Relying on its technical know-how, which enables it to evaluate precisely the risks faced in all the segments of the rail industry, Alstom Transport offers a state-of-the-art advanced security system that is modular, easy to integrate and operate around the clock, and that handles all functions intended to guarantee the safety and security of passengers.

Alstom's security systems can be integrated within larger systems: the system can be run by an integrated security centre, which is itself part of the overall structure of the information and rail communication system. It covers all rail environments: stations, tracks, tunnels, signalling equipment, trains, warehouses, and control centres.

The integration of all this information makes it possible to instantaneously connect the network's global surveillance (through a CCTV system, access control, intrusion detection, and smoke and fire detectors), *via* the Ethernet network, to the appropriate response (passenger information, public announcements, emergency calls, or interventions).

Alstom Transport's range of products extends from simple stand-alone security components to full integration within a control centre with assisted incident management capabilities. It offers a customizable security system structure that can be tailored to any type of train, station, control centre, or warehouse (under construction or renovation).

### Trains

#### TGV of the Future

Alstom is working on the TGV of the Future project since September 2013. The French rail industry is preparing to propose to its national and international clients a very high-speed train which is innovative and lies at the heart of an improvement and productivity strategy for the high-speed rail ecosystem. Alstom Transport is already working with ADEME and several partners (suppliers, competitiveness clusters or research institutes for instance) to develop the project. The TGV of the Future will offer a capacity of up to 750 seats and its total cost will be optimised with a strong reduction in energy consumption (objective: -35%) as well as greatly reduced maintenance costs compared to current trains.

### CITADIS™ X05

The tramway market should experience strong growth in the coming years. The objective is to expand the current offer of tramways (the CITADIS<sup>™</sup> range of products) with improved performances by including multiple configurations, two types of bogies, and the use of permanent magnet traction motors that reduce energy consumption. Efforts have also been made to reduce maintenance costs and comply with both current standards and those under development. Finally, the objective is also to enable the transportation of an increasing number of passengers under optimal conditions of comfort. The programme was launched in July 2013 and some tramways sold in Sydney.

#### CITADIS Spirit<sup>™</sup>

The development of a large market for low-floor Light Rail Vehicles (LRV) is expected in North America in the coming years. The objective of the CITADIS Spirit<sup>™</sup> project is to develop a new range of CITADIS<sup>™</sup> products for North America able to travel at speeds of 100 km/h while relying on an optimized configuration and performances in compliance with APTA recommendations. Its 100% "low-floor" configuration and the fact that it is produced in North America at a very competitive price make this a highly differentiating product for Alstom. The programme began in 2013 and the full launch of the first train is expected to take place in Ottawa in the spring of 2018.

#### Zero emission Regional Train

Hydrogen Fuel cell is a leading technology to replace conventional Diesel or gas engines. To replace trains powered by Diesel powerpacks, Alstom is developing with the support of the German federal government and in partnership with DLR, a German research institute, a Zero-emission train featuring fuel cells and energy storage system. Over the fiscal year, Alstom has signed several letters of intent for the use of this new generation of emission-free train in Germany.

#### H3 Locomotive

The goal of this programme is to develop an innovative shunting locomotive with power up to 1,000 kW. This locomotive platform consists of four standardized versions:

- Akku version (170 kWh batteries);
- Hybrid version (one generator set plus a traction battery);
- Version with a dual engine (two generator sets);
- Version with a single engine (one generator set).

This programme was launched in 2012 and the first locomotive has been showcased at Innotrans 2014. Ten H3 locomotives have been sold in Germany so far.

# Silicon Carbide (SiC) to improve traction performance

Alstom Transport uses silicon carbide components to design the traction power converters of its trains. The main advantages of this technological change are the reduction of losses in energy, weight savings, and an improvement in the level of comfort (*e.g.* noise).

### Natural cooling system based on Capillary Pumped Loop (CPL)

Natural cooling of traction system is a key asset for Eco-design, as it reduces noise emission, energy consumption and maintenance, compared to forced cooled solution. Aside to traditional natural cooling system, based on heatsink and heatpipe, Alstom Transport is developing with its partner Calyos an advanced natural cooling solution based on capillary pumped loop. Thanks to the two-phase cooling providing higher energy density, CPL enlarges the scope of application of natural cooling to more powerful and/or more compact traction systems.

### Systems

#### Integrated metro solution: AXONIS™

This solution is focused on developing a network of metropolitan trains that integrates civil engineering work as well as the design of electromechanical systems. It is designed to meet the requirements of cities already facing traffic congestion by offering them a competitive solution relative to existing offers. The goal was to devise an optimised solution for the deployment of an integrated system that includes a viaduct with a capacity of 10,000 to 45,000 pphpd (passengers per hour and per direction). The system was commercialised in late 2013.

### Services

#### HEALTHHUB™

Launched some years ago *via* TRAINTRACER<sup>™</sup>, this R&D programme has evolved and currently integrates all the initiatives associated with the management of the train, infrastructure and signalling status, including forecast of the future state of a given component. TRAINTRACER<sup>™</sup> remotely monitors the health status of a fleet and presents its key parameters *via* a simple web interface. The efficiency of maintenance is improved by accelerating detection, diagnostics, and repairs, as well as by achieving a 30% reduction in the amount of time the train is not in use. The programme facilitates the implementation of predictive maintenance. Part of HEALTHHUB<sup>™</sup>, TRAINSCANNER<sup>™</sup> is a unique four-in-one diagnosis portal providing information on the key systems of the train.

## Signalling

#### **URBALIS** Fluence<sup>™</sup>

The goal of the URBALIS Fluence<sup>™</sup> programme is to develop a new generation of generic signalling systems for urban applications based on technological breakthroughs intended to improve operating reliability, flexibility and performance, and to reduce the costs of both application and development engineering. URBALIS Fluence<sup>™</sup> offers the ability to combine the typically separate interlocking and automated control functions of the train in a single control system installed onboard the train. The main advantages of this development are a higher transportation capacity, improved operational availability, and reduced costs throughout the lifecycle. *Lille Métropole Communauté Urbaine* (France) chose URBALIS Fluence<sup>™</sup> for its Line 1.

#### Smartlock<sup>™</sup> 400GP

The goal of the generic product known as Smartlock<sup>™</sup> 400 is to drive the convergence of various types of interlocking mechanisms in order to devise a single interlocking architecture that must be integrated in generic applications (systems) and specific applications (solutions). This development includes interlocking functions such as the central vital cubicle, trackside equipment with I/O interface, the diagnostic, maintenance, and support functions, juridical recorder, compilation tools, application and simulation engineering tools, as well as the testing tools. The programme began in 2010 and the solution was installed in Turkey in 2014.

### **Cross-innovation**

Alstom Transport has a wide variety of partnerships participating to the Open Innovation approach:

- Alstom Transport and the Régie Autonome des Transports Parisiens (RATP) have decided to combine their resources and create a common entity under the name "Metrolab", in order to carry out research and development initiatives associated with the "Metro of the Future" project.
- As a founder of IRT Railenium, IRT SystemX and ITE Supergrid, Alstom Transport develops R&D programmes taking advantage of the state of the art knowledge of these institutes.
- As an associate member of IMS Centre in Cincinnati University, Power Electronics Platform in Germany (ECPE) or CPES in Virginia Tech, Alstom Transport develops R&D programmes on specific areas of interest.
- As a member of competitiveness clusters in France and in Europe, Alstom Transport takes part of the R&D ecosystem in the mobility area.
- A joint laboratory has been launched with *Institut national de recherche en informatique et automatique* (INRIA) a research organisation in France with the objective to develop Alstom's footprint in the field of digital technologies (power automation and control, cyber security, big data, simulation and optimisation, communication networks, etc.).

Moreover, through the involvement in European (FP7, H2020, SHIFT2RAIL, etc.) and local (in Wallonia, France, etc.) collaborative programmes, Alstom Transport is at the forefront of innovation in the mobility area.

# DISCONTINUED OPERATIONS

# **ALSTOM THERMAL POWER**

Alstom Thermal Power designs, manufactures, and delivers solutions that allow customers to generate competitive, eco-friendly, reliable and flexible power.

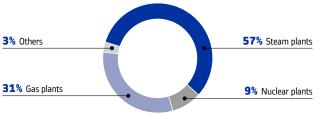
With over 100 years' experience in supplying turnkey power plants worldwide, Alstom also upgrades, refurbishes and retrofits all components for existing thermal power plants to maximise returns on customers' assets over their entire lifecycle.

Thermal Power has the industry's most comprehensive portfolio of thermal technologies – coal, gas, oil and nuclear – and holds leading positions in power generation services, turnkey power plants, and air quality control systems. Alstom is also a pioneer in carbon capture technologies.

# **INDUSTRY CHARACTERISTICS**

The world's installed thermal power generation capacity in 2014 was estimated at 4,292 GW, growing at 3.9% year over year. The thermal installed base represents about 72% of the total installed base, with the rest mainly constituted of renewables.

#### GLOBAL THERMAL POWER INSTALLED BASE (GW)



Source: Alstom

Emerging countries are faced with an urgent need for new dependable generation capacity, both to cover their seasonal consumption peaks and to meet the growing electricity demand on base load, which is directly linked to their economy growth and demographic dynamic. Despite a weakening in growth domestic product, in particular in China and East Asia, emerging economies still remain the largest markets for new thermal power plants in the years to come.

In mature countries, investments in new thermal power generation facilities did not progress except in North America (gas plants). However, the ageing installed base of power plants in those regions continues to drive recurrent need for retrofit, sustained by environmental concerns and the need to reduce the cost of electricity.

### **Market evolution**

Moderate GDP growth in Europe was not sufficient to impact the electricity demand which declined again last year. In addition, overcapacity and growing renewable penetration are lowering utilisation of thermal plants, making the business case for new build, or sometimes even existing ones, uncertain. As a consequence, the European thermal market for new plants remained depressed in 2014.

The North American thermal market expanded, with an encouraging trend on gas plants pulled through by cheap gas prices and coal plant retirement, despite a still weak electric consumption growth and low electricity prices.

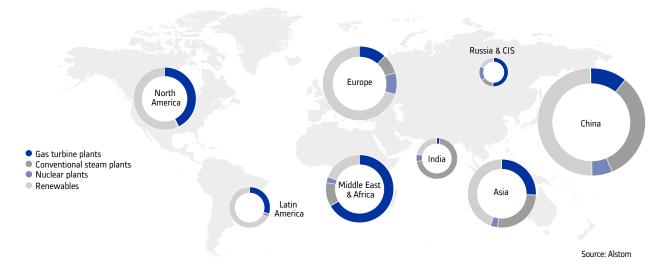
Emerging countries have shown an overall significant decrease in demand for new thermal build driven predominantly by China, more because of environmental pressures on steam plants than the moderation in economic growth levels compared to last year. In Africa and Latin America, the thermal market remained stable (excluding the Algerian mega contract booked in 2013 from the comparison). Substantial market degradation was observed in Russia and CIS region in the gas plant market.

As a consequence of these evolutions, overall orders for new build thermal power plants decreased slightly compared with 2013. As expected, the Air Quality Control System power market slowed down substantially because of the end of the DeNOx installation campaign in China. The installed base services market pursued its growth.

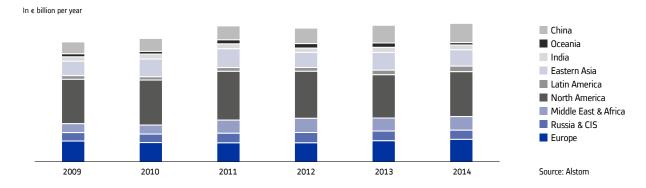
Although a progressive nuclear recovery is expected over the next years, the nuclear market was impacted by postponement of projects in the UK, China and India, as well as by the economic downturn in Russia and CIS. As for the existing nuclear fleet, there is a sustained retrofit market, combined with "stress tests" performed worldwide that will drive significant additional spending for safety enhancements. The new coal plant market decreased overall compared to 2013. India and East-Asia steam market progressed but could not compensate the downturn on China market impacted by the environmental pressures on coal plants. Outside Asia, the steam market has remained at a low level, with no heavy fuel oil (HFO) in the Middle-East and Africa.

The global gas plant market tended to stabilise in 2014 versus 2013. In Europe, the market did not show any sign of recovery. Middle East and North America were bullish, and other markets were resilient except Russia, CIS and to a lesser extent Africa. A significant share of the market remains in China and South-East Asia despite high gas price in these regions (source: Alstom).

MEDIUM TERM GLOBAL POWER MARKET FORECAST AVERAGE 240-270 GW P.A. Over the coming years, new build growth should be supported by demand for gas power plants in certain regions. Investment in new nuclear plants should re-start progressively in a number of countries. For new steam plants, investment should be moderate but will keep a significant share in the global thermal market, driven by the continuous need to add capacity in Asia.



The service market drivers remain globally strong, although the evolution is contrasted by region. In markets such as China, India, the rest of Asia or the Middle East, the increasing size of the installed base of power plants progressively boosts service needs. In mature countries, the thermal service market is impacted by plant retirements, lower utilisation rate as grids integrate more renewables and stagnant electricity demand.



THERMAL SERVICE AND RETROFIT MARKET

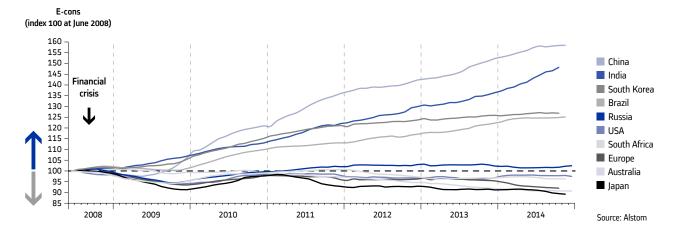
# **Market drivers**

#### Economic growth

In mature countries, the electricity intensity (correlation ratio of electricity consumption to Gross Domestic Product) is progressively declining due to a shift to a more service-based economy and increasing energy efficiency. However, the US economic recovery in 2014 should trigger an increase in electricity consumption.

#### **ELECTRICITY CONSUMPTION** (TWh, 12 months moving average)

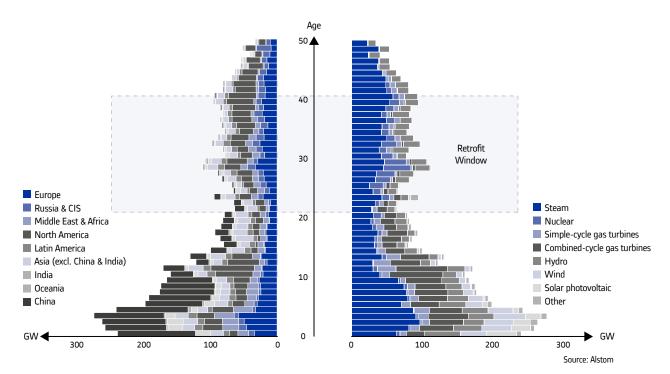
Although lower than expected in Asia, Latin America and Middle East, growth in emerging markets remained strong in the 3-8% range. India had a stronger growth than expected whereas the Russian & CIS markets were strongly impacted by the economic crisis this year. Significant business opportunities are expected near term in Middle East, Africa and Turkey. On longer term perspective, power generation across most of Asia is expected to continue to increase substantially, with India remaining one of the highest-potential markets.



#### Installed base: ageing of power plants

The ageing installed base, along with stricter environmental regulations, should lead to higher demand for retrofit and modernisation solutions. Over the recent years, demand for maintenance and refurbishment has been strengthened by a general trend among power producers to seek increased performance, lower operating costs and extended lifetimes of their existing plants.

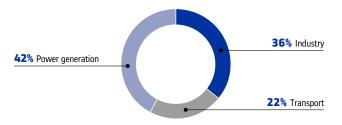
AGE PYRAMID OF WORLD INSTALLED CAPACITY INSTALLED BASE: 6,009 GW (2014)



#### **Environmental concerns**

Environmental concerns highlight the need for lower emissions and water conservation in both existing and new power plants. Fossil fuel prices, which are expected to remain structurally high in the coming decades, except in North America, are also contributing to demand for the improvement of efficiency rates.

CO, EMISSIONS FROM FOSSIL FUEL COMBUSTION



Source: IEA – World Energy Outlook 2014

The annual round of UN climate change negotiations (COP20, Lima) laid the foundations for a new global climate agreement to be reached in 2015 in Paris (COP21). A decision was adopted on the format and process for INDCs (or Intended Nationally Determined Contributions) based on the principle that all countries should adopt emissions reductions targets, while those targets will be "differentiated" among countries.

# **COMPETITIVE POSITION**

In the steam and gas turbine plant markets (gas turbines, steam turbines, generators, boilers, emission control systems), the major players of the sector include General Electric, Siemens or Ansaldo in Europe and the USA, Mitsubishi Heavy Industries or Toshiba in Japan, Doosan Heavy Industries in South Korea, Shanghai Electric, Harbin Electric and Dongfang Electric in China as well as BHEL in India.

# OFFERING

Alstom's power generation offering is derived from a deep understanding of power markets and customer needs. Government and power companies are under pressure to provide more affordable, environmentally-sound and stable energy. Alstom delivers high-quality solutions to enable its customers to meet the challenges of energy sustainability and make the most of their assets during their entire lifecycle by:

- reducing cost of electricity generation, to ensure assets competitiveness;
- lowering environmental footprint, to make these assets increasingly eco-friendly;

#### Regulations

Country-specific regulations are creating both uncertainty and opportunities for the thermal power market. Country-specific regulations as well as the access to fuels, such as availability of non-conventional gas, will play a major role in the energy mix of each country.

Alongside the importance of de-carbonising the industrial sector, there is also a global push for stricter environmental regulations on conventional pollutants such as particulates, SO<sub>2</sub>, NOx and mercury. In Europe and the USA, a number of regulations have already driven many investments in environmental control technology for new power plants as well for the installed base.

In the rest of the world, there has been an accelerated pace to implement more stringent regulations. In China, the Ministry of Environmental Protection issued new emission standards for new and existing thermal power plants, driving the demand for Air Quality Control Systems and more efficient power generation equipment International Financial Institutions (IFIs) also play a role in emerging economies to push such "clean coal" investments by imposing their own emission limits once granting a loan, offering an immense potential in the years to come.

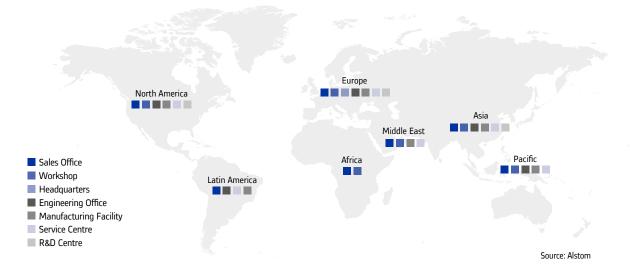
In services for the installed base, Alstom competes with original equipment providers (Woodgroup/Siemens), independent service providers (Turbocare) and many local field service companies.

- increasing flexibility and reliability, to ensure that assets can respectively:
  - adapt to fluctuating electricity and fuel markets conditions,
  - generate the required electrical load through maximised availability, reliability, and maintainability.

# **Global footprint**

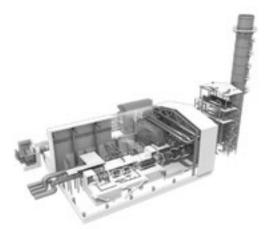
Alstom Thermal Power operates in all geographic markets and is present in over 70 countries.

#### A WORLDWIDE MANUFACTURING FOOTPRINT



### Gas

#### Simple- or combined-cycle power plants



Whatever the operating configuration, gas-fired simple- and combinedcycle power plants are designed to provide outstanding operational flexibility and high plant efficiency, while minimising the environmental impact. Alstom's power plants delivered to date have been designed and optimised for various applications including cogeneration, district heating, desalination and special industrial applications such as aluminium or steel making industry.

#### Integrated solutions

Simple-cycle power plants are constructed whenever power generation capacity needs to be built rapidly and/or for peaking operations. Alstom offers simple-cycle power plants to meet wide-ranging customer requirements.

For efficient, flexible and competitive power-generating capacity, Alstom proposes combined-cycle power plant designs with optimised installation times, high-performance, low emissions, high operational and fuel flexibility features. The Alstom-made reference power plants are adaptable to various site conditions.

Alstom's project capabilities and references encompass the transformation of simple-cycle into combined-cycle power plants (add-ons), and the conversion of steam power plants into combined-cycle power plants (repowering).

Alstom is also working to offer hybrid solutions to its customers. The ability of Alstom gas turbines to operate in part/low-load and base-load allows for the seamless integration of solar renewable solutions within combined-cycle power plants.

Integration of high temperature and pressure steam from Alstom's concentrated solar tower-based solutions directly into the steam turbine allows for the most efficient integrated solar combined-cycle power plants.

#### Products

#### **Gas turbines**

With around **1,500** gas turbines installed worldwide, Alstom delivers technologically innovative and proven gas turbines, offering:

- higher operational flexibility to support the development of power generation from renewable sources;
- higher base-load and part-load output and efficiency;
- lower emissions.

Alstom's gas turbine products span from 113 MW to more than 320 MW:

- GT26 (>325 MW) for 50 Hz;
- GT24 (>230 MW) for 60 Hz;

- GT13E2 (>200 MW) for 50 Hz;
- GT11N2 (>113 MW) for 50 Hz and (>115 MW) for 60 Hz (also available for low calorific fuels like blast furnace gas as GT11N2LBtu).

#### Steam turbines

In combined-cycle power plants, the thermal design of Alstom steam turbines delivers a highly efficient heat recovery cycle and offers excellent operational flexibility:

- STF30C: (150-400 MW);
- STF15C: (100-250 MW).

#### Turbogenerators

Alstom provides a full range of turbogenerators based on leading technologies for simple-cycle and combined-cycle power plants:

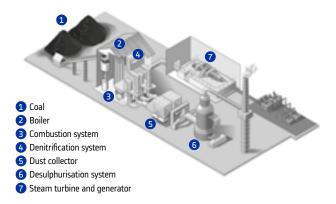
- TOPGAS<sup>™</sup> covers a power output range from 300 MW to 710 MW at 50 Hz and from 250 MW to 450 MW at 60 Hz;
- TOPAIR<sup>™</sup> covers a power output range from 150 MW to 400 MW at 50 Hz and from 90 MW to 311 MW at 60 Hz. As a leader in air-cooled technology, Alstom has set the trend with TOPAIR<sup>™</sup> by designing a simple, robust and highly reliable air-cooled turbogenerator resulting in low lifecycle costs for its customers;
- TOPACK<sup>™</sup> covers a power output range from 40 MW to 165 MW at 50 Hz and from 40 MW to 110 MW at 60 Hz.

#### Heat Recovery Steam Generator (HRSG)

Alstom offers a complete range of HRSG, optimised for cycling and constructability that provide high performance in all modes of operation. More than 750 HRSG behind gas turbines of 50 MW and above have been supplied by Alstom, including drum-type and once-through HRSG, thus providing the Group with unparalleled experience in this field (source: Alstom).

#### Steam

#### Coal and oil fired power plants



Alstom has the largest installed base worldwide, with approximately 30% of boilers installed around the globe using Alstom technology, totalling around 850 GW (source: Alstom). Alstom's experience includes subcritical, supercritical and ultra-supercritical steam range as well as a broad spectrum of fuels including all types of coal, oil and biomass. Alstom has developed firing systems for both suspension firing and fluidised bed that have been proven to offer the lowest emission levels with high combustion efficiency.

Alstom manufactures, delivers, installs and services steam turbine generator sets from 15 MW to 1,200 MW. Today, Alstom's fleet represents more than 20% of the world's installed steam turbine capacity (source: Alstom). Alstom steam turbines for power generation solutions are available as back-pressure or condensing turbines with and without controlled steam extractions for a wide range of applications, including steam turbine power plants, combined-cycle power plants, cogeneration power plants as well as renewable applications, like Concentrated Solar Power plants (CSP).

#### Integrated solutions

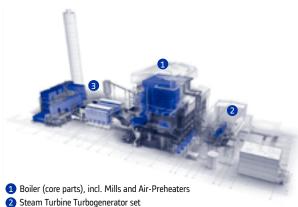
Alstom provides a comprehensive range of flexible integrated solutions for the full spectrum of required generation output. The steam power plants can efficiently operate in single or multi-unit arrangements, and with different types of boilers.

Alstom manages large-scale and complex projects, providing the entire range of services from technical engineering and sub-contracting to construction and commissioning. The Plant Integrator™ approach enables Alstom to be a leading provider of full turnkey Steam Power Plants.

Alstom delivers all major parts of the power station, with in-house solutions to provide optimum performance for all steam cycles from 100 MW to the largest plants in service today. Its cutting-edge expertise with ultra-supercritical technologies ensures high efficiency. Alstom's position as a leading supplier of environmental control solutions also significantly reduces the environmental impact of power plants. Moreover, Alstom's new steam power plants can be now designed to be  $CO_2$  capture-ready. In addition to the full turnkey plant offering, the benefits of Plant Integrator<sup>TM</sup> can also be achieved with Power Block and i.PP (Integrated Power Package) solutions.

Recently, Alstom increased its integrated offering portfolio with the Integrated Power Package (i.PP), focusing on the needs of EPC (Engineering, Procurement and Construction) customers traditionally sourcing power components only.

ALSTOM INTEGRATED POWER PACKAGE (i.PP)



Air Quality Control System equipment (optional)

#### Products

#### Large steam turbines

Alstom offers a comprehensive portfolio of highly reliable, efficient and operationally flexible steam turbines for all fossil-fired power plant applications, with outputs of up to 1,200 MW.

In fossil-fired steam plants, Alstom steam turbines are compatible with the highest ultra-supercritical steam parameters. The conventional Steam Turbine portfolio:

- STF100: 700-1,200 MW;
- STF60: 500-900 MW;
- STF40: 250-700 MW;
- STF25: 100-350 MW.

In cogeneration power plants, Alstom steam turbines enable highly flexible operation between power and heat demand and efficiently accommodate wide variations in process steam flows:

COMAX<sup>™</sup>: 100-400 MW.



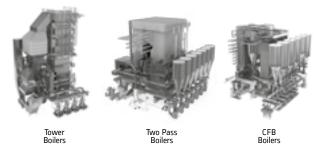
#### **Boilers**

Alstom offers a broad range of high-performance utility boilers and related equipment that includes:

- suspension-fired boilers, up to 1,200 MW today, using advanced pulverised coal firing technologies;
- Circulating Fluidised Bed (CFB) boilers, up to 660 MW with ultrasupercritical steam cycles, particularly efficient in burning a wide variety of low-grade and difficult-to-burn fuels;
- oil and gas-fired boilers, up to 800 MW;

 boiler auxiliary equipment including coal mills as part of the boiler package as well as individual components.

Alstom's expertise in boiler technologies and firing systems provides the perfect blend of knowledge and experience to ensure that each fuel burns cleanly. Alstom has designed a family of low-NO<sub>x</sub> tangential and wall-fired combustion systems to significantly abate emissions, such as NO<sub>x</sub>.



#### Turbogenerators

Alstom provides a full range of turbogenerators based on leading technologies for power plants:

- GIGATOP<sup>™</sup> 2-pole covers a power output range from 400 MW to 1,400 MW at 50 Hz and from 340 MW to 1,100 MW at 60 Hz. Alstom's GIGATOP<sup>™</sup> 2-pole has demonstrated extremely high reliability in operation, resulting in low lifecycle costs for Alstom's customers;
- TOPGAS<sup>™</sup> covers a power output range from 300 MW to 530 MW at 50 Hz and from 250 MW to 450 MW at 60 Hz;
- TOPAIR<sup>™</sup> covers a power output range from 150 MW to 400 MW at 50 Hz and from 90 MW to 300 MW at 60 Hz. As a leader in air-cooled technology, Alstom has set the trend with TOPAIR<sup>™</sup> by designing a simple, robust and highly reliable air-cooled turbogenerator resulting in low lifecycle costs for its customers. The largest air-cooled turbogenerator in operation is a TOPAIR<sup>™</sup> at 340 MW;
- TOPACK<sup>™</sup> covers a power output range from 40 MW to 150 MW at 50 Hz and from 40 MW to 90 MW at 60 Hz.



As for gas turbine turbogenerators, these steam turbogenerators are the result of continuous development that has pushed the limits of power output while maximising efficiency. At the same time, they are simple and easy to operate and maintain.

## **Environmental Control Solutions (ECS)**

Alstom is the world-leading supplier of air quality control solutions (AQCS) for power generation and many other industrial applications (source: Alstom). This wide range of air quality control solutions addresses existing and future emission-compliance needs for all traditional pollutants:

- control of sulphur dioxide (SO<sub>2</sub>): up to 99% reduction and above;
- control of nitrogen oxide (NO<sub>x</sub>): up to 95% reduction;
- control of particulate matters: down to 10 mg/Nm<sup>3</sup> or lower and PM 2.5 compliant;
- control of mercury emissions: above 90% reduction;
- control of other pollutants such as SO<sub>3</sub>, HCl, HF, dioxins and furans.

# CO, Capture and Storage (CCS)

Alstom focuses mainly on post-combustion and oxy-combustion technologies, as these applications cover both new build power plants and the existing installed base.

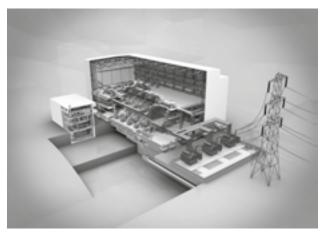
- Post-combustion capture technology separates CO<sub>2</sub> from the exhaust gases using a chemical solvent. Alstom has prioritised two technologies: advanced amines and chilled ammonia. These technologies can be applied to both coal-fired and combined-cycle gas-fired power plants.
- The oxy-combustion method burns the fuel in a mixture of oxygen and recycled CO<sub>2</sub> instead of air. This combustion produces a concentrated stream of CO<sub>2</sub> that can be easily separated and stored.
- Second-generation technologies, such as Chemical Looping Combustion (CLC) and Regenerative Calcium Cycle (RCC), are also being looked at because they offer the prospect of additional future benefits.

Alstom has implemented several pilot and demonstration projects: eight units have completed tests in the USA and Europe. Five units are in operation or in commissioning using oxy-combustion, chilled ammonia, advanced amines or second generation technologies.

Alstom has consequently engaged in the full commercialisation of this technology and is on track to deliver fully integrated CCS-enabled fossil-fuelled power plants to its customers across the world, well in time for the anticipated large-scale deployment of the technology into the 2020's and beyond.

In the medium term,  $CO_2$  utilisation (CCU) in the chemical and oil & gas sectors could also offer interesting spin-off opportunities for Alstom's  $CO_2$  capture systems.

### **Nuclear**



Alstom is the global leader in turbine island solutions for nuclear power plants: 40% of the world's nuclear power stations operating today use Alstom's technology (source: Alstom). The turbines with the highest output in the world today are four Alstom ARABELLE<sup>™</sup> turbines now in operation in EDF plants in France. This technology has also been chosen to equip the new nuclear power plant currently in construction at Flamanville (France), which will deliver the highest output in the world from one single reactor.

#### Nuclear solutions

Alstom offers integrated turbine islands as well as a wide range of nuclear specific products. The Group is the most experienced turbine manufacturer able to fully design, engineer and manufacture all the main equipment of a turbine island for any type of nuclear reactor.

Alstom's core competencies cover all phases of implementation of the power conversion systems and all levels of integration, starting from turbine island basic and detailed design, including general turbine hall layout, civil work interface studies, supply of mechanical and electrical equipment, as well as instrumentation and control systems, project documentation and customer training, erection up to commissioning and performance testing. On top of its product expertise on a stand-alone basis, Alstom can provide in-house Engineering, Procurement and Construction (EPC) capability to propose a fully integrated turbine island offer.

### Products

#### Steam turbines

Widely acknowledged as the most advanced in the market, the "halfspeed" ARABELLE™ turbine offers outstanding power output (900 to 1,900 MW) and uses advanced technology: welded-rotors, unique combined High Pressure / Intermediate Pressure (HP/IP) module, wide range of last-stage blade for each frequency (50 Hz and 60 Hz), compact arrangement for fewer bladed rows. The ARABELLE™ technology brings significant benefits for the plant's owner and operator, especially unparalleled efficiency, reliability and highest availability, resistance to stress corrosion cracking, longevity (60 years) and facilitates operation and maintenance, bringing down the overall cost of electricity production.

#### Turbogenerators

With an output range from 900 MW to 1,900 MW, in both 50 and 60 Hz markets, GIGATOP<sup>TM</sup> 4-pole, the turbogenerator behind Alstom's proprietary ARABELLE<sup>TM</sup> steam turbine, sets the benchmark for reliability and efficiency. Alstom's GIGATOP<sup>TM</sup> four-pole is the world largest turbogenerator in operation today.

#### Heat exchangers

Alstom also offers a comprehensive range of heat exchanger solutions, from consulting and field support to component supply and turnkey retrofit, for all kinds of power plants, steam, gas, solar, and nuclear.

Alstom's heat exchanger equipment is designed for up to 1,900 MW units, with an installed base of over 450 GW worldwide (source: Alstom).

The heat exchanger offering comprises three major product clusters: surface condensers, moisture separation/reheating equipment and feed-water heater systems.

#### Pumps

With more than 6,000 large pumps installed worldwide, Alstom has an unparalleled experience in designing, installing and maintaining large and specialised pumps for thermal power plants (circulating cooling water pumps, condensate extraction pumps, main and booster feedwater pumps).

#### Auxiliaries for nuclear islands

#### Emergency Diesel Generator (EDG) packages

In the last ten years, Alstom has installed over half of the world's integrated EDG packages for nuclear reactors, covering the whole emergency power range required, from 3 to 10 MW (source: Alstom). Alstom EDG packages are totally reliable, reflecting Alstom's in-depth expertise in power plant technology and extensive experience in EDG packages engineering.

#### Liquid Purification Systems (LPS)

Alstom has developed leading-edge solutions for treating waste emanating from a nuclear power plant. The Alstom liquid waste treatment system and the boron recycling system are state-of-the-art solutions to ensure that nuclear power stations are clean power generation plants. They benefit from unique Alstom-developed and manufactured technology such as the Alstom jet-tray gas stripper. Alstom has supplied such systems for French, British, South African, South Korean and Chinese nuclear power plants.

### Power automation and control solutions



This business is dedicated to the delivery of solutions for the automation and control of a power plant or a portfolio of power plants, using all types of generation fuels: steam, gas, nuclear and renewables.

Alstom's ALSPA® Series 6 product line includes a full range of products, systems and service solutions covering the entire control room with plant management operation and optimisation tools, plant and machine automation, asset management and online or remote monitoring and diagnostic systems.

These solutions aim at optimising the efficiency, quality, availability and safety of power generation plants and fleets, thus providing the means to obtain the best output from power plants, the right amount of power at the right time and the desired voltage or frequency in a protected and secure environment.

- Efficiency: Alstom offers solutions ensuring a power plant is running at optimal performance at all times. These include distributed control systems (DCS), machine-controlling solutions such as turbine governing and generator excitation, instrumentation and electrical balance of plant equipment.
- Optimisation: Alstom provides plant lifecycle and maintenance management solutions, as well as monitoring and diagnostic systems for rotating and non-rotating equipment of the plant. In addition, Alstom's portfolio includes advanced process control software and simulation tools to train plant operators, as well as test production scenarios for plant production scheduling optimization and fleet performance management.
- Flexibility: Alstom's control systems and solutions allow power plants to constantly adapt to the flexible generation demand characterizing today's power grid, in particular in adjusting to the surges of renewable power loads.
- Services: full range of products and services adapted to all needs for the installation and the maintenance of automation and controls solutions, starting from engineering, manufacturing, testing and system integration, through to training, lifetime extension or retrofit.

# **Thermal Services**

# Full and dedicated service provider across the entire plant

Having supplied equipment present in around 25% of the global power generation installed base (source: Alstom, including gas turbines, steam turbines, generators, boilers, HRSGs, air quality control systems, balance of plant and instrumentation and control), Alstom has the experience and offering to best support its customers' needs throughout the lifecycle of the plant, enabling their power plants to remain competitive through a changing market.

Through the acquisition and integration of various technologies, Alstom delivers effective solutions both for its own fleet and the fleet of other manufacturers. This leads Alstom's thermal services to a unique position which is further developed through significant and dedicated investment in research and development for the installed base, with focus on solutions that reduce the cost of electricity, minimise the environmental footprint and increase an asset's flexibility and lifetime.

#### Strong local presence

Thermal Power has the largest organisation dedicated to serving the installed base within the industry, counting over 30 centres of technical expertise including 5 reconditioning workshops, 7 service factories and mobile workshops.

Alstom's footprint and broad industry expertise enable it to support customers with strong technology and product portfolio, local service and engineering capabilities and quick access to expertise centres.



With 4 units serviced at Lanxi plant (China), Alstom passes 1,000 steam turbine cylinder retrofits worldwide.

#### Products for all fuels and all equipment

Alstom offers services for all types of equipment in gas, steam, nuclear and industrial plants. The Group has a comprehensive service and modernisation offer for its own equipment and other manufacturers':



GT13E2 MXL2 first implementation at South Humberbank PS (UK). GT26 MXL2 LPC Vane at Ringsend Power Plant, Ireland. GT24 MXL2 implementation at Bayside Power Station, Canada.

- Alstom gas turbines: Benefiting from the experience of a large installed fleet, Alstom delivers solutions to improve performance, reduce cost, extend lifetime and minimise emissions of a plant. Alstom's plant support centres, local expertise and workshops support customers to optimise their asset performance with customised service contracts, integrated plant services, state-of-the-art reconditioning, field services and solution packages for parts or upgrades. After successfully implementing the MXL2 upgrade package for the GT13E2, it was launched for the GT24 and GT26 gas turbines. The MXL2 leads to reduced cost and CO<sub>2</sub> emissions, while increasing service intervals, contributing also to significantly lower operating costs and improving both availability and power dispatch security.
- Gas turbines from other manufacturers: With dedicated resources and products, Alstom has the full capabilities to design and supply improved parts, field services, reconditioning, gas turbine upgrades and emission reduction solutions and long-term agreements for F-class, E-class and B-class gas turbines and combined-cycle plants.
- Steam turbines: Alstom has the capability to perform steam turbine services and retrofits with "impulse" (ITB) or "reaction" (RTB) turbine blading technology for Alstom and other manufacturers' steam turbines. With advanced solutions to improve performance and extend lifetime with minimal downtime and cost, Alstom is the global leader in steam turbine retrofits, and the only company to have successfully executed the retrofit of more than 1,000 steam turbine cylinders. Regardless of the original manufacturer and the existing turbine technology, Alstom's broad technology expertise allows customising solutions to match the customer's needs.
- Generators: Thermal Power's offering includes on-line solutions, in-situ inspections, smart repairs as well as fast rewind & upgrade solutions to minimise costs while maintaining asset reliability.
- Boilers & HRSGs: With the largest installed base in the world, Alstom
  offers a full scope of technical and engineering services from parts,
  outages and repairs to component upgrades and engineered solutions
   meeting today's growing environmental and market demands for
  the world's ageing power generation installed base. Alstom provides
  products and services for Alstom fleets, Alstom-licensed boilers and
  other manufacturers' equipment worldwide.
- Air quality control systems: Alstom has the complete range of solutions for electrostatic precipitators (ESP), fabric filters (FF), flue gas desulphurisation (wet FGD and dry FGD) and selective catalytic reduction (SCR) including advanced controls and inspection solutions and upgrades to meet new regulatory requirements and reduce cost.
- Nuclear conventional island balance of plant: With over 30 years of experience, Alstom offers a range of services for mechanical and electrical balance of plant including pumps, emergency generators, heat exchange systems and safety systems.

In addition, in-depth plant knowledge, experience and expertise in product and component integration enable Alstom to offer solutions at plant level to support its customers throughout the complete lifecycle:

 Plant assessments: Technical and economical assessments of existing plants, taking into account market drivers and customers' improvement strategy to help optimise investment decisions and improve competitiveness.

# **RESEARCH AND DEVELOPMENT**

In 2014, Alstom's R&D teams concentrated on customer-focused improvements to existing equipment, service solutions as well as new developments built on the "Voice of Customer" analysis, an in-depth process aiming at capturing customers' expectations, conducted by each business and product line:

- gas turbine technologies for higher firing temperatures and longer service life;
- combustion systems for more flexibility lower emissions compliant turn down;
- further optimised Steam Turbine blade efficiency and stage loading;
- plant configurations and layout for 700°c coal plants and associated materials validation;
- higher power density and efficiency generator components and processes;
- improved test facilities for components and complete systems and turbines;
- service solutions for Alstom and non-Alstom fleets.

Alstom Thermal Power's R&D execution centres are located throughout Europe, North America and Asia. In addition to its internal resources, Alstom actively works with leading academic institutions to access facilities, expertise and research talent across the world. Alstom has active R&D collaboration relations with more than 350 universities and technology-leading industry partners, and participates actively in all important associations and standard bodies.

In gas technologies, the R&D focus has been and remains on providing flexibility and increased combined-cycle efficiency. Thermal Power continues to focus its R&D efforts on selected technological fields that are essential for the successful development of the next generation of gas turbines and upgrade packages: GT mass flow, innovative blades, cooling air reduction, ceramic thermal protection system and advanced manufacturing techniques. In 2014/15, together with partners, Alstom completed the construction of a combustor test facility as expansion of the infrastructure at the German Aerospace Center in Cologne. The aim of the combustor test facility is to further increase the temperature capability of combustors while at the same time significantly reducing exhaust gas and noise emissions from gas turbines.

- Plant products: Modular "add-on" plant improvement products focusing on performance, environmental impact and flexibility.
- Plant retrofit: Key technologies optimising the entire plant in a retrofit project rather than just the original components (all of them are in-house).

For coal applications, the Sector's R&D ambition is to reach over 50% efficiency with reduced emission levels for large power plants, thanks to a long-term R&D strategic focus on advanced combustion, steam cycle and steam turbine blade technologies. In this area, Alstom's ultra-supercritical (USC) circulating fluidised bed (CFB) boiler technology has progressed and large USC steam turbines are now operating in Germany (Neurath, Boxberg) with very high levels of reliability. This technology allows higher flexibility and performance. Moreover, all components support a grid with high levels of intermittent renewables.

Thermal Power has been carrying out an intensive R&D programme over the past years to meet the technological and economic challenges of capturing the  $CO_2$  created by fossil fuel-based electricity production. The White Rose 500 MW Carbon Capture plant in the UK was selected for the NER300 and UKCCS funding schemes as a large demonstrator of CCS technology.

The chemical looping technology under development (allowing both full combustion with Carbon Capture, and partial combustion to Syngas according to demand) will prepare the next generation for CCS application.

In the field of nuclear, the Sector is paving the way for steam turbine generators adapted to future fourth generation nuclear reactors. Innovative concepts for power conversion systems and modular steam turbine solutions for emerging small modular reactors are under investigation. On a more short-term scale, a strong effort is focusing on design for manufacturability and cost reduction, but also turbine island modules and methodologies for short construction time.

In the Power Automation and Control Business, Thermal Power is focused on solutions that improve plant operation efficiency, enhance asset reliability and availability, support predictive maintenance strategies and optimise plant performance.

Another recent priority is plant availability improvement, through the development of fast inspection and repair technologies supported by advanced in-house robotic capabilities and the development of additive manufacturing technologies.

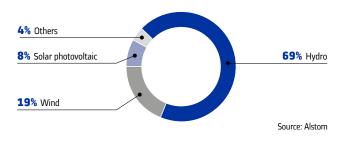
# **ALSTOM RENEWABLE POWER**

Alstom Renewable Power offers the most comprehensive range of renewable power generation solutions for integrated power plants covering hydroelectricity, wind, geothermal, biomass, solar, as well as tidal stream energies. In addition, it provides individual components including all types of turbines and generators, and has a full range of services, including plant modernisation, maintenance and operational support.

# INDUSTRY CHARACTERISTICS

The worldwide renewable installed power generation capacity was estimated in 2014 at around 1,680 gigawatts (GW), representing 28% of the total installed base.

**RENEWABLE INSTALLED BASE, 2014** 



### Market evolution

Renewable power markets have been strongly growing over the past decade, and are forecasted to represent 45% of the new power plants (in GW) to be ordered over the next decade (source: Alstom). New orders should be driven by existing markets such as hydro and onshore wind, but also by more recent ones such as offshore wind and solar.

The renewable power market as a whole has grown in 2014, and should remain solid in the next years (average ~80 GW expected without solar photovoltaic).

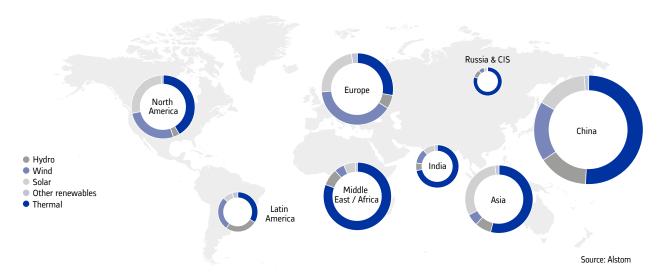
The new build hydro market rebounded in 2014 from low historical 2013 levels, despite postponement of large projects in China. A good level of orders in Latin America, Africa, Asia, Middle East and China more than compensated the limited activity in India and North America. China is expected to resume its large projects and land at an 8-10 GW market level in the coming years. It will continue to be the largest

market, representing approximately half of the total new hydro orders in gigawatts (GW) over the next decade, followed by the Latin American market. Further growth in hydro will also come from the service and retrofit market driven by the ageing installed bases in North America, Europe and Russia. Roughly half of the overall hydro market in value is expected to be driven by service and retrofit activities.

The onshore wind market grew by around 10% in 2014, increasing in Europe, Americas and China. In the USA, the extension of the Production Tax Credit until the end of 2014 resulted in a strong market volume in the United States. Latin America saw a dominance of wind against hydro, and was also an active contributor to the onshore wind recovery, particularly in Brazil where wind power is now competitive with other energy sources. China remained the largest wind market in GW, followed by North America, Europe and Latin America.

The offshore wind market continued to develop, largely in Europe in 2014. Going forward, costs reduction through the learning curve will be the key driver to grow the technology over the next decade in Europe, China and Asia (source: Alstom).

The "new energies" markets (geothermal, biomass, solar and marine energies) moved up in 2014. In geothermal, the market was back to historical level after two low years on the row. In concentrated solar power (CSP), the market is still in its early phase with few orders in Africa and in Israel, where Alstom got its first reference order in CSP tower technology. The development of storage solutions, performance and cost optimisations as well as hybridisation will be key drivers in ensuring competitiveness and growth of this segment. Geothermal and biomass new power plant markets should increase by 50% over the next decade (source: Alstom). Finally, the ocean market, currently in the development phase with numerous announcements of pilot farms, is expected to reach around 500 MW per year within ten years, with tidal power to emerge predominantly over the period and wave technology possibly taking off later (source: Alstom). MEDIUM TERM GLOBAL POWER MARKET FORECAST AVERAGE 240-270 GW P.A.



## **Market drivers**

Demand for power generation equipment is mainly driven by environmental targets and regulations, subsidies and incentives schemes, as well as the ageing of the installed base. Other factors such as economic growth (especially for large hydro plants), fuel prices and availability, as well as energy management are also, to a lower extent, elements shaping the power market.

Harnessing renewable energy is a complex matter. For renewable power, in order to experience long-term sustainable growth, developers must eventually target what is commonly referred to as "grid parity", which is achieved when the price of electricity produced by solar, wind or any renewable energy equals the price of electricity from the grid. In remote or particularly favourable areas, electricity produced locally from geothermal, solar or wind energy is already cheaper than conventional sources of electricity requiring new distribution lines to be built and connected to the main transmission grid. But in most cases and technologies, this is not yet the case, and for now it can only be achieved through support schemes, such as feed-in tariffs or tax incentives.

The second challenge lies in the intermittent nature of most renewable energies. Typical examples are low solar radiation during cloudy days and varying wind patterns. The intermittency of renewables is pushing energy providers to look at ways of storing energy to guarantee stable supply or to have back-up power ready to respond to weather conditions volatility. This characteristic of renewable energy becomes more evident as the share of grid-connected renewables increases, spurring challenges and developments in both energy management and grid infrastructure. Hydropower has a strong role to play as an efficient way to store energy on a large scale.

#### Climate Change – Opportunities and political targets

In September 2014 the "Better Growth, Better Climate: The New Climate Economy Report" released by a commission of 24 global leaders from government, business, finance and economics in 19 countries concludes that governments and businesses can now improve economic growth and reduce their carbon emissions together. Rapid technological innovation and new investment in infrastructure are making it possible today to tackle climate change at the same time as improving economic performance.

The challenge of unprecedented risks due to climate change appears obvious. The strong global economy prior to the financial crisis led to a considerable increase of greenhouse gas (GHG) emissions. Most of it would be a result of growing use of fossil fuels combined with other sources such as agriculture, deforestation and industry. Continuing the current trend of increasing emissions could result in a rise of the average global temperature of more than 4°C above pre-industrial levels. This would be more than twice the 2°C rise which world leaders have agreed on in order to avoid the most dangerous impacts of climate change. Considering the evidence presented by the Intergovernmental Panel on Climate Change (IPCC) the report points out that a delay in managing climate risk will only worsen the problem. The report's central insight is that many of the policy and institutional reforms needed to invigorate growth and improve wellbeing over the next 15 years could also help reduce climate risk. The identified key drivers are:

• raising resource efficiency;

THREE CRITICAL ECONOMIC SYSTEMS AND THREE KEY DRIVERS OF CHANGE

 Cities
 Land use
 Energy

 Resource efficiency
 Infrastructure investment
 Innovation

HIGH-QUALITY, INCLUSIVE AND RESILIENT GROWTH = BETTER GROWTH

Source: The New Climate Economy Report, September 2014

• investing in low-carbon infrastructure: Low-carbon forms of

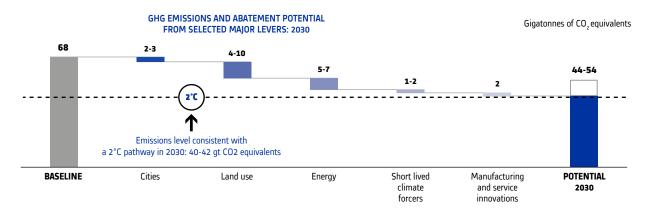
• stimulating innovation: Innovation is a central driver of economic

are crucial when reducing GHG emissions;

growth in a world of limited natural resources.

infrastructure, particularly in energy supply, buildings and transport,

GOOD ECONOMIC ACTIONS TOWARDS THE WAY OF A 2°C PATH



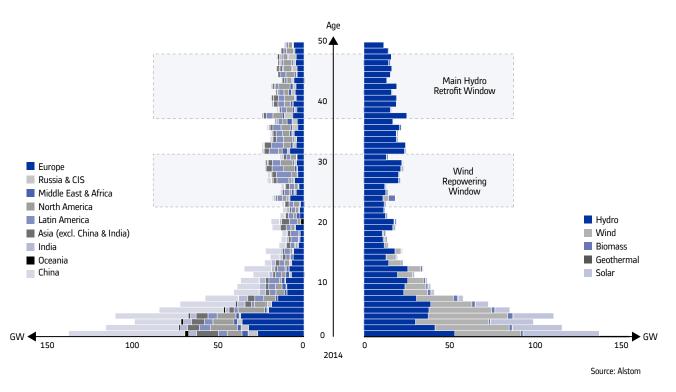
Source: The New Climate Economy Report, Septembre 2014

#### Ageing installed base of power plants

The ageing installed base and increasing fuel prices should lead to a higher demand for retrofit, which is becoming a growing part of the renewable power market. The retrofit business window has been around for decades in the hydro business and has benefited power plant manufacturers such as Alstom. The Group believes that the large worldwide ageing installed base will be a significant source of future growth for its service and retrofit activities, especially in Europe and in the USA, but also increasingly in other regions such as Asia. In order to address rising power demand and extend the lifetime of plants, utilities strive to replace components in order to maintain or increase current levels of installed capacity. The growing number of old plants will therefore continue to drive the market for servicing and retrofits.

By carrying out an integrated analysis of power plant equipment, operation and maintenance, individual plants can be improved to run more efficiently, thus cutting, enhancing performance and reducing carbon footprint.

#### AGE PYRAMID OF RENEWABLE INSTALLED BASE (1,680 GW IN 2014)



# COMPETITIVE POSITION

In hydroelectric power generation, the main competitors are Voith Hydro, Andritz Hydro, Toshiba as well as Harbin, Dongfang and BHEL.

Alstom wind's main competitors are Vestas, Gamesa, Siemens, General Electric, Suzlon, Enercon and Sinovel.

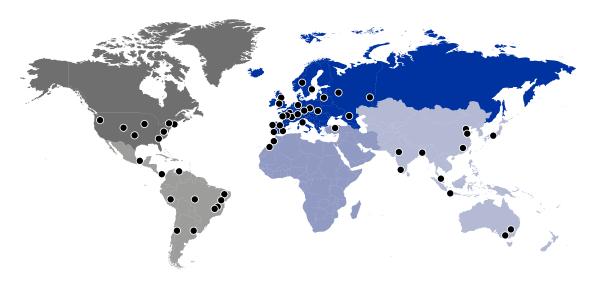
In geothermal power generation, Alstom faces competition from Ansaldo and Japanese suppliers such as Mitsubishi Heavy Industries, Toshiba and Fuji on conventional steam turbine and component supply. In solar thermal power, Alstom and its partner BrightSource Energy compete mainly with Abengoa, Sener and Solar Reserve. The competitive strength of Renewable Power includes its strong global presence and references, a broad portfolio of existing and under development renewable energy technologies, continued investment into R&D, project execution expertise and strong relationships established with all key power generators worldwide. Renewable Power technologies offer an improved availability and increased efficiency of energy conversion as well as lowered construction and maintenance costs. Its integration and control solutions also offer the ability to manage renewables within a complex fleet.

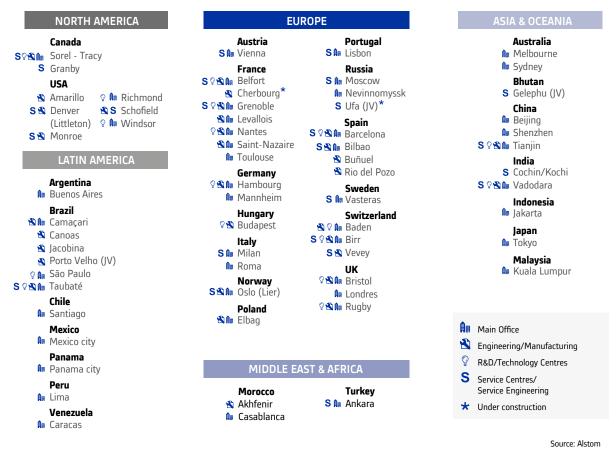
# OFFERING

Renewable Power's offering is organised around three levers driving Alstom's product and portfolio development in order to maximise returns of customers' assets over the entire lifecycle by:

- reducing the cost of electricity generation to ensure assets competitiveness;
- lowering the environmental footprint to make these assets increasingly eco-friendly;
- increasing flexibility and reliability to ensure assets can respectively adapt to fluctuating electricity and fuel markets conditions as well as generate the required electrical load through maximised reliability, availability and maintainability.

#### MAIN INDUSTRIAL, ENGINEERING AND R&D CENTRES





### Hydro power

With more than 25% of the global hydropower installed base, Alstom offers a comprehensive range of innovative services and equipment for power generation. Alstom's expertise covers all hydropower schemes from water to wire: from designs to services, from small to large, from run-of-river to pumped storage power plants, from individual equipment

to complete turnkey solutions for new projects and for the installed base. Alstom's technology is central to many record-breaking hydropower plants including the world's five highest capacity hydro installations in operation: Three Gorges (22.7 GW) in China, Itaipu (14.8 GW) in Brazil, La Grande (13.8 GW) in Canada as well as Guri (12.5 GW) in Venezuela and Tucurui (8.4 GW) in Brazil. Alstom is recognised for its project management expertise. As an integrator, the Group offers a single point of contact to coordinate and interact with all related parties and can act as consortium leader for electro mechanical and hydro mechanical equipment, taking full responsibility to optimise the plant as an integrated system.

Alstom's global footprint spans a network of research and development capabilities along with engineering, manufacturing and project management offices around the world, located in close proximity to its customer base. Alstom has a network of six full-value chain entities, located in its main markets, on three continents.

#### **Turbines and generators**

Alstom provides a full range of hydro turbines with a wide range of power capacities, including Francis, Kaplan, bulb, propeller, Pelton and pump turbines as well as speed governors to meet all customers' needs and applications.

Alstom's hydro generator range is composed of large, medium and small hydro generators, bulb generators, asynchronous and synchronous motor-generators and excitation systems.

With a market share close to 40% (source Alstom, 2004-2013), Alstom is leader in pumped storage plants (pump turbines and motor generators). Pumped storage plays an important role in today's energy market due to the development of intermittent energy sources, such as wind and solar, which increase the need for storage and power regulation.

#### Control systems and balance of plant

Alstom's core competencies in control systems span over all types of hydro power plants to improve power production. In this field of strategic products for power generation applications, Alstom has developed and qualified specific control system solutions as well as dedicated machine control equipment, in order to guarantee safe, optimised power plant operation.

#### Hydro-mechanical equipment

Alstom designs and manufactures hydro-mechanical equipment for hydro power plants as well as for waterways and irrigation systems.

#### Service and retrofit

Alstom supports plant operators, owners and investors to reduce the total cost of ownership thanks to a comprehensive asset management programme. The Hydro PlantLife® portfolio offers the broadest range of customised and off-the-shelf service and retrofit solutions, suitable for fleets, plants and components, covering all technologies, from turbines to balance of plant. Hydro PlantLife® aims at maintaining plant availability, keeping the plant running at optimum efficiency and increasing plant performance throughout its lifecycle. Based on state-of-the-art technology, Alstom solutions respect the latest environmental regulations and are suitable for Alstom and other Original Equipment Manufacturer equipment, regardless of the power range of the hydro power equipment.

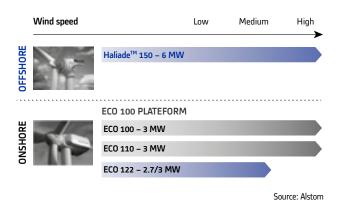
Because proximity is key to providing the level of service excellence that Customers expect, Alstom operates in more than 70 countries, ensuring a direct access to experts and optimal support through its global network of around 25 local service centres. Dedicated to providing a quick response, regardless of Customers' geographical location, Alstom's local teams are on hand to service Customers, bearing in mind cultural practices and requirements.

#### Wind Power

Alstom offers integrated wind farm solutions, covering site development activities, system or key component design and manufacturing, assembly, installation and services. The Group offers onshore and offshore wind turbines ranging from 1.67 MW to 6 MW, providing solutions for all types of geographical locations and wind conditions.

To date, Alstom has installed more than 3,500 wind turbines in over 300 farms worldwide with a total capacity of more than 6.5 GW.

All Alstom wind turbines feature the ALSTOM PURE TORQUE® concept, a unique rotor support concept protecting the drive train components from deflection loads, delivering higher reliability, higher operational availability and lower maintenance costs.



#### Onshore wind power solutions

The ECO 100 platform is a product solution, offering three rotor diameters with a power output of 2.7 to 3 MW: 100 metres (ECO 100), 110 metres (ECO 110) and 122 metres (ECO 122), allowing high yield and leading efficiency across all wind classes. The ECO 100 platform is an extensively proven platform with more than 3,500 MW installed or under construction worldwide (as of 31 December 2014).

Alstom's ECO 100 platform allows developers to select the best rotor location for each specific site. The combination of two or even three ECO 100 platform wind turbine models on a wind farm has been named by Alstom as POWEROF3<sup>TM</sup> concept. This unique offering optimises each project's capacity factor by up to 20%. In addition, having one platform with various models enables Alstom to provide common spare parts, standardised operation and maintenance procedures for the whole site, allowing a lower cost of energy in a wide range of wind projects.

#### Offshore wind power solutions

The HALIADE<sup>™</sup> 150-6 MW direct-drive offshore wind turbine is the first new generation of large offshore wind turbine, suitable for all offshore conditions. Each HALIADE<sup>™</sup> 150-6 MW unit produces enough electricity to supply about 5,000 households.

Alstom is collaborating with Dominion on a DOE offshore technology demonstration project off the coast of Virginia. In December 2013, Alstom signed its first offshore commercial contract outside of Europe, for the supply of five HALIADE™150-6 MW turbines to Deep Water Wind for their 30 MW Block Island project off the coast of the state of Rhode Island.

Floating wind energy provides an innovative alternative for enhancing the energy potential of maritime settings that are too deep to install fixed-bottom foundations. In October 2014, Alstom joined DCNS to found a sector of excellence in the floating wind energy business. The partnership agreement aims at developing and then commercialising an integrated system for a semi-submersible floating wind turbine delivering 6 MW.

#### Services

Alstom's full range of service capabilities can provide spare parts, repair as well as on-site field services up to and including long-term operating and maintenance solutions. A modular approach covering manpower and materials for corrective, preventive and predictive maintenance tasks means that customers can also select the optimal combination of services to meet their specific needs.

Based on over 30 years of experience in wind turbine maintenance and on the latest developments in industrial communications, Alstom's Supervisory Control and Data Acquisition (SCADA) system lies at the heart of its enhanced operation and maintenance strategy. WindAccess™ is a web-based tool, which provides remote access to wind turbine data. By using this product, the performance of an individual wind turbine or the whole wind farm can be studied and optimised in real time.

Alstom has recently developed a new wind farm control system, called Alstom Wind e-control<sup>™</sup>, that provides a fast and accurate method of active and reactive power regulation to comply with the most demanding grid requirements, providing very high flexibility and adaptability in order to contribute to grid stability.

#### **New Energies**

#### Geothermal

With more than 50 years of experience, Alstom has built a total capacity of close to 400 MW to date in geothermal energy.

Alstom can provide tailored plant configurations for both 50 Hz and 60 Hz electricity markets, starting with its smallest plant layout of approximately 15 MW. Alstom offers steam turbine and generators, condensers, hotwell pumps, instrumentation and control systems. In the

medium size range of 35-65 MW, Alstom can provide a modular plant based around its well-proven single-flow turbine module. For larger steam fields with proven steam resources, Alstom offers plant sizes in the 65+ MW range based around a double-flow turbine configuration, which offers both excellent performance and economies of scale.

In addition, Alstom offers contracts to cover the day-to-day running and scheduled maintenance of the plant. Overall, Alstom can tailor a package to exactly suit its customer's plant and business strategy.

#### Solar

Solar thermal, also known as Concentrated Solar Power (CSP), is becoming a key part of the renewable solutions for power generation.

Alstom has accumulated years of experience in steam turbines as it sold its first steam turbines for solar thermal power plants in the late 1980s. Alstom's state-of-the-art power blocks can be used for the three main technologies of Concentrated Solar Power: parabolic trough, linear Fresnel and tower. Each concentration method, requiring direct radiation from the sun, is capable of producing high temperatures and correspondingly high thermodynamic efficiencies, but they vary in the way in which they track the sun and focus light. Alstom offers both its geared reaction turbine (GRT) 5-65 MW and mid-sized turbine (MT) 50-100+ MW for solar power generation.

Alstom provides a comprehensive range of flexible integrated solutions from complete turnkey CSP plants to individual components for solar power plants based on its in-house receiver, turbine and generator technology and its proven engineering, procurement and construction skills. Alstom has developed the largest central receiver boiler, or Solar Receiver Steam Generator, capable of powering a 250 MWe CSP plant as well as molten salt central receiver, enabling fully dispatchable solar generation.

The CSP Tower technology, developed by Alstom in partnership with BrightSource, employs thousands of mirrors to reflect sunlight onto a central receiver atop a tower to heat a transfer fluid (water or molten salts). Alstom believes in the potential of this CSP Tower technology in the appropriate parts of the world (United States, Chile, North and South Africa, Middle East, Australia, India) both for producing power and boosting existing or new combined-cycle or steam power plants. With molten salts energy storage, sizable to allow potentially 24 hours continuous operation, the technology helps ensuring grid stability after sunset.

#### Biomass

Alstom provides fuel-tailored solutions for biomass plants with industrial turbines and customised generators adapted to the demand of biomass firing. It is leveraging the engineering, procurement and construction (EPC) experience built by its Steam Business and expertise of in-house key components, like steam turbine generator (STG), boiler, distributed control system (DCS), Air Quality Control Systems (AQCS) to provide the optimised integrated solution. In addition, Alstom specialises in dedicated biomass co-firing systems for large coal power plants. Alstom is also working with clients on 100% biomass conversion on utility class boilers.

#### Tidal stream energy

Tidal stream energy technology refers to extracting electrical energy from marine tidal currents. Tidal stream turbines are governed by the same basic principles that apply to traditional wind turbines but take into account the fact that water is about 800 times denser than air, hence more compact turbines at a same power rating. A major advantage is the complete predictability of this renewable energy source, following the successful testing of a 500 kW turbine.

Alstom has been testing (1) a 1 MW tidal turbine in different operational conditions since 2013. After its progressive ramp up to full nominal power, the turbine has successfully injected over 1 GWh of electricity to the grid, which allowed to validate the performances and power curve, design tools, installation process as well as demonstrating autonomous running. Having taken advantage of this experience, Alstom offers an even more efficient, cost-effective and easy to maintain tidal turbine<sup>(2)</sup>: the Oceade™ 18-1.4 MW. With a rotor diameter of 18 metres, it has a nominal power of 1.4 MW and three variable pitching blades. It is equipped with plug-and-play modules on rails, easily accessible through an inspection hatch at the rear of the nacelle to enable faster assembly and maintenance. This buoyant turbine is easy to tow to and from the operating site avoiding the need of heavy lift at sea. Timeframe of installation or retrieving is reduced, as well as maintenance costs since there is no need for specialist vessels or divers. Moreover, the unit rotates to face the incoming tide at an optimal angle and thus extract the maximum energy potential.

In December 2014, Alstom has been chosen, together with GDF SUEZ, to equip a tidal pilot farm at Raz Blanchard with four Oceade<sup>™</sup> 18-1.4 MW tidal turbines, as well as an Alstom electrical subsea hub<sup>(3)</sup>. This represents a decisive step towards setting up commercial operations in tidal energy.

#### Industrial steam turbines

Alstom is a global leader in steam turbine technology with over 100 years' experience in manufacturing, delivering, installing and servicing steam turbine-generator sets. It has delivered more than 1,000 industrial steam turbines of below 100 MW, totalling 17 GW in installed capacity worldwide.

With highly efficient components and customisable cycles to maximise overall plant efficiency and flexibility in operation, Alstom offers two industrial steam turbine product lines suitable for a wide variety of applications such as biomass, waste-to-energy, concentrated solar power, geothermal, cogeneration for industrial applications, independent power producers and utilities:

- With high reliability and proven technologies, the geared reaction steam turbines feature highly flexible modular concept that comes in a plug-and-play package to reduce installation and commissioning time and costs, providing optimised solutions for efficient steam production.
- The advanced mid-sized steam turbines comprise a flexible modular concept, proven technology and high efficiency. Thanks to the flexibility of its design, it is available in reheat and non-reheat configurations with axial and downward exhaust options allowing it to be integrated into any plant configuration.

### **RESEARCH AND DEVELOPMENT**

Alstom's researchers and engineers work in collaboration with partners and local universities with a view to devise effective solutions in terms of cost, performance, flexibility and environmental footprint. The inherent flexibility of hydro makes it an ideal complement to intermittent renewable energy sources of power generation. However, intermittency requires today's hydraulic machines to withstand more starts and stops and to operate at wider ranges of power outputs, putting more stress on the machines. To design machines that can withstand these stresses, Alstom has R&D programmes focused on mechanical fatigue and hydraulic behaviour, using calculations backed up by site experience. Creating in-house Alstom hydro product designs, Global Technology Centres contribute to breakthroughs in the fields of power regulation, energy storage, variable speed technologies, composite materials, services, environmental solutions and the next generation of high efficiency and flexible turbine and generator designs adapted to the evolving requirements of the market. Located close to its customers around the world, Alstom's Global Technology Centres provide valuable feedback of experience from projects. A network of 6 centres located in Alstom's main markets is in operation today:

- Grenoble (France lead centre), dedicated to turbines with a new test platform dedicated to tidal bulb turbines;
- Birr (Switzerland), focused on generators;
- Vadodara (India), dedicated to Pelton turbines and sand erosion solutions with a dedicated Pelton test platform;

<sup>(1)</sup> Part of the ReDapt (Reliable Data Acquisition Platform for Tidal) consortium project, implemented and co-funded by the Energy Technologies Institute (ETI).

<sup>(2)</sup> Tidal turbine development receive the support of ADEME and FEDER (Fonds Européen de Développement en Région).

<sup>(3)</sup> The choice is part of the Investissements d'Avenir Scheme, calling for €47 billion to fund innovation in France and increase its growth potential: www.ademe.fr – www.investissement-avenir.gouvernement.fr.

- Sorel Tracy (Canada), focused on retrofit/modernisation;
- Taubaté (Brazil), specialised in Kaplan turbines with a dedicated Kaplan test platform, and in solutions for low head hydro power plants;
- Tianjin (China), specialised in medium Francis turbines.

Alstom has made continuous advancements in pumped storage technology which has been reflected in recent wins such as Gilboa (Israel) and Qiongzhong (China), as well as the industry's first conversion of a fixed speed pumped storage unit to variable speed at EDF's Le Cheylas (France) plant as part of the European Commission-funded eStorage project.

In the field of onshore wind, the ECO 100 platform offers high yield and leading efficiency across all wind classes. Latest evolution of this platform, the ECO 122 was specifically designed to harness medium and low winds thanks to its 122 metres rotor diameter. This new generation of onshore wind turbines also features technological innovations, particularly with regards to tower height and rated power, with a model now commercially available in 3 MW, complementing its version in 2.7 MW. Through those latest changes, the ECO 122 allows wind farms located on less windy sites to offer better yields.

In offshore wind technologies, the HALIADE<sup>™</sup> 150 is a new generation of large 6 MW direct drive turbines specially designed to meet the needs of the French, German and UK markets, as a first step. Two prototypes are installed in Europe, pre-series will be installed in the US with series production expected to start in 2015.

The HALIADE<sup>m</sup> 150-6 MW turbine incorporates dedicated offshore technology in collaboration with some of the industry's leading component suppliers:

 The ALSTOM PURE TORQUE® technology protects the generator and improves its performance by diverting unwanted stresses from the wind safely to the turbine's tower through the main frame.

- With no mechanical gearbox coupled to the generator, the turbine consists of fewer rotating parts, increasing reliability, maximising turbine availability and reducing maintenance costs. The use of a permanent magnet generator (PMG) leads to better generation efficiencies and even greater overall mechanical reliability. The innovative "Advanced High Density" direct drive PMG is a more compact and lightweight design compared to earlier generation direct drive systems.
- Using 73.5-metre turbine blades jointly developed with LM Wind Power, the 150-metre rotor diameter combined with 6 MW rated power maximises the capture of energy. The turbine generates up to 40% more electricity per kg of material used than today's offshore machines (source: Alstom).

In the domain of solar energy, Alstom pursues several R&D product and technology programmes leveraging its experience in traditional power generation technologies. The current Alstom CSP offering focuses on a range from 50 to 250 MWe, with potential for project-specific extensions. Technology evolution is designed, tested, validated in cooperation with primary institutes and universities as well as in Alstom test facilities.

The same principle of providing market-responsive, performing, effective and reliable optimised pre-engineered solutions applies for Alstom development in geothermal and biomass products, where Alstom exploits its integration experience and turbine and turbogenerator portfolio.

Alstom ensures the proper level of cross-fertilisation between the different units of Renewable Power as well as with the Group to achieve the full leveraging of its unique technological platforms (for instance, tidal technology using both hydro and wind competencies, CSP technology leveraging steam turbine existing expertise).

## ALSTOM GRID

Alstom Grid has one clear vision: to develop innovative solutions for a flexible, reliable, affordable and sustainable electrical grid everywhere. Alstom designs, manufactures, installs and services the power transmission and distribution products as well as systems that empower the planet's low carbon economy.

The Sector boasts a complete portfolio of power equipment and software solutions for the efficient transmission of electricity to serve its customers across the entire energy chain.

With more than 130 years of experience, Alstom Grid has played a key role in the development of electrical transmission and distribution grids.

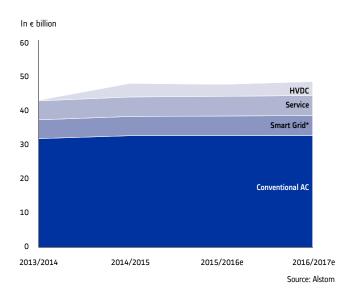
### **INDUSTRY CHARACTERISTICS**

#### Market evolution

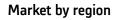
Services and Smart Grid solutions should grow at a moderate pace, while the High Voltage Direct Current (HVDC) market is expected to stay at high level ( $\sim \epsilon 4$  billion/year). A flat Alternative Current (AC) transmission market is expected in the coming years. Increased exchange rate volatility and low oil prices could impact the overall market value.

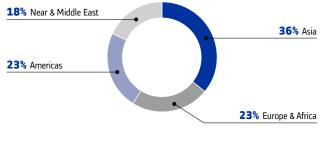
#### Market by segment

#### WORLDWIDE MARKET EVOLUTION



(\*) Excluding new Smart Grid markets (advanced metering infrastructure, meters and distribution automation).





Source: Alstom

In Europe, market growth is supported by the expansion of renewable energy (onshore and offshore wind farms) as well as the development of Supergrids (country interconnections, HVDC highways) and Smart Grids.

The European transmission infrastructure has evolved, mostly driven by European Commission's "20/20/20" commitment (20% reduction in greenhouse gas emissions; 20% of EU energy to come from renewable generation; 20% improvement in energy efficiency). Major renewable generation projects have been launched, creating the need for new transmission capabilities, and which also require the integration of power electronics solutions into the existing grid and/or the modernisation of traditional transmission equipment. In Germany, this also brings development plans for power highways to transmit offshore wind energy down to the southern part of the country to reach consumers.

The Russian market was strongly impacted by the economic crisis in 2014/15.

With the exception of some countries, Africa is mostly contributing to market growth through fast-developing economies, sustained urbanisation and the support of international financial institutions. Africa is an area of major investments due to massive needs in transmission and rural electrification. The Middle East market has increased significantly in 2014/15 mainly due to Saudi Arabia's infrastructure and Qatar's investments.

The market forecast for China remains stable at high levels for the coming years. The main drivers are High Voltage Direct Current (HVDC), Ultra High Voltage Alternating Current (UHVAC) and the modernisation of rural networks. Furthermore, key utilities in this country are deploying special efforts on Smart Grid development.

In India, the need to reinforce grid security, stability and efficiency has fostered investments in UHVAC (765 kV), HVDC and Smart Grids.

In North America, the market is supported by economic growth, infrastructure renewal programmes and tie-ins between renewables and the Oil & Gas sector. Alstom Grid was awarded three large HVDC projects in Canada in 2014/15 and renewable generation programmes will continue to create opportunities for large HVDC projects.

In Latin America, the market is driven by very large infrastructure projects for hydro and wind power, especially in Brazil. HVDC interconnections are needed to stabilise the continental network and long-distance HVDC lines needed between large power sources and remote points of consumption. Mining and industrial investments are starting to recover in Chile, Peru and Brazil.

#### **Market drivers**

Four main drivers for market growth have been identified in the medium term.

## Global economic growth and electrification in emerging countries

There is a strong link between the growth of a country's gross domestic product (GDP) and the increase in electricity consumption per capita. This is frequently seen in emerging economies, and there are several examples of massive investments in the extension of electrical grids, both to sustain industrial production and to improve access to electricity for the entire population.

An increase in electricity production in a country will directly impact growth of the transmission market and drive the development of ultrahigh voltage alternative current (AC) and direct current (DC) grids.

## Infrastructure renewal and modernisation in mature countries

In many mature economies, electrical grid infrastructures were built following strong investments in the 1970s and are now coming to the end of their operational lifespans. It is time to progressively renew this installed base and modernise the grids. This market constraint requires investments in grid infrastructures, creating business opportunities for equipment suppliers. There is demand for ever more efficient products, with less impact on the environment, and equally for more digital equipment using open communication protocols, as well as asset management solutions.

## Integration of low-carbon energies driving the development of Supergrid and Smart Grid

Today, over 40% of power is generated from coal-fired plants and only 5% comes from wind or solar. Yet by 2035, renewable energy sources are expected to account for more than 30% of all power generation (source: IEA).

Renewable energy sources have less impact on the environment, but their intermittent nature makes integrating such energy into the network quite challenging. These energy resources, which are decentralised and small-scale, drive demand response and energy storage technologies, making the distribution networks more intelligent and more complex.

#### Supergrid: evolving towards stronger networks

The energy needs of the modern world are higher than ever: significant power is required for electro-intensive consumer electronics, large data centres, electrical cars, etc. Additionally, increasing demand for highly reliable power supplies make the Supergrid (networks which transcend regional, country and even continental boundaries) especially relevant.

Many countries use different types of electrical current across the grid: AC, which is flexible, or DC, which is more efficient. Combining the two ("Meshing") optimises the benefits of each system, as a meshed grid is a stronger, interconnected network.

In the future, the Supergrid will need to be efficient, easy to maintain, and flexible enough to integrate intermittent renewable energies.

### Smart Grid: the information technology era of the grid industry

Since the beginning of the 1990s, environmental policies have brought about ambitious development plans for low carbon and renewable electricity sources. The new technologies introduced by Smart Grids are creating more efficient ways of operating electricity flows, ensuring the stability of the electrical grid when it receives an intermittent supply of electricity, or optimising network control and interconnecting assets through digital equipment. Furthermore new end-user behaviour, such as the will to control their own electricity consumption or the use of electrical cars, has led to more distributed energy equipment needs.

## More stringent requirements for power supply reliability, security and efficiency

Consumers' requirements for their energy supply are multiple. Hospitals or air-traffic control rooms need reliability; energy-intensive industries need high power capacities to operate. In all cases, the security of generation – guaranteeing a consistent, seamless energy supply – is critical to avoid power outages.

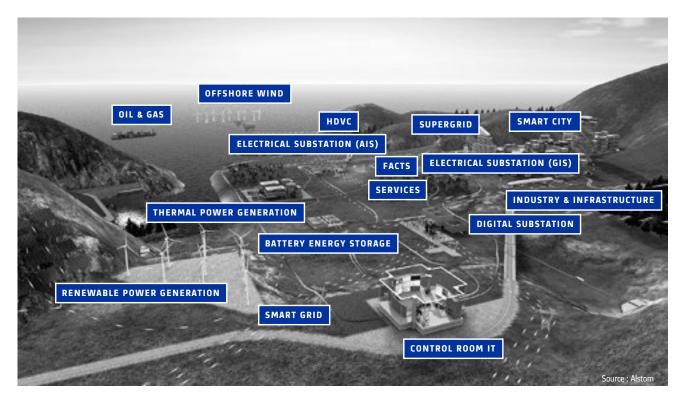
## **COMPETITIVE POSITION**

Alstom Grid, ABB and Siemens are the three leading global players in the transmission market. Emerging players from Asian countries such as Korea, China and India are currently extending their offer and their geographical reach. Alstom Grid has a number of fundamental advantages when compared to its competitors: high-quality products, expertise in engineered solutions, an ambitious innovation policy and a global footprint. When combined, these advantages enable Alstom to provide a solid and highly suitable response to market demands.

### OFFERING

Alstom Grid has a wide range of solutions for various segments including oil and gas, mines and metal, rail and infrastructures (such as medical centres and data centres), as well as cities and municipalities.

#### A COMPLETE PORTFOLIO



Alstom Grid is active on all continents, with close to 90 manufacturing or engineering sites worldwide. This international manufacturing footprint puts Alstom Grid close to its customers, enables global competitiveness and allows it to develop solutions adapted to its clients' specific requirements and needs.

#### MANUFACTURING AND ENGINEERING SITES WORLDWIDE



With over 50 local service centres, five oil analysis laboratories and 21 technical institutes in over 30 countries, Alstom Grid continues to expand its services footprint, in several regions including North America and India.

#### High voltage substations and products

#### **Turnkey systems**

Alstom Grid provides complete turnkey engineered solutions for high voltage (HV) substations for utilities, power generation companies and industries in both alternating and direct current, bringing together the right mix of high-voltage products through expert engineering and full project management. With bases of operation in 35 countries across the world and over 2,000 engineers, the Company's expertise and project management talents are strategically positioned where the customers need them the most.

#### Air-insulated switchgear (AIS)

Air-insulated Switchgear (AIS) is a collective term covering the complete, compact and environmentally-friendly portfolio of high voltage primary equipment for air-insulated substations, including most of the main elements that make up an outdoor electrical substation. Alstom's AIS portfolio includes circuit breakers, instrument transformers and disconnectors that use air-insulation technology. It also includes solutions for controlling, and monitoring installations and special generator circuit breakers for power generation. These elements connect the various parts of a substation, protect the equipment and people, and measure the energy flowing through them.

With an installed base of more than 220,000 products in service worldwide, Alstom Grid is recognised as a leader in the air-insulated switchgear market for conventional and new solutions such as digital installation and compact modules.

With its ever-expanding and innovative product portfolio (from 72.5 up to 1,200 kV), Alstom Grid provides state-of-the-art high voltage products and services to its customers worldwide, in order to secure the transmission of energy from the power station to the consumer, with both high safety and operational excellence.

#### Gas-insulated substations and Gas-insulated lines (GIS & GIL)

Gas-insulated substation (GIS) and gas-insulated lines (GIL) use SF<sub>6</sub> instead of air as insulating medium. As in any substation, a GIS includes circuit-breakers, disconnectors, earthing switches, current and voltage transformers, etc. Gas-insulated substations are compact enough to be installed indoors, thus enabling installation to implement substations in the most demanding locations, be it in specific as well in terms of ambient conditions (urban areas, regions with sand, pollution, seismic activity, etc.). They are also well adapted to sites where the overall footprint must be kept low.

Alstom Grid has delivered over 22,000 GIS bays to 2,500 substations, and over 200 total kilometres of gas-insulated lines, to customers in 100 countries and for voltages up to 800 kV. Thanks to five decades of technical leadership and operational experience, Alstom Grid has a prominent position, with an extensive GIS and GIL range that can meet the most demanding criteria.

In 2014, Alstom Grid unveiled  $g^3$ , "green gas for grid", a revolutionary alternative to SF<sub>6</sub> gas offering a 98% less impact on global warming than SF<sub>6</sub>. Alstom's  $g^3$  is the foundation for the "greenest" GIS and GIL solutions ever.

#### **Power transformers**

Alstom Grid designs, manufactures, tests and commissions:

 all types of power transformers from medium to ultra-high voltage (765 kV AC and 800 kV DC) and from small (5 MVA) to very large power ratings (1,500 MVA);

- a wide range of bushings up to 1,100 kV AC and 800 kV DC for all types of applications;
- on-line condition monitoring systems for power transformers.

It has also developed eco-efficient low-noise Green Power transformers providing concrete environmental benefits and energy efficiency.

Power transformers industrial footprint includes eleven dedicated manufacturing units located in Europe, Asia as well as North and South America. All units are aligned with the same technical concept, manufacturing processes and quality assurance.

As of today, more than 170 High Voltage Direct Current (HVDC) transformers have been successfully delivered worldwide.

#### Smart solutions

Alstom Grid commercialises integrated Smart Grid systems: packaged solutions combining digital equipment and software from Alstom Grid's various product lines into customised systems for transmission and distribution utilities. Alstom's Smart Grid solutions are based on two main technologies: the network management solutions and substation automation solutions.

#### Network management solutions

Network management solutions are software solutions and platforms for grid control rooms, in charge of piloting and controlling the power grid. Alstom Grid's network management solutions product line is the world leader in energy management and energy market systems. The key technology, known as **e-terra**<sup>™</sup> global energy solutions, is used by utilities in their control centres to manage the generation, transmission, distribution and trading of electric energy. In addition to its solutions for electricity control rooms, Alstom Grid also develops software solutions for maintaining, monitoring and controlling liquid and gas products (crude oil, natural gas, multiphase fluid and refined products) and pipeline systems.

Complementing its software solutions, Alstom Grid's network management solutions also offer a consulting and integration activity. Alstom Grid's subsidiary UISOL (Utility Integration SOLutions) is the recognised integration specialist of the utility industry, and a trusted advisor to utilities for grid modernisation. UISOL helps utilities improve their operations by end-to-end integration of computer systems and optimising business processes.

In addition to its software solutions, Alstom Grid also offers a full suite of telecom solutions for utilities, integrating high bandwidth services into the telecom backbone and offering a high level of performance and reliability in a competitively-priced package that ensures low cost of ownership.

#### Substation automation solutions

Substation automation solutions comprise Intelligent Electronic Devices (IED) and software solutions that protect, control and monitor electrical substations for utilities and electro-intensive industries. Alstom Grid provides a full range of cutting-edge substation automation solutions

that are compliant with all the main international standards and ready for digital substations.

The MiCOM Agile and DS Agile ranges of IEC 61850-compliant protection relays, measurement devices and control units are able to monitor, control and protect all the equipment in a substation as well as feed important information back to the control room. The MiCOM Agile range of IEDs extends from the highest transmission voltage applications, through to primary and secondary distribution network protection, control and monitoring. Alstom Grid launched P40 Agile with IEC 61850 Edition2, process bus for line differential, transformer and feeder/auto-reclose protection relays. Advancements within Agile digital substations' release 2.0 allow the highest performance to be achieved with the smallest equipment footprint.

During the fiscal year, Alstom Grid introduced its latest version of DS Agile, the successful Digital Control System (DCS) for AC and DC electrical utility substations and industrial installations, which offers enhances situational awareness features thanks to its new DS Agile aView user interface.

The Digital Automation Platform (DAP) is a family of flexible multifunction controllers and servers designed for managing, securing and delivering substations' operational and non-operational information to the electrical utility's control room (SCADA) and other remote services.

COSI Digital Instrument Transformers provide new Optical Instrument Transformer technology, fully IEC 61850 compliant and serving both AC (up to 1,200 kV) and DC (up to 800 kV) transmission systems.

#### **Digital substation solutions**

Alstom Grid recently unveiled the next generation Digital Substation 2.0: the latest generation of electrical substations (AIS or GIS) integrating new layers of optical primary equipment and substation automation technology.

The path towards the full digital substation solution is a key business evolution in the decade to come, and is expected to generate significant business potential.

## The Supergrid, HVDC and power electronics

Power electronics solutions are high-performance applications that manage the active and reactive power flow in a network. They are most commonly used for the conversion of AC to DC and vice-versa, but they are also used to improve power quality and control when integrated into a traditional AC transmission network.

## High Voltage Direct Current (HVDC) solutions up to 800 kV

On several continents the electricity industry has begun the development of what are now referred to as "Supergrids", *i.e.* large, wide-area electricity grids. The advantage of Supergrids is to combine AC and DC networks as one vast meshed grid giving all connected networks more stability, strength and reliability by sharing power. Alstom Grid has identified High Voltage Direct Current (HVDC) technology as a strategic priority in the development of these very large networks, and has focused on developing both existing technologies in this field: Line Commutated Converters (LCC), the traditional HVDC technology that connects asynchronous networks but also has the capability to deliver bulk power across long-distance; and Voltage Source Converters (VSC), the latest HVDC technology which is more compact, ideal for offshore wind connection to the grid, and key to creating multi-terminal connections.

Alstom Grid continues to develop HVDC LCC, moving towards higher voltages up to 1,100 kV (including HVDC valves, converter transformers and bushings). Its HVDC Centre of Excellence in Stafford (United Kingdom) remains one of the world's most advanced sites for designing and producing HVDC and Ultra HVDC (UHVDC) equipment.

Alstom Grid's Voltage Source Converter (VSC), the HVDC MaxSine<sup>™</sup>, is ideally suited for the connection of offshore wind farms to the grid and multi-terminal applications.

## Flexible Alternating Current Transmission Systems (FACTS)

FACTS are power electronics-based solutions that address grid efficiency challenges by enhancing control over existing AC power lines and increasing their transmission capacity. They also help to improve power quality by increasing production efficiency for electro-intensive industries.

As one of the world's leading specialist in grid solutions and power electronics, Alstom Grid offers an extensive FACTS portfolio that dramatically improves stability and reliability of existing and future transmission systems, creating a quick return on investment for the customer.

Fixed Series Capacitors (FSC) and Static VAr Compensators (SVC) are two key solutions for Alstom Grid as they actively improve the stability, reliability and performances of the existing and future transmission systems by providing fast voltage control, reactive power control and power oscillation damping either in steady transmission or during a transient fault in the system.

#### Special power supplies

Electro-intensive industries such as electrolysis plants (aluminium, zinc, copper, chlorine, etc.) rely on the DC substation expertise of Alstom Grid. The Company's rectifier-based power solutions for aluminium electrolysis processes position it as a world leader, and the renowned ability of Alstom Grid's DC substations to deliver up to 600 kA reinforces this position. Trusted by the world's largest metal producers, its solid experience in coordinating multi-national projects means that its high quality systems keep production facilities running.

Another growing area of importance in modern grid structures is battery energy storage solutions. There are currently three types of large battery solutions with ratings up to 1.25 MW per power block. Alstom Grid's Special Power Supplies team has developed a turnkey connection package that connects batteries to renewable energy sources such as wind and solar farms, and then to the grid to solve congestion issues.

Alstom Grid MaxSine<sup>™</sup> eStorage is a fully integrated offering including a dedicated energy management system, real-time software that optimises the energy storage asset guaranteeing lifetime, efficiency and availability of the power plant, and a reversible power electronics equipment that connects with major battery technologies.

#### **Reactive power compensation**

Alstom Grid has over 60 years of experience in power quality and energy efficiency solutions for generation companies, electric utilities and industries. The company offers a wide range of high voltage and low voltage reactive power compensation equipment to minimise power losses and increase equipment utilisation. Complemented with Alstom Grid's technical expertise and customer intimacy, these products bring significant savings potential with reduced environmental impact.

#### Services

Alstom Grid offers environmentally friendly and high quality services to optimise electrical infrastructures, improve equipment's return on investment and prolong asset lifecycle.

Alstom Grid's services cover the needs of all customers: transmission and distribution utilities, power generation, electro-intensive industries and railways, as well as offshore wind farms and oil and gas platforms. Alstom Grid provides lifetime support on high voltage equipment (air-insulated and gas-insulated switchgears, power transformers, power electronics) whether initially delivered by Alstom Grid or not, or on entire networks from annual inspections to minor and major maintenance. This includes substation condition assessment and condition monitoring to support decision-making processes and solutions for the renovation, modernisation and extension of any equipment requiring improved performance or having obsolescence issues.

In 2014/2015 Alstom Grid expanded its capabilities to better serve local customers with the opening of a transformer repair workshop up to 400 MW in India, a regional parts centre for North America while capitalising on technical know-how with a worldwide expertise centre for dead tank circuit breaker in Canada. In addition, Alstom Grid's network consulting experts offer tailored technical solutions and expertise to plan, analyse, optimise and manage electrical infrastructure *via* network planning, performances analysis, and power system and equipment incident analysis.

Alstom Grid's Technical Institute offers a comprehensive range of training courses in electrical grid safety, operations, maintenance, protection, control and management. This high value-added selection of training courses covers all aspects of electricity, with an offer ranging from fundamentals to competence management.

## Asset management and condition monitoring solutions

Alstom Grid combines its wide set of competences and solutions to provide a holistic approach to the overall management of electrical assets. From real time monitoring of equipment up to their integration into the information architecture and business processes, the overall objective is to maximise asset value and grid reliability. Taking into account the physical condition of the assets, various financial constraints and the criticality of each piece of equipment, Alstom Grid now offers an overall business solution to optimise maintenance and asset replacement strategies.

From field inspections to enterprise integration, Alstom Grid's solutions have been developed based on 130 years of worldwide experience in manufacturing electrical equipment, automation devices and on-line condition monitoring tools, integrating mission-critical IT systems, and servicing assets fleets.

### **RESEARCH AND DEVELOPMENT**

Innovation is a cornerstone of Alstom Grid's strategy. Sustained investment in research and development is essential for keeping its product portfolio competitive and to differentiate from competitors.

Alstom Grid's technology centres and their teams of technical experts are involved in long- and medium-term technology research programmes to prepare for the future needs of electrical networks. Other product development activities take place in specialised excellence and competence centres located worldwide. Collaborative relationships are maintained with approximately 40 leading universities and research laboratories in Europe, Asia and North America.

In September 2014, the European Commission approved funding from the French state's *"Investissements d'avenir"* programme to support the research oriented Institute for Energy Transition (ITE) "Supergrid Institute". Initiated and coordinated by Alstom, this Institute combines the expertise from companies in the power sector and academic partners. Its work is dedicated to expand search technologies for future transport networks and mass storage of electric power that will improve energy management and favour renewable energy integration.

## g<sup>3</sup> (green gas for grid): the alternative to SF<sub>6</sub> for high voltage applications

In August 2014, Alstom Grid launched the world's first clean alternative to SF<sub>6</sub>, the gas commonly used in Air insulated and Gas insulated high-voltage equipment. The revolutionary SF<sub>6</sub>-free solution, called "green gas for grid" (g<sup>3</sup>), was jointly developed with  $3M^{TM}$ , a leader in environmentally sustainable solutions. With performances comparable to SF<sub>6</sub> and with 98% less impact on global warming, it is a suitable technology for the development of the new generation of clean high- and ultra-high voltage equipment.

## Innovation in high voltage switchgear and equipment

Extensive R&D efforts have led to developments in several product ranges throughout 2014/15, including:

- on-going development of new circuit breakers solutions: development of the FKGA7 generator circuit breakers rated at 210 kA breaking capacity and 30,000 A permanent current;
- extension of the HYpact range for air-insulated substations with a model for railway application (16.7 Hz);
- on-going development of dead tank solutions for air-insulated substations: 145 kV dead tank circuit breaker with a 63 kA breaking capacity; 245 kV dead tank circuit breaker with a 63 kA breaking capacity;
- on-going development of new gas-insulated substation solutions: new 145 kV gas-insulated substation; new compact 245 kV and 420 kV gas-insulated substation, development of a SF<sub>6</sub>-free version of the 145 kV gas-insulated substation;
- on-going development for a new 550 kV single-chamber circuitbreaker, rated 63 kA; new 800 kV gas-insulated substation for the Indian market; development of a SF<sub>6</sub>-free version of 420 kV gas-insulated lines;
- development of a new SVC valve, both for industrial and power networks, including a new powerful digital control system.

#### Direct current solutions

The recent years have seen a new trend in the transmission market to drastically increase voltage levels. As a leader in UHV technology, Alstom Grid has developed products to cover specific needs of this new growing market. After a complete development programme for 800 kV HVDC systems, Alstom Grid has also developed the bushing solutions needed to accompany the transformers and the wall bushing.

The main highlights are:

- on-going development of ultra-fast DC circuit-breaker. The current that was interrupted during the type tests was 5,200 amps, with switching voltage peaking of 160 kV;
- extension of the VSC offering with new valve sub-modules rated 1,800 A;
- development started for a new digital control platform for all HVDC applications;
- on-going development of a 400 kV HVDC dry type transformer bushing (RIP technology).

#### **Digital substations**

Alstom Grid's engineers have designed the strategic components which allow the company to offer digital substations fully compatible with the new IEC 61850 standard.

The overall performance of the system has been tested in Alstom Grid Technology Centre in Villeurbanne (France). Both pilot and industrial scale projects have been launched, including the pilot *Poste Intelligent* (France). This digital substation project with France's RTE tests in real conditions new digital control systems and primary equipment, including condition monitoring, new human machine interface in the substation, and enhanced coordination between the high voltage and medium voltage grids. It is designed to provide a reference model for future smart substations, enabling better monitoring, operation and maintenance in smart grid infrastructures.

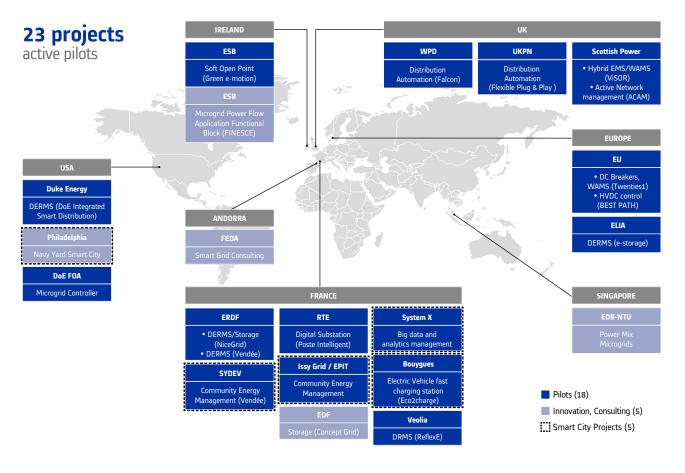
## Eco-design for environmentally-friendly solutions

Alstom Grid has an eco-design policy to develop environmentally-friendly solutions offering significant environmental benefits, including better product performance across all phases of the product lifecycle.

Eco-design uses the Life Cycle Assessment (LCA) approach: the evaluation of the environmental impacts of a given product or service at every stage of the cycle from manufacturing through product operation to end-of-life. Alstom Grid's R&D teams use this methodology to measure and improve the environmental impacts at product's and substation's levels.

#### Smart Grid

Alstom develops and tests innovative Smart Grid and smart cities systems as well as combinations of solutions through a number of demonstration projects worldwide, together with customers and public authorities. The company is a worldwide leader in this particular domain, with 23 Smart Grid demonstration projects underway in 2014/15. SMART GRID PROJECTS: PILOTS, PROTOTYPES AND EARLY CONCEPTS



Source : Alstom

Additionally, Alstom Grid's R&D labs are working on the next generation of Smart Grid solutions, including:

- Data analytics: To collect the data, equipment such as smart meters, distribution and substation intelligent devices and phasor measurement units are used. With the SystemX technical cluster (Institute for Technological Research), Alstom Grid will expand its e-terra operational data management (ODM) platform to collect Grid data and analyse new Smart City use cases. The ODM platform launches cloud-based big data solutions in near real-time to handle the city's 'Internet of things' for energy and transportation, including smart meters, distributed photovoltaic systems, electric vehicles, distributed storage, and new distributed generation. The real-time energy analytics platform will support decision-making for grid operators, aggregators, city energy managers and prosumers.
- Wide-area automation: Today's grids are operating near their maximum capacity with higher energy flows that are variable in both value and direction. This is a significant challenge for grid operators to face. Alstom Grid is currently developing a new wide automation solution to detect grid disturbances and trigger tailored emergency protection schemes. The solution leverages advanced grid condition monitoring, new power electronics automation and defence plans tailored to prevent and mitigate blackouts. A first real-life "test" in India of such islanding and load management schemes has been successful on the transmission level, showing it can help reduce the impact of blackouts around big cities.

# MANAGEMENT REPORT ON CONSOLIDATED FINANCIAL STATEMENTS – FISCAL YEAR 2014/15

MAIN EVENTS OF FISCAL YEAR 2014/15 Definition of the second secon	50
The Energy transaction	50
Agreement between Alstom and the US Department of Justice	51
Disposal of the business auxiliary components	51
Strong commercial and operational performance in continuing activities	52
Support to Alstom's future development	52
Group Corporate Responsibility	53
GENERAL COMMENTS ON ACTIVITY AND RESULTS & AFR	54
Consolidated key financial figures	54
Key geographical figures	55
	55
	56
Transport	56
Corporate & others	59
Discontinued operations: Energy transaction	59
OPERATING AND FINANCING REVIEW	61
Income statement	61
Balance sheet	63
Liquidity and capital resources	65
Use of non-GAAP financial indicators	66

2

The Content of the Annual Financial Report is identified in the summary table with the help of the pictogram

## MAIN EVENTS OF FISCAL YEAR 2014/15

### THE ENERGY TRANSACTION

#### Presentation of the General Electric offer

On 26 April 2014, the Board of Directors of Alstom received from General Electric (GE) an offer, countersigned by Alstom on 29 April 2014, and updated by GE on 20 June 2014, to acquire its Energy activities. On 20 June 2014, the Board of Directors of the Company unanimously decided to issue a positive recommendation on the GE offer.

GE would acquire the Thermal Power, Renewable Power and Grid activities as well as central and shared services (legal entities ALSTOM and ALSTOM Holdings would not be disposed) (the "Energy Business") for a committed equity value of  $\epsilon 12.35$  billion, pursuant to a master agreement between GE and Alstom. By taking over Alstom's Energy activities, GE undertakes to take on all assets as well as all liabilities and risks exclusively or predominantly associated with the Energy Business (this will not apply to the agreement concluded with the US Department of Justice detailed in Note 1.2). In the context of the transaction, Alstom would get indemnified by GE for any liability pertaining to the Energy Business which Alstom may incur after closing of the transaction.

The completion of the transaction is subject to a limited number of conditions precedent, which essentially cover works council consultation, receipt of authorizations required from a regulatory and merger control standpoint. However, once the authorizations relating to entities being sold, which account for at least 85% of the turnover of all the entities subject to the sale, including authorizations in certain key countries (such as authorisations of the European Commission and the U.S. authority), have been obtained, the parties may complete the transaction, with the remainder to be transferred in successive stages, provided there would be no violation of applicable law to do so.

In the framework of the acquisition of Energy activities by GE, three alliances would be created:

- the Grid alliance would consist of a combination of Alstom Grid and GE Digital Energy businesses to be held through two joint venture holding companies (Alstom would hold a 50%-1 stake in each Joint venture's share capital and voting rights);
- the Renewables alliance would consist of Alstom's hydro, offshore wind and tidal businesses; this alliance also would be held through two joint venture holding companies (Alstom would hold a 50%-1 stake in each Joint venture's share capital and voting rights);
- the scope of the Global Nuclear & French Steam alliance would include the production and servicing of the "ARABELLE™" steam turbine equipment for nuclear power plants worldwide, as well as Alstom's steam turbine equipment and servicing for applications in France. Alstom would hold 20%-1 share of the share capital into the joint venture company and would have 50%-2 votes of voting rights. The French State would hold a preferred share giving it veto and other governance rights over issues relating, inter alia, to security and nuclear plant technology in France.

The investment by Alstom in these alliances would amount to *circa*  $\in$  2.5 billion. The future joint venture companies would be accounted for under equity method in Alstom's consolidated financial statements.

In December 2014, GE and Alstom entered into an amendment to the original agreement. Alstom has agreed to an extension of the trademark licensing of its name from five years to 25 years as well as other contractual amendments for an additional consideration of *circa*  $\in$  0.4 billion to be paid by GE.

GE would sell Alstom 100% of its signalling business, with sales of *circa* \$500 million in 2013 and 1,200 employees, and the companies would sign several collaboration agreements including a service agreement for GE locomotives outside of the United States of America, R&D, sourcing and manufacturing and commercial support in the United States of America.

#### Process

On 4 November 2014, on conclusion of the information-consultation procedure with personnel representative bodies, the Board of Directors of Alstom approved the signing of the master agreement which was signed on the same date, the 4 November 2014.

The application for the approval of the transaction under Article L. 151-3 of the Monetary and Financial Code relating to foreign investments in France has been filed by GE on 1 October 2014. Authorization was obtained on 4 November 2014.

In accordance with the AFEP-MEDEF code, the transaction was approved by the shareholders with a majority of 99.2% during an Extraordinary General Meeting submitted to and convened on 19 December 2014.

Following the information-consultation procedure with works councils and the authorisation relating to foreign investments in France, the support expressed by shareholders during the EGM is a key milestone since the signing of the agreements with GE.

The completion of the transaction is now subject to receipt of authorizations required from a regulatory and merger control standpoint in a certain number of jurisdictions. The master agreement specifies that if the conditions precedents have not been met by 30 November 2015, either party shall be allowed to terminate the master agreement in accordance with its terms.

The European Commission opened on 23 February 2015 an in-depth investigation in the transaction (known as Phase II) on the European Union competition implications of merging the GE & Alstom heavyduty gas turbine (HDGT) businesses, and the U.S. Department of Justice, Antitrust Division, requested further documents. Several other jurisdictions are also continuing their analysis of the transaction. Such in-depth reviews by regulators are common in such transaction and Alstom remains confident on the positive final outcome. Subject to obtaining the regulatory and merger control authorizations required, the closing of the transaction is expected to occur in the coming months.

The closing would be followed by a cash return to shareholders which could range between €3.5 billion and €4 billion and be implemented through a public share buy-back offer (offre publique de rachat d'actions). The precise amount to be distributed and method of distribution would be specified at a later date and would be submitted to a shareholders' decision after closing of the transaction.

Once this transaction is completed, Alstom would refocus on its fully owned Transport activities and on its Energy alliances with GE.

#### Accounting treatment

Since the Board's approval of the offer on 20 June 2014, following the different decisions and approvals obtained, and taking into consideration the expected effective closing of the transaction, Alstom considers that the conditions are met for the application to the Energy activities of IFRS 5 – "Non-current assets held for sale and discontinued operations": the Group has made a decision to sell the assets concerned and considers the sale to be highly probable as of 31 March 2015.

In the consolidated financial statements, the activities being disposed are reported as follows:

- the assets held for sale and the related liabilities are presented separately from other assets and liabilities on specific lines on the balance sheet as at 31 March 2015, with no reclassification of the comparative balance sheet as at 31 March 2014;
- the net profit of discontinued operations realized over the year is disclosed by a single amount on the face of the consolidated income statement into the line named "Net profit from discontinued operations". The income statement of comparative periods is presented in accordance with IFRS 5 and as detailed in Note 3 "Comparability";
- the net cash flows attributable to the operating, investing and financing activities of discontinued operation realized over the year are disclosed in the consolidated statement of cash flows.

At the date of the disposal, the capital gain as well as the related tax impact will be recognised under the line "Net profit from discontinued operations". The disposal value will significantly exceed the carrying value of the net assets held for sale.

For more details on the consequences of the deal on the consolidated financial statements as well as the adjustments made on data published in the 2013/14 Registration Document, please refer to Note 3 and Note 4 to the consolidated financial statements for the year ended 31 March 2015.

### AGREEMENT BETWEEN ALSTOM AND THE US DEPARTMENT OF JUSTICE

Alstom has concluded on 22 December 2014 an agreement with the U.S. Department of Justice (DOJ) in order to put an end to the investigation conducted in the United States from 2010 on subsidiaries of the Group relating to alleged potential violations of the Foreign Corrupt Practices Act (FCPA).

Two US subsidiaries, Alstom Power Inc. and Alstom Grid Inc. (formerly known as Alstom T&D Inc.), have agreed to enter into deferred prosecution agreements with the DOJ relating to FCPA charges. If these two US subsidiaries fulfil the terms of their deferred prosecution agreements, all criminal charges will be dismissed against them at the end of three years. Another Alstom subsidiary, Alstom Network Schweiz AG (formerly known as Alstom Prom AG), has agreed to plead guilty to FCPA antibribery charges. In relation to these underlying charges, the

ultimate parent company of the Group, Alstom S.A. has agreed to plead guilty to violating the books and records and internal controls provisions of the FCPA and to pay a fine of approximately \$772 million.

The DOJ agreement has also stipulated that no part of the fine can be passed on to GE as part of the projected sale of Alstom's energy businesses.

The Plea agreements concluded with the DOJ are subject to approval by the competent American court.

Payment of the fine is expected to occur ten days after entry of judgement and pronouncement of sentence, based upon such approval. Sentencing is currently scheduled for June 2015 which schedule could be postponed by the Court.

### DISPOSAL OF THE BUSINESS AUXILIARY COMPONENTS

The Auxiliary components business was part of the Steam business within Thermal Power and was active both in the new equipment market and aftermarket services across three product lines: air preheaters and gas-gas heaters for thermal power plants, heat transfer solutions for a variety of petrochemical and industrial processes, and grinding mills for diversified industrial applications.

The sale of the Auxiliary components business to a European investment firm was completed on 29 August 2014. The business was sold for an Enterprise Value of around  $\epsilon$ 730 million as part of the non-core asset disposal programme announced by Alstom in November 2013.

The Auxiliary components business being part of Thermal Power, it is part of the planned transaction with GE. As a consequence, the Group presents all impacts regarding this disposal on the line "Net profit from discontinued operations" of the income statement.

### STRONG COMMERCIAL AND OPERATIONAL PERFORMANCE IN CONTINUING ACTIVITIES

In compliance with IFRS 5, Thermal Power, Renewable Power and Grid activities have been reported in Alstom's consolidated financial statements as discontinued operations; they are therefore not included in Orders received, Sales, Income from Operations and EBIT, and are reported under the "Net profit – discontinued operations" line.

During fiscal year 2014/15, Alstom's orders received reached  $\in$ 10.0 billion, a 61% increase in comparison with the level of last year on an organic basis. This record high performance was driven by a jumbo contract booked in South Africa for around  $\in$ 4 billion and several major orders, including a large metro contract for the Greater Paris network in France and a fully integrated tramway project in Qatar. On 31 March 2015, the Group backlog reached a record high at  $\in$ 28.4 billion, representing 55 months of sales.

Consolidated sales increased by 7% on an organic basis at €6.2 billion, fuelled by deliveries of intercity, suburban and very high-speed trains booked in France, Germany and Italy during the last two years. The Group's sales also benefited from a large growth in Middle East/Africa driven by the on-going execution of very high-speed trains in Morocco and tramway contracts in Dubai and by the first milestones executed on the South African jumbo contract.

During fiscal year 2014/15, the income from operations (after corporate costs) increased by a healthy 19%, from  $\epsilon$ 268 million in fiscal year 2013/14 to  $\epsilon$ 318 million this fiscal year, with an operating margin of 5.2% for fiscal year 2014/15 *versus* 4.7% last fiscal year, thanks to sound project execution and tight cost control partly mitigated by ramp-up costs associated to new platforms.

Highly impacted by the legal agreement concluded with the U.S. Department of Justice (*ca.*  $\epsilon$ 720 million), impairment charges on Russian associates (*ca.*  $\epsilon$ 90 million) and restructuring charges (*ca.*  $\epsilon$ 100 million), Net profit from Continuing operations (Group share) amounted to  $\epsilon$ (823) million in fiscal year 2014/15. Net profit from Discontinued operations (Group share) amounted to  $\epsilon$ 104 million. Net profit (Group share) was at  $\epsilon$ (719) million in fiscal year 2014/15, compared to  $\epsilon$ 556 million last year.

During fiscal year 2014/15, the Group free cash flow was negative at  $\epsilon$ (429) million compared to  $\epsilon$ (157) million during fiscal year 2013/14, mainly due to lower sales in Energy impacting progress payments and adverse cash profile of some projects over the period. After a negative free cash flow of  $\epsilon$ (1,376) million in the first semester, the Group generated a positive free cash flow of  $\epsilon$ 947 million in the second half of the fiscal year.

The negative free cash flow, proceeds from assets sale and the classification of the net cash position of discontinued operations in "Assets/Liabilities held for sale" generated a limited increase of the Group's net financial debt which stood at  $\epsilon$ (3,143) million on 31 March 2015 compared to  $\epsilon$ (3,038) million <sup>(1)</sup> on 31 March 2014.

On 31 March 2015, Alstom had a cash and cash equivalent position of  $\epsilon$ 1,599 million, as well as undrawn available credit facilities for  $\epsilon$ 1,350 million. The Group had also additional facilities amounting to a total of  $\epsilon$ 1,600 million fully undrawn as of 31 March 2015, available up to the completion (and subject to the non-cancellation) of the proposed transaction with GE, or 1 December 2015.

## SUPPORT TO ALSTOM'S FUTURE DEVELOPMENT

#### **Research & Development**

During the fiscal year 2014/15, Alstom spent €116 million in research and development, notably for the development of the URBALIS<sup>™</sup> Fluence signalling solution and the CITADIS<sup>™</sup> Spirit light rail vehicle intended to the North American market.

In September 2014, Alstom Transport announced several major innovations focusing on three main goals: enhance passenger experience, encourage proximity with its customers and reduce life cycle costs:

- The latest version of the CITADIS<sup>™</sup> tramway enhanced to be more comfortable, spacious and accessible. The CITADIS<sup>™</sup> X05 also integrates new technologies which reduce energy consumption and lifecycle costs and enable the particular requirements of cities to be met.
- ATLAS 400 and ATLAS 500, new solutions to meet the ERTMS <sup>(2)</sup> standards for rail interoperability. Based on its ten years of expertise, ATLAS 400 is specially adapted to low-density routes and reduces the amount of trackside equipment whereas ATLAS 500 is designed for high-density lines with an increased headway performance. Both are applicable for re-signalling upgrades or new-build projects.

(2) European Rail Traffic Management System.

<sup>(1)</sup> Figures have been restated as mentioned in Note 3 to the consolidated financial statements "Comparability" following the first application of IFRS 11.

- HealthHub, a new "predictive" maintenance tool using advanced data analytics to predict the remaining useful life of rolling stock, infrastructure and signalling assets. This innovative approach is designed for a move from traditional mileage-based maintenance to condition-based predictive maintenance, thus reducing lifecycle cost and improving equipment availability for the operator.
- A new generation of H3 hybrid shunting locomotives equipped with a 350 kW diesel generator and a battery. This three-axle locomotive consumes far less fuel than conventional vehicles and substantially cuts pollutant emissions.

In May 2014, Alstom had already introduced, jointly with the Association of French Regions and SNCF, the new CORADIA<sup>™</sup> Polyvalent as the next-generation regional trains which are gradually entering into service in the French Regions. These trains are designed to combine efficiency, economic performance and environmental protection while suiting each Region's needs. So far, over 200 CORADIA<sup>™</sup> Polyvalent trains have been ordered by 12 French Regions.

Over the second half of fiscal year 2014/15, Alstom signed letters of intent with various German regions to deliver a new generation of emission-free trains, based on the Alstom CORADIA<sup>™</sup> platform. In addition to being completely emission-free, a new energy management system allows to reduce energy consumption. Moreover, its noise level is drastically reduced compared to conventional diesel trains.

#### Investments

During fiscal year 2014/15, Alstom Transport invested  $\notin$  99 million in capital expenditures (excluding capitalised development costs) to further develop its industrial footprint in growing markets while modernising its existing facilities in developed countries.

In March 2015, Alstom inaugurated a new production line for CITADIS™ tramways in its Taubaté plant in Brazil. This new production facility will serve the Brazilian market as well as the broader Latin America region where a number of new tramway projects are emerging. When fully operational, the facility will employ around 150 people.

In India, Transport invested in the development of its engineering centre for signalling and rolling stock, located in Bangalore.

In Europe, Transport invested in the modernisation of its manufacturing facilities in France, Germany and Poland to enhance their efficiency. In addition, to improve its service offer, the Sector opened a new control room dedicated to regional train maintenance in Italy as well as a new bogie overhaul facility in the United Kingdom.

#### Acquisitions and partnerships

In South Africa, Alstom Transport entered into a joint venture, Gibela, with local shareholders to deliver one of the biggest projects in rail transport worldwide. Following the jumbo contract awarded by PRASA (Passenger Rail Agency of South Africa) in October 2013, the Gibela joint venture is committed to establishing a new production facility in the East region of Johannesburg, which should be operational by June 2015. With this facility, Gibela will deliver 600 commuter trains and provide technical support and supply of spare parts over an 18-year period.

In France, the transfer of AREVA TA's Command & Control for Transportation (CCT) activity to Alstom was completed in October 2014. The acquisition of a business which includes design and production of signalling solutions for tramways and metros, TCMS <sup>(1)</sup> on-board safety information management system and radio communications technology will strengthen Alstom's offer in signalling and confirm its position in the transport networks market in the Paris and Île-de-France areas.

In Russia, the 2ES5 freight locomotive, jointly produced by Alstom and Transmashholding (TMH), obtained the certification, confirming its compliance with Russian mandatory safety norms. In addition, Alstom also signed two important Memoranda of Understanding with Russian Railways (RZD) and RZDstroy, both aiming at developing railway transportation in Russia and beyond.

Finally, in December 2014, Alstom signed an agreement with the Kazakh national railway company (KTZ) aiming to acquire an additional 25% of KTZ's stake, thereby bringing its total share in the EKZ joint venture to 50%. After approval by the relevant authorities, Alstom will become the main shareholder in EKZ, KTZ and TMH both holding 25% of the joint venture based in Astana. By increasing its share in a company that has recently been awarded a  $\epsilon$ 1.3 billion contract for the maintenance of electric locomotives, Alstom shows its confidence in the Kazakh market attractiveness. As major shareholder, the Group wants to extend EKZ scope to maintenance activities with the creation of a service centre.

### **GROUP CORPORATE RESPONSIBILITY**

#### Environment, Health and Safety (EHS)

During fiscal year 2014/15, Alstom successfully maintained its efforts to reduce the environmental footprint of its operations. The Group showed a good trend in most of the indicators concerning its environmental performance of operations. For instance, SF<sub>6</sub> fugitive emission trend during 2014/15 is showing a clear improvement. 100% of Alstom manufacturing sites over 200 employees and several other sites have gained or maintained the ISO 14001 certification.

About occupational safety, the Alstom Zero Deviation Plan (AZDP) remains the "keystone" of Alstom actions throughout the Group. This programme targets high-risk activities and the protection of employees and contractors worldwide from the potential risks of working in an Alstom workshop, factory, test facility or construction site. A new audit campaign covered over 170 sites with improvement on compliance to Alstom Safety Directives including the two new directives added last year. As a consequence, the number of severe accidents has reduced while the injury frequency rate <sup>(2)</sup> was maintained at 1.2, with the objective of reaching 1.0 at the end of fiscal year 2015/16.

(1) TCMS: Train Control Management System.

<sup>(2)</sup> Number of accidents with time lost to injury per million hours worked.

#### Corporate Social Responsibility (CSR)

During fiscal year 2014/15, the CSR organisation has developed action plans to increase Sustainable Development mind-set among employees and managers, such as the issuance of a monthly newsletter and several local initiatives. Alstom successfully maintained its listing in the DJSI <sup>(1)</sup> World & Europe and in the CDLI <sup>(2)</sup> for French companies, respectively for the fourth and third consecutive years.

The Alstom Foundation supported a batch of projects to favour access to primary education in emerging countries. In June 2014, the Board of the Foundation approved 20 new projects, some of which focused on access to education in different countries such as Mexico, India and South Africa.

## **GENERAL COMMENTS** ON ACTIVITY AND RESULTS

Following the different decisions and approvals obtained, and taking into consideration the expected effective closing of the Energy transaction, Alstom considers that the conditions are met for the application of IFRS 5 – "Non-current assets held for sale and discontinued operations". In the consolidated financial statements, the activities being disposed are reported separately in the income statement and in the statement of cash flows as discontinued operations.

For more details on the consequences of the deal on the consolidated financial statements as well as the adjustments made on data published in the 2013/14 Registration Document, please refer to Note 3 and Note 4 to the consolidated financial statements for the year ended 31 March 2015.

### CONSOLIDATED KEY FINANCIAL FIGURES

The following table sets out the Group's key performance indicators for 2014/15.

	Year ended Ye		% variation March 20	% variation March 2015/March 2014	
(in € million)	31 March 2015	31 March 2014 <sup>(1)</sup>	Actual	Organic	
Order backlog	28,394	22,936	24%	17%	
Orders received	10,046	6,148	63%	61%	
Sales	6,163	5,726	8%	7%	
Income from operations	318	268	19%	12%	
Operating margin	5.2%	4.7%			
EBIT	(621)	162	NA		
Net profit from continuing operations – Group share	(823)	160	NA		
Net profit from discontinued operations – Group share	104	396	-74%		
Net profit – Group share	(719)	556	NA		
Free cash flow	(429)	(157) <sup>(2)</sup>			
Capital employed	857	7,886 <sup>(2)</sup>			
Net cash/(debt)	(3,143)	(3,038) <sup>(2)</sup>			
Headcount <sup>(3)</sup>	87,849	93,002	-6%		

(1) Figures have been restated as mentioned in Note 3 to the consolidated financial statements "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

(2) Figures have been restated as mentioned in Note 3 to the consolidated financial statements "Comparability" following the first application of IFRS 11.

(3) Headcount are Group figures.

<sup>(1)</sup> Dow Jones Sustainability Index (DJSI).

<sup>(2)</sup> Carbon Disclosure Leadership Index (CDP France report 2014).

## **KEY GEOGRAPHICAL FIGURES**

Total Group		Year ended 31 March 2015						
Actual figures		Middle East/ Europe Americas Asia/Pacific Africa Tota						
(in € million, except for Headcount)	Europe	Americas	Asia/Pacific	Africa	Total			
Orders received	2,837	980	1,141	5,088	10,046			
% of contrib.	28%	10%	11%	51%	100%			
Sales	4,340	739	449	635	6,163			
% of contrib.	70%	12%	7%	11%	100%			
Headcount <sup>(2)</sup>	50,257	15,055	18,022	4,515	87,849			
% of contrib.	57%	17%	21%	5%	100%			

Total Group	Year ended 31 March 2014 <sup>(1)</sup>					
Actual figures				Middle East/		
(in € million, except for Headcount)	Europe	Americas	Asia/Pacific	Africa	Total	
Orders received	2,586	1,459	381	1,722	6,148	
% of contrib.	42%	24%	6%	28%	100%	
Sales	4,072	702	453	499	5,726	
% of contrib.	71%	12%	8%	9%	100%	
Headcount <sup>(2)</sup>	52,965	16,832	18,790	4,415	93,002	
% of contrib.	57%	18%	20%	5%	100%	

Figures have been restated as mentioned in Note 3 to the consolidated financial statements "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.
 Headcount are Group figures. In comparison with FY2013/14 Registration Document, Turkey has been removed from European region and included into Middle

East/Africa.

## **OUTLOOK**

For the medium term, sales are expected to grow at over 5% per year organically, and the operating margin should gradually improve within the 5-7% range. Free cash flow is expected to be in line with net income before Energy activities contribution with possible volatility on short periods.

## **OPERATIONAL** ANALYSIS

### TRANSPORT

The following table presents key performance indicators for Transport:

Transport	Year ended	Year ended	% variation March 2015	March 2014
Actual figures (in € million)	31 March 2015	31 March 2014 <sup>(1)</sup>	Actual	Organic
Order backlog	28,301	22,818	24%	18%
Orders received	10,043	6,130	64%	61%
Sales	6,139	5,680	8%	7%
Income from operations	345	308	12%	7%
Operating margin	5.6%	5.4%		
EBIT	159	228	-30%	
Capital Employed	1,772	1,895 <sup>(2)</sup>	-6%	

(1) Figures have been restated as mentioned in Note 3 to the consolidated financial statements "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

(2) Figures have been restated as mentioned in Note 5.1 following the first application of IFRS 11.

#### **Orders received**

During fiscal year 2014/15, Transport recorded  $\epsilon$ 10,043 million of orders, an increase of 61% *versus* last year on a comparable basis. This record high performance was driven by a jumbo contract signed with PRASA in South Africa for around  $\epsilon$ 4 billion.

The Sector also recorded several large metro contracts notably for the delivery of 35 metro trains to the Paris network in France, a full metro system to the city of Guadalajara in Mexico as well as fully-automated METROPOLIS<sup>™</sup> trainsets in Australia. Orders were also boosted by tramways contracts such as 35 CITADIS<sup>™</sup> vehicles for the city of Lusail, Qatar and several projects to equip the cities of Setif, Mostaganem and Ouargla in Algeria. In the signalling business, Transport was notably awarded equipment for a new high-speed line in Spain and the associated maintenance. The Sector also booked a sound level of services.

Transport	Year ended	% of	Year ended 31 March	% of	% variat March 2015/ M	
Actual figures (in € million)	31 March 2015	contrib.	2014(*)	contrib.	Actual	Org.
Europe	2,837	28%	2,579	42%	10%	9%
Americas	980	10%	1,459	24%	-33%	-33%
Asia/Pacific	1,141	11%	381	6%	199%	193%
Middle East/Africa	5,085	51%	1,711	28%	197%	185%
ORDERS BY DESTINATION	10,043	100%	6,130	100%	<b>64</b> %	61%

(\*) Figures have been restated as mentioned in Note 3 to the consolidated financial statements "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

During fiscal year 2014/15, orders received in Europe increased by 9% on an organic basis at €2,837 million, representing 28% of the Sector's orders. This performance was notably driven by a large order booked in France for the supply of 35 eight-car metros for the line 14 of the Paris network. Additionally, Transport was selected to supply 25 CORADIA<sup>™</sup> Nordic regional trains to the Skåne region in Sweden, four PENDOLINO<sup>™</sup> high-speed trains in Switzerland and 15 CITADIS<sup>™</sup> Dualis tram-trains for the Île-de-France region in France. In Italy, Transport booked several contracts to overhaul a fleet of PENDOLINO<sup>™</sup> trains and to supply 20 optional CORADIA<sup>™</sup> Meridian regional trains. In the signalling business, the Sector will provide its ERTMS <sup>(1)</sup> signalling system and the associated maintenance for a period of 20 years for the Spanish new North-West high-speed line. Alstom's ERTMS signalling solutions will also equip a high-speed railway segment in Romania. Finally, Transport was awarded a contract to maintain 75 passenger cars on a sleeper service in the United Kingdom.

(1) ERTMS: European Railways Traffic Management System.

In Americas, Transport's orders received amounted to €980 million, decreasing by 33% compared to last year on an organic basis when the Sector registered a long-term maintenance contract for CITADIS<sup>™</sup> trains in Canada as well as several metro contracts in Chile and Argentina. During fiscal year 2014/15, two major metro orders were booked in Mexico: the first one for the delivery of a full metro system to the city of Guadalajara including 18 METROPOLIS<sup>™</sup> trains, the communication and the traffic control systems, and the second one for the upgrade and the modernization of Mexico City metro trains. Finally, in Canada, Transport was awarded a large contract to equip the Toronto Union Station with a new signalling system.

In Asia/Pacific, orders received tripled compared to last year on an organic basis, to reach €1,141 million during fiscal year 2014/15. This growth was notably fed by two large contracts signed in Australia to construct, operate and maintain the CBD and South East Light Rail line and to provide 22 fully-automated METROPOLIS<sup>™</sup> trainsets and signalling equipment to the city of Sydney. The Sector was also awarded a contract to supply METROPOLIS<sup>™</sup> trainsets to the city of Kochi in India.

In fiscal year 2014/15, Middle East/Africa accounted for 51% of the Sector's total orders received with €5,085 million recorded, becoming the first commercial region for Transport. This performance was mainly driven by the jumbo rail contract awarded by PRASA in South Africa to supply X'TRAPOLIS Mega<sup>™</sup> commuter trains as well as the technical support and supply of spare parts over an 18-year period. In addition, Transport signed a large contract in Qatar to provide to the city of Lusail a fully integrated tramway system including 35 CITADIS<sup>™</sup> vehicles. The Sector was also selected to supply a tramway system to the city of Setif in Algeria as well as tramways for Mostaganem and Ouargla cities. Finally, two signalling and infrastructure contracts were signed in Egypt to equip the Beni Suef-Asyut regional railway line as well as Cairo's metro line 3.

Transport received the following major orders during fiscal year 2014/15:

Country	Description
Algeria	Supply of CITADIS <sup>™</sup> tramways for the cities of Mostaganem and Ouargla
Australia	Supply of 22 six-car fully-automated METROPOLIS™ trainsets and the CBTC (Communications Based Train Control) signalling system
Australia	Design, delivery and commissioning of an integrated tramway system, including 30 CITADIS™ tramways and signalling equipment for Sydney
France	Supply of 35 eight-car metros trains for the Paris network
Italy	Option for 20 additional CORADIA™ Meridian regional trains
Mexico	Supply of 18 METROPOLIS™ trains, the communication system, the high-voltage and traction substations and the CTBC signalling system
Mexico	Upgrading and modernization of Mexico City metro trains
South Africa	Supply of 600 X'TRAPOLIS Mega™ commuter trains (3,600 cars) over a period of 10 years and the associated maintenance for a period of 18 years
Qatar	Design, manufacturing, commissioning and servicing of 35 CITADIS™ tramways, power supply equipment, signalling and trackworks
Spain	Supply of ERTMS Level 2 signalling system and the associated maintenance for a period of 20 years for the new North-West high-speed line
Sweden	Supply of 25 CORADIA™ Nordic regional trains
Switzerland	Supply of four additional PENDOLINO <sup>™</sup> high-speed trains
United Kingdom	15-year service contract to maintain 75 passenger cars on the "Caledonian Sleeper" trains

#### Sales

Transport sales increased by 7% on an organic basis at  $\epsilon$ 6,139 million during fiscal year 2014/15 compared to  $\epsilon$ 5,680 million for the last fiscal year. The Sector's sales were mainly driven by the progress of large contracts booked in France, Germany and Italy over the last two financial years and by the growth in Middle East/Africa.

Transport	Year ended	% of	Year ended 31 March	% of	% variati March 2015/ M	
Actual figures (in € million)	31 March 2015	contrib.	2014(*)	contrib.	Actual	Org.
Europe	4,340	71%	4,058	71%	7%	6%
Americas	739	12%	679	12%	9%	8%
Asia/Pacific	449	7%	453	8%	-1%	-3%
Middle East/Africa	611	10%	490	9%	25%	22%
SALES BY DESTINATION	6,139	100%	5,680	100%	8%	7%

(\*) Figures have been restated as mentioned in Note 3 to the consolidated financial statements "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

In Europe, Transport's sales amounted to €4,340 million, an increase of 6% on an organic basis. The growth was driven by deliveries of intercity, suburban and very high-speed trains following strong orders received in France, Germany and Italy during the last two years. Concerning high-speed trains, a PENDOLINO<sup>™</sup> maintenance contract was traded in the United Kingdom while trains were delivered in Poland and in Switzerland. During fiscal year 2014/15, the region accounted for 71% of the total Sector's sales.

Driven by the deliveries of metro trainsets to Brazil and Chile, and by the sustained signalling and maintenance activities in the United States of America, sales in Americas reached €739 million, a 8% organic increase compared to fiscal year 2013/14, representing 12% of the Sector's sales during fiscal year 2014/15.

In Asia/Pacific, Transport's sales amounted to €449 million, a 3% organic decrease compared to last fiscal year, sustained by the execution of various projects notably the delivery of METROPOLIS<sup>™</sup> trainsets to Singapore metro and the production of X'TRAPOLIS<sup>™</sup> trains for Australia.

During fiscal year 2014/15, Transport recorded €611 million of sales in Middle East/Africa, up 22% *versus* last year on an organic basis, mainly due to progress made on very high-speed trains in Morocco and on a tramway system in the United Arab Emirates and to the first milestones executed in the PRASA jumbo contract.

## Income from operations and operating margin

Transport's income from operations increased by 12% to  $\epsilon$ 345 million for fiscal year 2014/15, compared to  $\epsilon$ 308 million for the previous year, thanks to sound project execution and tight costs control, however, partly mitigated by ramp-up costs associated with new platforms.

### **CORPORATE & OTHERS**

Corporate & Others comprise corporate costs which are not part of the transaction with GE as well as some Thermal Power, Renewable Power and Grid units which are not part of the transaction and which do not contribute significantly to the Group results.

Moreover, in order to present relevant financial information, the Group has done a preliminary allocation of the Corporate costs (external costs, legal costs...) and liabilities (notably provisions for litigations) between Continuing operations and Discontinued operations in accordance with agreements negotiated with GE.

The following table presents the key figures for Corporate & Others:

Corporate & Others (in $\epsilon$ million)	Year ender 31 March 2019	
Order backlog	93	3 118
Orders received	3	3 18
Sales	24	4 46
Income from operations	(27)	) (40)
EBIT	(780)	) (66)
Capital employed	(915	) NA
(*) Figure have been neglected as mentioned in Night 2 to the second lideted for	noial statements "Commerchility" following the applicatio	

(\*) Figures have been restated as mentioned in Note 3 to the consolidated financial statements "Comparability" following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

Corporate and Others' EBIT was highly impacted by the \$772 million (*ca*.  $\epsilon$ 720 million) Alstom S.A. agreed to pay to the U.S. Department of Justice (DOJ) as part of the agreement concluded to resolve the investigation into alleged violations of the U.S. Foreign Corrupt Practices Act (FCPA).

### **DISCONTINUED OPERATIONS: ENERGY TRANSACTION**

On 20 June 2014, the Board of Directors of Alstom decided to issue a positive recommendation to GE's offer to acquire the Thermal Power, Renewable Power and Grid activities, as well as corporate and shared

services ("Energy"). This Energy transaction is reported in Alstom's consolidated financial statements as discontinued activities.

The following table presents the key performance indicators of Energy for 2014/15:

Energy	Year ended Yea		% variation March 201	5/March 2014
Actual figures (in € million)	31 March 2015	31 March 2014 <sup>(*)</sup>	Actual	Organic
Order backlog	29,787	28,059	6%	1%
Orders received	13,321	15,116	-12%	-12%
Sales	13,330	14,332	-7%	-6%

(\*) Figures have been restated as mentioned in Note 3 to the consolidated financial statements "Comparability" following the first application of IFRS 11.

During fiscal year 2014/15, Energy orders received amounted to €13,321 million, a decrease of 12% *versus* last year on a comparable basis. Energy order intake included the supply and maintenance of three gas turbines in Mexico and in Turkey as well as the delivery of ultra-supercritical boiler, steam turbine and generator to a lignite fired plant in Thailand. Energy was also awarded a project for the erection of

a large thermal solar power plant in Israel and associated maintenance, several wind turbines contracts in Brazil and large High Voltage Direct Current contracts in Asia and in North America.

#### Energy received the following major orders during this period:

Country	Description
Brazil	Supply of 4x175 MW Hydro turbines
Brazil	Delivery of 237 ECO 100, ECO 110 & ECO 122 Wind Turbines
Canada	Turnkey contract for an HVDC solution
Chile	Transmission system
Israel	Engineering, Procurement and Construction (EPC) of a solar power station and full operations and maintenance (O&M) activities for a period of 25 years
India	Phase 2 of 800 kV Champa-Kurukshetra Ultra High Voltage Direct Current (UHVDC) link
Mexico	Supply, operation and maintenance of a GT24™ turbine
South Korea	HVDC Line Commutated Converter (LCC)
Thailand	Supply of an ultra-supercritical boiler with integrated Selective Catalytic Reduction of NOx (SCR), an ultra–supercritical steam turbine and generator, and an air quality control systems composed of a Wet Flue Gas Desulphurisation (WFGD) system
Turkey	Supply and maintenance of the power island of a 950 MW combined-cycle power plant including two GT26 gas turbines, two heat recovery steam generators (HRSGs), one steam turbine and three turbo-generators
Turkey	Supply of 2x660 MW Boiler and Turbine Generator

During fiscal year 2014/15, Energy sales amounted to €13,330 million, a 6% organic decreased *versus* last year. Despite the execution ramp up of wind contracts in Brazil, Energy sales were impacted by low bookings in previous periods.

#### **Note: Specific measurements**

In compliance with IFRS 5, the Group has applied the following specific measurements which impact the consolidated financial statements:

- Discontinued operations (including non-current assets, current assets and the related liabilities classified as held for sale), as a whole, have been measured at the lower of their carrying amount and fair value less costs to sell.
- The exception of IAS 12 consisting in not recognising mechanical deferred taxes resulting from the difference between tax and consolidated values of the investments/subsidiaries being disposed is no more applicable since it becomes probable that the temporary difference will reverse in the foreseeable future with the sale of the subsidiaries. Thus, deferred tax liabilities have been recognised with an income statement impact presented within the "Net profit from discontinued operations".

- Amortisation on non-current assets classified as "assets held for sale" has ceased at the date of IFRS 5 application.
- Costs specifically incurred in the context of the deal have been presented in the P&L within the "Net profit from discontinued operations".

The current accounting impacts of the planned Energy transaction are based on the GE offer and related agreements, and reflect management current best estimate. They will be finalized as part of the transaction closing, expected to occur in the coming months.

For more details on the consequences of the deal on the consolidated financial statements as well as the adjustments made on data published in the 2013/14 Registration Document, please refer to Note 3 and Note 4 to the consolidated financial statements for the year ended 31 March 2015.

## **OPERATING AND FINANCING** REVIEW

## **INCOME STATEMENT**

Total Group	Year ended	Year ended	% variation March 2015/March 2014		
(in € million)	31 March 2015	31 March 2014 <sup>(*)</sup>	Actual	Organic	
Sales	6,163	5,726	8%	7%	
Cost of sales	(5,237)	(4,804)	9%	8%	
R&D expenditure	(112)	(122)	-8%	-8%	
Selling expenses	(199)	(204)	-2%	-2%	
Administrative expenses	(297)	(328)	-9%	-9%	
INCOME FROM OPERATIONS	318	268	19%	12%	
Operating margin	5.2%	4.7%			

(\*) Figures have been restated as mentioned in Note 3 to the consolidated financial statements "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

#### Sales

During fiscal year 2014/15, consolidated sales amounted to €6.2 billion, a 7% increase on an organic basis *versus* last year. Alstom sales benefited from the progress made on intercity trains, suburban trains and very high-speed trains contracts booked in France, Germany and Italy during the last two years. In the United Kingdom, major milestones were also reached on a large maintenance contract for PENDOLINO<sup>™</sup> high-speed trains while several high-speed trains were delivered in Poland and in Switzerland. The Group operational performance was also fuelled by growth in Middle East/Africa, 22% above the level of last year on an organic basis, mainly due to progress made on very high-speed trains to Morocco and to the first milestones executed on the PRASA contract.

#### **Research and development expenses**

In fiscal year 2014/15, Alstom kept a sustained level of research and development expenses at  $\epsilon$ 112 million close to the  $\epsilon$ 122 million recorded last year, confirming the Group's commitment to focus on differentiation and competitiveness. Capitalisation of development costs went down from  $\epsilon$ 77 million last year to  $\epsilon$ 67 million in fiscal year 2014/15.

#### Selling and administrative expenses

Thanks to a strict control of costs and the successful implementation of the dedicated to excellence (d2e) performance plan, selling expenses decreased compared to last year both in volume (-2% on a comparable basis) and as percentage of sales (from 3.6% to 3.2%).

Compared to fiscal year 2013/14, administrative expenses also went down both in volume (-9% on a comparable basis) and as percentage of sales (from 5.7% to 4.8%) driven by cost savings actions initiated according to dedicate to excellence (d2e) performance plan.

#### Income from operations

The Group's income from operations reached  $\epsilon$ 318 million in fiscal year 2014/15 *versus*  $\epsilon$ 268 million last year. The operating margin improved from 4.7% last year to 5.2% in fiscal year 2014/15.

Total Group (in € million)	Year ended 31 March 2015	Year ended 31 March 2014 <sup>(*)</sup>	% variation March 2015/ March 2014
Income from operations	318	268	19%
Restructuring costs	(106)	(48)	121%
Other income (expense)	(833)	(58)	N/A
Earnings before interest and taxes	(621)	162	N/A
Financial income (expense)	(137)	(159)	-14%
Income tax charge	8	94	-91%
Share of net income of equity-accounted investments	(64)	70	N/A
Non-controlling interests attributable to continuing operations	(9)	(7)	29%
NET PROFIT FROM CONTINUING OPERATIONS	(823)	160	N/A
Net profit from discontinued operations	113	399	-72%
Non-controlling interests attributable to discontinued operations	(9)	(3)	N/A
NET INCOME – GROUP SHARE	(719)	556	N/A

(\*) Figures have been restated as mentioned in Note 3 to the consolidated financial statements "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

#### Earnings before interest and taxes (EBIT)

During fiscal year 2014/15, EBIT amounted to  $\epsilon$ (621) million for fiscal year 2014/15, compared to  $\epsilon$ 162 million in 2013/14. The Group was notably impacted by the \$772 million (*ca.*  $\epsilon$ 720 million) Alstom S.A. agreed to pay as part of an agreement concluded with the U.S. Department of Justice (DOJ). EBIT was also impacted by other non-recurring charges booked such as assets write-off and by restructuring plans launched during the year in order to efficiently adapt the Group's footprint to its commercial environment.

#### Net financial income (expense)

Net financial expense went down at  $\epsilon$ (137) million during fiscal year 2014/15 compared to  $\epsilon$ (159) million for the previous year. Net interest expenses decreased to  $\epsilon$ (105) million during 2014/15 compared to  $\epsilon$ (130) million last year, mainly thanks to the reimbursement of a  $\epsilon$ 722 million bond in September 2014.

#### Income tax charge

On the basis of a negative taxable income, the Group recorded an income tax profit of  $\epsilon 8$  million for fiscal year 2014/15 *versus*  $\epsilon 94$  million last year when deferred income tax assets were recognised in the United States of America and in France.

The income tax profit included a  $\in$  (45) million current income tax charge versus  $\in$  (48) million last year and a  $\in$  53 million deferred income tax credit versus  $\in$  142 million in 2013/14.

## Share of net income of equity-accounted investments

The share of net income of equity investments was impacted by an impairment recorded on Transmashholding (TMH) reflecting the uncertainties of its upcoming performance and the unfavourable exchange rate of the Russian Rouble.

#### Net profit – Group share

The decrease of EBIT, combined with non-recurring impairment charges impacting equity investees in Transport, resulted in a decrease of Net profit from Continuing operations (Group share) which amounted to  $\epsilon$ (823) million for fiscal year 2014/15 as compared to  $\epsilon$ 160 million last fiscal year (adjusted following the first application of IFRS 11 and following the application of IFRS 5 in the context of the Energy disposal).

Net profit from Discontinued operations (Group share) reached  $\epsilon$ 104 million for fiscal year 2014/15 versus  $\epsilon$ 396 million for previous fiscal year.

Finally, the Net profit (Group share) amounted to  $\epsilon$ (719) million in fiscal year 2014/15, compared to  $\epsilon$ 556 million for the same period last year.

### **BALANCE SHEET**

Following the different decisions and approvals obtained, and taking into consideration the expected effective closing of the Energy transaction, Alstom considers that the conditions are met for the application of IFRS 5 – "Non-current assets held for sale and discontinued operations". In the consolidated financial statements, the assets held for sale and the related liabilities are presented separately from other assets and liabilities on specific lines on the balance sheet.

For more details on the consequences of the deal on the consolidated financial statements as well as the adjustments made on data published in the 2013/14 Registration Document, please refer to Note 3 and Note 4 to the consolidated financial statements for the year ended 31 March 2015.

Total Group Actual figures <i>(in € million)</i>	Year ended 31 March 2015	Year ended 31 March 2014 <sup>(*)</sup>	Variation March 2015/ March 2014
Goodwill	688	5,269	(4,581)
Intangible assets	444	2,053	(1,609)
Property, plant and equipment	656	2,968	(2,312)
Associates and non-consolidated investments	363	705	(342)
Other non-current assets	473	510	(37)
Deferred taxes	732	1,647	(915)
Non-current assets	3,356	13,152	(9,796)
Working capital assets	6,802	14,506	(7,704)
Marketable securities and other current financial assets	61	26	35
Cash and cash equivalents	1,599	2,276	(677)
Current assets	8,462	16,808	(8,346)
Asset held for sale	21,415	293	21,122
ASSETS	33,233	30,253	2,980

Total Group Actual figures <i>(in € million)</i>	Year ended 31 March 2015	Year ended 31 March 2014 <sup>(*)</sup>	Variation March 2015/ March 2014
Equity (Group share and minorities)	4,224	5,109	(885)
Provisions (non-current and current)	1,314	1,901	(587)
Accrued pension and other employee benefits	461	1,525	(1,064)
Financial debt (current and non-current)	5,186	5,704	(518)
Deferred taxes	11	176	(165)
Working capital liabilities (excl. provisions)	6,864	15,838	(8,974)
Liabilities related to assets held for sale	15,173	-	15,173
LIABILITIES	33,233	30,253	2,980

(\*) Figures have been restated as mentioned in Note 3 to the consolidated financial statements "Comparability" following the first application of IFRS 11.

#### Goodwill and intangible assets

At the end of March 2015, goodwill amounted to  $\epsilon$ 688 million against  $\epsilon$ 5,269 million at the end of March 2014. Movements over the period ended mainly arose from the classification of the Energy activities' goodwill as "Assets held for sale" for an amount of  $\epsilon$ 4,690 million.

Intangible assets include acquired intangible assets and capitalised development costs. They decreased to €444 million on 31 March 2015 (compared to €2,053 million on 31 March 2014) mainly from the classification of the Energy activities' Intangible assets as "Assets held

for sale" for an amount of €1,824 million. At 31 March 2015, the Group considers that the assumptions used to assess the recoverable value of Transport's intangibles at 31 March 2014 are not substantially modified.

#### Tangible assets

The Group's tangible assets decreased to €656 million on 31 March 2015, compared to €2,968 million on 31 March 2014 mainly coming from the classification of the Energy activities' tangible assets as "Assets held for sale" for €2,786 million.

Concerning the Continuing activities, the Group chose to further develop its industrial footprint in fast growing markets while modernising its existing facilities through €99 million of capital expenditures (excluding capitalised development expenses) compared to €111 million last year. In emerging markets, Transport invested in the development of a new production line for CITADIS<sup>TM</sup> tramways in Brazil which will serve the broader Latin America region as well in a signalling centre located in India. In Europe, the Sector inaugurated a new control room dedicated to regional trains' maintenance in Italy as well as a new bogie overhaul facility in the United Kingdom.

## Associates and non-consolidated investments

Associates and non-consolidated investments accounted for €363 million on 31 March 2015, compared to €705 million on 31 March 2014. This evolution is mainly due to unfavourable trend on the business plan of activities in Russia taking into account the actual crisis and assumptions on recovery and to the classification of the Energy activities' associates and non-consolidated investments as "Assets held for sale" for €204 million.

#### Other non-current assets

Other non-current assets amounted to  $\epsilon$ 473 million at the end of March 2015, compared to  $\epsilon$ 510 million at the end of March 2014. Financial non-current assets directly associated to a long-term lease of trains and associated equipment for a London metro operator slightly increased from  $\epsilon$ 364 million at the end of March 2014 to  $\epsilon$ 383 million at the end of March 2015 due to evolution of EUR/GBP exchange rate.

#### Working capital

Working capital (defined as current assets excluding assets held for sale, cash and cash equivalents and marketable securities, less current liabilities excluding current financial liabilities and including non-current provisions) on 31 March 2015 was  $\epsilon(1,376)$  million compared to  $\epsilon(3,233)$  million on 31 March 2014. The increase is mainly linked to the classification of the Energy activities' working capital as "Assets held for sale" for an amount of  $\epsilon$ 2,928 million partly offset by the provision booked to cover the \$772 million (*ca.*  $\epsilon$ 720 million) legal agreement Alstom S.A. agreed to pay to the U.S. Department of Justice (DOJ).

#### **Deferred tax**

Net deferred tax assets decreased to  $\epsilon$ 721 million at the end of March 2015, from  $\epsilon$ 1,471 million a year before. The evolution is mainly linked to the classification of the Energy activities' deferred tax as "Assets held for sale" for an amount of  $\epsilon$ 913 million.

#### Current and non-current provisions

The current and non-current provisions decreased from  $\epsilon$ 1,901 million on 31 March 2014 to  $\epsilon$ 1,314 million on 31 March 2015. The evolution is mainly linked to the classification of the Energy activities' current and non-current provisions as "Assets held for sale" for an amount of  $\epsilon$ 1,186 million, partly offset by the provision booked to cover the legal agreement Alstom S.A. agreed to pay to the U.S. Department of Justice (DOJ).

# Equity attributable to the equity holders of the parent and non-controlling interests

Equity on 31 March 2015 decreased to  $\epsilon$ 4,224 million (including non-controlling interests) from  $\epsilon$ 5,109 million on 31 March 2014. It was mostly impacted by:

- net profit from the fiscal year 2014/15 of €(719) million (Group share);
- pensions variation (recorded in equity) of €(499) million in 2014/15;
- currency translation adjustment of €304 million during fiscal year 2014/15.

#### **Financial debt**

The gross financial debt reached €5,186 million at the end of March 2015 compared to €5,704 million at the end of March 2014 notably thanks to the reimbursement of a bond in September 2014 for €722 million.

See Note 26 to the consolidated financial statements for further details regarding the financial debt.

### LIQUIDITY AND CAPITAL RESOURCES

The following table presents selected figures concerning the consolidated statement of cash flows:

Total Group (in € million)	Year ended 31 March 2015	Year ended 31 March 2014 <sup>(*)</sup>
Net cash provided by operating activities before changes in net working capital	(421)	923
Changes in net working capital resulting from operating activities	726	(302)
Net cash provided by operating activities	305	621
Of which operating flows provided/(used) by discontinued operations	163	415
Net cash used in or provided by investing activities	(213)	(879)
Of which investing flows provided/(used) by discontinued operations	593	(645)
Net cash used in financing activities	(336)	551
Of which financing flows provided/(used) by discontinued operations	(193)	63
NET (DECREASE)/INCREASE IN CASH AND CASH EQUIVALENTS	(244)	293
Cash and cash equivalents at the beginning of the period	2,276	2,147
Net effect of exchange rate variations	229	(142)
Other changes	8	(22)
Transfer to assets held for sale	(670)	-
CASH AND CASH EQUIVALENTS AT THE END OF THE PERIOD	1,599	2,276

(\*) Figures have been restated as mentioned in Note 3 to the consolidated financial statements "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

#### Net cash provided by operating activities

Net cash provided by operating activities was  ${\small €305}$  million for fiscal year 2014/15, compared to  ${\small €621}$  million for the previous year.

Net cash provided by operating activities before changes in net working capital was  $\epsilon(421)$  million in 2014/15. It represents the cash generated by the Group's net profit after elimination of non-cash items (given that provisions are included in the definition of the working capital, they are not part of the elimination of non-cash items) and before working capital movements.

The Group's net working capital change resulting from operating activities was positive at  $\epsilon$ 726 million in 2014/15 compared to  $\epsilon$ (302) million last fiscal year.

#### Net cash used in investing activities

Net cash used in investing activities amounted to  $\epsilon$ (213) million for fiscal year 2014/15, *versus*  $\epsilon$ (879) million for the previous year. In 2014/15, capital expenditures (excluding capitalised development expenses) amounted to  $\epsilon$ (458) million and capitalised development costs to  $\epsilon$ (298) million. Disposals of businesses, net of cash sold, amounted to  $\epsilon$ 623 million in 2014/15 which mainly includes the proceeds from the disposal of the auxiliary components business mentioned in 1.3. Acquisitions of businesses, net of cash acquired, amounted to  $\epsilon$ (50) million in 2014/15 *versus*  $\epsilon$ (116) million in 2013/14.

#### Net cash provided by financing activities

Net cash provided by financing activities was at  $\epsilon$ (336) million for fiscal year 2014/15, compared to  $\epsilon$ 551 million the previous year. This evolution is mainly due to a bond repayment partly offset by the issuance of commercial papers.

#### Net cash/(debt) position

On 31 March 2015, the Group recorded a net debt level of €(3,143) million, compared to the net debt position of €(3,038) million at 31 March 2014.

Total Group (in € million)	Year ended 31 March 2015	Year ended 31 March 2014 <sup>(*)</sup>
Net cash/(debt) at the beginning of the period	(3,038)	(2,376)
Change in cash and cash equivalents	(244)	293
Change in marketable securities and other current financial assets & liabilities	(7)	(15)
Change in bonds and notes	780	(474)
Change in current and non-current borrowings	(471)	(332)
Change in obligations under finance leases	39	38
Transfer to assets held for sale	(387)	-
Net debt of acquired entities at acquisition date and other variations	185	(172)
NET CASH/(DEBT) AT THE END OF THE PERIOD	(3,143)	(3,038)

(\*) Figures have been restated as mentioned in Note 3 to the consolidated financial statements "Comparability" following the first application of IFRS 11.

Notes 25, 26, 27, 30 and 31 to the consolidated financial statements provide further details, respectively on:

- the analysis of pensions and other employee benefits;
- the nature and the maturity of the financial debt;

- the Group's policy regarding financial risk management, including currency, interest, credit and liquidity risks;
- off-balance sheet commitments;
- lease obligations.

## **USE OF NON-GAAP FINANCIAL INDICATORS**

This section presents financial indicators used by the Group that are not defined by accounting standard setters.

#### **Orders received**

A new order is recognised as order received only when the contract creates enforceable obligations between the Group and its customer.

When this condition is met, the order is recognised at the contract value.

If the contract is denominated in a currency other than the functional currency of the reporting unit, the Group requires to immediately eliminate the currency exposure through the use of forward currency sales. Orders are then measured using the spot rate at inception of hedging instruments.

In the context of the Energy disposal, orders received presented for fiscal year 2014/15 are figures from continuing activities.

#### Order backlog

Order backlog represents sales not yet recognised on orders already received.

Order backlog at the end of a financial year is computed as follows:

- order backlog at the beginning of the year;
- plus new orders received during the year;
- less cancellations of orders recorded during the year;
- less sales recognised during the year.

The order backlog is also subject to changes in the scope of consolidation and to foreign currency translation effects.

In the context of the Energy disposal, order backlog presented for fiscal year 2014/15 are figures from continuing activities.

#### Free cash flow

Free cash flow is defined as net cash provided by operating activities less capital expenditures including capitalised development costs, net of proceeds from disposals of tangible and intangible assets. In particular, free cash flow does not include the proceeds from disposals of activity. The most directly comparable financial measure to free cash flow calculated and presented in accordance with IFRS is net cash provided by operating activities, and a reconciliation of free cash flow and net cash provided by operating activities is presented below:

Total Group (in € million)	Year ended 31 March 2015	Year ended 31 March 2014 <sup>(*)</sup>
Net cash provided by operating activities	305	621
Of which operating flows provided/(used) by discontinued operations	163	415
Capital expenditure (including capitalized development costs)	(756)	(811)
Proceeds from disposals of tangible and intangible assets	22	33
Free cash flow	(429)	(157)

(\*) Figures have been restated as mentioned in Note 3 to the consolidated financial statements "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

Alstom uses the free cash flow both for internal analysis purposes as well as for external communication as the Group believes it provides accurate insight regarding the actual amount of cash generated or used by operations.

#### **Capital employed**

Capital employed is defined as the closing position of goodwill, intangible assets, property, plant and equipment, associates and available-for-sale financial assets, other non-current assets (excluding prepaid pension benefits and financial non-current assets directly associated to financial debt) and current assets (excluding marketable securities and other current financial assets, and cash and cash equivalents) minus non-current provisions and current liabilities (excluding current financial debt).

Capital employed by Sector and at Group level is presented in Note 5 to the consolidated financial statements as of 31 March 2015.

Capital employed is used both for internal analysis purposes and for external communication as it provides insight regarding the amount of financial resources employed by a Sector or the Group as a whole and the profitability of a Sector or the Group as a whole in regard to resources employed.

At the end of March 2015, capital employed reached €857 million, compared to €7,886 million at the end of March 2014. Movements over the period ended mainly arose from the classification of the Energy activities' assets and liabilities as "Assets held for sale".

Total Group (in € million)	Year ended 31 March 2015	Year ended 31 March 2014 <sup>(*)</sup>
Non-current assets	3,356	13,152
less deferred tax assets	(732)	(1,647)
less non-current assets directly associated to financial debt	(383)	(364)
less prepaid pension benefits	(8)	(22)
Capital employed – non-current assets (A)	2,233	11,119
Current assets	8,462	16,808
less cash & cash equivalents	(1,599)	(2,276)
less marketable securities and other current financial assets	(61)	(26)
Capital employed – current assets (B)	6,802	14,506
Current liabilities	9,893	18,326
less current financial debt	(1,998)	(1,297)
plus non-current provisions	283	710
Capital employed – liabilities (C)	8,178	17,739
CAPITAL EMPLOYED (A)+(B)-(C)	857	7,886

(\*) Figures have been restated as mentioned in Note 3 to the consolidated financial statements "Comparability" following the first application of IFRS 11.

#### Net cash

Net cash is defined as cash and cash equivalents, marketable securities and other current financial assets and financial non-current assets directly associated to financial debt, less current and non-current financial debt.

Total Group (in € million)	Year ended 31 March 2015	Year ended 31 March 2014 <sup>(*)</sup>
Cash and cash equivalents	1,599	2,276
Marketable securities and other current financial assets	61	26
Financial non-current assets directly associated to financial debt	383	364
less:		
Current financial debt	1,998	1,297
Non-current financial debt	3,188	4,407
NET CASH/(DEBT)	(3,143)	(3,038)

(\*) Figures have been restated as mentioned in Note 3 to the consolidated financial statements "Comparability" following the first application of IFRS 11.

#### Organic basis

Figures disclosed in this section include performance indicators presented on an actual basis and on an organic basis. Figures have been given on an organic basis in order to eliminate the impact of changes in business composition and of variation of exchange rates between the Euro and the foreign currencies. The Group uses figures prepared on an organic basis both for internal analysis and for external communication, as it believes they provide means to analyse and explain variations from one period to another. However these figures, provided on an organic basis, are not measurements of performance under IFRS. To prepare figures on an organic basis, the figures presented on an actual basis are adjusted as follows:

- the actual figures for 2013/14 (order backlog, orders received, sales and income from operations) are restated taking into account the exchange rates used for 2014/15, as used for preparing the consolidated financial statements;
- in order to reflect the same scope of activity, actual figures for 2013/14 are restated from disposals made during fiscal year 2014/15 and 2014/15 actual figures are restated from acquisitions made in fiscal year 2014/15.

Figures on an organic basis are presented in the table shown next page.

#### ALSTOM – ORGANIC FIGURES 2014/15

	Year ended 31 March 2014 <sup>(*)</sup>				Year ended 31 March 2015				
- (in € million)	Actual figures	Exchange rate	Scope impact	Comparable figures	Actual figures	Scope impact		% var. act. March 2015/ March 2014	
Transport	22,818	1,212	1	24,031	28,301	(24)	28,277	24%	18%
Corporate & Others	118	5	-	123	93	-	93	-21%	-24%
ORDERS BACKLOG	22,936	1,217	1	24,154	28,394	(24)	28,370	24%	17%
Transport	6,130	108	1	6,239	10,043	-	10,043	64%	61%
Corporate & Others	18	(1)	-	17	3	-	3	-83%	-82%
ORDERS RECEIVED	6,148	107	1	6,256	10,046	-	10,046	63%	61%
Transport	5,680	56	1	5,737	6,139	(5)	6,134	8%	7%
Corporate & Others	46	(3)	-	43	24	-	24	-48%	-44%
SALES	5,726	53	1	5,780	6,163	(5)	6,158	8%	7%
Transport	308	14	-	322	345	(1)	344	12%	7%
Corporate & Others	(40)	-	-	(40)	(27)	-	(27)	-33%	-33%
INCOME FROM OPERATIONS	268	14	-	282	318	(1)	317	19%	12%
Transport	5.4%			5.6%	5.6%		5.6%		
Corporate & Others									
OPERATING MARGIN	4.7%			4.9%	5.2%		5.1%		
Sales	5,726	53	1	5,780	6,163	(5)	6,158	8%	7%
Cost of sales	(4,804)	(39)	(1)	(4,844)	(5,237)	4	(5,233)	9%	8%
R&D expenses	(122)	-	-	(122)	(112)	-	(112)	-8%	-8%
Selling expenses	(204)	-	-	(204)	(199)	-	(199)	-2%	-2%
Administrative expenses	(328)	-	-	(328)	(297)	-	(297)	-9%	-9%
INCOME FROM OPERATIONS	268	14	-	282	318	(1)	317	19%	12%

(\*) Figures have been restated as mentioned in Note 3 to the consolidated financial statements "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

# 3 FINANCIAL INFORMATION

CONSOLIDATED FINANCIAL STATEMENTS & CONSOLIDATED FINANCIAL STATEMENTS	72
Consolidated income statement	72
Consolidated statement of comprehensive income	73
Consolidated balance sheet	74
Consolidated statement of cash flows	75
Consolidated statement of changes in equity	77
Notes to the consolidated financial statements	78
Statutory Auditors' report on the consolidated financial statements	146
STATUTORY ACCOUNTS	148
Income statement * HAFR	148
Balance sheet * HAFR	149
Notes to the statutory financial statements $\mathscr{F}^{AFR}$	150
Five-year summary	165
Appropriation of the net income for the period ended 31 March 2015	166
Comments on statutory accounts	166
Statutory Auditors' report on the financial statements 🏵	167
Statutory Auditors' special report on related-party	
agreements and commitments	169

The Content of the Annual Financial Report is identified in the summary table with the help of the pictogram

# **CONSOLIDATED FINANCIAL STATEMENTS**

Year ended 31 March 2015

# CONSOLIDATED INCOME STATEMENT

Year ended			ended
(in € million)	Note	31 March 2015	31 March 2014 <sup>(1)</sup>
Sales	(5)	6,163	5,726
Cost of sales		(5,237)	(4,804)
Research and development expenses	(6)	(112)	(122)
Selling expenses		(199)	(204)
Administrative expenses		(297)	(328)
Income from operations	(5)	318	268
Other income	(7)	4	-
Other expense	(7)	(943)	(106)
Earnings before interest and taxes	(5)	(621)	162
Financial income	(8)	109	64
Financial expense	(8)	(246)	(223)
Pre-tax income		(758)	3
Income tax charge	(9)	8	94
Share of net income of equity-accounted investments	(13)	(64)	70
Net profit from continuing operations		(814)	167
Net profit from discontinued operations	(4)	113	399
NET PROFIT		(701)	566
Net profit from continuing operations attributable to:			
Equity holders of the parent		(823)	160
Non controlling interests		9	7
Net profit from discontinued operations attributable to:			
Equity holders of the parent		104	396
Non controlling interests		9	3
Earnings per share (in €)			
Basic earnings per share	(10)	(2.32)	1.80
Diluted earnings per share	(10)	(2.31)	1.78
Earnings per share (in €)			
Basic earnings per share from continuing operations	(10)	(2.66)	0.52
<ul> <li>Diluted earnings per share from continuing operations</li> </ul>	(10)	(2.65)	0.51
Earnings per share (in €)		(	
Basic earnings per share from discontinued operations	(10)	0.34	1.28
<ul> <li>Diluted earnings per share from discontinued operations</li> </ul>	(10)	0.33	1.27

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

# CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

		Year ended		
(in € million)	Note	31 March 2015	31 March 2014 (1)	
Net profit recognised in income statement		(701)	566	
Remeasurement of post-employment benefits obligations		(598)	107	
Income tax relating to items that will not be reclassified to profit or loss	(9)	99	(54)	
Items that will not be reclassified to profit or loss		(499)	53	
Of which from equity-accounted investments		-	-	
Fair value adjustments on available-for-sale assets		(1)	(15)	
Fair value adjustments on cash flow hedge derivatives		(34)	(1)	
Currency translation adjustments		304	(326)	
Income tax relating to items that may be reclassified to profit or loss	(9)	6	4	
Items that may be reclassified to profit or loss		275	(338)	
Of which from equity-accounted investments		(80)	(69)	
Other comprehensive income		(224)	(285)	
Of which attributable to discontinued operations	(4)	(172)	(165)	
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD		(925)	281	
Attributable to:				
Equity holders of the parent		(954)	285	
Non controlling interests		29	(4)	
Total comprehensive income attributable to equity shareholders arises from:				
Continuing operations		(881)	42	
Discontinued operations		(73)	243	
Total comprehensive income attributable to minority equity arises from:				
Continuing operations		15	5	
Discontinued operations		14	(9)	

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

The accompanying notes are an integral part of the consolidated financial statements.

# CONSOLIDATED BALANCE SHEET

### Assets

(in € million)	Note	At 31 March 2015	At 31 March 2014 (1)
Goodwill	(11)	688	5,269
Intangible assets	(11)	444	2,053
Property, plant and equipment	(12)	656	2,968
Investments in joint-ventures and associates	(13)	327	545
Non consolidated investments	(14)	36	160
Other non-current assets	(15)	473	510
Deferred taxes	(9)	732	1,647
Total non-current assets		3,356	13,152
Inventories	(16)	821	2,972
Construction contracts in progress, assets	(17)	2,554	3,951
Trade receivables	(18)	1,470	4,450
Other current operating assets	(19)	1,957	3,133
Marketable securities and other current financial assets	(20)	61	26
Cash and cash equivalents		1,599	2,276
Total current assets		8,462	16,808
Assets held for sale	(4)	21,415	293
TOTAL ASSETS		33,233	30,253

### Equity and liabilities

(in € million)	Note	At 31 March 2015	At 31 March 2014 (1)
Equity attributable to the equity holders of the parent	(22)	4,134	5,044
Non controlling interests		90	65
Total equity		4,224	5,109
Non-current provisions	(24)	283	710
Accrued pension and other employee benefits	(25)	461	1,525
Non-current borrowings	(26)	2,847	4,009
Non-current obligations under finance leases	(26)	341	398
Deferred taxes	(9)	11	176
Total non-current liabilities		3,943	6,818
Current provisions	(24)	1,031	1,191
Current borrowings	(26)	1,947	1,250
Current obligations under finance leases	(26)	51	47
Construction contracts in progress, liabilities	(17)	3,455	8,426
Trade payables		917	3,819
Other current operating liabilities	(28)	2,492	3,593
Total current liabilities		9,893	18,326
Liabilities related to assets held for sale	(4)	15,173	-
TOTAL EQUITY AND LIABILITIES		33,233	30,253

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

The accompanying notes are an integral part of the consolidated financial statements.

# CONSOLIDATED STATEMENT OF CASH FLOWS

			Year ended		
(in € million)	Note	31 March 2015	31 March 2014 <sup>(1)</sup>		
Net profit		(701)	566		
Depreciation, amortisation, expense arising from share-based payments and others		311	565		
Post-employment and other long-term defined employee benefits		25	(17)		
Net (gains)/losses on disposal of assets		(242)	(23)		
Share of net income of equity-accounted investments (net of dividends received)		109	(6)		
Deferred taxes charged to income statement	(9)	77	(162)		
Net cash provided by operating activities – before changes in working capital		(421)	923		
Changes in working capital resulting from operating activities <sup>(2)</sup>	(21)	726	(302)		
Net cash provided by/(used in) operating activities		305	621		
Of which operating flows provided/(used) by discontinued operations <sup>(2)</sup>	(4)	163	415		
Proceeds from disposals of tangible and intangible assets		22	33		
Capital expenditure (including capitalised R&D costs)		(756)	(811)		
Increase/(decrease) in other non-current assets		(52)	(2)		
Acquisitions of businesses, net of cash acquired		(50)	(116)		
Disposals of businesses, net of cash sold		623	17		
Net cash provided by/(used in) investing activities		(213)	(879)		
Of which investing flows provided/(used) by discontinued operations	(4)	593	(645)		
Capital increase/(decrease) including non controlling interests		15	35		
Dividends paid including payments to non controlling interests		(10)	(267)		
Issuances of bonds & notes		-	500		
Repayments of bonds & notes issued		(780)	(26)		
Changes in current and non-current borrowings		471	332		
Changes in obligations under finance leases		(39)	(38)		
Changes in marketable securities and other current financial assets and liabilities		7	15		
Net cash provided by/(used in) financing activities		(336)	551		
Of which financing flows provided/(used) by discontinued operations	(4)	(193)	63		
Net increase/(decrease) in cash and cash equivalents		(244)	293		
Cash and cash equivalents at the beginning of the period		2,276	2,147		
Net effect of exchange rate variations		229	(142)		
Other changes		8	(22)		
Transfer to assets held for sale		(670)			
Cash and cash equivalents at the end of the period		1,599	2,276		
Income tax paid		(249)	(262)		
Net of interests paid & received		(238)	(202)		

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

(2) Includes the impact of the assigned receivables that were derecognized in the amount of €105 million, as described in Notes 2.3.14 and 4, as at 31 March 2015.

31 March 2015	31 March 2014 <sup>(1)</sup>
(244)	293
(7)	(15)
780	(474)
(471)	(332)
39	38
(387)	-
185	(172)
(105)	(662)
(3,038)	(2,376)
(3,143)	(3,038)
	(3,038)

Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.
 The net cash/(debt) is defined as cash and cash equivalents, marketable securities and other current financial assets and non-current financial assets directly associated to liabilities included in financial debt (see Note 15), less financial debt (see Note 26).

The accompanying notes are an integral part of the consolidated financial statements.

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

(in € million, except for number of shares)	Number of outstanding shares	Capital	Additional paid-in capital	Retained earnings	Other comprehensive income	Equity attributable to the equity holders of the parent	Non controlling interests	Total equity
AT 31 MARCH 2013	308,158,126	2,157	875	3,648	(1,686)	4,994	93	5,087
Movements in other								
comprehensive income	-	-	-	-	(271)	(271)	(14)	(285)
Net income for the period	-	-	-	556	-	556	10	566
Total comprehensive income	-	-	-	556	(271)	285	(4)	281
Change in controlling interests								
and others	101	-	-	11	-	11	(15)	(4)
Dividends paid	-	-	-	(259)	-	(259)	(9)	(268)
Issue of ordinary shares under								
long term incentive plans	543,919	4	1	(3)	-	2	-	2
Recognition of equity settled								
share-based payments	-	-	-	11	-	11	-	11
AT 31 MARCH 2014 (1)	308,702,146	2,161	876	3,964	(1,957)	5,044	65	5,109
Movements in other								
comprehensive income	-	-	-	-	(235)	(235)	12	(223)
Net income for the period	-	-	-	(719)	-	(719)	18	(701)
Total comprehensive income	-	-	-	(719)	(235)	(954)	29	(925)
Change in controlling interests								
and others	89	-	-	(9)	21	12	4	16
Dividends paid	-	-	-	-	-	-	(9)	(9)
Issue of ordinary shares under								
long term incentive plans	1,090,262	8	3	(5)	-	6	-	6
Recognition of equity settled								
share-based payments	-	-	-	26	-	26	-	26
AT 31 MARCH 2015	309,792,497	2,169	879	3,257	(2,171)	4,134	90	4,224

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

The accompanying notes are an integral part of the consolidated financial statements.

# **NOTES** TO THE CONSOLIDATED FINANCIAL STATEMENTS

#### **DETAILED SUMMARY**

Note 1	Major events	79
Note 2	Accounting policies	81
Note 3	Comparability	91
Note 4	Assets held for sale and discontinued operations	96
Note 5	Segment information	99
Note 6	Research and development expenditure	_101
Note 7	Other income and other expense	_102
Note 8	Financial income (expense)	_102
Note 9	Taxation	_103
Note 10	Earnings per share	105
Note 11	Goodwill and intangible assets	106
Note 12	Property, plant and equipment	108
Note 13	Investments in joint ventures and associates	109
Note 14	Non-consolidated investments	_113
Note 15	Other non-current assets	_113
Note 16	Inventories	_114
Note 17	Construction contracts in progress	114
Note 18	Trade receivables	_115
Note 19	Other current operating assets	_115

Note 20	Marketable securities and other current financial assets	_116
Note 21	Working capital	116
Note 22	Equity	_117
Note 23	Share-based payments	_118
Note 24	Provisions	123
Note 25	Post-employment and other long-term defined employee benefits	124
Note 26	Financial debt	129
Note 27	Financial instruments and financial risk management	129
Note 28	Other current operating liabilities	138
Note 29	Employee benefit expense and headcount	138
Note 30	Contingent liabilities and disputes	139
Note 31	Lease obligations	141
Note 32	Independent Auditors' fees	142
Note 33	Related parties	142
Note 34	Subsequent events	143
Note 35	Major companies included in the scope of consolidation	144

Alstom ("the Group") serves the rail transport market through its Transport Sector and the power generation and transmission markets through its Thermal Power, Renewable Power and Grid activities ("Energy activities"). The Group designs, supplies, and services a complete range of technologically-advanced products and systems for its customers, and possesses a unique expertise in systems integration and through life maintenance and services.

The operational activities of the Group are organised as follow:

### Transport

The Transport Sector serves the urban transit, regional/intercity passenger travel markets and freight markets all over the world with rail transport products, systems and services.

#### **Thermal Power**

Thermal Power offers a comprehensive range of power generation solutions using gas or coal from integrated power plants and all types of turbines, generators, boilers, emission control systems to a full range

### NOTE 1 · MAJOR EVENTS

### 1.1. Alstom strategic move

#### 1.1.1. Presentation of the General Electric offer

On 26 April 2014, the Board of Directors of Alstom received from General Electric (GE) an offer, countersigned by Alstom on 29 April 2014, and updated by GE on 20 June 2014, to acquire its Energy activities. On 20 June 2014, the Board of Directors of the Company unanimously decided to issue a positive recommendation on the GE offer.

GE would acquire the Thermal Power, Renewable Power and Grid activities as well as central and shared services (legal entities Alstom and Alstom Holdings would not be disposed) (the "Energy Business") for a committed equity value of  $\epsilon$ 12.35 billion, pursuant to a master agreement between GE and Alstom. By taking over Alstom's Energy activities, GE undertakes to take on all assets as well as all liabilities and risks exclusively or predominantly associated with the Energy Business (this will not apply to the agreement concluded with the US Department of Justice detailed in Note 1.2). In the context of the transaction, Alstom would get indemnified by GE for any liability pertaining to the Energy Business which Alstom may incur after closing of the transaction.

The completion of the transaction is subject to a limited number of conditions precedent, which essentially cover works council consultation, receipt of authorizations required from a regulatory and merger control standpoint. However, once the authorizations relating to entities being sold, which account for at least 85% of the turnover of all the entities subject to the sale, including authorizations in certain key countries (such as authorisations of the European Commission and the US authority),

of services including plant modernisation, maintenance and operational support. It also supplies conventional islands for nuclear power plants.

### **Renewable Power**

Renewable Power offers EPC solutions, turbines and generators, control equipment and maintenance for Hydro power and Wind power activities. It includes geothermal and solar thermal businesses.

#### Grid

Grid designs and manufactures equipment and engineered turnkey solutions to manage power grids and transmit electricity from the power plant to the large end-user, be it a distribution utility or an industrial process or production facility.

The consolidated financial statements are presented in euro and have been authorised for issue by the Board of Directors held on 5 May 2015. In accordance with French legislation, they will be final once approved by the shareholders of Alstom at the Annual General Meeting convened for 30 June 2015.

have been obtained, the parties may complete the transaction, with the remainder to be transferred in successive stages, provided there would be no violation of applicable law to do so.

In the framework of the acquisition of Energy activities by GE, three alliances would be created:

- the Grid alliance would consist of a combination of Alstom Grid and GE Digital Energy businesses to be held through two joint venture holding companies (Alstom would hold a 50%-1 stake in each Joint venture's share capital and voting rights);
- the Renewables alliance would consist of Alstom's hydro, offshore wind and tidal businesses; this alliance also would be held through two joint venture holding companies (Alstom would hold a 50%-1 stake in each Joint venture's share capital and voting rights);
- the scope of the Global Nuclear & French Steam alliance would include the production and servicing of the "Arabelle" steam turbine equipment for nuclear power plants worldwide, as well as Alstom's steam turbine equipment and servicing for applications in France. Alstom would hold 20%-1 share of the share capital into the joint venture company and would have 50%-2 votes of voting rights. The French State would hold a preferred share giving it veto and other governance rights over issues relating, inter alia, to security and nuclear plant technology in France.

The investment by Alstom in these alliances would amount to circa  $\epsilon$ 2.5 billion. The future joint venture companies would be accounted for under equity method in Alstom's consolidated financial statements.

In December 2014, GE and Alstom entered into an amendment to the original agreement. Alstom has agreed to an extension of the trademark licensing of its name from 5 years to 25 years as well as other contractual amendments for an additional consideration of circa  $\notin$ 0.4 billion to be paid by GE.

GE would sell Alstom 100% of its signalling business, with sales of circa \$500 million in 2013 and 1,200 employees, and the companies would sign several collaboration agreements including a service agreement for GE locomotives outside of the United States of America, R&D, sourcing and manufacturing and commercial support in the United States of America.

#### 1.1.2. Process

On 4 November 2014, on conclusion of the information-consultation procedure with personnel representative bodies, the Board of Directors of Alstom approved the signing of the master agreement which was signed on the same date, the 4 November 2014.

The application for the approval of the transaction under Article L. 151-3 of the Monetary and Financial Code relating to foreign investments in France has been filed by GE on 1 October 2014. Authorization was obtained on 4 November 2014.

In accordance with the AFEP-Medef Code, the transaction was approved by the shareholders with a majority of 99.2% during an Extraordinary General Meeting submitted to and convened on 19 December 2014.

Following the information-consultation procedure with works councils and the authorisation relating to foreign investments in France, the support expressed by shareholders during the EGM is a key milestone since the signing of the agreements with GE.

The completion of the transaction is now subject to receipt of authorizations required from a regulatory and merger control standpoint in a certain number of jurisdictions. The master agreement specifies that if the conditions precedents have not been met by 30 November 2015, either party shall be allowed to terminate the master agreement in accordance with its terms.

The European Commission opened on 23 February 2015 an in-depth investigation in the transaction (known as Phase II) on the European Union competition implications of merging the GE & Alstom heavy-duty gas turbine (HDGT) businesses, and the US Department of Justice, Antitrust Division, requested further documents. Several other jurisdictions are also continuing their analysis of the transaction. Such in-depth reviews by regulators are common in such transaction and Alstom remains confident on the positive final outcome.

Subject to obtaining the regulatory and merger control authorizations required, the closing of the transaction is expected to occur in the coming months.

The closing would be followed by a cash return to shareholders which could range between €3.5 billion and €4 billion and be implemented through a public share buy-back offer (offre publique de rachat d'actions). The precise amount to be distributed and method of distribution would be specified at a later date and would be submitted to a shareholders' decision after closing of the transaction.

Once this transaction is completed, Alstom would refocus on its fully owned Transport activities and on its Energy alliances with GE.

#### **1.1.3.** Accounting treatment

Since the Board's approval of the offer on 20 June 2014, following the different decisions and approvals obtained, and taking into consideration the expected effective closing of the transaction, Alstom considers that the conditions are met for the application to the Energy activities of IFRS5 – Non-current assets held for sale and discontinued operations: the Group has made a decision to sell the assets concerned and considers the sale to be highly probable as of 31 March 2015.

In the consolidated financial statements, the activities being disposed are reported as follows:

- the assets held for sale and the related liabilities are presented separately from other assets and liabilities on specific lines on the balance sheet as at 31 March 2015, with no reclassification of the comparative balance sheet as at 31 March 2014;
- the net profit of discontinued operations realized over the year is disclosed by a single amount on the face of the consolidated income statement into the line named "Net profit from discontinued operations". The income statement of comparative periods is presented in accordance with IFRS 5 and as detailed in Note 3 "Comparability";
- the net cash flows attributable to the operating, investing and financing activities of discontinued operation realized over the year are disclosed in the consolidated statement of cash flows.

At the date of the disposal, the capital gain as well as the related tax impact will be recognised under the line "Net profit from discontinued operations". The disposal value will significantly exceed the carrying value of the net assets held for sale.

# **1.2.** Agreement between Alstom and the US Department of Justice

Alstom has concluded on 22 December 2014 an agreement with the US Department of Justice (DOJ) in order to put an end to the investigation conducted in the United States from 2010 on subsidiaries of the Group relating to alleged potential violations of the Foreign Corrupt Practices Act (FCPA).

Two US subsidiaries, Alstom Power Inc. and Alstom Grid Inc. (formerly known as Alstom T&D Inc.), have agreed to enter into deferred prosecution agreements with the DOJ relating to FCPA charges. If these two US subsidiaries fulfil the terms of their deferred prosecution agreements, all criminal charges will be dismissed against them at the end of three years. Another Alstom subsidiary, Alstom Network Schweiz AG (formerly known as Alstom Prom AG), has agreed to plead guilty to FCPA antibribery charges. In relation to these underlying charges, the ultimate parent company of the Group, Alstom S.A. has agreed to plead guilty to violating the books and records and internal controls provisions of the FCPA and to pay a fine of approximately \$772 million.

The DOJ agreement has also stipulated that no part of the fine can be passed on to GE as part of the projected sale of Alstom's Energy businesses.

The Plea agreements concluded with the DOJ are subject to approval by the competent American court.

Payment of the fine is expected to occur ten days after entry of judgement and pronouncement of sentence, based upon such approval. Sentencing is currently scheduled for June 2015 which schedule could be postponed by the Court.

# **1.3.** Sale of the Auxiliary components business

The Auxiliary components business was part of Steam business within Thermal Power and was active both in the new equipment market and aftermarket services across three product lines: air preheaters and gas-gas heaters for thermal power plants, heat transfer solutions for a variety of petrochemical and industrial processes, and grinding mills for diversified industrial applications.

The sale of the Auxiliary components business to a European investment firm was completed on 29 August 2014. In application of the agreements

signed by the two parties on 1 April 2014 for a disclosed enterprise value of  $\epsilon$ 730 million, the proceeds of the sale initially of  $\epsilon$ 685 million was subject to minor price adjustment. Alstom received the closing notice on 6 January 2015 leading to a positive price adjustment.

The gain on sale represents  $\epsilon$ 295 million before taxes ( $\epsilon$ 201 million after taxes) and is recorded in "Net profit from discontinued operations" in the income statement as of 31 March 2015. The Auxiliary components business being part of Thermal Power, the Group presents all impacts regarding this disposal (gain on sale, costs) on the line "Net profit from discontinued operations" of the income statement.

### NOTE 2 · ACCOUNTING POLICIES

# 2.1. Basis of preparation of the consolidated financial statements

Alstom consolidated financial statements, for the year ended 31 March 2015, have been prepared:

- in accordance with the International Financial Reporting Standards (IFRS) and interpretations published by the International Accounting Standards Board (IASB) and endorsed by the European Union and whose application was mandatory as at 31 March 2015;
- using the same accounting policies and measurement methods as at 31 March 2014, with the exceptions of changes required by the enforcement of new standards and interpretations.

The information relating to consolidated financial statements for the fiscal year ended 31 March 2013, presented in the 2013/14 registration document D.14-0550 filed with the AMF on 20 May 2014 are included by reference.

The full set of standards endorsed by the European Union can be consulted on the website of the European Commission at:

http://ec.europa.eu/internal\_market/accounting/ias/index\_en.htm

#### 2.1.1. New standards and interpretations mandatorily applicable for financial periods beginning on 1 April 2014

#### New consolidation standards

#### • Consolidated statements (IFRS 10):

IFRS 10 supersedes IAS 27, Consolidated and separate financial statements and SIC 12, Consolidation – Special purpose entities. This standard introduces a new definition of control. With a view to the first-time application of this standard, the Group undertook an analysis of its investments to determine the level of control exercised over them pursuant to the new definition of control. The Group did not identify any change following the first-time application of this standard.

#### Joint arrangements (IFRS 11):

IFRS 11 supersedes IAS 31, Interests in joint ventures, and SIC 13, Jointly controlled entities – non monetary contributions by venturers. The changes and impacts resulting from first-time application of this new standard are detailed in Note 3 "Comparability".

- Disclosure of interests in other entities (IFRS 12):
- IFRS 12 covers all the disclosures required when an investor has an interest in any of the followings: subsidiaries, joint arrangements, associates and/or non-consolidated structured entities, regardless of the level of control or influence over the entity.
- Investments in associates and joint ventures (IAS 28 revised):
- IAS 28 has been amended to include the requirements for joint ventures to be accounted for under the equity method following the issuance of IFRS 11 (see above).
- Transition guidance (amendments to IFRS 10, IFRS 11 and IFRS 12).

#### Others

- Offsetting financial assets and financial liabilities (amendments to IAS 32).
- Recoverable amount disclosures for non-financial assets (amendments to IAS 36).
- Novation of derivatives and continuation of hedge accounting (amendments to IAS 39).

The other amendments effective as of 1 April 2014 do not have a material impact on the Group's consolidated financial statements.

# 2.1.2. New standards and interpretations not yet mandatorily applicable

#### 2.1.2.1. New standards and interpretations endorsed by the European Union

- Levies (IFRIC 21): this interpretation, effective as of 1 April 2015 for Alstom, relates to the recognition date at which the levies should be accrued.
- Improvements to IFRS 2011-2013.

These interpretations will be applied retrospectively and their impact is currently being analysed.

#### 2.1.2.2. New standards and interpretations not yet approved by the European Union and not yet mandatorily applicable

- Financial instruments:
  - classification and measurement of financial assets (IFRS 9);
  - mandatory effective date and transition guidance (amendments to IFRS 9 and IFRS 7);
  - hedge accounting and amendments to IFRS 9, IFRS 7 and IAS 39.
- Revenue from contracts with customers (IFRS 15): the standard will be applicable for annual periods beginning after 1 January 2017.
- Clarification of acceptable methods of depreciation and amortisation (amendments to IAS 16 and IAS 38).
- Accounting for acquisitions of interests in joint operations (amendments to IFRS 11).
- Sale or contribution of assets between an investor and its associate or joint venture (amendments to IFRS 10 and IAS 28).
- Defined Benefit Plans: Employee contributions (amendments to IAS 19R).
- Improvements to IFRS 2010-2012 and IFRS 2012-2014.

The potential impacts of these new pronouncements are currently being analysed.

### 2.2. Use of estimates

The preparation of the consolidated financial statements in conformity with IFRS requires management to make various estimates and to use assumptions regarded as realistic and reasonable. These estimates or assumptions could affect the value of the Group's assets, liabilities, equity, net income and contingent assets and liabilities at the closing date. Management reviews estimates on an on-going basis using information currently available. Actual results may differ from those estimates, due to changes in facts and circumstances.

The accounting policies most affected by the use of estimates are the following:

#### Revenue and margin recognition on construction and long-term service contracts and related provisions

The Group recognises revenue and gross margin on construction and long-term service contracts using the percentage of completion method based on milestones; in addition, when a project review indicates a negative gross margin, the estimated loss at completion is immediately recognised.

Recognised revenue and margin are based on estimates of total expected contract revenue and cost, which are subject to revisions as the contract progresses. Total expected revenue and cost on a contract reflect management's current best estimate of the probable future benefits and obligations associated with the contract. Assumptions to calculate present and future obligations take into account current technology as well as the commercial and contractual positions, assessed on a contract-by-contract basis. The introduction of technologically-advanced products exposes the Group to risks of product failure significantly beyond the terms of standard contractual warranties applicable to suppliers of equipment only.

Obligations on contracts may result in penalties due to late completion of contractual milestones, or unanticipated costs due to project modifications, suppliers or subcontractors' failure to perform or delays caused by unexpected conditions or events. Warranty obligations are affected by product failure rates, material usage and service delivery costs incurred in correcting failures.

Although the Group makes individual assessments on contracts on a regular basis, there is a risk that actual costs related to those obligations may exceed initial estimates. Estimates of contract costs and revenues at completion in case of contracts in progress and estimates of provisions in case of completed contracts may then have to be re-assessed.

#### Estimate of provisions relating to litigations

The Group identifies and analyses on a regular basis current litigations and measures, when necessary, provisions on the basis of its best estimate of the expenditure required to settle the obligation at the balance sheet date. These estimates take into account information available and different possible outcomes.

#### Valuation of deferred tax assets

Management judgment is required to determine the extent to which deferred tax assets can be recognised. Future sources of taxable income and the effects of the Group global income tax strategies are taken into account in making this determination. This assessment is conducted through a detailed review of deferred tax assets by jurisdiction and takes into account past, current and future performance deriving from the existing contracts in the order book, the budget and the three-year plan, and the length of carry back, carry forwards and expiry periods of net operating losses.

#### Measurement of post-employment and other long-term defined employee benefits

The measurement of obligations and assets related to defined benefit plans makes it necessary to use several statistical and other factors that attempt to anticipate future events. These factors include assumptions about the discount rate, the rate of future compensation increases as well as withdrawal and mortality rates. If actuarial assumptions materially differ from actual results, it could result in a significant change in the employee benefit expense recognised in the income statement, actuarial gains and losses recognised in other comprehensive income and prepaid and accrued benefits.

#### Valuation of assets

The discounted cash flow model used to determine the recoverable value of the groups of cash generating units to which goodwill is allocated includes a number of inputs including estimates of future cash flows, discount rates and other variables, and then requires significant judgment.

Impairment tests performed on intangible and tangible assets are also based on assumptions. Future adverse changes in market conditions or poor operating results from underlying assets could result in an inability to recover their current carrying value.

#### Inventories

Inventories, including work in progress, are measured at the lower of cost and net realisable value. Write-down of inventories are calculated based on an analysis of foreseeable changes in demand, technology or market conditions in order to determine obsolete or excess inventories. If actual market conditions are less favourable than those projected, additional inventory write-downs may be required.

### 2.3. Significant accounting policies

#### 2.3.1. Consolidation methods

#### **Subsidiaries**

Subsidiaries are entities over which the Group exercises control.

The Group controls an entity when (i) it has power over this entity, (ii) is exposed to or has rights to variable returns from its involvement with that entity, and (iii) has the ability to use its power over that entity to affect the amount of those returns.

Generally the determination of control is consistent with the level of voting rights of the entity held by the Group, which gives the Group the power and current ability to direct the relevant activities of the entity.

Subsidiaries are fully consolidated in the consolidated financial statements from the date on which control is transferred to the Group and deconsolidated from the date that control ceases.

Inter-company balances and transactions are eliminated.

Non-controlling interests in the net assets of consolidated subsidiaries are identified in a specific line of the equity named "Non-controlling interests". Non-controlling interests consist of the amount of those interests at the date of the original business combination and their share of changes in equity since the date of the combination. In the absence of explicit agreements to the contrary, subsidiaries' losses are systematically allocated between equity holders of the parent and non-controlling interests based on their respective ownership interests even if this results in the non-controlling interests having a deficit balance.

Transactions with non-controlling interests that do not result in loss of control are considered as transactions between shareholders and accounted for in equity.

#### Joint arrangements

Joint arrangements are the entities over which the Group has joint control.

The Group jointly controls an entity when decisions relating to the relevant activities of that entity require unanimous consent of the Group and the other parties who share control.

A joint arrangement is classified either as a joint operation or as a joint venture. The classification is based on the rights and obligations of the parties to the arrangement, taking into consideration the structure and legal form of the arrangement, the terms agreed by the parties in the contractual arrangement and, when relevant, other facts and circumstances (see also Note 3.2.):

#### Joint operations

Joint operations are entities in which the Group has rights to the assets and obligations for the liabilities.

The Group recognises the assets, liabilities, revenues and expense related to its interests in the joint operation. A joint operation may be conducted under a separate vehicle or not.

#### Joint ventures

Joint ventures are entities in which the Group only has rights to the net assets.

Interests in joint ventures are consolidated under the equity method as described in the paragraph below.

#### Investments in associates

Associates are entities over which the Group has significant influence. In other words, the Group participates in decisions related to these entities' financial and operating policies without having control (exclusive or joint).

Generally, the existence of significant influence is consistent with a level of voting right held by the Group between 20% and 50%.

Interests in associates are consolidated under the equity method in the consolidated financial statements as described in the paragraph below.

#### Equity method

The Group accounts for its interests in associates and joint ventures under the equity method. Wherever necessary, accounting policies of associates and joint ventures have been changed to ensure consistency with the policies adopted by the Group.

Under the equity method, investments in associates are carried in the consolidated balance sheet at cost, including any goodwill arising and transaction costs. Earn-outs are initially recorded at fair value and adjustments recorded through cost of investment when their payments are probable and can be measured with sufficient reliability.

Any excess of the cost of acquisition over the Group's share of the net fair value of the identifiable assets, liabilities and contingent liabilities of the associate or joint venture recognized at the date of acquisition is recognized as goodwill. The goodwill is included within the carrying amount of the investment and is assessed for impairment as part of the investment. In case of an associate or joint venture purchased by stage, the Group uses the cost method to account for changes from available for sale (AFS) category to "Investments in joint ventures and associates".

Associates and joint ventures are presented in the specific line "Investments in joint ventures and associates" of the balance sheet, and the Group's share of its associates' profits or losses is recognized in the line "Share of net income of equity-accounted investments" of the income statement whereas its share of post-acquisition movements in reserves is recognized in reserves.

Losses of an associate or joint venture in excess of the Group's interest in that associate or joint venture are not recognized, except if the Group has a legal or implicit obligation.

The impairment expense of investments in associates and joint ventures is recorded in the line "Share of net income of equity-accounted investments" of the income statement.

# 2.3.2. Translation of financial statements denominated in currencies other than euro

Functional currency is the currency of the primary economic environment in which a reporting entity operates, which in most cases, corresponds to the local currency. However, some reporting entities may have a functional currency different from local currency when that other currency is used for the entity's main transactions and faithfully reflects its economic environment.

Assets and liabilities of entities whose functional currency is other than the euro are translated into euro at closing exchange rate at the end of each reporting period while their income and cash flow statements are translated at the average exchange rate for the period. The currency translation adjustments resulting from the use of different currency rates for opening balance sheet positions, transactions of the period and closing balance sheet positions are recorded in other comprehensive income. Translation adjustments are transferred to the consolidated income statement at the time of the disposal of the related entity.

Goodwill and fair value adjustments arising from the acquisition of entities whose functional currency is not euro are designated as assets and liabilities of those entities and therefore denominated in their functional currencies and translated at the closing rate at the end of each reporting period.

#### 2.3.3. Business combinations

Business combinations completed between the 1 January 2004 and the 31 March 2010 have been recognised applying the provisions of the previous version of IFRS 3.

Business combinations completed from the 1 April 2010 onwards are recognised in accordance with IFRS 3 Revised.

The Group applies the acquisition method to account for business combinations. The consideration transferred for the acquisition of a subsidiary is the sum of fair values of the assets transferred and the liabilities incurred by the acquirer at the acquisition date and the equity-interest issued by the acquirer. The consideration transferred includes contingent consideration, measured and recognized at fair value at the acquisition date.

For each business combination, any non-controlling interest in the acquiree may be measured either at the acquisition-date fair value, leading to the recognition of the non-controlling interest's share of goodwill (full goodwill method) or at the non-controlling interest's proportionate share of the acquiree's identifiable net assets, resulting in recognition of only the share of goodwill attributable to equity holders of the parent (partial goodwill method).

Acquisition-related costs are recorded as an expense as incurred.

Goodwill arising from a business combination is measured as the difference between:

- the fair value of the consideration transferred for an acquiree plus the amount of any non-controlling interests of the acquiree and;
- the net fair value of the identifiable assets acquired and liabilities assumed at the acquisition date.

Initial estimates of consideration transferred and fair values of assets acquired and liabilities assumed are finalised within twelve months after the date of acquisition and any adjustments are accounted for as retroactive adjustments to goodwill. Beyond this twelve-month period, any adjustment is directly recognised in the income statement.

Earn-outs are initially recorded at fair value and adjustments made beyond the twelve-month measurement period following the acquisition are systematically recognised through profit or loss.

Goodwill is not amortised but tested for impairment annually at closing date or more frequently if events or changes in circumstances indicate a potential impairment.

In case of a step-acquisition that leads to the Group acquiring control of the acquiree, the equity interest previously held by the Group is remeasured at its acquisition-date fair value and any resulting gain or loss is recognised in profit or loss.

#### 2.3.4. Non-Current Assets Held for Sale and Discontinued Operations

IFRS 5, Non-Current Assets Held for Sale and Discontinued Operations, sets out the accounting treatment applicable to assets held for sale and presentation and disclosure requirements for discontinued operations.

#### 2.3.4.1. Assets held for sale

Non-current assets held for sale are presented on a separate line of the balance sheet when (i) the Group has made a decision to sell the asset(s) concerned and (ii) the sale is considered to be highly probable. These assets are measured at the lower of net carrying amount and fair value less costs to sell.

When the Group is committed to a sale process leading to the loss of control of a subsidiary, all assets and liabilities of that subsidiary are reclassified as held for sale, irrespective of whether the Group retains a residual interest in the entity after sale.

#### 2.3.4.2. Discontinued operations

A discontinued operation is a component of an entity that either has been disposed of or is classified as held for sale and represents a separate major line of business or geographical area of operations, is part of a single co-ordinated plan to dispose of a separate major line of business or geographical area of operations, or is a subsidiary acquired exclusively with a view to resale.

When these criteria are met, the results and cash flows of discontinued operations are presented on a separate line in the consolidated income statement and statement of cash flows for each period. The Group assesses whether a discontinued operation represents a major line of business or geographical area of operations mainly on the basis of its relative contribution to the Group's consolidated financial statements.

In compliance with IFRS 5, the Group applies the following specific measurements which impact the consolidated financial statements:

 discontinued operations (including non-current assets, current assets and the related liabilities classified as held for sale), as a whole, are measured at the lower of their carrying amount and fair value less costs to sell;

- goodwill, tangible and intangible assets are no longer reviewed for impairment;
- the exception of IAS 12 consisting in not recognising mechanical deferred taxes resulting from the difference between tax and consolidated values of the investments/subsidiaries being disposed is no more applicable since it becomes probable that the temporary difference will reverse in the foreseeable future with the sale of the subsidiaries. Thus, deferred tax liabilities are recognised with an income statement impact presented within the "Net profit from discontinued operations";
- amortisation on non-current assets classified as "assets held for sale" ceases at the date of IFRS 5 application;
- costs specifically incurred in the context of the deal are presented in the P&L within the "Net profit from discontinued operations";
- all intercompany balance-sheet positions are eliminated.

#### 2.3.5. Segment information

Operating segments used to present segment information are identified on the basis of internal reports used by the Chief Executive Officer (CEO) to allocate resources to the segments and assess their performance. There is no segment aggregation.

The Chief Executive Officer is the Group's "chief operating decisions maker" within the meaning of IFRS 8.

The methods used to measure the key performance indicators of the segments for internal reporting purposes are the same as those used to prepare the consolidated financial statements (see also Note 5).

#### 2.3.6. Sales and costs generated by operating activities

#### Measurement of sales and costs

The amount of revenue arising from a transaction is usually determined by the contractual agreement with the customer. In the case of construction contracts, claims are considered in the determination of contract revenue only when it is highly probable that the claim will result in additional revenue and the amount can be reliably estimated.

Penalties are taken into account in reduction of contract revenue as soon as they are probable.

Production costs include direct costs (such as material, labour and warranty costs) and indirect costs. On the basis of funding required for the execution of contracts, borrowing costs may be attributed to construction contracts whose execution period exceeds one year. Warranty costs are estimated on the basis of contractual agreement, available statistical data and weighting of all possible outcomes against their associated probabilities. Warranty periods may extend up to five years. Selling and administrative expenses are excluded from production costs.

#### **Recognition of sales and costs**

Revenue on sale of manufactured products is recognised according to IAS 18, *i.e.* essentially when the significant risks and rewards of ownership are transferred to the customer, which generally occurs on delivery. Revenue on short-term service contracts is recognised on performance of the related service. All production costs incurred or to be incurred in respect of the sale are charged to cost of sales at the date of recognition of sales. Revenue on construction contracts and long-term service agreements is recognised based on the percentage of completion method: the stage of completion is assessed by milestones which ascertain the completion of a physical proportion of the contract work or the performance of services provided for in the agreement. The revenue for the period is the excess of revenue measured according to the percentage of completion over the revenue recognised in prior periods.

Cost of sales on construction contracts and long-term service agreements is computed on the same basis. The cost of sales for the period is the excess of cost measured according to the percentage of completion over the cost of sales recognised in prior periods. As a consequence, adjustments to contract estimates resulting from work conditions and performance are recognised in cost of sales as soon as they occur, prorated to the stage of completion.

When the outcome of a contract cannot be estimated reliably but the contract overall is expected to be profitable, revenue is still recognised based on milestones, but margin at completion is adjusted to nil.

When it is probable that contract costs at completion will exceed total contract revenue, the expected loss at completion is recognised immediately as an expense.

Bid costs are directly recorded as expenses when a contract is not secured.

With respect to construction contracts and long-term service agreements, the aggregate amount of costs incurred to date plus recognised margin less progress billings is determined on a contract-by-contract basis. If the amount is positive, it is included as an asset designated as "Construction contracts in progress, assets". If the amount is negative, it is included as a liability designated as "Construction contracts in progress, liabilities".

The caption "Construction contracts in progress, liabilities" also includes down payments received from customers.

# Recognition of research and development costs and overhead expenses

Research expenditure is expensed as incurred. Development costs are expensed as incurred unless the project they relate to meets the criteria for capitalisation (see 2.3.11).

Selling and administrative expenses are expensed as incurred.

#### 2.3.7. Income from operations

Income from operations is the indicator used by the Group to present the level of operational performance that can be used as part of an approach to forecast recurring performance.

Income from operations includes gross margin, research and development expenses, selling and administrative expenses. It includes in particular the service cost of employee defined benefits, the cost of share-based payments and employee profit sharing and capital gains (losses) on disposal of intangible and tangible assets arising from ordinary activities.

#### 2.3.8. Other income and other expense

Other income and other expense are representative of items which are inherently difficult to predict due to their unusual, irregular or non-recurring nature.

Other income may include capital gains on disposal of investments or activities and capital gains on disposal of tangible and intangible assets arising from activities disposed of, or facing restructuring plans as well as any income associated to past disposals.

Other expense include capital losses on disposal of investments or activities and capital losses on disposal of tangible and intangible assets relating to activities facing restructuring plans as well as any costs associated to past disposals, restructuring costs, rationalisation costs, significant impairment losses on assets, costs incurred to effect business combinations and amortisation expense of assets exclusively acquired in the context of business combinations (margin in backlog, customer relationship, margin on inventory), litigation costs that have arisen outside the ordinary course of business and a portion of post-employment and other long-term defined benefit expense (plan amendments, impacts of curtailments and settlements and actuarial gains and losses referring to long-term benefits other than post-employment benefits).

Rationalisation costs are linked to the Group-wide cost competitiveness plan called D2E (Dedicated to Excellence). Those costs are incremental ones and are incurred on a short-term period.

#### 2.3.9. Financial income and expense

Financial income and expense include:

- interest income representing the remuneration of the cash position;
- interest expense related to the financial debt (financial debt consists of bonds, the debt component of compound instruments, other borrowings and lease-financing liabilities);
- other expenses paid to financial institutions for financing operations;
- the financial component of the employee defined benefits expense (net interest income (expense) and administration costs);
- other income or expense from cash and cash equivalents and marketable securities.

#### 2.3.10. Foreign currency transactions

Foreign currency transactions are initially recognised by applying to the foreign currency amount the spot exchange rate between the functional currency of the reporting unit and the foreign currency at the date of the transaction. Currency units held assets to be received and liabilities to be paid resulting from those transactions are re-measured at closing exchange rates at the end of each reporting period. Realised exchange gains or losses at date of payment as well as unrealised gains or losses deriving from re-measurement are recorded in the income statement.

Since the Group is exposed to foreign currency volatility, the Group puts in place a significant volume of hedges to cover this exposure. These derivatives are recognised on the balance sheet at their fair value at the closing date. Providing that the relationships between the foreign currency exposure and the related derivatives are qualifying relationships, the Group uses the specific accounting treatments designated as hedge accounting. A relationship qualifies for hedge accounting if, at the inception of the hedge, it is formally designated and documented and if it proves to be highly effective throughout the financial reporting periods for which the hedge was designated. Hedging relationships may be of two types:

- cash flow hedge in case of hedge of the exposure to variability of cash flows attributable to highly probable forecast transactions;
- fair value hedge in case of hedge of the exposure attributable to recognised assets, liabilities or firm commitments.

#### Cash flow hedge

When cash flow hedge accounting applies, the portion of the gain or loss on the hedging instrument that is determined to be an effective hedge is recognised in other comprehensive income. When the forecast transaction results in the recognition of a financial asset or liability, the amounts previously recognised directly in other comprehensive income are recycled into the income statement. When the forecast transaction results in the recognition of a non-financial asset or liability (for instance, inventories or construction contracts in progress), the gain or loss that was directly recognised in other comprehensive income is included in the carrying amount of the asset or liability.

#### Fair value hedge

When fair value hedge accounting applies, changes in the fair value of derivatives and changes in the fair value of hedged items are both recognised in the income statement and offset each other up to the gain or loss on the effective portion on the hedging instrument.

Whatever the type of hedge, the ineffective portion on the hedging instrument is recognised in the income statement as well as realised and unrealised exchange gains and losses on hedged items and hedging instruments.

As the effective portion on the hedging instrument offsets the difference between the spot rate at inception of the hedge and the effective spot rate at the outcome of the hedge, sales and costs resulting from commercial contracts are recognised at the spot rate at inception of the hedge throughout the life of the related commercial contracts, provided that the corresponding hedging relationships keep on qualifying for hedge accounting. For a large Transport project located in South Africa, the hedged firm commitments resulting from the commercial contract are recognised on a forward rate basis. Provided that the corresponding hedging relationship qualifies for hedge accounting, the change in fair value of the hedged items recorded at the project forward rate at inception offsets the change in fair value of the derivatives.

The Group uses export insurance policies to hedge its currency exposure on certain contracts during the open bid period. When commercial contracts are awarded, insurance instruments are settled and forward contracts are put in place and recorded according the fair value hedge accounting as described above.

#### 2.3.11. Intangible assets

Intangible assets include acquired intangible assets (such as technology and licensing agreements) and internally generated intangible assets (mainly development costs).

#### Acquired intangible assets

Acquired intangible assets are initially measured at cost and amortised on a straight-line basis over their estimated useful lives. Useful lives can extend to twenty years due to the long-term nature of the underlying contracts and activities. The amortisation expense of assets acquired through ordinary transactions is recorded in cost of sales, research and development expenditure, selling expenses or administrative expenses, based on the function of the underlying assets. The amortisation expense of assets exclusively acquired in the context of a business combination (margin in backlog, customer relationship) is recognised as other expense.

#### Internally generated intangible assets

Development costs are capitalised if and only if the project they relate to meet the following criteria:

- the project is clearly defined and its related costs are separately identified and reliably measured;
- the technical feasibility of the project is demonstrated;
- the intention exists to complete the project and to use or sell it;
- adequate technical and financial resources are available to complete the project;
- it is probable that the future economic benefits attributable to the project will flow to the Group.

Capitalised development costs are costs incurred directly attributable to the project (materials, services, fees...), including an appropriate portion of relevant overheads.

Capitalised development costs are amortised on a straight-line basis over the estimated useful life of the asset. The amortisation charge is reported in research and development expenses.

#### 2.3.12. Property, plant and equipment

Property, plant and equipment are stated at cost less accumulated depreciation and any accumulated impairment loss. When an item of property, plant and equipment is made up of components with different useful lives, the total cost is allocated between the various components. Components are then separately depreciated.

Depreciation is computed using the straight-line method over the estimated useful lives of each component. The useful lives most commonly used are the following:

(in years)	Estimated useful life
Buildings	7-40
Machinery and equipment	3-25
Tools, furniture, fixtures and others	1-10

Useful lives are reviewed on a regular basis and changes in estimates, when relevant, are accounted for on a prospective basis. The depreciation expense is recorded in cost of sales, selling expenses or administrative expenses, based on the function of the underlying assets.

Borrowing costs that are attributable to an asset whose construction period exceeds one year are capitalised as part of the costs of the asset until the asset is substantially ready for use or sale. Property, plant and equipment acquired through finance lease arrangements or long-term rental arrangements that transfer substantially all the risks and rewards incidental to ownership are capitalised. They are recognised at their fair value at the inception of the lease, or, if lower, at the present value of the minimum lease payments. The corresponding liability to the lessor is included in the balance sheet as a financing obligation. Lease payments are apportioned between finance charges and repayment of the lease obligation so as to achieve a constant rate of interest on the remaining balance of the liability.

Assets held under finance leases are depreciated over their expected useful lives on the same basis as owned assets or the term of the relevant lease, when shorter.

Leases that do not transfer substantially all risks and rewards incidental to ownership are classified as operating leases. Rentals payable are charged to profit or loss on a straight-line basis over the term of the relevant lease. Benefits received and receivable as an incentive to enter into an operating lease are recognised on a straight-line basis over the lease term.

# 2.3.13. Impairment of goodwill, tangible and intangible assets

Assets that have an indefinite useful life – mainly goodwill and intangible assets not yet ready to use – are not amortized but tested for impairment at least annually or when there are indicators that they may be impaired. Other intangible and tangible assets subject to amortization are tested for impairment only if there are indicators of impairment.

The impairment test methodology is based on a comparison between the recoverable amount of an asset and its net carrying value. If the recoverable amount of an asset or a cash-generating unit (CGU) is estimated to be less than its carrying amount, the carrying amount is reduced to its recoverable amount and the impairment loss is recognised immediately in the income statement. In the case of goodwill allocated to a group of CGUs, the impairment loss is allocated first to reduce the carrying amount of goodwill and then to the other assets on a pro-rata basis of the carrying amount of each asset.

A cash-generating unit is the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other groups of assets. If an asset does not generate cash inflows that are largely independent of other assets or groups of assets, the recoverable amount is determined for a cash-generating unit.

For internal management purposes, goodwill acquired in a business combination is monitored at Sector level as defined in the presentation of the Group: therefore goodwill is tested for impairment at the level of the group of cash-generating units.

The recoverable amount is the higher of fair value less costs to sell and value in use. The value in use is elected as representative of the recoverable value. The valuation performed is based upon the Group's internal three-year business plan. Cash flows beyond this period are estimated using a perpetual long-term growth rate for the subsequent years. The recoverable amount is the sum of the discounted cash flows and the discounted terminal residual value. Discount rates are determined using the weighted-average cost of capital. Impairment losses recognised in respect of goodwill cannot be reversed. The impairment losses recognized in respect of other assets than goodwill may be reversed in a later period and recognized immediately in the income statement. The carrying amount is increased to the revised estimate of recoverable amount, so that the increased carrying amount does not exceed the carrying amount that would have been determined, had no impairment loss been recognized in prior years.

#### 2.3.14. Financial assets

#### Loans and deposits

Loans are initially measured at their fair value, plus directly attributable transaction costs and are subsequently measured at amortised cost using the effective interest rate method. Deposits are reported as other non-current assets when their initial maturity is more than three months and as cash and cash equivalents in case of demand deposits or when the initial maturity is less than three months.

If there is any indication that those assets may be impaired, they are reviewed for impairment. Any difference between the carrying value and the impaired value (net realisable value) is recorded as a financial expense. The impairment loss can be reversed if the value is recovered in the future. In that case, the reversal of the impairment loss is reported as a financial income.

#### Investments and debt securities

Investments in non-consolidated companies are designated as available-for-sale financial assets. They are initially measured at their fair value, plus directly attributable transaction costs and subsequently re-measured at fair value.

The fair value of listed securities is the market value at the closing date. A valuation model is used in case of unlisted securities. Changes in fair value are directly recognised in other comprehensive income until the security is disposed of or is determined to be impaired. On disposal or in case of significant or prolonged decline in the fair value, the cumulative gain or loss previously recognised in other comprehensive income is included in the profit or loss for the period. Unlike impairment losses recognised in respect of investments in a debt instrument, impairment losses recognised in respect of investments in equity instruments cannot be reversed through profit and loss.

When the fair value cannot be determined reliably, investments in non-consolidated companies are measured at cost. Any impairment loss recognised for such investment is not reversed in a subsequent period, except when disposed of.

All debt securities that the Group has the expressed intention and ability to hold to maturity are designated as held-to-maturity financial assets. They are measured at amortised cost using the effective interest rate method, less any impairment loss recognised to reflect amounts expected not to be recoverable. An impairment loss is recognised in profit or loss when there is objective evidence that the asset is impaired and is measured as the difference between the investment's carrying value and the present value of the estimated future cash flows discounted at the effective interest rate computed at initial recognition. Impairment losses may be reversed through profit and loss in subsequent periods. Marketable securities are securities held for trading which cannot be considered as cash and cash equivalents. They are designated as financial asset at fair value through profit or loss. Changes in fair value are reported as financial income or expense.

#### **Derivative financial instruments**

Derivative financial instruments are recognised and re-measured at fair value (see Note 2.3.10. for foreign currency hedging instruments and Note 2.3.20. for interest rate derivatives).

#### Receivables

Receivables are initially recognised at fair value, which in most cases approximates the nominal value. If there is any subsequent indication that those assets may be impaired, they are reviewed for impairment. Any difference between the carrying value and the impaired value (net realisable value) is recorded within income from operations. The impairment loss can be reversed if the value is recovered in the future. In that case, the reversal of the impairment loss is reported within income from operations.

#### **Derecognition of financial assets**

The Group derecognizes a financial asset when the contractual rights to the cash flows from the asset expire or when it transfers the contractual rights in a transaction under which substantially all the risks and rewards of the financial assets are transferred.

#### 2.3.15. Inventories

Raw materials and supplies, work in progress and finished products are stated at the lower of cost, using the weighted average cost method, or net realisable value.

Inventory cost includes direct material and, where applicable, direct labour costs and those overheads that have been incurred in bringing the inventories to their existing location and condition.

Work in progress refers to costs incurred on product contracts or short term service contracts whose execution will be finalised during a next period.

Net realisable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and selling expenses.

#### 2.3.16. Cash and cash equivalents

Cash and cash equivalents consist of cash and short-term highly liquid investments with original maturities of three months or less that are readily convertible to known amounts of cash, which are subject to an insignificant risk of change in value.

Bank overdrafts are shown within borrowings in current liabilities on the balance sheet.

#### 2.3.17. Taxation

The Group computes taxes in accordance with prevailing tax legislation in the countries where income is taxable. The current income tax charge is calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet date in the countries where the Company's subsidiaries and associates operate and generate taxable income. Management periodically evaluates positions taken in tax returns with respect to situations in which applicable tax regulation is subject to interpretation and establishes provisions where appropriate on the basis of amounts expected to be paid to the tax authorities.

Temporary differences arising between the carrying amount and the tax base of assets and liabilities, unused tax losses and unused tax credits are identified for each taxable entity (or each tax group when applicable). Corresponding deferred taxes are calculated at the enacted or substantively enacted tax rates that are expected to apply in the period when the asset is realised or the liability settled.

Deferred tax assets are recognised for all deductible temporary differences, unused tax losses and unused tax credits to the extent that it is probable that taxable profits will be available in the future against which the deductible differences, unused tax losses and unused tax credits can be utilised. The carrying amount of deferred tax assets is reviewed at each balance sheet date.

Deferred tax liabilities are recognised for all taxable temporary differences, with the exception of certain taxable temporary differences between the Group's share in the net assets in subsidiaries, joint arrangements and associates and their tax bases. The most common situation when such exception applies relates to undistributed profits of subsidiaries where distribution to the shareholders would trigger a tax liability: when the Group has determined that profits retained by the subsidiary will not be distributed in the foreseeable future, no deferred tax liability is recognised. Nevertheless, the exception is no more applicable to investments/subsidiaries being disposed since it becomes probable that the temporary difference will reverse in the foreseeable future with the sale of the subsidiaries. Therefore, in this specific case, deferred tax liabilities are recognised.

Deferred tax assets and liabilities are offset when both of the following conditions are met:

- the Group has a legally enforceable right to set off current tax assets against current tax liabilities; and
- the deferred tax assets and liabilities relate to income taxes levied by the same taxation authority.

Deferred tax is charged or credited to net income, except when it relates to items charged or credited directly to other comprehensive income, in which case the deferred tax is classified in other comprehensive income.

#### 2.3.18. Provisions

As long as a construction contract or a long-term service agreement is in progress, obligations attributable to such a contract are taken into account in the assessment of the margin to be recognised and are therefore reported within the accounts "Construction contracts in progress, assets" or "Construction contracts in progress, liabilities".

Upon completion of the contract, such obligations are recognised as distinct liabilities when they satisfy the following criteria:

- the Group has a present legal or constructive obligation as a result of a past event;
- it is probable that an outflow of economic resources will be required to settle the obligation; and
- such outflow can be reliably estimated.

These liabilities are presented as provisions when they are of uncertain timing or amount. When this uncertainty is dispelled, they are presented as trade payables or other current liabilities.

Obligations resulting from transactions other than construction contracts and long-term service agreements are directly recognised as provisions as soon as the above-mentioned criteria are met.

Where the effect of the time value of money is material, provisions are measured at their present value.

Restructuring provisions are made when plans to reduce or close facilities, or to reduce the workforce have been finalised and approved by the Group management and have been announced before the balance sheet date, resulting in an obligation of the Group to third parties. Restructuring costs include employees' severance and termination benefits and estimated facility closing costs. In addition to such provisions, restructuring costs may include asset write-off relating to the restructured activities.

#### 2.3.19. Financial liabilities

#### Bonds and borrowings

Bonds and interest-bearing bank loans are initially recognised at fair value, less any transaction costs directly attributable to the issuance of the liability. These financial liabilities are subsequently measured at amortised cost, using the effective interest rate method.

#### **Derivative financial instruments**

Derivative financial instruments are recognised and re-measured at fair value (see Note 2.3.10 for foreign currency hedging instruments and Note 2.3.20 for interest rate hedging instruments).

#### Payables

Payables are initially recognised at fair value, which in most cases approximates the nominal value. They are subsequently re-measured at amortised cost.

#### 2.3.20. Interest rate derivatives

The Group may enter into hedges for the purpose of managing its exposure to movements in interest rates. Derivatives are recognised on the balance sheet at fair value at the closing date. Providing that the relationships between the interest rate exposure and the related derivatives are qualifying relationships, the Group uses the specific accounting treatments designated as hedge accounting. Fair value hedge accounting and cash flow hedge accounting are applied to fixed and floating rate borrowings, respectively.

In the case of fair value hedge relationships, the re-measurement of the fixed rate borrowing is offset in the income statement by the movement in the fair value of the derivative up to the effective portion of hedged risk. In the case of cash flow hedging relationships, the change in fair value of the derivative is recognised directly in other comprehensive income. Amounts previously recognised directly in other comprehensive income are reclassified to the income statement, when the hedged risk impacts the income statement.

#### 2.3.21. Share-based payments

The Group issues equity-settled and cash-settled share-based payments to certain employees.

#### Equity-settled share-based payments

Equity-settled share-based payments are measured at fair value at the grant date (excluding the effect of non-market-based conditions) using the binomial pricing model or the Black-Scholes model for plans issued from 2009. The cumulative recognised expense is based on the fair value at grant date and on the estimated number of shares that will eventually vest (including the effect of non-market-based vesting conditions). It is recorded in income from operations throughout the vesting period with a counterpart in equity.

At the end of each reporting period, the entity revises its estimates of the number of options that are expected to vest based on the non-market vesting conditions. It recognises the impact of the revision to original estimates, if any, in the income statement, with a corresponding adjustment to equity.

#### Cash-settled share-based payments

For cash-settled share-based payments, a liability equal to the portion of the goods or services rendered is recognised at the current fair value. The fair value is remeasured at each balance-sheet date and at the date of settlement, with any changes recognised in the income statement.

The Group may also provide employees with the ability to purchase the Group's ordinary shares at a discounted price compared to that of the current market value. In that case, the Group records an expense based on the discount given and its estimate of the shares expected to vest.

# 2.3.22. Post-employment and other long-term defined employee benefits

The Group provides its employees with various types of post-employment benefits, such as pensions, retirement bonuses and medical care, and other long-term benefits, such as jubilee awards and deferred compensation schemes. The type of benefits offered to individual employees is related to local legal requirements as well as practices of the specific subsidiaries.

The Group's health care plans are generally contributory with participants' contributions adjusted annually.

#### Post-employment defined benefit plans

For single employer defined benefit plans, the Group uses the Projected Unit Credit Method to determine the present value of its obligations and the related current and past service costs/profits. This method considers the actuarial assumptions' best estimates (for example, the expected turnover, the expected future salary increase and the expected mortality).

Most defined benefit pension liabilities are funded through pension funds legally distinct from the entities constituting the Group. Plan assets related to funded plans are invested mainly in equity and debt securities. Other supplemental pension plans sponsored by the Group for certain employees are directly paid by the employer as they become due. Post-employment medical benefit plans are predominantly unfunded. The Group periodically reviews plan assets and obligations. The effects of any change in actuarial assumptions together with the differences between forecast and actual experience are assessed. The Group recognises in other comprehensive income the full amount of any actuarial gains and losses as well as the effect of any asset ceiling.

The estimated cost of providing defined benefits to employees is accrued during the years in which the employees render services. In the income statement, the service cost is included in the income from operations. The past service cost/profit and specific events impacts (*e.g.* curtailments and settlements) are recognised in other expense/income. Net interest on the net defined benefit liability (asset) and administration costs are included in financial income (expenses).

The Group also participates in multi-employer defined benefit plans, mainly in the United States of America and Canada. As corresponding funds are not able to provide sufficient information to use defined benefit accounting, these plans are accounted for as defined contribution plans (see below).

#### Post-employment defined contribution plans

For defined contribution plans, the Group pays contributions to independently administered funds at a fixed percentage of employees' pay. These contributions are recorded as operating expenses.

#### Other long-term employee benefits

The accounting method used when recognising obligations arising from other long-term employee benefits is similar to the method used for post-employment defined benefits, except that actuarial gains/losses are immediately recognised in full in "other income/expense" in the income statement.

#### 2.3.23. Off balance sheet commitments

# Commitments arising from execution of operations controlled by the Group

In the ordinary course of business, the Group is committed to fulfil various types of obligations arising from customer contracts (among which full performance and warranty obligations). Obligations may also arise from leases and regulations in respect of tax, custom duties, environment, health and safety. These obligations may or may not be guaranteed by bonds issued by banks or insurance companies.

As the Group is in a position to control the execution of these obligations, a liability only arises if an obligating event (such as a dispute or a late completion) has occurred and makes it likely that an outflow of resources will occur.

When the liability is considered as only possible but not probable or, when probable, cannot be reliably measured, it is disclosed as a contingent liability.

When the liability is considered as probable and can be reliably measured, the impact on the financial statements is the following:

- if the additional liability is directly related to the execution of a customer contract in progress, the estimated gross margin at completion of the contract is reassessed; the cumulated margin recognised to date based on the percentage of completion and the accrual for future contract loss, if any, are adjusted accordingly;
- if the additional liability is not directly related to a contract in progress, a liability is immediately recognised on the balance sheet.

The contractual obligations of subcontractors towards the Group are of the same nature as those of the Group towards its customers. They may be secured by the same type of guarantees as those provided to the Group's customers.

No contingent asset is disclosed when the likelihood of the obligation of the third party remains remote or possible. A contingent asset is disclosed only when the obligation becomes probable. Any additional income resulting from a third party obligation is taken into account only when it becomes virtually certain.

# Commitments arising from execution of operations not wholly within the control of the Group

Obligations towards third parties may arise from on-going legal proceedings, credit guarantees covering the financial obligations of third parties in cases where the Group is the vendor, and indemnification guarantees issued in connection with disposals of business entities.

In case of legal proceedings, a contingent liability is disclosed when the liability is considered as only possible but not probable, or, when probable, cannot be reliably measured. In case of commitments arising from guarantees issued, contingent liabilities are disclosed as soon as guarantees have been delivered and as long as they have not matured.

### NOTE 3 · COMPARABILITY

# **3.1. IFRS 5, Non-current assets held for** sale and discontinued operations

As mentioned in Note 1.1, the Energy activities are reported as "discontinued operations" in Alstom consolidated financial statements. In accordance with IFRS 5:

- the assets held for sale and the related liabilities are presented separately from other assets and liabilities on specific lines on the balance sheet as at 31 March 2015, with no reclassification of the comparative balance sheet as at 31 March 2014;
- the net profit of discontinued operations realized over the year is disclosed by a single amount on the face of the consolidated income statement into the line named "Net profit from discontinued operations". The income statement of comparative periods is re-presented in accordance with IFRS 5;
- the net cash flows attributable to the operating, investing and financing activities of discontinued operation realized over the year are disclosed in the consolidated statement of cash flows.

A provision is recorded if the obligation is considered as probable and can be reliably measured.

Contingent assets arising from legal proceedings or guarantees delivered by third parties are only disclosed when they become probable.

#### 2.3.24. Earnings per share

Basic earnings per share are computed by dividing the period net profit (loss) before the financial cost (net of tax) of bonds reimbursable with shares, by the weighted average number of outstanding shares during the period increased by the weighted average number of shares to be issued on reimbursement of bonds reimbursable with shares ("ORA").

Diluted earnings per share are computed by dividing the period net profit (loss) before the financial cost (net of tax) of bonds reimbursable with shares, by the weighted average number of outstanding shares during the period adjusted in order to take into consideration all dilutive instruments (ORA, stock options, free shares).

# 2.3.25. Presentation of consolidated financial statements

The consolidated financial statements are presented in millions of Euros.

### 3.2. First time application of IFRS 11, Joint arrangements

As described in Note 2.3.1 "Consolidation methods", IFRS 11 prescribes accounting treatments for arrangements over which two or more investors exercise joint control. Pursuant to this new standard, a joint arrangement is classified either as a joint operation or as a joint venture. The classification is based on the rights and obligations of the parties to the arrangement, taking into consideration the structure and legal form of the arrangement, the terms agreed by the parties in the contractual arrangement and, when relevant, other facts and circumstances.

The impacts of the first-time application of this standard (applied retrospectively) are presented in paragraph 3.3.

# **3.3.** Impacts on consolidated financial statements

Both impacts of IFRS 11 and IFRS 5 on the Group's consolidated financial statements of the comparative periods are presented below. The application of those two standards has no impact on the equity of the Group.

### Consolidated income statement restated

	Year ended 31 March 2014			
		IFRS 11	IFRS 5	
(in € million)	Published	Impacts	Impacts	Restated
Sales	20,269	(211)	(14,332)	5,726
Cost of sales	(16,213)	173	11,236	(4,804)
Research and development expenses	(733)	11	600	(122)
Selling expenses	(966)	4	758	(204)
Administrative expenses	(933)	3	602	(328)
Income from operations	1,424	(20)	(1,136)	268
Other income	27	-	(27)	-
Other expense	(443)	(1)	338	(106)
Earnings before interest and taxes	1,008	(21)	(825)	162
Financial income	28	(2)	38	64
Financial expense	(336)	(1)	114	(223)
Pre-tax income	700	(24)	(673)	3
Income tax charge	(163)	4	253	94
Share of net income of equity-accounted investments	29	20	21	70
Net profit from continuing operations	566	-	(399)	167
Net profit from discontinued operations	-	-	399	399
NET PROFIT	566	-	-	566
Net profit from continuing operations attributable to:				
<ul> <li>Equity holders of the parent</li> </ul>	556	-	(396)	160
Non controlling interests	10	-	(3)	7
Net profit from discontinued operations attributable to:				
<ul> <li>Equity holders of the parent</li> </ul>	-	-	396	396
Non controlling interests	-	-	3	3
Earnings per share <i>(in €)</i>				
Basic earnings per share	1.80	-	-	1.80
Diluted earnings per share	1.78	-	-	1.78
Earnings per share (in $\epsilon$ )				
<ul> <li>Basic earnings per share from continuing operations</li> </ul>	1.80	-	(1.28)	0.52
<ul> <li>Diluted earnings per share from continuing operations</li> </ul>	1.78		(1.27)	0.51
Earnings per share <i>(in €)</i>				
<ul> <li>Basic earnings per share from discontinued operations</li> </ul>	-	-	1.28	1.28
<ul> <li>Diluted earnings per share from discontinued operations</li> </ul>	-	-	1.27	1.27

### Statement of comprehensive income restated

	Year ended 31 March 2014				
		IFRS 11			
(in € million)	Published	Impacts	Restated		
Net profit recognised in income statement	566	-	566		
Remeasurement of post-employment benefits obligations	107	-	107		
Income tax relating to items that will not be reclassified					
to profit or loss	(54)	-	(54)		
Items that will not be reclassified to profit or loss	53	-	53		
Of which from equity-accounted investments	-	-	-		
Fair value adjustments on available-for-sale assets	(15)	-	(15)		
Fair value adjustments on cash flow hedge derivatives	(1)	-	(1)		
Currency translation adjustments	(326)	-	(326)		
Income tax relating to items that may be reclassified					
to profit or loss	4	-	4		
Items that may be reclassified to profit or loss	(338)	-	(338)		
Of which from equity-accounted investments	(62)	(7)	(69)		
Other comprehensive income	(285)	-	(285)		
TOTAL COMPREHENSIVE INCOME FOR THE PERIOD	281	-	281		
Attributable to:					
Equity holders of the parent	285	-	285		
Non controlling interests	(4)	-	(4)		
Total comprehensive income attributable to equity shareholders arises from:					
Continuing operations	42	-	42		
Discontinued operations	243	-	243		
Total comprehensive income attributable to minority equity arises from:					
Continuing operations	5	-	5		
Discontinued operations	(9)	-	(9)		

### Consolidated balance sheet restated

		At 31 March 2014			At 31 March 2013	
(in € million)	Published	IFRS 11 Impacts	Restated	Published	IFRS 11 Impacts	Restated
ASSETS						
Goodwill	5,281	(12)	5,269	5,536	(12)	5,524
Intangible assets	2,054	(1)	2,053	1,982	(2)	1,980
Property, plant and equipment	3,032	(64)	2,968	3,024	(42)	2,982
Investments in joint-ventures and						
associates	460	85	545	598	68	666
Non consolidated investments	160	-	160	100	-	100
Other non-current assets	533	(23)	510	521	(15)	506
Deferred taxes	1,647	-	1,647	1,720	-	1,720
Total non-current assets	13,167	(15)	13,152	13,481	(3)	13,478
Inventories	2,977	(5)	2,972	3,144	(5)	3,139
Construction contracts in progress, assets	3,967	(16)	3,951	4,158	(13)	4,145
Trade receivables	4,483	(33)	4,450	5,285	(30)	5,255
Other current operating assets	3,203	(70)	3,133	3,328	(5)	3,323
Marketable securities and other current						
financial assets	18	8	26	36	-	36
Cash and cash equivalents	2,320	(44)	2,276	2,195	(48)	2,147
Total current assets	16,968	(160)	16,808	18,146	(101)	18,045
Assets held for sale	293	-	293	-	-	-
TOTAL ASSETS	30,428	(175)	30,253	31,627	(104)	31,523

	At 31 March 2014				At 31 March 2013	
(in € million)	Published	IFRS 11 Impacts	Restated	Published	IFRS 11 Impacts	Restated
EQUITY AND LIABILITIES						
Equity attributable to the equity holders						
of the parent	5,044	-	5,044	4,994	-	4,994
Non controlling interests	65	-	65	93	-	93
Total equity	5,109	-	5,109	5,087	-	5,087
Non-current provisions	710	-	710	680	-	680
Accrued pension and other employee						
benefits	1,526	(1)	1,525	1,674	(1)	1,673
Non-current borrowings	4,009	-	4,009	4,197	(13)	4,184
Non-current obligations under finance						
leases	398	-	398	433	-	433
Deferred taxes	176	-	176	284	-	284
Total non-current liabilities	6,819	(1)	6,818	7,268	(14)	7,254
Current provisions	1,191	-	1,191	1,309	-	1,309
Current borrowings	1,267	(17)	1,250	283	(1)	282
Current obligations under finance leases	47	-	47	42	-	42
Construction contracts in progress,						
liabilities	8,458	(32)	8,426	9,909	(46)	9,863
Trade payables	3,866	(47)	3,819	4,041	(34)	4,007
Other current operating liabilities	3,671	(78)	3,593	3,688	(9)	3,679
Total current liabilities	18,500	(174)	18,326	19,272	(90)	19,182
Liabilities held for sale	-	-	-	-	-	-
TOTAL EQUITY AND LIABILITIES	30,428	(175)	30,253	31,627	(104)	31,523

### Consolidated statement of cash flows restated

	Yea	ar ended 31 March 2014	ł
(in € million)	Published	IFRS 11 Impacts	Restated
Net profit	566	-	566
Depreciation, amortisation, expense arising from share-based payments and others	569	(4)	565
Post-employment and other long-term defined employee benefits	(17)	-	(17)
Net (gains)/losses on disposal of assets	(23)	-	(23)
Share of net income of equity-accounted investments (net of dividends received)	7	(13)	(6)
Deferred taxes charged to income statement	(163)	1	(162)
Net cash provided by operating activities – before changes in working capital	939	(16)	923
Changes in working capital resulting from operating activities	(300)	(2)	(302)
Net cash provided by/(used in) operating activities	639	(18)	621
Proceeds from disposals of tangible and intangible assets	34	(2)	33
Capital expenditure (including capitalised R&D costs)	(844)	33	(811)
Increase/(decrease) in other non-current assets	(9)	8	(2)
Acquisitions of businesses, net of cash acquired	(105)	(11)	(116)
Disposals of businesses, net of cash sold	17	-	17
Net cash provided by/(used in) investing activities	(907)	28	(879)
Capital increase/(decrease) including non controlling interests	36	(1)	35
Dividends paid including payments to non controlling interests	(267)	-	(267)
Changes in ownership interests with no gain/loss of control	-	-	-
Issuances of bonds & notes	500	-	500
Repayments of bonds & notes issued	(26)	-	(26)
Changes in current and non-current borrowings	346	(14)	332
Changes in obligations under finance leases	(38)	-	(38)
Changes in marketable securities and other current financial assets and liabilities	13	2	15
Net cash provided by/(used in) financing activities	564	(13)	551
Net increase/(decrease) in cash and cash equivalents	296	(3)	293
Cash and cash equivalents at the beginning of the period	2,195	(48)	2,147
Net effect of exchange rate variations	(148)	6	(142)
Other changes	(23)	1	(22)
Cash and cash equivalents at the end of the period	2,320	(44)	2,276
Income tax paid	(266)	4	(262)
Net of interests paid & received	(202)	-	(202)

### NOTE 4 • ASSETS HELD FOR SALE AND DISCONTINUED OPERATIONS

### 4.1. The planned Energy transaction

As mentioned in Note 1.1 and in Note 2.3.4, Alstom considers – since the Board's approval on 20 June 2014 – that conditions for the application of IFRS 5 are met with respect to the plan to sell Energy activities:

- the assets held for sale and the related liabilities are presented separately from other assets and liabilities on specific lines on the balance sheet as at 31 March 2015, with no reclassification of the comparative balance sheet as at 31 March 2014;
- the net profit of discontinued operations realized over the year is disclosed by a single amount on the face of the consolidated income statement into the line named "Net profit from discontinued operations". The income statement of comparative periods is re-presented in accordance with IFRS 5;
- the net cash flows attributable to the operating, investing and financing activities of discontinued operation realized over the year are disclosed in the consolidated statement of cash flows.

As far as central and shared services are part of Energy transaction, the Group has analysed and allocated Corporate costs (internal and external costs, legal costs...) and liabilities (provisions, pension plans) between continuing operations and discontinued operations to report relevant financial information.

The current accounting impacts of the planned Energy transaction are based on the GE offer and related agreements, and reflect management current best estimate. They will be finalized as part of the transaction closing, expected to occur in the coming months.

# 4.2. Sale of the Auxiliary components business

As of 31 March 2014, assets held for sale amounting to  $\epsilon$ 293 million related to the contemplated sale of the Auxiliary components business to a European investment firm. As described in Note 1.3, the disposal was completed on 29 August 2014 and the gain on sale representing  $\epsilon$ 295 million before taxes ( $\epsilon$ 201 million after taxes) is recorded in the "Net profit from discontinued operations" line in the income statement as of 31 March 2015.

### 4.3. Financial statements of discontinued operations

#### Income statement

	Year e	Year ended			
n € million)	31 March 2015	31 March 2014 <sup>(1)</sup>			
Sales	13,330	14,332			
Pre-tax income	454	673			
Income tax charge	(343)	(253)			
Share of net income of equity-accounted investments	2	(21)			
NET PROFIT FROM DISCONTINUED OPERATIONS	113	399			
Attributable to:					
Equity holders of the parent	104	396			
Non controlling interests	9	3			

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

At 31 March 2015, the impacts relating to the application of IFRS5 to the Energy activities are the following:

- Alstom ceased the amortization of Energy's tangible and intangible assets at the date of IFRS 5 application (€292 million before taxes and €(66) million of tax effect);
- the net interests paid to Alstom Holdings resulting from cash pooling agreements amount to €(76) million (€(50) million as at 31 March 2014) (see Note 8);
- the income tax charge includes €(72) million of deferred tax expense related to the recognition of deferred tax liabilities resulting from the difference between tax and consolidated values of the investments/ subsidiaries.

Other impacts specifically linked to the transaction with GE in the income statement include:

- the costs specifically incurred in the context of the deal for  $\epsilon(108)$  million;
- stock options and performance plans conditions acceleration and other compensation.

#### Other comprehensive income

As at 31 March 2015, the cumulative amount recognised in other comprehensive income relating to the Energy activities amounts to  $\epsilon(1,667)$  million, including:

 items that will not be reclassified to profit and loss mainly relating to actuarial gains and losses on defined benefit obligations for an amount net of tax of €(1,875) million;

#### **Balance-sheet**

 items that will be reclassified to profit and loss amounting to €208 million mainly related to currency translation adjustment.

Following the sale of the Auxiliary components business,  $\epsilon$ (21) million of other comprehensive income on pensions have been reclassified to Retained earnings and  $\epsilon$ (16) million of consolidated translation adjustment have been recycled in the income statement as at 31 March 2015.

(in € million)	At 31 March 2015
Goodwill	4,690
Intangible assets	1,824
Property, plant and equipment	2,786
Investments in joint-ventures and associates	86
Non consolidated investments	118
Other non-current assets	127
Deferred taxes	1,043
Total non-current assets	10,674
Inventories	2,352
Construction contracts in progress, assets	1,734
Trade receivables	3,172
Other current operating assets	2,809
Marketable securities and other current financial assets	4
Total current assets	10,071
Cash and cash equivalents	670
TOTAL ASSETS HELD FOR SALE	21,415

(in € million)	At 31 March 2015
Non-current provisions	491
Accrued pension and other employee benefits	1,761
Deferred taxes	130
Total non-current liabilities (excluding financial debt)	2,382
Current provisions	695
Construction contracts in progress, liabilities	5,702
Trade payables	3,439
Other current operating liabilities	2,668
Total current liabilities (excluding financial debt)	12,504
Financial debt	287
TOTAL LIABILITIES RELATED TO ASSETS HELD FOR SALE	15,173

The impairment test at 31 March 2014 supported the Group's opinion that goodwill was not impaired.

At the date of IFRS 5 application, the Group considered that the assumptions used to assess the recoverable value of goodwill of

Thermal Power, Renewable Power and Grid at 31 March 2014 were not substantially modified.

The disposal value will significantly exceed the carrying value of net assets held for sale.

#### Aggregated statement of cash-flow

(in € million)	Year ended 31 March 2015
Operating flows provided/(used) by discontinued operations	163
Investing flows provided/(used) by discontinued operations	593
Financing flows provided/(used) by discontinued operations	(193)

The Group entered into factoring programs to finance trade receivables. Energy subsidiaries transferred trade receivables as at March 2015, among which  $\leq 105$  million were eligible for derecognition under IAS 39, which were part of the operating flows provided/used by discontinued activities.

Investing flows include primarily the followings:

- cash impact of the disposal of the Auxiliary components business for an amount of €665 million;
- internal disposals of investments by discontinued entities to continued entities for a total amount of €654 million, and;
- capital expenditure for an amount of €(590) million.

Financing flows include:

- internal dividends paid by discontinued entities to continued entities for a total amount of €(415) million;
- internal flows related to capital increase of continued entities performed by discontinued activities for €(300) million;
- internal flows related to capital increase of discontinued entities performed by continued activities for €579 million.

Financing flows do not include internal loans/borrowings, considered as cash and cash equivalent.

#### **Contingent liabilities – Commercial obligations**

As at 31 March 2015, the total outstanding bonding guarantees related to Energy contracts, issued by banks or insurance companies, amounts to  $\epsilon$ 11.9 billion ( $\epsilon$ 9.5 billion at 31 March 2014).

# **NOTE 5 · SEGMENT INFORMATION**

Operating segments used to present segment information are identified on the basis of internal reports used by the Chief Executive Officer (CEO) – the Group's chief operating decisions maker with the meaning of IFRS 8 – to allocate resources to the segments and assess their performance.

Pursuant to IFRS 5, the Energy activities (Thermal Power, Renewable Power, Grid and central and shared services excluding Alstom SA and Alstom Holdings), which are discontinued operations as at 31 March 2015, are no longer reported as operating segments but are presented as "Discontinued sectors".

### 5.1. Key indicators by operating segment

AT 31 MARCH 2015

(in € million)	Transport	Corporate & Others <sup>(1)</sup>	Discontinued Sectors	Eliminations	Total
Sales	6,143	24		(4)	6,163
Inter Sector eliminations	(4)	-		4	-
Total Sales	6,139	24		-	6,163
Income (loss) from operations	345	(27)		-	318
Earnings before interest and taxes	159	(780)		-	(621)
Financial income (expense)					(137)
Income tax					8
Share of net income of equity-accounted investments					(64)
Net profit from continuing operations					(814)
Net profit from discontinued operations (2)			113		113
NET PROFIT					(701)
Capital expenditure	(165)	(1)	(590)	-	(756)
Depreciation and amortisation in EBIT	163	2	97	-	262

(1) Corporate costs were allocated between discontinued Sectors and Corporate & Others (continuing operations) (see Note 4.1).

(2) See Note 4 "Assets held for sale and discontinued operations".

		Corporate &	
(in € million)	Transport	Others	Total
Segment assets <sup>(1)</sup>	7,655	1,380	9,035
Deferred taxes (assets)			732
Prepaid employee defined benefit costs			8
Financial assets			2,043
Assets held for sale (4)			21,415
TOTAL ASSETS			33,233
Segment liabilities (2)	5,883	2,295	8,178
Deferred taxes (liabilities)			11
Accrued employee defined benefit costs			461
Financial debt			5,186
Total equity			4,224
Liabilities related to assets held for sale (4)			15,173
TOTAL EQUITY AND LIABILITIES			33,233
Capital employed <sup>(3)</sup>	1,772	(915)	857

(1) Segment assets are defined as the sum of goodwill, intangible assets, property, plant and equipment, equity-accounted investments and other investments, other non-current assets (other than those related to financial debt and to employee defined benefit plans), inventories, construction contracts in progress assets, trade receivables and other operating assets.

(2) Segment liabilities are defined as the sum of non-current and current provisions, construction contracts in progress liabilities, trade payables and other operating liabilities;

(3) Capital employed corresponds to segment assets minus segment liabilities;

(4) See Note 4.2 "Assets held for sale and discontinued operations".

#### AT 31 MARCH 2014 (1)

		Corporate &	Discontinued		
(in € million)	Transport	Others <sup>(2)</sup>	Sectors	Eliminations	Total
Sales	5,687	46		(7)	5,726
Inter Sector eliminations	(7)	-		7	-
Total Sales	5,680	46		-	5,726
Income (loss) from operations	308	(40)		-	268
Earnings before interest and taxes	228	(66)		-	162
Financial income (expense)					(159)
Income tax					94
Share of net income of equity-accounted investments					70
Net profit from continuing operations					167
Net profit from discontinued operations <sup>(3)</sup>			399		399
NET PROFIT					566
Capital expenditure	(187)	(1)	(623)	-	(811)
Depreciation and amortisation in EBIT	141	2	397	-	540

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

(2) Corporate costs were allocated between discontinued Sectors and Corporate & Others (continuing operations) (see Note 4.1).

(3) See Note 4 "Assets held for sale and discontinued operations".

	Thermal	Renewable			Corporate &	
(in € million)	Power	Power	Grid	Transport	Others	Total
Segment assets <sup>(2)</sup>	9,610	3,104	5,072	6,868	971	25,625
Deferred taxes (assets)						1,647
Prepaid employee defined benefit costs						22
Financial assets						2,666
Assets held for sale (5)						293
TOTAL ASSETS						30,253
Segment liabilities (3)	7,145	1,641	2,972	4,973	1,008	17,739
Deferred taxes (liabilities)						176
Accrued employee defined benefit costs						1,525
Financial debt						5,704
Total equity						5,109
Liabilities related to assets held for sale (5)						-
TOTAL EQUITY AND LIABILITIES						30,253
Capital employed (4)	2,465	1,463	2,100	1,895	(37)	7,886

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

(2) Segment assets are defined as the sum of goodwill, intangible assets, property, plant and equipment, equity-accounted investments and other investments, other non-current assets (other than those related to financial debt and to employee defined benefit plans), inventories, construction contracts in progress assets, trade receivables and other operating assets;

(3) Segment liabilities are defined as the sum of non-current and current provisions, construction contracts in progress liabilities, trade payables and other operating liabilities.

(4) Capital employed corresponds to segment assets *minus* segment liabilities.

(5) Relates to the sale of the Auxiliary Component business.

### 5.2. Key indicators by geographic area

#### SALES BY COUNTRY OF DESTINATION

	Year ended			
(in € million)	31 March 2015	31 March 2014 <sup>(1)</sup>		
Europe	4,340	4,072		
of which France	1,284	1,323		
Americas	739	702		
Asia & Pacific	449	453		
Middle-East & Africa	635	499		
TOTAL GROUP	6,163	5,726		

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

**NON-CURRENT ASSETS BY COUNTRY OF ORIGIN** 

(en millions d'€)	At 31 March 2015	At 31 March 2014 (1)
Europe	1,892	4,883
of which France	883	1,548
Americas	104	858
Asia/Pacific	219	1,979
Middle East/Africa	18	3,692
TOTAL GROUP	2,233	11,412

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

Movements over the period ended 31 March 2015 mainly arose from the classification of the Energy activities' non-current assets as "Assets held for sale" for an amount of  $\epsilon$ 9,630 million.

Non-current assets by country of origin are defined as non-current assets other than those related to financial debt, to employee defined benefit plans and deferred tax assets.

### 5.3. Information about major customers

No external customer represents individually 10% or more of the Group's consolidated sales.

# **NOTE 6 · RESEARCH AND DEVELOPMENT EXPENDITURE**

	Year	Year ended		
(in € million)	31 March 2015	31 March 2014 <sup>(1)</sup>		
Research and development expenses	(112)	(122)		
Development costs capitalised during the period	(67)	(77)		
Amortisation expense of capitalised development costs	63	68		
Amortisation of acquired technology	-	· ·		
TOTAL RESEARCH AND DEVELOPMENT EXPENDITURE	(116)	(131)		

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

During the fiscal year ended 31 March 2015, the Group invested  $\in$ 116 million in research and development, notably for the development of the Urbalis<sup>TM</sup> Fluence signaling solution and the CITADIS<sup>TM</sup> Spirit light rail vehicle intended to the North American market.

The research and development programs relate to the broadening and strengthening of Transport Sector product offering.

# NOTE 7 • OTHER INCOME AND OTHER EXPENSE

	Year ended		
(in € million)	31 March 2015	31 March 2014 <sup>(1)</sup>	
Capital gains on disposal of businesses	4	-	
Other income	4	-	
Capital losses on disposal of businesses	(16)	(3)	
Restructuring and rationalisation costs	(106)	(48)	
Impairment losses and other	(821)	(55)	
Other expense	(943)	(106)	
OTHER INCOME (EXPENSE)	(939)	(106)	

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

Other income and other expense represent mainly:

- losses on prior years disposals;
- restructuring costs related to the adaptation of Transport's footprint;
- rationalization costs linked to the Group-wide costs competitiveness plan called D2E ("Dedicated to Excellence");
- costs associated with legal proceedings that have arisen outside of the ordinary course of business, in particular the settlement with the US DOJ for €722 million (see Note 1);
- impairment on assets in France and in Russia for a total amount of €39 million (€20 million related to investments in Russia as of 31 March 2014).

# NOTE 8 · FINANCIAL INCOME (EXPENSE)

	Year	Year ended		
(in € million)	31 March 2015	31 March 2014 <sup>(1)</sup>		
Interest income	12	4		
Interest expense recharged to the discontinued operations	76	50		
Net exchange gain	13	8		
Other financial income	8	2		
Financial income	109	64		
Interest expense on borrowings	(193)	(184)		
Net financial expense from employee defined benefit plans (see Note 25)	(14)	(12)		
Other financial expense	(39)	(26)		
Financial expense	(246)	(223)		
FINANCIAL INCOME (EXPENSE) FROM CONTINUING OPERATIONS	(137)	(159)		
Out of which:				
<ul> <li>Financial income/(expense) arising from financial instruments (see Note 27.1)</li> </ul>	(199)	(196)		

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

As at 31 March 2015:

- interest income of €12 million represents the remuneration of the Group's cash positions over the period;
- interest expense recharged to the discontinued operations amounts to €76 million in application of the cash pool agreements (see also Note 4);
- interest expense of €(193) million represents the cost of the external gross financial debt of the Group;
- the net financial expense from employee defined benefit plans of
   €(14) million represents the interest costs on obligations net of
   interest income from fund assets calculated using the same discount
   rate;
- other financial expense includes mainly fees and commitment fees paid on guaranteed facilities, syndicated loans and other financing facilities for €(29) million.

## **NOTE 9 · TAXATION**

### 9.1. Analysis of income tax charge

The following table summarises the components of income tax charge:

	Year ended		
(in € million)	31 March 2015	31 March 2014 <sup>(1)</sup>	
Current income tax charge	(45)	(48)	
Deferred income tax charge	53	142	
Income tax charge	8	94	

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

The income tax charge may change from one year to another, notably based on the following events:

 the Group's ability to recognise deferred tax assets and to use its tax loss carry forwards;

• the geographical mix of income before taxes;

- the outcome of income tax audits and;
- changes on local regulations.

### 9.2. Income tax reconciliation

The following table provides reconciliation from the income tax charge valued at the French statutory rate to the actual income tax charge, free of the temporary additional contributions:

	Year ended			
(in € million)	31 March 2015	31 March 2014 <sup>(1)</sup>		
Pre-tax income	(758)	3		
Statutory income tax rate of the parent company	34.43%	34.43%		
Expected tax charge	261	(1)		
Impact of:				
<ul> <li>Difference between normal tax rate applicable in France and normal tax rate in force in jurisdictions outside France</li> </ul>	2	29		
Changes in unrecognised deferred tax assets	7	31		
Changes in tax rates	(7)	1		
<ul> <li>Additional tax expenses (withholding tax, CVAE in France and IRAP in Italy)</li> </ul>	(19)	(28)		
• Permanent differences and other <sup>(2)</sup>	(236)	62		
Income tax charge	8	94		

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

(2) Including impact of the agreement with the DOJ for an amount of €(248) million (refer to Note 1.2), as at 31 March 2015 and internal reorganisation as at 31 March 2014.

### 9.3. Deferred tax assets and liabilities

	Year ended		
(in € million)	At 31 March 2015	At 31 March 2014 (1)	
Deferred tax assets	732	1,647	
Deferred tax liabilities	(11)	(176)	
DEFERRED TAX ASSETS, NET	721	1,471	

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

### 9.4. Changes in net deferred tax assets

Net deferred tax assets reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The following table summarises the significant components of the Group's net deferred tax assets:

(in € million)	At 31 March 2014 <sup>(1)</sup>	Change in P&L <sup>(3)</sup>	Change in equity <sup>(2)</sup>	Translation adjustments and other changes	Assets and liabilities held for sale	At 31 March 2015
Differences between carrying amount and tax basis of tangible and intangible assets	4	(157)	-	(3)	226	70
Accruals for employee benefit costs not yet deductible	240	(8)	99	37	(301)	67
Provisions and other accruals not yet deductible	443	47	-	57	(399)	148
Differences in recognition of margin on construction contracts	(84)	24	-	(55)	99	(16)
Tax loss carry forwards	900	62	-	90	(563)	489
Other	(32)	(45)	6	9	25	(37)
NET DEFERRED TAX ASSETS/(LIABILITIES)	1,471	(77)	105	135	(913)	721

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

(2) Mainly related to actuarial gains and losses directly recognised in equity (see consolidated statement of comprehensive income).

(3) Of which  $\epsilon$ 53 million for continuing activities and  $\epsilon$ (130) million for discontinued activities.

Translation At adjustments					
(in € million)	31 March 2013 <sup>(1)</sup>	Change in P&L <sup>(3)</sup>	Change in equity <sup>(2)</sup>	and other changes	31 March 2014*
Differences between carrying amount and tax basis of					
tangible and intangible assets	(93)	92	-	5	4
Accruals for employee benefit costs not yet deductible	287	9	(54)	(2)	240
Provisions and other accruals not yet deductible	516	25	-	(98)	443
Differences in recognition of margin on construction contracts	(133)	(29)	-	78	(84)
Tax loss carry forwards	878	49	-	(27)	900
Other	(19)	17	4	(34)	(32)
NET DEFERRED TAX ASSETS/(LIABILITIES)	1,436	163	(50)	(78)	1,471

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

(2) Mainly related to actuarial gains and losses directly recognised in equity (see consolidated statement of comprehensive income).

(3) Of which €142 million for continuing activities and €21 million for discontinued activities.

The assessment of the ability to recover net deferred tax assets at 31 March 2015 ( $\epsilon$ 721 million) is based on an extrapolation of the latest three-year business plan and strategy for the long-term recovery of tax losses in each country.

Unrecognised deferred tax assets amounts to  $\epsilon$ 400 million at 31 March 2015 ( $\epsilon$ 363 million at 31 March 2014 for continuing activities). Most of these unrecognised deferred taxes are originated from tax losses carried forward ( $\epsilon$ 363 million at 31 March 2015 and  $\epsilon$ 325 million at 31 March 2014 for continuing activities), out of which  $\epsilon$ 182 million are not subject to expiry at 31 March 2015 ( $\epsilon$ 101 million at 31 March 2014 for continuing activities).

# NOTE 10 · EARNINGS PER SHARE

### 10.1. Earnings

Year ended		
31 March 2015	31 March 2014 <sup>(1)</sup>	
(823)	160	
104	396	
(719)	556	
	31 March 2015 (823) 104	

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

### **10.2.** Number of shares

	Year ended		
	31 March 2015	31 March 2014	
Weighted average number of ordinary shares used to calculate basic earnings per share (see			
Note 22)	309,364,543	308,559,756	
Effect of dilutive instruments other than bonds reimbursable with shares:			
<ul> <li>Stock options and performance shares (LTI plan)</li> </ul>	1,749,335	2,948,209	
Performance shares (Alstom Sharing plans)	-	113,406	
Weighted average number of ordinary shares used to calculate diluted earnings per share (see			
Note 22)	311,113,878	311,621,371	

### 10.3. Earnings per share

	Year ended		
(in €)	31 March 2015	31 March 2014 <sup>(1)</sup>	
Basic earnings per share	(2.32)	1.80	
Diluted earnings per share	(2.31)	1.78	
Basic earnings per share from continuing operations	(2.66)	0.52	
Diluted earnings per share from continuing operations	(2.65)	0.51	
Basic earnings per share from discontinued operations	0.34	1.28	
Diluted earnings per share from discontinued operations	0.33	1.27	

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

# NOTE 11 · GOODWILL AND INTANGIBLE ASSETS

Goodwill and intangible assets with indefinite useful lives are reviewed for impairment at least annually and whenever events or circumstances indicate that they might be impaired. Such events or circumstances are related to significant, unfavourable changes that are of a lasting nature and affect either the economic environment or the assumptions or the targets adopted as of the acquisition date. An impairment loss is recognised when the recoverable value of the assets tested becomes durably lower than their carrying value.

### 11.1. Goodwill

At 31 March 2014 <sup>(1)</sup>	Acquisitions and adjustments on preliminary goodwill	Disposals	Translation adjustments and other changes	Assets held for sale	At 31 March 2015
674	4	-	10	-	688
2,904	-	-	69	(2,973)	-
532	-	-	10	(542)	-
1,159	1	-	15	(1,175)	-
5,269	5	-	104	(4,690)	688
5,269	5	-	104	(4,690)	688
-	-	-	-	-	-
	<b>31 March</b> 2014 <sup>(1)</sup> 674 2,904 532 1,159 <b>5,269</b>	31 March 2014 (1)         adjustments on preliminary goodwill           674         4           2,904         -           532         -           1,159         1           5,269         5	31 March 2014 (1)adjustments on preliminary goodwillDisposals6744-2,9042,9045321,1591-5,2695-	At 31 March 2014 (1)Acquisitions and adjustments on preliminary goodwilladjustments and other Changes674-102,9042,904-69532-101,1591-5,2695-5,2695104	At 31 March 2014 <sup>(1)</sup> Acquisitions and adjustments on preliminary goodwilladjustments and otherAssets held for sale6744-10-2,904-69(2,973)532-10(542)1,1591-155,2695-1045,2695-104

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

Movements over the period ended 31 March 2015 mainly arose from the classification of the Energy activities' goodwill as "Assets held for sale" for an amount of  $\epsilon_{4,690}$  million (see Note 4).

(in € million)	At 31 March 2013 <sup>(1)</sup>	Acquisitions and adjustments on preliminary goodwill	Disposals	Translation adjustments and other changes <sup>(2)</sup>	At 31 March 2014 <sup>(1)</sup>
Transport	679	-	-	(5)	674
Thermal Power	3,221	-	-	(317)	2,904
Renewable Power	489	55	(12)	-	532
Grid	1,135	31	-	(7)	1,159
GOODWILL	5,524	86	(12)	(329)	5,269
Of which:					
Gross value	5,524	86	(12)	(329)	5,269
Impairment	-	-	-	-	-

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

(2) Translation adjustments and other changes include primarily the transfer to assets held for sale of the goodwill of the Auxiliary components business (see Notes 1.3 and 3).

#### Goodwill impairment test

As of 31 March 2015, Alstom tested the value of goodwill allocated to Transport Sector applying valuation methods consistent with previous years. Alstom ensured that the recoverable amount of the Transport Sector exceeded its carrying value (including goodwill).

# Presentation of key assumptions used for the determination of recoverable amounts

The value in use of the Transport Sector is determined as the discounted value of future cash flows by using cash flow projections for the next

three years consistent with the Group's internal business plan, the extrapolation of the two following years and the most recent forecasts prepared by the Sector.

The value in use is mainly driven by the terminal value which is particularly sensitive to changes in the assumptions on the discount rate after tax, the long-term growth rate and the terminal value operating margin (corresponding to the ratio Income from Operations over Sales). The main assumptions used to assess the recoverable amounts of goodwill are as follows:

	Transport
Net carrying amount of goodwill at 31 March 2015 <i>(in € million)</i>	688
Value elected as representative of the recoverable value	value in use
Number of years over which cash flow estimates are available	3 years
Extrapolation period of cash flow estimates	2 years
Long-term growth rate at 31 March 2015	1.5%
Long-term growth rate at 31 March 2014	1.5%
After tax discount rate at 31 March 2015 <sup>(1)</sup>	8.5%
After tax discount rate at 31 March 2014 (1)	8.5%

(1) The application of pre-tax discount rates to pre-tax cash flows leads to the same valuation of Cash Generating Units.

Sensitivity of the values in use to key assumptions can be presented as follows:

(in € million)		Transport
	-25 bp	+25 bp
Operating margin (terminal value)	(134)	134
	-25 bp	+25 bp
After tax discount rate	123	(115)
	-10 bp	+10 bp
Long-term growth rate	(38)	39

As of 31 March 2015, the recoverable amount of the Transport sector exceeded its carrying value and the sensitivity of the values in use to key assumptions support the Group's opinion that goodwill is not impaired.

### **11.2.** Intangible assets

	At 31 March	Additions/ disposals/	Translation adjustments and	Assets held	At 31 March
(in € million)	<b>2014</b> <sup>(1)</sup>	amortisation	other changes	for sale	2015
Development costs	2,211	298	10	(1,480)	1,039
Acquired technology	1,388	-	2	(1,390)	-
Other intangible assets	859	(1)	33	(723)	168
Gross value	4,458	297	45	(3,593)	1,207
Of which gross value attributable to					
discontinued operations	3,330	232	31	(3,593)	-
Development costs	(842)	(73)	(8)	261	(662)
Acquired technology	(928)	(21)	-	949	-
Other intangible assets	(635)	(6)	(19)	559	(101)
Amortisation and impairment	(2,405)	(100)	(27)	1,769	(763)
Of which amortisation and impairment					
attributable to discontinued operations	(1,730)	(26)	(13)	1,769	-
Development costs	1,369	225	2	(1,219)	377
Acquired technology	460	(21)	2	(441)	-
Other intangible assets	224	(7)	14	(164)	67
NET VALUE	2,053	197	18	(1,824)	444
Of which net value attributable					
to discontinued operations	1,600	206	18	(1,824)	-

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

(in € million)	At 31 March 2013 <sup>(1)</sup>	Additions/ disposals/ amortisation <sup>(2)</sup>	Translation adjustments and other changes	At 31 March 2014 <sup>(1)</sup>
Development costs	1,900	270	41	2,211
Acquired technology	1,422	-	(34)	1,388
Other intangible assets	820	44	(5)	859
Gross value	4,142	314	2	4,458
Development costs	(724)	(117)	(1)	(842)
Acquired technology	(842)	(86)	-	(928)
Other intangible assets	(596)	(43)	4	(635)
Amortisation and impairment	(2,162)	(246)	3	(2,405)
Development costs	1,176	153	40	1,369
Acquired technology	580	(86)	(34)	460
Other intangible assets	224	1	(1)	224
NET VALUE	1,980	68	5	2,053

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

(2) Amortization expenses of capitalized development costs include impairments of technology in the Transport and Renewable Power Sectors as of 31 March 2014.

Movements over the period ended 31 March 2015 mainly arose from the classification of the Energy activities' intangible assets as "Assets held for sale" for an amount of €1,824 million (see Note 4).

## NOTE 12 · PROPERTY, PLANT AND EQUIPMENT

(in € million)	At 31 March 2014 <sup>(1)</sup>	Acquisitions/ amortisation/ impairments	Disposals	Translation adjustments and other changes	Assets held for sale	At 31 March 2015
Land	181	-	(10)	(2)	(116)	53
Buildings	1,958	75	(28)	173	(1,549)	629
Machinery and equipment	2,966	151	(79)	146	(2,465)	719
Constructions in progress	326	173	(3)	(83)	(360)	53
Tools, furniture, fixtures and other	483	41	(38)	73	(326)	233
Gross value	5,914	440	(158)	307	(4,816)	1,687
Of which gross value attributable to discontinued operations	4,339	347	(141)	271	(4,816)	-
Land	(11)	(2)	2	1	2	(8)
Buildings	(741)	(51)	19	(31)	486	(318)
Machinery and equipment	(1,844)	(74)	74	(24)	1,342	(526)
Constructions in progress	-	-	-	(9)	-	(9)
Tools, furniture, fixtures and other	(350)	(18)	33	(35)	200	(170)
Amortisation and impairment	(2,946)	(145)	128	(98)	2,030	(1,031)
Of which amortisation and impairment						
attributable to discontinued operations	(2,011)	(57)	113	(75)	2,030	-
Land	170	(2)	(8)	(1)	(114)	45
Buildings	1,217	24	(9)	142	(1,063)	311
Machinery and equipment	1,122	77	(5)	122	(1,123)	193
Constructions in progress	326	173	(3)	(92)	(360)	44
Tools, furniture, fixtures and other	133	23	(5)	38	(126)	63
NET VALUE	2,968	295	(30)	209	(2,786)	656
Of which net value attributable						
to discontinued operations	2,328	290	(28)	196	(2,786)	-

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

( a constitue)	At 31 March	Acquisitions/ amortisation/	Disease	Translation adjustments and	At 31 March
(in € million)	2013 (1)	impairments	Disposals	other changes <sup>(2)</sup>	2014 <sup>(1)</sup>
Land	194	1	(4)	(10)	181
Buildings	1,922	147	(47)	(64)	1,958
Machinery and equipment	2,943	207	(87)	(97)	2,966
Constructions in progress	357	94	(1)	(124)	326
Tools, furniture, fixtures and other	495	28	(28)	(12)	483
Gross value	5,911	477	(167)	(307)	5,914
Land	(10)	(1)	-	-	(11)
Buildings	(734)	(85)	37	41	(741)
Machinery and equipment	(1,848)	(169)	79	94	(1,844)
Constructions in progress	(1)	(1)	-	2	-
Tools, furniture, fixtures and other	(336)	(37)	24	(1)	(350)
Amortisation and impairment	(2,929)	(293)	140	136	(2,946)
Land	184	-	(4)	(10)	170
Buildings	1,188	62	(10)	(23)	1,217
Machinery and equipment	1,095	38	(8)	(3)	1,122
Constructions in progress	356	93	(1)	(122)	326
Tools, furniture, fixtures and other	159	(9)	(4)	(13)	133
NET VALUE	2,982	184	(27)	(171)	2,968

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

(2)  $\epsilon$ (171) million of which translation adjustments for an amount of  $\epsilon$ (143) million.

The net value of tangible assets held under finance leases and included in the above data is as follows:

(en millions d'€)	At 31 March 2015	At 31 March 2014 (1)
Land	13	13
Buildings	24	50
Machinery and equipment	-	1
Tools, furniture, fixtures and other	1	18
NET VALUE OF TANGIBLE ASSETS HELD UNDER FINANCE LEASES	38	82

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

Commitments to purchase fixed assets amount to  $\epsilon$ 124 million at 31 March 2015. They notably arise from investments to industrialize new products and enhance productivity in Poland ( $\epsilon$ 24 million) and a new production facility in Taubate – Brazil ( $\epsilon$ 20 million). Movements over

the period ended 31 March 2015 mainly arose from the classification of the Energy activities' Property Plant and Equipment as "Assets held for sale".

## NOTE 13 · INVESTMENTS IN JOINT VENTURES AND ASSOCIATES

#### **Financial information**

	Share in equity		Share of ne	et income
(in € million)	At 31 March 2015	At 31 March 2014 <sup>(1)</sup>	For the year ended 31 March 2015	For the year ended 31 March 2014 <sup>(1)</sup>
Associates	243	429	(46)	53
Joint ventures	84	116	(18)	17
TOTAL	327	545	(64)	70

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

#### Movements during the period

(in € million)	At 31 March 2015	At 31 March 2014 (1)
Opening balance	545	666
Share in net income of equity-accounted investments	20	71
Impairment <sup>(2)</sup>	(82)	(22)
Share in net income of equity-accounted investments	(62)	49
Of which continued	(64)	70
Of which discontinued	2	(21)
Dividends	(47)	(43)
Acquisitions	19	26
Changes in consolidation method (3)	-	(100)
Translation adjustments and other	(42)	(53)
Transfer to assets held for sale	(86)	-
CLOSING BALANCE	327	545

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11

(2) At 31 March 2015, impairment relates primarily to "The Breakers Investments BV". At 31 March 2014, impairment relates to SEC Alstom Shanghaï Lingang (Grid) for ε(13) million and AWS Ocean Energy Limited (Renewable Power) for ε(9) million, disposed of over the period.

(3) Of which BrightSource Energy investment which is accounted for as a non-consolidated investment as at 31 March 2014, given the limited effective influence and financial information available.

### 13.1. Investment in associates

		Share in equity		Share of ne	et income
(in € million)	% ownership	At 31 March 2015	At 31 March 2014 <sup>(1)</sup>	For the year ended 31 March 2015	For the year ended 31 March 2014 <sup>(1)</sup>
The Breakers Investments B.V.	25%	208	372	(38)	66
Other		35	57	(8)	(13)
ASSOCIATES		243	429	(46)	53

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

#### **13.1.1**. Main associates

#### The Breakers Investments B.V.

On 27 May 2011, the Group acquired 25% stake (plus one share) in the company The Breakers Investments B.V. This company holds 100% of Transmashholding ("TMH"), the leading Russian railway equipment manufacturer that operates in Russia and in the other countries of the Commonwealth of Independent States (CIS). The summarized financial information (at 100%) presented below are the figures disclosed in the financial statements of The Breakers Investments B.V. as of 31 December and are established in accordance with IFRS. These financial statements, established in Rubles, were converted to Euros based on the rates used by the Group as of 31 March.

#### **Balance sheet**

(in € million)	At 31 December 2014	At 31 December 2013
Non-current assets	937	1,127
Current assets	1,031	1,223
TOTAL ASSETS	1,968	2,350
Equity-attributable to the owners of the parent company	824	998
Equity-attributable to non-controlling interests	200	290
Non current liabilities	286	302
Current liabilities	658	760
TOTAL EQUITY AND LIABILITIES	1,968	2,350

Income statement

(in € million)	Year ended 31 December 2014	Year ended 31 December 2013
Sales	2,466	3,485
Net income from continuing operations	173	336
Share of non-controlling interests	(14)	(49)
Net income attributable to the owners of the parent company	159	287
Other comprehensive income	15	1
TOTAL COMPREHENSIVE INCOME	188	336

The reconciliation of the summarized financial information of The Breakers Investments with the carrying value of the Group's interests can be broken down in the following way:

(in € million)	At 31 March 2015
Net asset of the Breakers Investments B.V. at 31 December 2014	824
Income (loss) forecast for the latest quarter	(3)
Other variations	0
Net asset of the Breakers Investments B.V. at 31 March 2015	821
Equity interest held by the Group	25%
Goodwill	79
Impairment of share in net asset of equity investment	(70)
Other <sup>(1)</sup>	(6)
CARRYING VALUE OF THE GROUP'S INTERESTS IN THE BREAKERS INVESTMENTS B.V	208
(1) Correspond to fair value restatements calculated at the time of the acquisition	

Correspond to fair value restatements calculated at the time of the acquisition. (1)

Movements over the period mainly derive from the decrease of the RUB currency which associated with a revised business plan led the Group to the recognition of a  $\epsilon$ 70 million impairment loss, as at 31 March 2015.

(in € million)	At 31 March 2014
Net asset of the Breakers Investments B.V. at 31 December 2013	998
Income (loss) forecast for the latest quarter	27
Other variations	1
Net asset of the Breakers Investments B.V. at 31 March 2014	1,026
Equity interest held by the Group	25%
Goodwill	121
Other <sup>(1)</sup>	(6)
CARRYING VALUE OF THE GROUP'S INTERESTS IN THE BREAKERS INVESTMENTS B.V	372

(1) Correspond to fair value restatements calculated at the time of the acquisition.

(in € million)	Year ended 31 March 2015
Net income of the Breakers Investments B.V. for the year ended 31 December 2014	159
Income net adjustment due to the closing date difference	(27)
Net income of the Breakers Investments B.V. for the year ended 31 March 2015	133
Equity interest held by the Group	25%
Impairment of share in net asset of equity investment	(70)
Other <sup>(1)</sup>	(1)
GROUP'S SHARE IN THE NET INCOME OF THE BREAKERS INVESTMENTS B.V	(38)

(1) Correspond to the amortization of the amounts recognized at the time of allocation of the acquisition price.

(in € million)	Year ended 31 March 2014
Net income of the Breakers Investments B.V. for the year ended 31 December 2013	287
Income net adjustment due to the closing date difference	(13)
Net income of the Breakers Investments B.V. for the year ended 31 March 2014	274
Equity interest held by the Group	25%
Other <sup>(1)</sup>	(2)
GROUP'S SHARE IN THE NET INCOME OF THE BREAKERS INVESTMENTS B.V	66
(1) Correspond to the amortization of the amounts recognized at the time of allocation of the acquisition price.	

#### Dividends

(in € million)	At 31 March 2015	At 31 March 2014
Dividends received	35	35

#### 13.1.2. Other associates

The Group's investment in other associates is not significant on an individual basis. On aggregate, the net carrying value of Alstom's Investment represents €35 million as of 31 March 2015 (€57 million as of 31 March 2014).

The various components of these joint ventures' comprehensive income attributable to the Group are the following:

(in € million)	At 31 March 2015	At 31 March 2014 (1)
Group share in net profit from continuing operations	(8)	(13)
Group's share of other comprehensive income	-	· · ·
GROUP'S SHARE OF TOTAL COMPREHENSIVE INCOME	(8)	(13)
	• · · · · ·	

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

### 13.2. Investment in joint-ventures

		Share in equity		Share of ne	et income
(in € million)	% ownership	At 31 March 2015	At 31 March 2014 (1)	For the year ended 31 March 2015	For the year ended 31 March 2014 <sup>(1)</sup>
Casco	49%	70	52	16	16
Other		14	65	(34)	1
Joint ventures		84	116	(18)	17

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

Group investment in others joint ventures is not significant on an individual basis. On aggregate, it corresponds to a net carrying value of €84 million as of 31 March 2015 (€116 million as of 31 March 2014).

The various components of these joint ventures' comprehensive income attributable to the Group are the following:

(in € million)	At 31 March 2015	At 31 March 2014 (1)
Group share in net profit from continuing operations	(18)	17
Group's share of other comprehensive income	-	· ·
GROUP'S SHARE OF TOTAL COMPREHENSIVE INCOME	(18)	17

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

## **NOTE 14 · NON-CONSOLIDATED INVESTMENTS**

	At 31 March 2015			At 31 March 2014 (1)
		Impairment/Fair		
(in € million)	Gross value	Value Change	Net	Net
BrightSource Energy	-	-	-	83
SEC Alstom (Shanghai Baoshan) Transformers Co., Ltd	-	-	-	20
Other (2)	41	(5)	36	57
TOTAL	41	(5)	36	160

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

(2) Other investments represent an aggregate net carrying value of  $\epsilon$  36 million as of 31 March 2015 ( $\epsilon$ 57 million as of 31 March 2014). This net carrying value is an accurate representation of the fair value.

Both BrightSource Energy and SEC Alstom Transformers Co. Ltd are part of the Energy business and as such classified as assets held for sale, as at 31 March 2015.

### Movements during the period

(in € million)	At 31 March 2015	At 31 March 2014 (1)
Opening balance	160	101
Change in fair value (2)	(1)	(15)
Acquisitions	4	7
Changes in consolidation method (3)	-	73
Translation adjustments and other	(9)	(6)
Transfer to assets held for sale (3)	(118)	· ·
CLOSING BALANCE	36	160

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS

(2) Variation recorded in other comprehensive income as fair value gains/(losses) on assets available for sale.

(3) Of which BrightSource Energy Investment.

The Group's equity investment in other investments is not significant on an individual basis and mainly pertains to investments in companies that hold PPPs (public-private partnerships) agreements or have entered into concession agreements, typically for an ownership lower than 20%.

## NOTE 15 · OTHER NON-CURRENT ASSETS

(in € million)	At 31 March 2015	At 31 March 2014 (1)
Financial non-current assets associated to financial debt <sup>(2)</sup>	383	364
Long-term loans, deposits and other	90	146
OTHER NON-CURRENT ASSETS	473	510

 Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11
 These non-current assets relate to a long-term rental of trains and associated equipment to a London metro operator (see Notes 26 and 30.1). They are made up as follows:

- at 31 March 2015, €365 million receivables and €18 million deposit;

- at 31 March 2014, €349 million receivables and €15 million deposit.

## NOTE 16 · INVENTORIES

(in € million)	At 31 March 2015	At 31 March 2014 (1)
Raw materials and supplies	549	1,015
Work in progress	243	1,950
Finished products	138	319
Inventories, gross	930	3,284
Raw materials and supplies	(70)	(150)
Work in progress	(18)	(124)
Finished products	(21)	(38)
Write-down	(109)	(312)
INVENTORIES, NET	821	2,972

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

Movements over the period ended 31 March 2015 mainly arose from the classification of the Energy activities' inventories as "Assets held for sale" for an amount of  $\epsilon_{2,352}$  million (see Note 4).

## NOTE 17 · CONSTRUCTION CONTRACTS IN PROGRESS

(in € million)	At 31 March 2015	At 31 March 2014 (1)	Variation
Construction contracts in progress, assets	2,554	3,951	(1,397)
Construction contracts in progress, liabilities	(3,455)	(8,426)	4,971
CONSTRUCTION CONTRACTS IN PROGRESS	(901)	(4,475)	3,574

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

(in € million)	At 31 March 2015	At 31 March 2014 (1)	Variation
Contracts costs incurred plus recognised profits less recognised losses			
to date	29,584	60,881	(31,297)
Less progress billings	(28,506)	(62,043)	33,537
Construction contracts in progress excluding down payments received			
from customers	1,078	(1,162)	2,240
Down payments received from customers	(1,979)	(3,313)	1,334
CONSTRUCTION CONTRACTS IN PROGRESS	(901)	(4,475)	3,574

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

Movements over the period ended 31 March 2015 mainly arose from the classification of the Energy activities' construction contracts in progress including down payments as "Assets held for sale" for a net amount of  $\epsilon$ 3,968 million (see Note 4).

## NOTE 18 • TRADE RECEIVABLES

			Past due on the closing date					
(in € million)	No past due on Total the closing date		Less than 60 days	Between 60 and 180 days	More than 180 days			
At 31 March 2015	1,470	1,065	138	43	224			
• o/w gross	1,480	1,070	138	43	229			
<ul> <li>o/w impairment</li> </ul>	(10)	(5)	-	-	(5)			
At 31 March 2014 (1)	4,450	3,521	316	196	417			
• o/w gross	4,569	3,562	323	196	488			
<ul> <li>o/w impairment</li> </ul>	(119)	(42)	(7)	-	(70)			

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

Movements over the period ended 31 March 2015 mainly arose from the classification of the Energy activities' trade receivables as "Assets held for sale" for a net amount of  $\epsilon$ 3,172 million (see Note 4).

Impairment losses are determined considering the risk of non-recovery assessed on a case by case basis. Due to the type of business operated by the Group, past due receivables are frequently representative of outstanding amounts confirmed by customers but whose payment is subject to clearance of items raised during inspection of works. Such receivables do remain fully recoverable; costs to be incurred for the clearance of pending items are included in the determination of the margin at completion of the related contracts.

## **NOTE 19 · OTHER CURRENT OPERATING ASSETS**

(in € million)	At 31 March 2015	At 31 March 2014 (1)
Down payments made to suppliers	118	517
Corporate income tax	117	216
Other taxes	248	866
Prepaid expenses	54	238
Other receivables	145	373
Derivatives relating to operating activities	782	397
Remeasurement of hedged firm commitments in foreign currency	493	526
OTHER CURRENT OPERATING ASSETS	1,957	3,133

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

Derivatives relating to operating activities centralized by Alstom Holdings, including those affected to hedge operating foreign currency exposures of the Energy activities, are not classified as held for sale. However, re-measurement of hedged firm commitments in foreign currency related to Energy activities are classified as held for sale (under the line items "other current operating assets" and "other current operating liabilities" in the balance-sheet of the Energy activities disclosed in Note 4).

## NOTE 20 • MARKETABLE SECURITIES AND OTHER CURRENT FINANCIAL ASSETS

(in € million)	At 31 March 2015	At 31 March 2014 (1)
Derivatives related to financing activities	61	26
Marketable securities	-	-
MARKETABLE SECURITIES AND OTHER CURRENT FINANCIAL ASSETS	61	26

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

## NOTE 21 · WORKING CAPITAL

### 21.1. Balance sheet positions

(in € million)	At 31 March 2015	At 31 March 2014 (1)
Inventories	821	2,972
Construction contracts in progress, assets	2,554	3,951
Trade receivables	1,470	4,450
Other current operating assets	1,957	3,133
ASSETS	6,802	14,506
Non-current provisions	283	710
Current provisions	1,031	1,191
Construction contracts in progress, liabilities	3,455	8,426
Trade payables	917	3,819
Other current operating liabilities	2,492	3,593
LIABILITIES	8,178	17,739
WORKING CAPITAL	(1,376)	(3,233)

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

### 21.2. Analysis of variation in working capital

(in € million)	Year ended 31 March 2015
Working capital at the beginning of the period	(3,233)
Changes in working capital resulting from operating activities <sup>(1)</sup>	(726)
Changes in working capital resulting from investing activities	63
Translation adjustments and other changes	(408)
Transfer to assets held for sale	2,928
Total changes in working capital	1,857
WORKING CAPITAL AT THE END OF THE PERIOD	(1,376)

(1) Of which  $\varepsilon(722)$  million related to the agreement with the US Department of Justice.

On the period, the variation in working capital resulting from operating activities from continuing operations amounts to  $\epsilon$ (673) million.

## NOTE 22 · EQUITY

When managing capital, objectives of the Group are to safeguard its ability to continue as a going concern so that it can provide returns to shareholders, bring benefits to its other partners and optimise the structure of the capital in order to reduce its cost. To achieve this, the Group may choose to:

- adjust the amount of dividends paid to the shareholders;
- reimburse a portion of capital to the shareholders;
- issue new shares; or,
- sell assets in order to scale back its debt.

### 22.1. Movements in share capital

#### Movements in financial year ended 31 March 2015

At 31 March 2015, the share capital of Alstom amounted to  $\epsilon$ 2,168,547,479 consisting of 309,792,497 ordinary shares with a par value of  $\epsilon$ 7 each. For the year ended 31 March 2015, the weighted average number of outstanding ordinary shares amounted to 309,364,543 after the dilutive effect of bonds reimbursable in shares "Obligations Remboursables en Actions" and to 311,113,878 after the effect of all dilutive instruments.

During the year ended 31 March 2015:

- 1,408 bonds reimbursable in shares "Obligations Remboursables en Actions" were converted into 89 shares at a par value of €7. The 78,242 bonds reimbursable with shares outstanding at 31 March 2015 represent 4,913 shares to be issued;
- 1,090,262 of ordinary shares were issued under long term incentive plans.

#### Movements in financial year ended 31 March 2014

At 31 March 2014, the share capital of ALSTOM amounted to  $\epsilon$ 2,160,915,022 consisting of 308,702,146 ordinary shares with a par value of  $\epsilon$ 7 each. For the year ended 31 March 2014, the weighted average number of outstanding ordinary shares amounted to 308,559,756 after the dilutive effect of bonds reimbursable in shares "Obligations Remboursables en Actions" and to 311,621,371 after the effect of all dilutive instruments.

During the year ended 31 March 2014:

- 1,616 bonds reimbursable in shares "Obligations Remboursables en Actions" were converted into 101 shares at a par value of €7. The 79,650 bonds reimbursable with shares outstanding at 31 March 2014 represent 5,002 shares to be issued;
- 543,919 of ordinary shares were issued under long term incentive plans.

### 22.2. Distribution of dividends

No dividend distribution will be proposed at the next Annual General Meeting.

The following dividends were distributed in respect of the previous three financial years:

- year ended 31 March 2014 (decision of Shareholders' Meeting held on 1 July 2014): no dividend distributed;
- year ended 31 March 2013 (decision of Shareholders' Meeting held on 2 July 2013): total amount of €259 million, corresponding to a €0.84 dividend per share;
- year ended 31 March 2012 (decision of Shareholders' Meeting held on 26 June 2012): total amount of €236 million, corresponding to a €0.80 dividend per share.

### 22.3. Currency translation adjustment

The currency translation adjustment, presented within the consolidated statement of comprehensive income, primarily reflects the variation of the US Dollar ( $\epsilon$ 185 million), Chinese Yuan ( $\epsilon$ 148 million), Indian Rupee ( $\epsilon$ 81 million), Brazilian Real ( $\epsilon$ (44) million), and Russian Federation Rouble ( $\epsilon$ (104) million) against the euro for the year ended 31 March 2015.

In relation with the disposal of the auxiliary component business,  $\epsilon$ (16) million of currency translation adjustment were reclassified in the income statement.

## NOTE 23 · SHARE-BASED PAYMENTS

### 23.1. Stock options and performance shares

#### **Key characteristics**

		by Shareholde n 9 July 2004	rs Meeting	Plans issued by Shareholders Meeting on 26 June 2007				
	Plan n°7	Plan n°8	Plan n°9	Plan n°10	Plan n°10	Plan n°11	Plan n°11	
	Stock options	Stock options	Stock options	Stock options	Performance shares	Stock options	Performance shares	
Grant date	17/09/2004	27/09/2005	28/09/2006	25/09/2007	25/09/2007	23/09/2008	23/09/2008	
	17/09/2007	27/09/2008	28/09/2009	25/09/2010		23/09/2011		
Exercise period	16/09/2014	26/09/2015	27/09/2016	24/09/2017	N/A	22/09/2018	N/A	
Number of beneficiaries	1,007	1,030	1,053	1,196	1,289	411	1,431	
Adjusted number granted <sup>(1)</sup>	5,566,000	2,803,000	3,367,500	1,697,200	252,000	754,300	445,655	
Adjusted number exercised since the origin	5,048,533	2,087,456	526,967	1,000	220,320	-	-	
Adjusted number cancelled since the origin	517,467	263,800	438,750	265,500	31,680	754,300	445,655	
Ajusted number outstanding at 31 March 2015	-	451,744	2,401,783	1,430,700	-	-	-	
inc. to the present members of the Executive Committee	-	-	335,000	178,600	-	-	-	
Adjusted exercise price <sup>(2)</sup> (in €)	8.60	17.88	37.33	67.50	N/A	66.47	N/A	
Fair value at grant date <i>(in €)</i>	7.30	10.30	12.90	29.24	129.20	16.71	63.54	

(1) The number of options and performance shares and the exercise price of options have been adjusted as a result of transactions that have impacted the number of capital shares after grant dates.

(2) The exercise price corresponds to the average opening price of the shares during the twenty trading days preceding the day on which the options were granted by the Board (neither discount nor surcharge).

At 31 March 2015, stock options granted by plans 7, 8, 9, 10, 11, 12, 13 and 14 are fully vested. For plans 8, 9 and 10, options will expire seven years after the end of the vesting period of each plan. For plans 12, 13, 14, 15 and 16, options will expire five years after the end of the vesting period.

The long term incentive plans set up since 2007 combine the allocation of stock options with the allocation of performance shares.

The grant of these instruments is conditioned by the satisfaction of the performance indicators.

#### FINANCIAL INFORMATION CONSOLIDATED FINANCIAL STATEMENTS Notes to the consolidated financial statements

Plans issued by Meeting on 2		Plans issued by Shareholders Meeting on 22 June 2010							
Plan n°12	Plan n°12	Plan n°13	Plan n°13	Plan n°14	Plan n°14	Plan n°15	Plan n°15	Plan n°16	Plan n°16
Stock options	Performance shares	Stock options	Performance shares	Stock options	Performance shares	Stock options	Performance shares	Stock options	Performance shares
21/09/2009	21/09/2009	13/12/2010	13/12/2010	04/10/2011	04/10/2011	10/12/2012	10/12/2012	01/10/2013	01/10/2013
21/09/2012 20/09/2017	N/A	13/12/2013 12/12/2018	N/A	04/10/2014 03/10/2019	N/A	10/12/2015 09/12/2020	N/A	03/10/2016 30/09/2021	N/A
436	1,360	528	1,716	514	1,832	538	1,763	292	1,814
871,350	522,220	1,235,120	740,860	1,369,180	804,040	1,312,690	781,540	671,700	1,000,700
-	182,432	-	506,330	9,429	229,950	-		-	-
561,150	339,788	387,970	234,530	539,645	318,359	715,985	424,730	16,300	53,100
310,200	-	847,150	-	820,106	255,731	596,705	356,810	655,400	947,600
53,000	-	65,992	-	247,338	-	159,170	19,550	248,500	98,500
49.98	N/A	33.14	N/A	26.39	N/A	27.70	N/A	26.94	N/A
11.26	48.11	7.59	31.35	3.14	19.77	5.80	26.70	3.84	22.62

#### LTI plan 15 granted on 10 December 2012

The total number of options exercisable and performance shares to be delivered depends on the Group's operating margin and the free cash flow for the fiscal years ended 31 March 2013, 31 March 2014 and 31 March 2015:

Year ended	31 March 2013	Year ended	31 March 2014	Year ended 31 March 2015			
	% of Conditional Options exercisable & performance shares to be delivered		% of Conditional Options exercisable & performance shares to be delivered		% of Conditional Options exercisable & performance shares to be delivered		
$FCF \ge 0$ and		$FCF \ge 0$ and		FCF ≥ 0 and			
OM ≥ 7.4%	40%	OM ≥ 7.6%	40%	OM ≥ 8%	20%		
$FCF \ge 0$ and		$FCF \ge 0$ and		$FCF \ge 0$ and			
$7.2\% \le 0M < 7.4\%$	30%	7.3% ≤ 0M < 7.6%	30%	7.5% ≤ 0M < 8%	10%		
$FCF \ge 0$ and		$FCF \ge 0$ and		FCF < 0 or			
7% ≤ 0M < 7.2%	10%	7% ≤ 0M < 7.3%	10%	OM < 7.5%	-		
FCF < 0 or		FCF < 0 or					
0M < 7%	-	0M < 7%	-	-	-		

FCF means Free Cash Flow and OM means Operating Margin.

Free cash flow is defined as net cash provided by operating activities less capital expenditures including capitalised development costs, net of proceeds from disposals of tangible and intangible assets. In particular, free cash flow does not include the proceeds from disposals of activity.

Based on consolidated financial statements for the fiscal years ended 31 March 2013 and 31 March 2014, the performance condition is achieved for 30% of an allotment of LTIP 15 options and performance shares.

Moreover, in the context of the sale of the Energy activities the Board of Directors has considered that the performance condition set for fiscal year ended 31 March 2015, weighing 20% of the global award, will be deemed fully satisfied subject to and upon the completion of the transaction.

As a result, 50% of the options will be exercisable under this plan and 50% of performance shares will be delivered. 50% of options and performance shares are cancelled.

#### LTI plan 16 granted on 1 October 2013

In the context of Energy transaction, the Board of Directors has considered that the performance conditions set for fiscal years ended 31 March 2015 and 31 March 2016 will be deemed fully satisfied subject to and upon the completion of the transaction.

As a consequence, all options will be exercisable under this plan and all performance shares will be delivered.

In addition, for both plans 15 & 16, the presence condition will be waived for the beneficiaries having left the Group as part of the Energy transaction on the condition they are employees of Alstom Group as at the date of the closing of the transaction.

Weighted average

Number of

#### Movements

	Number of options	Weighted average exercise price per share (in €)	Number of performance shares
Outstanding at 31 March 2013	8,743,578	36.58	2,124,847
Granted	671,700	26.94	1,000,700
Exercised	(122,912)	11.61	(340,344)
Cancelled	(442,434)	29.58	(279,007)
Outstanding at 31 March 2014	8,849,932	36.49	2,506,196
Granted	-	-	-
Exercised	(481,126)	13.06	(495,050)
Cancelled	(855,018)	27.23	(451,005)
OUTSTANDING AT 31 MARCH 2015	7,513,788	39.06	1,560,141
of which exercisable	6,261,683		N/A

#### Valuation

	Plan n°11	Plan n°11	Plan n°12	Plan n°12	Plan n°13	Plan n°13	Plan n°14	Plan n°14	Plan n°15	Plan n°15	Plan n°16	Plan n°16
	Stock	Performance										
	options	shares										
Grant date	23/09/2008	23/09/2008	21/09/2009	21/09/2009	13/12/2010	13/12/2010	04/10/2011	04/10/2011	10/12/2012	10/12/2012	01/10/2013	01/10/2013
Expected life (in years)	3.5	2.5 or 4.0	3.5	2.5 or 4.0	3.5	2.5 or 4.0	4.0	2.5 or 4.0	4.0	2.5 or 4.0	3.0	4.0
		31/05/2011		31/05/2012		31/05/2013		31/05/2014		31/05/2015		
End of vesting period	22/09/2011	or	20/09/2012	or	12/12/2013	or	03/10/2014	or	09/12/2015	or	30/09/2016	30/09/2017
		22/09/2012		20/09/2013		12/12/2014		03/10/2015		09/12/2016		
Adjusted exercise												
price <sup>(1)</sup> <i>(in €)</i>	66.47	N/A	49.98	N/A	33.14	N/A	26.39	N/A	27.70	N/A	26.94	N/A
Share price at grant												
date <i>(in</i> €)	65.10	65.10	50.35	50.35	35.40	35.40	23.82	23.82	29.77	29.77	26.33	26.33
Volatility	30%	N/A	30%	N/A	31%	N/A	31%	N/A	30%	N/A	28%	N/A
Risk free interest rate	4.1%	4.4%	2.0%	2.3%	1.8%	2.0%	1.5%	1.5%	0.5%	0.5%	0.9%	0.9%
Dividend yield	1.3%	1.3%	1.3%	1.3%	3.1%	3.1%	5.0%	5.0%	3.4%	3.4%	3.8%	3.8%

(1) The exercise price corresponds to the average opening price of the shares during the twenty trading days preceding the day of which the options were granted by the Board (no discount or surcharge).

The option valuation method follows a binomial mathematical model for plan 11 and a Black & Scholes model for plans 12, 13, 14, 15 and 16 with exercise of the options anticipated and spread over the exercise period on a straight-line basis. The volatility factor applied is an average of CAC 40 comparable companies' volatility at the grant date.

The Group booked a total expense of €26 million for the year ended 31 March 2015 and €11 million for the year ended 31 March 2014, out of which €20.5 million in discontinued operations for the year ended 31 March 2015 and €7.0 million for the year ended 31 March 2014.

### 23.2. Stock appreciation rights ("SARs")

#### **Key characteristics**

		Notional		
SARs n°7	SARs n°8	SARs (1)	SARs n°9	SARs n°10
01/12/2004	18/11/2005	16/12/2005	28/09/2006	25/09/2007
17/09/2007	27/09/2008	27/09/2008	28/09/2009	25/09/2010
16/09/2014	18/11/2015	26/09/2015	28/09/2016	24/09/2017
114	120	120	134	134
478,000	234,000	232,000	341,250	59,700
408,948	145,900	195,000	176,250	5,600
69,052	43,100	37,000	65,625	7,500
-	45,000	-	99,375	46,600
8.60	22.45	17.88	36.05	73.42
	01/12/2004 17/09/2007 16/09/2014 114 478,000 408,948 69,052	01/12/2004 18/11/2005 17/09/2007 27/09/2008 16/09/2014 18/11/2015 114 120 478,000 234,000 408,948 145,900 69,052 43,100 - 45,000	SARs n°7         SARs n°8         SARs (¹)           01/12/2004         18/11/2005         16/12/2005           17/09/2007         27/09/2008         27/09/2008           16/09/2014         18/11/2015         26/09/2015           114         120         120           478,000         234,000         232,000           408,948         145,900         195,000           69,052         43,100         37,000	SARs n°7         SARs n°8         SARs (i)         SARs n°9           01/12/2004         18/11/2005         16/12/2005         28/09/2006           17/09/2007         27/09/2008         27/09/2008         28/09/2019           16/09/2014         18/11/2015         26/09/2015         28/09/2016           114         120         120         134           478,000         234,000         232,000         341,250           69,052         43,100         37,000         65,625           69,052         43,000         -         99,375

(1) Notional SARs have been granted at an exercise price of €17.88 and are capped at €22.45.

 (2) The number of SARs and their exercise prices have been adjusted as a result of transactions that have impacted the number of capital shares after grant dates.
 (3) The exercise price corresponds to the average opening price of the shares during the twenty trading days preceding the day on which the options were granted by the Board (no discount or surcharge).

#### **Movements**

	Weighted average exercise
Number of SARs	price per share <i>(in €)</i>
222,775	41.04
-	-
(4,500)	28.11
-	-
218,275	41.31
-	-
(11,500)	26.88
(15,800)	43.86
190,975	41.96
190,975	
	222,775 - (4,500) - 218,275 - (11,500) (15,800) 190,975

#### Valuation

			Notional		
	SARs n°7	SARs n°8	SARs (1)	SARs n°9	SARs n°10
Grant date	01/12/2004	18/11/2005	16/12/2005	28/09/2006	25/09/2007
Expected life (in years)	4	4	4	4	4
End of vesting period	17/09/2007	27/09/2008	27/09/2008	28/09/2009	24/09/2010
Adjusted exercise price (2) (in $\epsilon$ )	8.60	22.45	17.88	36.05	73.42
Share price at 31 March 2015 <i>(in €)</i>	28.96	28.96	28.96	28.96	28.96
Share price at 31 March 2014 <i>(in €)</i>	19.82	19.82	19.82	19.82	19.82
Volatility	17.92%	17.92%	17.92%	17.92%	17.92%
Risk free interest rate	0.23%	0.23%	0.23%	0.23%	0.23%
Dividend yield	5.0%	5.0%	5.0%	5.0%	5.0%

(1) SARs of the Notional plan have been granted at an exercise price of  $\epsilon$ 17.88 and are capped at  $\epsilon$ 22.45.

(2) The number of SARs and their exercise prices has been adjusted as a result of transactions that have impacted the number of capital shares after grant dates.

The value of SARs plans is measured at the grant date using a Black & Scholes option valuation model taking into account the terms and conditions according to which the instruments were granted. Until the liability is settled, it is measured at each reporting date with changes in fair value recognized in profit and loss.

The Group booked a €0.2 million income for the year ended 31 March 2015, and a €1 million income for the year ended 31 March 2014.

## NOTE 24 • PROVISIONS

(in € million)	At 31 March 2014 <sup>(1)</sup>	Additions	Releases	Applications	Translation adjustments and other	Provisions related to assets held for sale	At 31 March 2015
Warranties	663	223	(198)	(177)	19	(430)	100
Litigations, claims and others	528	937	(160)	(106)	(4)	(264)	931
Current provisions	1,191	1,160	(358)	(283)	16	(695)	1,031
Of which current provisions attributable to discontinued							
operations	847	311	(291)	(193)	21	(695)	-
Tax risks & litigations	201	74	(42)	(10)	2	(119)	106
Restructuring	162	122	(9)	(74)	1	(155)	47
Other non-current provisions	347	148	(41)	(150)	44	(218)	130
Non-current provisions	710	344	(92)	(234)	46	(491)	283
Of which non-current provisions attributable to discontinued							
operations	512	227	(67)	(196)	15	(491)	-
TOTAL PROVISIONS	1,901	1,504	(450)	(517)	62	(1,186)	1,314
Of which provisions attributable to discontinued operations	1,359	538	(358)	(389)	36	(1,186)	-

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

(in € million)	At 31 March 2013 <sup>(1)</sup>	Additions	Releases	Applications	Translation adjustments and other	At 31 March 2014 <sup>(1)</sup>
Warranties	767	286	(179)	(216)	5	663
Litigations, claims and others	542	237	(132)	(112)	(7)	528
Current provisions	1,309	523	(311)	(328)	(2)	1,191
Tax risks & litigations	180	53	(33)	(5)	6	201
Restructuring	182	88	(25)	(81)	(2)	162
Other non-current provisions	318	174	(64)	(63)	(18)	347
Non-current provisions	680	315	(122)	(149)	(14)	710
TOTAL PROVISIONS	1,989	838	(433)	(477)	(16)	1,901

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

Movements over the period ended 31 March 2015 mainly arose from the classification of the Energy activities' provisions as "Liabilities related to assets held for sale" for an amount of €1,186 million (see Note 4) and the agreement reached with the US Department of Justice resulting in a fine of €722 million booked as current provision in continued activities as stipulated in the Note 1.2.

Provisions for warranties relate to estimated costs to be incurred over the residual contractual warranty period on completed contracts.

Provisions for litigations, claims and others relate to operating risks that are not directly linked to contracts in progress.

In relation to tax risks, the Group tax filings are subject to audit by tax authorities in most jurisdictions in which the Group operates. These audits may result in assessment of additional taxes that are subsequently resolved with the authorities or potentially through the courts. The Group believes that it has strong arguments against the questions being raised, that it will pursue all legal remedies to avoid an unfavourable outcome and that it has adequately provided for any risk that could result from those proceedings where it is probable that it will pay some amounts.

Restructuring provisions derive from the adaptation of the Transport's footprint (see also Note 7).

Other non-current provisions mainly relate to guarantees delivered in connection with disposals, employee litigations, commercial disputes and environmental obligations.

## NOTE 25 • POST-EMPLOYMENT AND OTHER LONG-TERM DEFINED EMPLOYEE BENEFITS

In addition to mandatory social insurance plans, the Group has introduced several benefit plans.

The defined benefit obligation amounting to  $\epsilon$ 952 million as of 31 March 2015 (see Note 25.2) is analysed as follows:

- several pension plans for €776 million;
- other post-employment benefits for €145 million which include end-of-service benefits in France and Italy; and
- other long-term defined benefits for €31 million which mainly correspond to jubilees in France and Germany.

Net provisions for post-employment benefits total €453 million, as of 31 March 2015 compared with €1,503 million, as of 31 March 2014. This amount includes in particular provisions of €1,761 million reclassified in the consolidated balance sheet in liabilities directly associated with assets held for sale.

### 25.1. Description of the plans

Post-employment benefits are paid under defined contribution and defined benefit plans. The Group's only obligation under defined contribution plans is to pay fixed contributions into the funding vehicle. The payments are recognised when incurred in the income statement.

Defined benefit plans are mainly in the United Kingdom, Switzerland, Germany and in the United States of America.

The specific characteristics (benefit formulas, funding policies and types of assets held) of the plans vary according to the regulations and laws in the country where the employees are located.

For most plans, the split of defined benefit obligations between continuing and discontinued activities is based on the proportion of beneficiaries which belong to the current Thermal Power, Renewable Power and Grid activities out of the total population.

In the United Kingdom, there are three defined benefit pension plans covering different populations.

The largest plan, which accounts for 89% of the defined benefit obligations in the country, is part of the discontinued activities. It provides an indexed pension annuity based on the employee's final pensionable earnings, as well as benefits payable upon death and serious ill-health. This plan was closed to new members in 2006. In accordance with British regulation, the Company and the Trustee Board of the scheme perform an actuarial valuation every three years, and agree on a recovery plan to correct any deficit arising. The current agreement was signed in April 2012, and the Company paid  $\epsilon$ 36 million of recovery contributions over the year ended 31 March 2015. The next valuation has been initiated as of 6 April 2015.

The two other plans are part of the continuing activities. They also provide a pension in the form of an indexed annuity and were closed to new members as of 1 July 2013.

New hires are ordinarily offered the opportunity to participate in a defined contribution group pension plan ("GPP"), a group life insurance plan and an income replacement scheme.

In Switzerland, the pension plans concern mainly people of discontinued activities. They allow members to accumulate retirement funds with interests in a dedicated account during their employment life. The account value is converted into a pension, in the form of an annuity or a lump sum payment, at retirement. The plans also include benefits payable upon death and disability.

In Germany, the plans cover both populations of continuing and discontinued activities. They provide coverage for pension, death and disability. In the past, the pension was accrued in the form of an annuity. The plans were deeply modified for future accruals in 2003 for the employees of the Grid Sector, in 2009 for the employees of the Thermal and Renewable Sectors and in 2010 for the employees of the Transport Sector to remove most defined benefit pension risks. The plans now continue to be accounted for as defined benefit plans under IAS 19R but with much lower risks for the Company. With respect to employee contributions, there are remitted into defined contributions plans.

In the United States of America, Alstom sponsors four qualified defined benefit pension plans and two post-retirement medical plans. Two of the qualified pension plans, namely a cash balance plan and a final average earnings plan, which represent 65% of the defined benefit obligations in the country, were closed to all service accruals in 2010. Employees now participate in a defined contribution 401(k) plan. The employer subsidies toward post-retirement medical plans were removed to new hires in 2002 and 2003 with the exception of a small number of unionized employees. All plans are part of discontinued activities except a pension plan and a post-employment medical plan whose beneficiaries belong to the Transport sector.

In France and Italy, defined benefit pension plans are mainly end-of-service benefits provided for under the terms of collective bargaining agreements and Group agreements.

In some countries, these commitments are covered in whole or in part by insurance contracts or pension funds. In this case, the commitments and assets are measured independently.

The fair value of plan assets is deducted from the Group's defined benefit obligation, as estimated using the projected unit credit method, in order to calculate the unfunded obligation to be covered by a provision, or the overfunded right to be recognized as an asset under specific requirements. In the following tables, the "Other" zone represents mainly the United States of America.

### 25.2. Defined benefit obligations

		United			
(in € million)	At 31 March 2015	Kingdom	Switzerland	Euro zone	Other
Defined benefit obligations at beginning of year	(5,974)	(2,505)	(1,518)	(1,140)	(811)
Service cost	(116)	(14)	(56)	(29)	(17)
Plan participant contributions	(42)	(3)	(38)	-	(1)
Interest cost	(238)	(123)	(38)	(37)	(40)
Plan amendments	(26)	-	9	(8)	(27)
Business combinations/disposals	52	-	-	17	35
Curtailments	3	-	-	-	3
Settlements	4	-	-	-	4
Actuarial gains (losses) – due to experience	24	8	4	14	(2)
Actuarial gains (losses) – due to changes					
in assumptions	(1,038)	(504)	(257)	(211)	(66)
Benefits paid	359	132	80	71	76
DBO related to assets held for sale	6,871	3,009	2,060	892	910
Foreign currency translation and others	(831)	(388)	(279)	-	(164)
DEFINED BENEFIT OBLIGATIONS AT END OF YEAR	(952)	(388)	(33)	(431)	(100)
Of which:					
Funded schemes	(643)	(388)	(33)	(155)	(67)
Unfunded schemes	(309)	-	-	(276)	(33)

		United			
(in € million)	At 31 March 2014 (1)	Kingdom	Switzerland	Euro zone	Other
Defined benefit obligations at beginning of year	(6,039)	(2,481)	(1,497)	(1,128)	(933)
Service cost	(99)	(13)	(44)	(25)	(17)
Plan participant contributions	(39)	(3)	(35)	-	(1)
Interest cost	(222)	(113)	(36)	(37)	(36)
Plan amendments	6	-	11	(4)	(1)
Business combinations/disposals	-	-	-	-	-
Curtailments	2	-	-	1	1
Settlements	-	-	-	-	-
Actuarial gains (losses) – due to experience	(4)	(2)	31	(21)	(12)
Actuarial gains (losses) – due to changes					
in assumptions	82	37	(2)	3	44
Benefits paid	308	121	55	71	61
DBO related to assets held for sale	-	-	-	-	-
Foreign currency translation and others	31	(51)	(1)	-	83
DEFINED BENEFIT OBLIGATIONS AT END OF YEAR	(5,974)	(2,505)	(1,518)	(1,140)	(811)
Of which:					
Funded schemes	(5,171)	(2,505)	(1,505)	(545)	(616)
Unfunded schemes	(803)	-	(13)	(595)	(195)

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

### 25.3. Plan assets

As indicated in Note 25.1, for defined benefit plans, plan assets have been progressively built up by contributions from the employer and the employees, primarily in the United Kingdom, Switzerland, the United States of America and Germany.

(in € million)	At 31 March 2015	United Kingdom	Switzerland	Euro zone	Other
Fair value of plan assets at beginning of year	4,522	2,125	1,556	324	517
Interest income	173	102	36	10	25
Actuarial gains (losses) on assets due to experience	360	170	116	44	30
Company contributions	138	61	59	3	15
Plan participant contributions	42	3	38	-	1
Business combinations /disposals	(24)	-	-	-	(24)
Settlements	(4)	-	-	-	(4)
Benefits paid from plan assets	(302)	(130)	(78)	(30)	(64)
Fair value of plan assets held for sale	(5,110)	(2,287)	(1,975)	(279)	(569)
Foreign currency translation and others	705	311	279	-	115
FAIR VALUE OF PLAN ASSETS AT END OF YEAR	500	355	31	72	42

(in € million)	At 31 March 2014 <sup>(1)</sup>	United Kingdom	Switzerland	Euro zone	Other
Fair value of plan assets at beginning of year	4,382	2,038	1,454	329	561
Interest income	153	90	33	11	19
Actuarial gains (losses) on assets due to experience	73	13	31	13	16
Company contributions	136	56	56	1	23
Plan participant contributions	39	3	35	-	1
Business combinations /disposals	-	-	-	-	-
Settlements	-	-	-	-	-
Benefits paid from plan assets	(253)	(119)	(54)	(30)	(50)
Fair value of plan assets held for sale	-	-	-	-	-
Foreign currency translation and others	(8)	44	1	-	(53)
FAIR VALUE OF PLAN ASSETS AT END OF YEAR	4,522	2,125	1,556	324	517

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

# **25.4.** Reconciliation of funded status of the plans with assets and liabilities recognised in the balance sheet

(in € million)	At 31 March 2015	At 31 March 2014 (1)
Defined benefit obligations	(952)	(5,974)
Fair value of plan assets	500	4,522
Funded status of the plans	(452)	(1,452)
Impact of asset ceiling	(1)	(51)
NET OF ACCRUED AND PREPAID BENEFIT COSTS AFTER ASSET CEILING	(453)	(1,503)
Of which :		
<ul> <li>Accrued pension and other employee benefit costs</li> </ul>	(461)	(1,525)
<ul> <li>Prepaid pension and other employee benefit costs</li> </ul>	8	22

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

Movements over the period ended 31 March 2015 mainly arose from the classification of the Energy activities' net accrued benefits as "Liabilities related to assets held for sale" (see Note 4).

The net asset of €8 million mainly related to a pension scheme in the United Kingdom is supported by appropriate refund expectations, as requested by IFRIC 14.

### 25.5. Components of plan assets

			United			
(in € million)	At 31 March 2015	%	Kingdom	Switzerland	Euro zone	Other
Equities	220	44.0%	44%	31%	34%	38%
Bonds	238	47.6%	48%	51%	62%	53%
Properties	23	4.6%	5%	13%	-	6%
Other	19	3.8%	3%	5%	4%	3%
TOTAL	500	100%	100%	100%	100%	100%

For the whole Group, plan assets amount to €5,610 million as at 31 March 2015 and are mainly composed of Equities (€1,995 million, 36%) and Bonds (€2,916 million, 52%).

	United						
(in € million)	At 31 March 2014 (1)	%	Kingdom	Switzerland	Euro zone	Other	
Equities	1,643	36.0%	38%	33%	34%	39%	
Bonds	2,399	53.0%	52%	51%	64%	58%	
Properties	386	9.0%	8%	14%	-	2%	
Other	94	2.0%	2%	2%	2%	1%	
TOTAL	4,522	100%	100%	100%	100%	100%	

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

An active market price exists for all plan assets except properties.

Assets of each funded plan are managed by a dedicated investment committee in accordance with the scheme rules and local regulation.

The Group has representatives on these committees and promotes simple and diversified investment strategies. The aim is to limit investment risks to those necessary to fulfil the benefit commitment (asset and liability management). As a result, strategic allocation favours liquid assets and especially long bonds.

At 31 March 2015, plan assets do not include securities issued by the Group.

### 25.6. Assumptions (weighted average rates)

Actuarial valuations of the Group's benefit obligation have been made as of 31 March 2015 and 31 March 2014. These valuations include:

- assumptions on staff turnover, mortality and salary increases;
- assumptions on retirement ages varying from 60 to 65 depending on the country and the applicable laws;
- discount rates used to determine the actuarial present value of the projected benefit obligations.

Actuarial assumptions used vary by type of plan and by country.

		United			
(in %)	At 31 March 2015 <sup>(1)</sup>	Kingdom	Switzerland	Euro zone	Other
Discount rate	2.80	3.50	1.15	1.86	3.78
Rate of compensation increase	3.17	3.80	1.49	2.71	2.44

(1) Assumptions relate to continuing activities (discount rate for the whole Group is 2.68%; rate of compensation increase for the whole Group is 2.91%).

		United			
(in %)	At 31 March 2014 (1)	Kingdom	Switzerland	Euro zone	Other
Discount rate	3.73	4.60	2.25	3.24	4.59
Rate of compensation increase	2.91	3.80	1.49	2.70	3.45
(1) Assumptions relate to the whole Group					

Assumptions relate to the whole Group.

As of 31 March 2015, the weighted average durations of the defined benefit obligations are the following:

		United			
(in years)	At 31 March 2015 <sup>(1)</sup>	Kingdom	Switzerland	Euro zone	Other
Weighted average duration	15	16	23	13	18

(1) Assumptions relate to continuing activities (weighted average duration for the whole Group is 16 years).

#### **Discount rate**

In accordance with IAS 19R principles, discount rates are set each year by reference to the market yields on high quality corporate bonds denominated in the relevant currency. In countries where there is no deep market in such bonds, discount rates are set by reference to the yields on government bonds. The required information is sourced from the Company's actuarial advisors and from market quotations and indices.

#### Rate of compensation increase

Compensation increase assumptions are determined at country level and reviewed centrally.

#### Assumptions related to the post-employment healthcare obligation

The healthcare trend rate is assumed to be 6.58% in the year ended 31 March 2015 and reduces thereafter to an ultimate rate of 5.49% from 2022 onwards.

#### Sensitivity analysis

A 25 bp increase or decrease in the main assumptions would have the following impacts on the defined benefit obligation:

(in € million)	At 31 March 2015
Impact of a 25 bp increase or decrease in the discount rate	(33.0)/+34.0
Impact of a 25 bp increase or decrease in the rate of compensation increase	+8.0/(7.9)

### 25.7. Analysis of post-employment and other long-term defined benefit expense

As at 31 March 2015, the benefit expense for the whole Group is the following:

(in € million)	Year ended 31 March 2015	Continued activities <sup>(1)</sup>	Discontinued activities	Year ended 31 March 2014 <sup>(3)</sup>
Service cost	(116)	(17)	(99)	(99)
Defined contribution plans <sup>(2)</sup>	(232)	(91)	(141)	(205)
Income from operations	(348)	(108)	(240)	(304)
Actuarial gains/(losses) on other long-term benefits	(8)	(1)	(7)	(6)
Past service gain (cost)	(26)	(16)	(10)	6
Curtailments/settlements	3	-	3	2
Other income (expense)	(31)	(17)	(14)	2
Financial income (expense)	(65)	(14)	(51)	(69)
TOTAL BENEFIT EXPENSE	(444)	(139)	(305)	(371)

(1) Including €8 million in relation to the United Kingdom and €106 million in relation to the euro zone.

(2) Including an expense of €20 million related to multi-employer contributions accounted for as defined contribution plans for the year ended 31 March 2015 for the whole group against an expense of €19 million for the year ended 31 March 2014.

(3) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11; €117 million relate to continuing activities.

### 25.8. Cash flows

In accordance with local practice and regulations, the Company pays contributions to the funded schemes it sponsors and benefits to the members of unfunded plans.

Total cash spent for defined benefit plans in the year ended 31 March 2015 amounted to  $\epsilon$ 195 million ( $\epsilon$ 29 million for the continuing activities) and covers both regular contributions for accruing service and recovery contributions in case of funding shortfall.

For defined benefit plans, the expected cash outflows for the continuing activities are the following:

- €41 million in the year ending 31 March 2016;
- €28 million in the year ending 31 March 2017;
- €31 million in the year ending 31 March 2018.

Total cash spent for defined contribution plans in the year ended 31 March 2015 amounted to  $\epsilon$ 232 million ( $\epsilon$ 91 million for the continuing activities).

For defined contribution plans, according to the Company's best estimate, payments should remain stable over the next years, at constant scope and exchange rates.

## NOTE 26 • FINANCIAL DEBT

Carrying amount (in $\epsilon$ million)	At 31 March 2015	At 31 March 2014 (1)
Bonds	3,838	4,614
Other borrowing facilities	856	537
Put options and earn-out on acquired entities	2	40
Derivatives relating to financing activities	59	13
Accrued interests	39	55
Borrowings	4,794	5,259
Non-current	2,847	4,009
Current	1,947	1,250
Obligations under finance leases	27	96
Other obligations under long-term rental <sup>(2)</sup>	365	349
Obligations under finance leases	392	445
Non-current	341	398
Current	51	47
TOTAL FINANCIAL DEBT	5,186	5,704

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

(2) The other obligations under long-term rental represent liabilities related to lease obligations on trains and associated equipment (see Notes 15 and 31).

Movements over the period ended 31 March 2015 mainly arose from the repayment of two bonds for a total amount of  $\epsilon$ 780 million and classification of the Energy activities as "Liabilities related to assets held for sale" for an amount of  $\epsilon$ 287 million (see Note 4).

The following table summarises the significant components of the Group's bonds:

	Nominal value (in € million)	Maturity date	Nominal interest rate	Effective interest rate
Alstom October 2015	500	05/10/2015	2.88%	2.98%
Alstom March 2016	500	02/03/2016	3.87%	4.05%
Alstom February 2017	750	01/02/2017	4.13%	4.25%
Alstom October 2017	350	11/10/2017	2.25%	2.44%
Alstom October 2018	500	05/10/2018	3.63%	3.71%
Alstom July 2019	500	08/07/2019	3.00%	3.18%
Alstom March 2020	750	18/03/2020	4.50%	4.58%

## NOTE 27 • FINANCIAL INSTRUMENTS AND FINANCIAL RISK MANAGEMENT

# 27.1. Financial instruments reported in the financial statements

The Group's financial liabilities comprise borrowings, trade and other payables. The main purpose of these financial liabilities is to raise funds for the Group's operations.

The Group has loans, trade and other receivables, and cash and cash equivalents that are directly derived from its operations.

The Group is exposed to currency risk, interest rate risk, credit risk and liquidity risk.

The main valuation methods applied are as follows:

- borrowings, when unhedged, are stated at amortised cost, determined by the effective interest rate method;
- the fair value of cash, cash equivalents, trade receivables and trade payables is considered as being equivalent to carrying value, due to their short maturities;

- the fair value of the financial debt is estimated based on either quoted market prices for traded instruments or current rates offered to the Group for debt of the same maturity;
- the fair value of derivative instruments is the estimated amount that the Group would receive or pay to settle the related contracts, valued on the basis of relevant yield curves and foreign exchange rates at closing date.

#### Year ended 31 March 2015

#### Balance sheet positions at 31 March 2015

IFRS 13 application "Fair Value Measurement", which requires counterparty risk to be taken into account in measuring derivative instruments, does not have a material impact on the Group's financial statements.

					amount of fi nts by categ			Fa	air value of ite as financial ir		
At 31 March 2015	Balance sheet carrying	Carrying amount not defined as financial			LRL at amortised	555		Listed	Internal model based on observable	Internal model not based on observable	
(in € million)	amount	instruments	FV P/L	AFS	cost	DER	Total	prices	factors	factors	Total
Non consolidated investments	36	-	-	36	-	-	36	-	-	36	36
Other non-current assets	473	8	-	-	465	-	465	-	82	383	465
Trade receivables	1,470	-	-	-	1,470	-	1,470	-	1,470	-	1,470
Other current operating											
assets	1,957	540	493	-	143	782	1,417	-	1,417	-	1,417
Marketable securities and											
other current financial assets	61	-	-	-	-	61	61	-	61	-	61
Cash and cash equivalents	1,599	-	1,599	-	-	-	1,599	-	1,599	-	1,599
ASSETS	5,596	548	2,092	36	2,078	843	5,048	-	4,629	419	5,048
Non-current borrowings	2,847	-	-	-	2,847	-	2,847	-	3,132	-	3,132
Non-current obligations											
under finance leases	341	-	-	-	341	-	341	-	341	-	341
Current borrowings	1,947	-	-	-	1,889	58	1,947	-	1,970	-	1,970
Current obligations under											
finance leases	51	-	-	-	51	-	51	-	51	-	51
Trade payables	917	-	-	-	917	-	917	-	917	-	917
Other current operating											
liabilities	2,492	575	176	-	382	1,360	1,918	-	1,918	-	1,918
LIABILITIES	8,595	575	176	0	6,427	1,418	8,021	-	8,329	0	8,329

(1) FV P/L short for fair value through profit and loss; AFS short for available-for-sale assets; LRL short for loans, receivables and liabilities and DER short for derivative instruments.

#### Financial income and expense arising from financial instruments for the year ended 31 March 2015

			LRL at amortised cost inc. related	
(in € million)	FV P/L	AFS	derivatives	Total
Interests	12	-	(193)	(181)
Interest income <sup>(1)</sup>	12	-	-	12
Interest expense	-	-	(193)	(193)
Dividends	-	-	-	-
Impairment/loss from subsequent measurement	-	-	-	-
Gain on disposal	-	-	-	-
Foreign currency and other	-	-	(18)	(18)
NET INCOME/EXPENSE FOR THE YEAR ENDED 31 MARCH 2015	12	-	(211)	(199)

(1) Excluding interest expense recharged to discontinued operations in application of the cash pool agreement (see Notes 4 and 8).

### Year ended 31 March 2014

#### Balance sheet positions at 31 March 2014

					amount of t nts by cate				Fair value of it as financial		ł
At 31 March 2014 <sup>(1)</sup>	Balance sheet carrying	Carrying amount not defined as financial		a	LRL at			Listed	Internal model based on observable	Internal model not based on observable	
(in € million)	amount	instruments	FV P/L	AFS	cost	DER	Total	prices	factors	factors	Total
Non consolidated											
investments	160	-	-	160	-	-	160	-	160	-	160
Other non-current assets	510	22	-	-	488	-	488	-	123	365	488
Trade receivables	4,450	-	-	-	4,450	-	4,450	-	4,450	-	4,450
Other current operating											
assets	3,133	1,839	526	-	371	397	1,294	-	1,294	-	1,294
Marketable securities and											
other current financial assets	26	-	-	-	-	26	26	-	26	-	26
Cash and cash equivalents	2,276	-	2,276	-	-	-	2,276	-	2,276	-	2,276
ASSETS	10,555	1,861	2,802	160	5,309	423	8,694	-	8,329	365	8,694
Non-current borrowings	4,009	-	-	-	4,009	-	4,009	-	4,489	-	4,489
Non-current obligations											
under finance leases	398	-	-	-	398	-	398	-	398	-	398
Current borrowings	1,250	-	-	-	1,237	13	1,250	-	1,249	-	1,249
Current obligations											
under finance leases	47	-	-	-	47	-	47	-	47	-	47
Trade payables	3,819	-	-	-	3,819	-	3,819	-	3,819	-	3,819
Other current											
operating liabilities	3,593	1,828	351	-	1,119	295	1,765	-	1,765	-	1,765
LIABILITIES	13,116	1,828	351	-	10,629	308	11,288	-	11,767	-	11,767

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

(2) FV P/L short for fair value through profit and loss; AFS short for available-for-sale assets; LRL short for loans, receivables and liabilities and DER short for derivative instruments.

#### Financial income and expense arising from financial instruments for the year ended 31 March 2014

			LRL at amortised cost inc. related	
(in € million)	FV P/L	AFS	derivatives	Total
Interests	4	-	(184)	(180)
Interest income (2)	4	-	-	4
Interest expense	-	-	(184)	(184)
Dividends	-	-	-	-
Impairment/loss from subsequent measurement	-	-	-	-
Gain on disposal	-	-	-	-
Foreign currency and other	-	-	(16)	(16)
NET INCOME/EXPENSE FOR THE YEAR ENDED 31 MARCH 2014 (1)	4	-	(200)	(196)

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

(2) Excluding interest expense recharged to discontinued operations in application of the cash *pool agreement* (see Notes 4 and 8).

### 27.2. Currency risk management

#### **Financial debt**

The nominal value of the financial debt split by currency is as follows:

(in € million)	At 31 March 2015	At 31 March 2014 (1)
Euro	4,650	4,873
Chinese Yuan	4	58
Brazilian Real	78	237
British Pound	377	383
Russian Federation Rouble	7	2
US Dollar	46	9
Other currencies	36	151
FINANCIAL DEBT IN NOMINAL VALUE	5,198	5,713

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

The debt in GBP essentially originates from a long-term lease scheme of trains, involving London Underground. The related  $\epsilon$ 365 million debt denominated in GBP is counter-balanced by long-term receivables having the same maturity and also denominated in GBP that are recognised as non-current assets (see Notes 15, 26 and 31).

#### Operations

In the course of its operations, the Group is exposed to currency risk arising from tenders submitted in foreign currency, awarded contracts and any future cash out transactions denominated in foreign currency. Main currencies triggering a significant exposure for the year ended 31 March 2015 are the US dollar and the Swiss Franc.

During the tender period, depending on the probability to obtain the project and on market conditions, the Group can hedge a portion of its tenders using options or export insurance contracts when possible. Once the contract is signed, forward exchange contracts are used to hedge the actual exposure during the life of the contract (either as the only hedging instruments or as a complement to existing export insurance contracts).

The Group requires all of its operating units to use forward currency contracts to eliminate the currency exposure on any individual sale or purchase transaction in excess of  $\in$ 100,000. Forward currency contracts must be denominated in the same currency as the hedged item. It is the Group's policy to negotiate the terms of hedge derivatives to match the terms of hedged items to maximise hedge effectiveness.

The Group uses almost exclusively currency forward contracts and swap currency contracts to adjust the maturity of the forward contracts to ensure that they are at all times as close as possible to the terms of the contractual flows. The portfolio of forward contracts has a weighted maturity of one and a half-year, however the Group does have some forward contracts beyond five years to reflect the long term nature of some of the contracts. The Group hedges about forty different currencies with a multitude of crosses depending on which entity of the Group is exposed to the currency. As of 31 March 2015 the Group has an outstanding portfolio of currency forward contracts hedging  $\in$  8.0 billion of cash out (supplier payments) and  $\notin$  9.5 billion of cash in (client receipts).

Most of the hedging instruments are negotiated by Alstom Holdings and are mirrored by hedging agreements between Alstom Holdings and the subsidiaries of the Group concerned. Whenever local regulations prohibit this hedging, instruments are negotiated directly with local banks.

Derivative instruments hedging foreign currency risk are recognised at their fair value on the balance sheet as follows:

	At 31 March	2015	At 31 March 2014 (1)		
(in € million)	Assets	Liabilities	Assets	Liabilities	
Derivatives qualifying for fair value hedge	831	1,383	423	321	
Derivatives qualifying for cash flow hedge	11	34	12	7	
Derivatives qualifying for net investment hedge	-	-	-	2	
Derivatives not qualifying for hedge accounting	1	1	1	1	
TOTAL	843	1,418	436	331	

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

The fair value of those instruments is the estimated amount that the Group would receive or pay to settle the related contracts, valued on the basis of relevant yield curves and foreign exchange rates at closing date.

The volatility of foreign exchange rates during the periods ended 31 March 2015 and 31 March 2014 explains the amount of fair value of derivative instruments (either positive or negative). For instruments that qualify for fair value hedge accounting, any change in fair value is mostly offset by the re-measurement of the underlying exposure (either on balance sheet or off-balance sheet).

At 31 March 2015, the fair value of hedging instruments included in the discontinued operations represents a net liability of  $\notin$  270 million (of which  $\notin$  292 million of hedging instruments against Alstom Holdings).

The following table shows the sensitivity of the Group's pre-tax income to a change in the US dollar and Swiss Franc exchange rates. The effects on pre-tax income arise from derivative instruments not qualifying for hedge accounting while the effect on income and expense directly recognised in equity is due to the measurement of the effective portion of derivative instruments qualifying for cash flow hedge accounting.

		USD rate	2	CHF rate			
	Variation	Effect on pre-tax income	Effect on income and expense directly recognised in equity	Variation	Effect on pre-tax income	Effect on income and expense directly recognised in equity	
Year ended	10%	-	-	5%	-	14	
31 March 2015	-10%	-	-	-5%	-	(14)	
Year ended	10%	(1)	-	5%	-	9	
31 March 2014 (1)	-10%	1	-	-5%	-	(9)	

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11 and following the application of IFRS 5 "Non-current assets held for sale and discontinued operations" in the context of the Energy disposal.

The effective portion of instruments qualifying for cash flow hedge accounting reclassified from equity to profit or loss during the year ended 31 March 2015 is negative by €5 million.

### 27.3. Interest rate risk management

The Group has not implemented an active interest rate risk management policy. However under the supervision of the Executive Committee, it may enter into transactions in order to hedge its interest rate risk on a case-by-case basis according to market opportunities.

Carrying amount (in € million)	At 31 March 2015	At 31 March 2014 (1)
Financial assets at floating rate	1,639	2,398
Financial assets at fixed rate	412	402
Financial assets bearing interests	2,051	2,800
Financial debt at floating rate	1	253
Financial debt at fixed rate, put options and earn-out on acquired entities	5,185	5,451
Financial debt	5,186	5,704
Total position at floating rate before swaps	1,640	2,651
Total position at fixed rate before swaps	5,597	5,853
Total position before hedging	7,237	8,504
Total position at floating rate after swaps	1,640	2,651
Total position at fixed rate after swaps	5,597	5,853
TOTAL POSITION AFTER HEDGING	7,237	8,504

(1) Figures have been restated as mentioned in Note 3 "comparability" following the first application of ifrs 11.

Sensitivity is analysed based on the Group's net cash position after hedging at 31 March 2015, assuming that it remains constant over one year.

In absence of instruments hedging the interest risk, the effects of increases or decreases in market rates are symmetrical: a rise of 0.1% would increase the net interest income by  $\in$ 1.6 million while a fall of 0.1% would decrease it by the same amount.

### 27.4. Credit risk management

Credit risk is the risk that a counterparty will not meet its obligations under a financial instrument or customer contract, leading to a loss. The Group is exposed to credit risk on its operating activities (primarily for trade receivables) and from its financing activities, including deposits, foreign currency hedging instruments and other financial instruments with banks and financial institutions.

#### **Risk related to customers**

The Group believes that the risk of a counterpart failing to perform as contracted, which could have a significant impact on the Group's financial statements or results of operations, is limited because the Group seeks to ensure that customers generally have strong credit profiles or adequate financing to meet their project obligations (see also Note 18).

In specific cases, the Group may use export credit insurance policies which may hedge up to 90% of the credit risk on certain contracts.

#### Risk related to other financial assets

The Group's exposure to credit risk related to other financial assets arises from default of the counterpart, with a maximum exposure equal to the carrying amount of those instruments. The financial instruments are taken out with over 30 different counterparties and the risk is therefore highly diluted.

#### Risk related to cash and cash equivalents

Credit risk from balances with banks and financial institutions is managed by Group treasury in accordance with the Group's policy.

At 31 March 2015 and at 31 March 2014, as part of the central treasury management, cash and cash equivalents are invested entirely in deposits with bank counterparts of first rank noted "Investment Grade".

The Group's parent company has access to some cash held by whollyowned subsidiaries through the payment of dividends or pursuant to intercompany loan arrangements. However local constraints can delay or restrict this access. Furthermore, while the Group's parent company has the power to control decisions of subsidiaries of which it is the majority owner, its subsidiaries are distinct legal entities and their payment of dividends and granting of loans, advances and other payments to the parent company may be subject to legal or contractual restrictions, be contingent upon their earnings or be subject to business or other constraints. These limitations include local financial assistance rules and corporate benefit laws.

The Group's policy is to centralise liquidity of subsidiaries at the parent company's level when possible. Restricted cash available at subsidiary level were  $\epsilon$ 155 million and  $\epsilon$ 296 million at 31 March 2015 and 31 March 2014, respectively for continuing activities.

The Group has derivatives with first class banks under agreements which require the offsetting of receivable and payable amounts in case of default of one of the contracting parties. These derivatives fall within the scope of disclosures under IFRS 7 on compensation and are presented in the tables below:

#### At 31 March 2015

		Gross amounts of recognized	Net amounts	Related amoun in the bala		
(in € million)	Gross amounts of recognized financial assets/ liabilities	financial assets/ liabilities set off in the balance sheet	of financial assets/liabilities presented in the balance sheet	Financial instruments	Cash collateral received	Net amount
Derivatives assets	843		843	(794)		47
Derivatives liabilities	(1,418)		(1,418)	794		(623)

#### At 31 March 2014 (1)

		Gross amounts of recognized	Net amounts	Related amoun in the balar		
(in € million)	Gross amounts of recognized financial assets/ liabilities	financial assets/ liabilities	of financial assets/liabilities presented in the balance sheet	Financial instruments	Cash collateral received	Net amount
Derivatives assets	437	-	437	(289)	_	148
Derivatives liabilities	(332)	-	(332)	289	-	(43)

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

### 27.5. Liquidity risk management

#### **Financial covenants**

In addition to its available cash and cash equivalents, amounting to  $\epsilon$ 2,271 million as of 31 March 2015 (out of which  $\epsilon$ 1,599 million related to continuing activities), the Group has a revolving credit facility maturing on the earlier of completion of the proposed transaction with GE and 16 December 2016, amounting to  $\epsilon$ 1.350 billion, which is fully undrawn as of March 2015.

The lenders to this revolving credit facility have confirmed that the proposed transaction with GE will not create any event of default under this facility.

The Group also has additional facilities amounting to a total of  $\epsilon$ 1.600 billion fully undrawn as of 31 March 2015, available up to the completion (and subject to the non-cancellation) of the proposed transaction with GE, maturing on the earlier of the completion of the proposed transaction with GE and 1 December 2015 (the "Bridge Facilities" and together with the revolving credit facility the "Credit Facilities").

In light of the above and of the maturity of its revolving credit facility described below, the Group considers that, subject to the transaction, it has sufficient financial flexibility to meet its financial obligations and needs in the difficult commercial context which adversely impacts its Energy activities since the announcement of the proposed transaction with GE, and which has resulted in a deterioration of the Group's net

working capital. The Group intends to replace the Credit Facilities with a new credit facility in an amount of  $\epsilon$ 400 million which it considers will be sufficient to cover its financial obligations and working capital requirements and which would be effective on the day of the completion of the proposed transaction with GE.

These facilities are subject to the following financial covenants, based on consolidated data:

Covenants	Minimum Interest Cover	Maximum total debt (in € million)	Maximum total net debt leverage
	(a)	(b)	(c)
	3	6,000	3.6

(a) Ratio of EBITDA (Earnings Before Interest and Tax plus Depreciation and Amortisation) to net interest expense (excluding interest related to obligations under finance lease).

(b) Total debt corresponds to borrowings, i.e. total financial debt less finance lease obligations. This covenant would apply if the Group is rated "non-investment grade" by both rating agencies, which is not the case at 31 March 2015.

(c) Ratio of total net debt (Total debt less short-term investments or trading investments and cash and cash equivalents) to EBITDA.

As of 31 March 2015, Alstom calculates covenants before the reclassifications in the income statement and the balance sheet required by IFRS 5 (*i.e.* considering both continuing and discontinued activities within the meaning of IFRS 5). The key Group indicators used to calculate the financial covenants are detailed below:

_(in € million)	For the year ended 31 March 2015	For the year ended 31 March 2014 <sup>(1)</sup>
EBITDA (excluding capital gain on disposal)	107	1,553
Net interest expense (excluding interests related to obligations under finance leases)	(200)	(194)
Total net debt <sup>(2)</sup>	2,850	2,956
INTEREST COVER RATIO	0.5	8.0
TOTAL NET DEBT LEVERAGE	26.6	1.9

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

(2) Total net debt of both continuing and discontinued activities.

In view of the proposed transaction with GE, the lenders to these facilities have agreed to waive any event of default linked to the breach of the financial covenants until the completion of the proposed transaction with General Electric (and subject to such completion) – until the earlier of 1 December 2015 or the completion of the proposed transaction – or the announcement date specifying the non-completion of the proposed transaction (the "Waiver").

In the event that it is announced that the proposed transaction with General Electric will not go ahead or, if the proposed transaction with General Electric does not complete by 1 December 2015, each of the Facilities would be in default as the Waiver of the financial covenants would lapse. This is likely to result in drawings under the Credit Facilities and requests for bonding guarantees under the Committed Bonding Facility being suspended and the possibility that all amounts outstanding under the Credit Facilities and the Committed Bonding Facility becoming immediately due and payable. This may also result in a significant part of the other debt of the Group becoming immediately repayable through the implementation of cross-default or cross-acceleration provisions contained in most of the Group's financing agreements and outstanding securities.

#### **Cash Flow**

The Group's objective is to maintain a strong liquidity. A revolving cash planning tool is used to monitor the Group's liquidity needs.

The following tables show the remaining maturities of all financial assets and liabilities held at 31 March 2015 and 31 March 2014.

Planning data for future new assets and liabilities are not reported. Amounts in foreign currency are translated at the closing rate. The variable interest payments are calculated using the last interest rates available at the closing date. Assets and liabilities that can be repaid at any time are always assigned to the earliest possible time period.

### Financial instruments held at 31 March 2015

#### Cash flow arising from instruments included in net cash/(debt) at 31 March 2015

Cash flow for the years		2016		2017		2018	2018-2020		2021 and thereafter	
ended 31 March (in € million)	Carrying amount	Interests	Repayment	Interests	Repayment	Interests	Repayment	Interests	Repayment	
Other non-current assets	383	25	37	23	42	10	287	-	17	
Marketable securities and										
other current financial assets	61	-	61	-	-	-	-	-	-	
Cash and cash equivalents	1,599	1	1,599	-	-	-	-	-	-	
Assets	2,043	26	1,697	23	42	10	287	-	17	
Non-current borrowings	(2,847)	(134)	-	(103)	(750)	(71)	(2,100)	-	3	
Non-current obligations under finance leases	(341)	-	-	(25)	(49)	(13)	(288)	-	(4)	
Current borrowings	(1,947)	-	(1,947)		-			-	-	
Current obligations under finance leases	(51)	(29)	(51)	-	-	-	-	-	-	
Liabilities	(5,186)	(163)	(1,998)	(128)	(799)	(84)	(2,388)	-	(1)	
NET CASH/(DEBT)	(3,143)	(137)	(301)	(105)	(757)	(74)	(2,101)	-	16	

#### Cash flow arising from operating derivatives at 31 March 2015

Cash flow for the years		2016		2017		2018-2020		2021 and thereafter	
ended 31 March (in € million)	Carrying amount	Interests	Repayment	Interests	Repayment	Interests	Repayment	Interests	Repayment
Other current operating assets	782	-	481	-	126	-	150	-	25
Assets	782	-	481	-	126	-	150	-	25
Other current operating									
liabilities	(1,360)	-	(679)	-	(301)	-	(344)	-	(36)
Liabilities	(1,360)	-	(679)	-	(301)	-	(344)	-	(36)
DERIVATIVES	(578)	-	(198)	-	(175)	-	(194)	-	(11)

#### Cash flow arising from instruments included in other financial assets and liabilities at 31 March 2015

Cash flow for the years		20	016	20	017	2018	2018-2020		2021 and thereafter	
ended 31 March (in € million)	Carrying amount	Interests	Repayment	Interests	Repayment	Interests	Repayment	Interests	Repayment	
Non consolidated investments	36	-	-	-	-	-	-	_	36	
Other non-current assets	82	-	28	-	1	-	6	-	47	
Trade receivables	1,470	-	1,470	-	-	-	-	-	-	
Other current operating assets	635	-	635	-	-	-	-	-	-	
Assets	2,223	-	2,133	-	1	-	6	-	83	
Trade payables	(917)	-	(917)	-	-	-	-	-	-	
Other current operating										
liabilities	(558)	-	(558)	-	-	-	-	-	-	
Liabilities	(1,475)	-	(1,475)	-	-	-	-	-	-	
OTHER FINANCIAL ASSETS										
AND LIABILITIES	748		658		1	-	6		83	

### Financial instruments held at 31 March 2014

#### Cash flow arising from instruments included in net cash/(debt) at 31 March 2014

Cash flow for the years		20	)15	20	016	2017	2017-2019		2020 and thereafter	
ended 31 March (in € million)	Carrying amount	Interests	Repayment	Interests	Repayment	Interests	Repayment	Interests	Repayment	
Other non-current assets	364	25	29	22	32	29	288	-	15	
Marketable securities and other current financial assets	26	-	26	-	-	-	-	-	-	
Cash and cash equivalents	2,276	16	2,276	-	-	-	-	-	-	
Assets	2,666	41	2,331	22	32	29	288	-	15	
Non-current borrowings	(4,009)	-	-	(151)	(1,004)	(251)	(1,743)	(43)	(1,262)	
Non-current obligations under										
finance leases	(398)	-	-	(25)	(57)	(32)	(325)	(1)	(16)	
Current borrowings	(1,250)	(209)	(1,250)	-	-	-	-	-	-	
Current obligations under										
finance leases	(47)	(28)	(47)	-	-	-	-	-	-	
Liabilities	(5,704)	(237)	(1,297)	(176)	(1,061)	(283)	(2,068)	(44)	(1,278)	
NET CASH/(DEBT)	(3,038)	(196)	1,034	(154)	(1,029)	(254)	(1,780)	(44)	(1,263)	

#### Cash flow arising from operating derivatives at 31 March 2014

Cash flow for the years		2015		2016		2017-2019		2020 and thereafter	
ended 31 March (in € million)	Carrying amount	Interests	Repayment	Interests	Repayment	Interests	Repayment	Interests	Repayment
Other current operating assets	397	-	168	-	88	-	124	-	17
Assets	397	-	168	-	88	-	124	-	17
Other current operating									
liabilities	(295)	-	(155)	-	(73)	-	(61)	-	(6)
Liabilities	(295)	-	(155)	-	(73)	-	(61)	-	(6)
DERIVATIVES	102	-	13	-	15	-	63	-	11

#### Cash flow arising from instruments included in other financial assets and liabilities at 31 March 2014

Cash flow for the years		2015 2016		)16	2017	-2019	2020 and thereafter		
ended 31 March (in € million)	Carrying amount	Interests	Repayment	Interests	Repayment	Interests	Repayment	Interests	Repayment
Non consolidated investments	160	-	-	-	-	-	-	-	160
Other non-current assets	124	-	95	-	3	-	16	-	10
Trade receivables	4,450	-	4,450	-	-	-	-	-	-
Other current operating assets	897	-	897	-	-	-	-	-	-
Assets	5,631	-	5,442	-	3	-	16	-	170
Trade payables	(3,819)	-	(3,819)	-	-	-	-	-	-
Other current operating									
liabilities	(1,470)	-	(1,470)	-	-	-	-	-	-
Liabilities	(5,289)	-	(5,289)	-	-	-	-	-	-
OTHER FINANCIAL ASSETS									
AND LIABILITIES	342	-	153	-	3	-	16	-	170

### 27.6. Commodity risk management

Most of commodities bought by the Group has already been modified and included into spare parts. For the other commodities, the Group has included into customer contracts a customer price adjustment clause, so that the Group has a limited exposure to the variation of commodity prices.

## **NOTE 28 · OTHER CURRENT OPERATING LIABILITIES**

(in € million)	At 31 March 2015	At 31 March 2014 (1)
Staff and associated liabilities	419	1,161
Corporate income tax	32	96
Other taxes	105	493
Deferred income	11	119
Other payables	389	1,079
Derivatives relating to operating activities	1,360	295
Remeasurement of hedged firm commitments in foreign currency	176	350
OTHER CURRENT OPERATING LIABILITIES	2,492	3,593

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

Derivatives relating to operating activities centralized by Alstom Holdings, including those affected to hedge operating foreign currency exposures of the Energy activities, are not classified as held for sale. However, re-measurement of hedged firm commitments in foreign currency related to Energy activities are classified as held for sale (under the line items "other current operating assets" and "other current operating liabilities" in the balance-sheet of the Energy activities disclosed in Note 4).

## NOTE 29 · EMPLOYEE BENEFIT EXPENSE AND HEADCOUNT

	Year ended			
(in € million)	31 March 2015	31 March 2014 <sup>(1)</sup>		
Wages and salaries	1,237	4,356		
Social charges	379	1,117		
Post-employment and other long-term benefit expense (see Note 25.7)	444	371		
Share-based payment expense (see Note 23)	26	10		
TOTAL EMPLOYEE BENEFIT EXPENSE	2,086	5,854		

(1) Figures have been restated as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

At 31 March 2015	At 31 March 2014
46,006	46,086
37,730	40,039
83,736	86,125
	46,006 37,730

(1) Headcount doesn't include any temporary people.

The above figures include employees of Energy Activities of 57,888 for the year ending 31 March 2015.

## **NOTE 30 · CONTINGENT LIABILITIES AND DISPUTES**

### **30.1.** Contingent liabilities

#### **Commercial obligations**

Contractual obligations of the Group towards its customers may be guaranteed by bank bonds or insurance bonds. Bank and insurance bonds may guarantee liabilities already recorded on the balance sheet as well as contingent liabilities.

As at 31 March 2015, the Group has in place both uncommitted bilateral lines in numerous countries up to  $\epsilon$ 25.4 billion and a Committed Syndicated Bonding Facility allowing issuance of instruments up to  $\epsilon$ 9.0 billion valid up to 27 July 2016.

As at 31 March 2015, the total outstanding bonding guarantees related to contracts from continuing activities, issued by banks or insurance companies, amounts to  $\epsilon$ 7.0 billion ( $\epsilon$ 7.5 billion at 31 March 2014).

The available amount under the Committed Bonding Facility at 31 March 2015 amounts to  $\epsilon$ 2.0 billion ( $\epsilon$ 2.0 billion at 31 March 2014). The available amount under bilateral lines at 31 March 2014 amounts to  $\epsilon$ 13.0 billion. The Committed Bonding Facility includes a certain number of financial covenants based on consolidated figures of the Group. As of 31 March 2015, Alstom calculates covenants before the reclassifications in the income statement and the balance sheet required by IFRS 5 (*i.e.* considering both continuing and discontinued activities within the meaning of IFRS 5).

The key Group indicators used to calculate the financial covenants are detailed in Note 27.5.

#### Vendor financing

Until 2003, the Group provided some financial support, referred to as vendor financing, to financial institutions financing certain purchasers of Transport equipment.

At 31 March 2015, guarantees given as part of past vendor financing arrangements concern guarantees given as part of a leasing scheme involving London Underground Limited (Northern Line) and amount to  $\pounds$ 177 million ( $\pounds$ 244 million and  $\pounds$ 214 million at 31 March 2015 and at 31 March 2014 respectively).

Were London Underground Limited to decide not to extend the contract beyond 2017, and to hand the trains back, the Group has guaranteed to the lessors that the value of the trains and associated equipment, net of the £15 million non-extension payment due by London Underground, should not be less than £177 million in 2017. The £177 million is included in the €365 million amount of "Other obligations under longterm rental" (see Note 26).

### 30.2. Disputes

As indicated in Note 1, within the contemplated sale of Alstom's Energy activities to General Electric, General Electric has undertaken to take on all liabilities and risks exclusively or predominantly associated with the said activities. This does not apply to the agreement with the US Department of Justice dated as of 22 December 2014 which is discussed below.

#### Disputes in the Group's ordinary course of business

The Group is engaged in several legal proceedings, mostly contractrelated disputes that have arisen in the ordinary course of business. These disputes, often involving claims for contract delays or additional work, are common in the areas in which the Group operates, particularly for large long-term projects. In some cases, the amounts, which may be significant, are claimed against the Group, sometimes jointly with its consortium partners.

In some proceedings the amount claimed is not specified at the beginning of the proceedings. Amounts retained in respect of these litigations are taken into account in the estimate of margin at completion in case of contracts in progress or included in provisions and other current liabilities in case of completed contracts when considered as reliable estimates of probable liabilities. Actual costs incurred may exceed the amount of initial estimates because of a number of factors including the inherent uncertainties of the outcome of litigation.

#### Other disputes

#### Asbestos

Some of the Group's subsidiaries are subject to civil proceedings in relation to the use of asbestos in France essentially and in the United States of America and the United Kingdom. In France, these proceedings are initiated by certain employees or former employees suffering from an occupational disease in relation to asbestos with the aim of obtaining a court decision allowing them to obtain a supplementary compensation from the French Social Security funds. In addition employees and former employees of the Group not suffering from an asbestos related occupational disease have started lawsuits before the French courts with the aim of obtaining compensation for damages in relation to their alleged exposure to asbestos, including the specific anxiety damage.

The Group believes that the cases where it may be required to bear the financial consequences of such proceedings do not represent a material exposure. While the outcome of the existing asbestos-related cases cannot be predicted with reasonable certainty, the Group believes that these cases would not have any material adverse effect on its financial condition.

#### Alleged anti-competitive activities

#### **GIS** equipment

In April 2006, the European Commission initiated proceedings against Alstom, along with a number of other companies, based on allegations of anti-competitive practices in the sale of gas-insulated switchgears ("GIS equipment"), a product of its former Transmission & Distribution business sold to Areva in January 2004, following investigations that began in 2004. On 24 January 2007, the European Commission levied a fine of  $\epsilon$ 65 million against Alstom which includes  $\epsilon$ 53 million on a joint and several basis with Areva T&D (subsequently renamed Alstom Grid). On 3 March 2011 the General Court of the European Union reduced the amount of fine levied against Alstom to  $\epsilon$ 58.5 million. The Court of Justice of the European Union issued its final decision on 10 April 2014. The amount of the reduced fine was confirmed, which, when adding the late payment interests due, makes the total amount paid by Alstom at  $\epsilon$ 79.3 million.

The civil action initiated by National Grid in 2008 before the High Court of Justice in London following the 2007 the European Commission decision to obtain damages, ended with a full and final settlement agreed in June 2014. Two other civil actions which started in May and September 2010 are ongoing before national jurisdictions for a global amount of approximately  $\epsilon$ 32 million.

On 16 September 2013 the Israeli Antitrust Authority issued a decision whereby Alstom and other companies were held liable for alleged anti-competitive arrangement in the GIS equipment Israeli market. No fine will be imposed to Alstom arising out of this decision. Alstom appealed this decision in October 2014. Following the decision, the Israeli state-owned company for the power distribution started a civil action in December 2013 for an amount of ILS 3.8 billion (approximately €800 million) against the members of the alleged anti-competitive arrangement. Alstom has submitted its defense. Two class actions for respective amounts of ILS 2 billion (approximately €400 million) and ILS 2.8 billion (approximately €600 million) have also been initiated against the members of the alleged anti-competitive arrangement for overcharge. Alstom vigorously contests these procedures on the merits and considers it has good arguments to defend these cases.

#### **Power transformers**

On 20 November 2008, the European Commission sent a statement of objections to a number of manufacturers of power transformers, including Alstom, concerning their alleged participation in anticompetitive arrangements. Alstom has contested the materiality of the alleged facts. On 7 October 2009, the European Commission levied a fine of €16.5 million against Alstom which includes €13.5 million on a joint and several basis with Areva T&D (subsequently renamed Alstom Grid). On 27 November 2014, the Court decided to maintain only the conviction for Alstom Grid in the amount of €13.5 million. In addition late payment interests is payable and therefore the total amount paid by Alstom in January 2015 was €15.5 million.

#### Transportation activities in Brazil

In July 2013, the Brazilian Competition Authority ("CADE") raided a number of companies involved in transportation activities in Brazil, including the subsidiary of Alstom Transport, following allegations of anti-competitive practices and illegal payments. After a preliminary investigation stage, CADE notified in March 2014 the opening of an administrative procedure against several companies, of which the Alstom Transport's subsidiary in Brazil, and certain current and former employees of the Group. Alstom Transport cooperates with CADE In case of proven anti-competitive practices, possible sanctions include fines, criminal charges and a temporary exclusion from public contracts. Civil damages are also possible. This procedure is at an early stage. Current and former employees of Alstom are also subject to criminal proceedings initiated in December 2014 by the public prosecutor of the state of Sao Paulo in connection with some of the Transport projects subject to CADE procedure. In December 2014, the public prosecutor of the state of Sao Paulo also initiated a lawsuit related to alleged anti-competitive practices regarding a train maintenance project in Brazil which is also subject to administrative proceedings since 2013.

#### Alleged illegal payments

Certain companies and/or current and former employees of the Group are currently being investigated and/or subject to procedures, by judicial or administrative authorities (including in Brazil, in the United Kingdom and in France) or international financial institutions with respect to alleged illegal payments in certain countries.

With respect to these above mentioned matters, the Group is cooperating with the concerned authorities or institutions. These investigations or procedures may result in criminal sanctions, including fines which may be significant, exclusion of Group subsidiaries from tenders and thirdparty actions.

In Brazil, assets of two Group's subsidiaries and shares of these entities held by the Group were frozen following a preliminary decision ordered in February 2015 for an amount of BRL 287 million (approximately €80 million) in relation to an ongoing procedure related to an energy project originated in the 1990s. The Prosecutor of the State of Sao Paulo launched in May 2014 an action against a Group's subsidiary in Brazil, along with a number of other companies, for a total amount of approximately €800 million excluding possible damages in connection with a transportation project. The Group's subsidiaries are defending themselves.

Alstom has concluded on 22 December 2014 an agreement with the US Department of Justice (DOJ) in order to put an end to the investigation conducted in the United States from 2010 on subsidiaries of the Group relating to alleged potential violations of the Foreign Corrupt Practices Act (FCPA). Two US subsidiaries, Alstom Power Inc. and Alstom Grid Inc. (formerly known as Alstom T&D Inc.), have agreed to enter into deferred prosecution agreements with the DOJ relating to FCPA charges. If these two US subsidiaries fulfil the terms of their deferred prosecution agreements, all criminal charges will be dismissed against them at the end of three years. Another Alstom subsidiary, Alstom Network Schweiz AG (formerly known as Alstom Prom AG), has agreed to plead guilty to FCPA antibribery charges. In relation to these underlying charges, the ultimate parent company of the Group, Alstom S.A. has agreed to plead guilty to violating the books and records and internal controls provisions of the FCPA and to pay a fine of approximately \$772 million. The DOJ agreement has also stipulated that no part of the fine can be passed on to General Electric as part of the projected sale of Alstom's Energy businesses. The Plea agreements concluded with the DOJ are subject to approval by the competent American court. Payment of the fine is expected to occur ten days after entry of judgment and pronouncement of sentence, based upon such approval. Sentencing is currently scheduled for June 2015, which schedule could be postponed by the court.

In the United Kingdom, the Serious Fraud Office (SFO) began investigations in 2010. The SFO opened during fiscal year 2014/15 three criminal prosecutions against entities of the Group and certain current and past employees of the Group in connection with transportation projects located in Poland, Tunisia, India and Hungary, and with an energy project located in Lithuania. These proceedings are at an early stage and the Group is unable, at this stage, to predict their consequences. The World Bank and Alstom entered into a negotiated resolution agreement on 21 February 2012. As part of this agreement, the World Bank announced its decision to debar Alstom Hydro France and Alstom Network Schweiz AG (Switzerland) and their affiliates from public tenders financed by the World Bank for a period of three years which ended on 21 February 2015. The World Bank determined that Alstom has implemented a corporate compliance program in line with the World Bank's integrity compliance policies and practices and has satisfied all of the other conditions of the February 2012 negotiated resolution agreement.

#### Lignite-fired station in Maritza

In 2006, Alstom was awarded by AES a contract for the manufacture of a lignite-fired station in Maritza, Bulgaria. During the execution of the project, Alstom experienced delays and works disruptions mostly due to the defective nature of the lignite supplied by AES. In February and March 2011, AES called the performance bank guarantee and terminated the contract. An arbitration procedure initiated by Alstom, resulted in a full and final settlement between the parties on 22 December 2014.

#### Budapest metro

In 2006, Alstom was awarded by BKV a contract for the delivery of metros for two lines in the city of Budapest. During the execution of the project, Alstom experienced delays mostly related to technical change requests from BKV and the refusal by the Hungarian Authority "NKH" to deliver the final train homologation in 2010 (in August 2007, NKH granted a Preliminary Type License). On 19 October 2010 BKV terminated the contract and called the bank guarantees. In July 2011 the parties agreed the re-entry into force of the contract and the suspension of the arbitration procedure initiated by Alstom in January 2011. The final train homologation was obtained in July 2012. The arbitration proceedings resumed on 17 December 2012 and are at the phase of assessments of damages claimed by the parties.

#### CR-1 Marmaray railway infrastructure – Turkey

In March 2007, the Turkish Ministry of Transport (DLH) awarded the contract to upgrade approximately 75 km of railway infrastructure in the Istanbul region, known as the "Marmaray Commuter Rail Project (CR-1)" to the consortium Alstom Dogus Marubeni (AMD), of which Alstom Transport's main French subsidiary is a member. This project, which included works on the transcontinental railway tunnel under the

Bosphorus, has undergone significant delays mainly due to difficulties for the DLH to make the construction site available. Thus, the AMD consortium terminated the contract in 2010. This termination was challenged by DLH, who thereafter called the bank guarantees issued by the consortium up to an amount of approximately  $\epsilon$ 80 million. Following injunctions, the payment of such bank guarantees was forbidden and the AMD consortium immediately initiated an arbitration procedure to resolve the substantive issues The arbitral tribunal has decided in December 2014 that the contract stands as terminated by virtue of Turkish law and has authorised the parties to submit their claims for compensation of the damages arising from such termination. As a result, the arbitration procedure is now in the phase of assessment of damages.

#### Signaling works in the Sao Paolo metro – Brazil

In July 2008, the Sao Paolo metro company (CMSP) awarded to Alstom Transport's subsidiary in Brazil a contract for the installation of signaling systems on lines 1, 2 and 3 of the Sao Paolo metro. The completion of the project suffered from significant delays, the causes of which are disputed by the parties, each party attributing the origin of such delays to the other. As a result of CMSP's application of delay penalty fees, and its denial of a grant of deadline extensions and financial compensation, Alstom Transport's subsidiary in Brazil brought its claims before an arbitral tribunal. This proceeding is on-going.

## Regional Minuetto trains & high-speed Pendolino trains – Italy

Alstom Transport's subsidiary in Italy is involved in two litigation proceedings with the Italian railway company Trenitalia. One is related to a supply contract of regional Minuetto trains awarded in 2001, and the other to a supply contract of high-speed Pendolino trains awarded in 2004. Each of these contracts has undergone technical issues and delays leading the Trenitalia company to apply delay penalty fees and to withhold payments. Since the parties dispute the origins of the technical failures as well as the causes and responsibilities of the delays, the matter was brought before Italian courts in 2010 and 2011 respectively. These proceedings are on-going.

There are no other governmental, legal or arbitration procedures, including proceedings of which the Group is aware and which are pending or threatening, which might have, or have had during the last twelve months, a significant impact on the financial situation or profitability of the Group.

(in € million)		urity of base payments	ents		
	Total	Within 1 year	1 to 5 years	Over 5 years	
Long term rental <sup>(2)</sup>	423	62	361	-	
Finance leases	85	17	52	16	
Operating leases	471	96	275	100	
TOTAL AT 31 MARCH 2015	980	175	688	117	
Long term rental <sup>(2)</sup>	425	53	140	232	
Finance leases	106	21	67	18	
Operating leases	859	179	495	185	
Total at 31 March 2014 <sup>(1)</sup>	1,390	253	702	435	

### NOTE 31 · LEASE OBLIGATIONS

(1) Figures have been restated and represented as mentioned in Note 3 "Comparability" following the first application of IFRS 11.

(2) Obligations related to a long-term rental of trains and associated equipment to a London metro operator (see Note 26) including interests to be paid.

Movements related to operating leases between 31 March 2014 and 31 March 2015 mainly arose from the classification of the Energy activities as held for sale for an amount of €345.8 million.

## NOTE 32 · INDEPENDENT AUDITORS' FEES

Fees due to auditors and members of their networks in respect of years ended 31 March 2015 and 31 March 2014 were as follows:

		•	-					
	Y	/ear ended 3	1 March 2015		Year ended 31 March 2014			
	Pricewaterho	useCoopers	Maz	ars	Pricewaterho	useCoopers	Maz	ars
(in € million)	Amount	%	Amount	%	Amount	%	Amount	%
AUDIT								
Independent Auditors' diligence, certification, review of individual								
and consolidated accounts	10.3	87%	7.0	80%	11.1	87%	7.5	85%
Alstom SA	1.2	10%	0.7	8%	1.3	10%	1	11%
<ul> <li>Controlled entities</li> </ul>	9.1	77%	6.3	72%	9.8	77%	6.5	74%
Other audit diligence and audit								
related services	1.1	9%	1.7	20%	0.5	4%	1.2	14%
<ul> <li>Alstom SA</li> </ul>	0.7	5%	0.3	3%	0.2	1%	-	-
<ul> <li>Controlled entities</li> </ul>	0.4	4%	1.4	16%	0.3	3%	1.2	14%
Sub-total	11.4	96%	8.7	99%	11.6	91%	8.7	99%
OTHER SERVICES								
Legal. tax and social <sup>(1)</sup>	0.5	4%	0.1	1%	0.5	4%	0.1	1%
Other <sup>(2)</sup>	-	-	-	-	0.6	5%	-	-
Sub-total	0.5	4%	0.1	1%	1.1	9%	0.1	1%
TOTAL	11.9	100%	8.8	100%	12.7	100%	8.8	100%

(1) Tax services provided outside of France, assisting the Group subsidiaries to comply with certain local tax requirements.

(2) "Research and Development" consulting services, in particular project management, provided in the United Kingdom.

## NOTE 33 • RELATED PARTIES

The Group has identified the following related parties:

- shareholders of the Group;
- associates & joint ventures;
- key management personnel.

### 33.1. Shareholders of the Group

Bouygues, a French company listed on Paris stock market, is the main shareholder of the Group, holding more than 5% of the parent company's share capital. At 31 March 2015, Bouygues holds 29.3% of Alstom's share capital and voting rights.

Bouygues and Alstom are involved in various contracts which are part of the ordinary course of business (*e.g.* phone contracts, construction contracts). All these relations are subject to normal market terms and conditions. Those operating flows are not material at Group's level.

## 33.2. Related-party disclosures

Related party transactions are mainly transactions with companies over which Alstom exercises significant influence or joint ventures over which Alstom exercises joint control. Transactions with related parties are undertaken at market prices.

	Year ended 31 March 2015		At 31 March 2015	
(in € million)	Income	Expenses	Receivables	Liabilities
Joint ventures	118	-	63	1
Associates	2	-	-	-

### 33.3. Key management personnel

The Group considers that key management personnel as defined by IAS 24 are the members of the Executive Committee during the year.

	Year ended	
(in € thousand)	31 March 2015	31 March 2014
Short-term benefits <sup>(1)</sup>	8,136	7,229
Fixed gross salaries	4,752	4,659
Variable gross salaries	3,384	2,570
Post-employment benefits	3,694	3,082
Post-employment defined benefit plans	3,558	2,938
Post-employment defined contribution plans	136	144
Other post-employment benefits	-	-
Other benefits	3,304	1,133
Non monetary benefits	209	207
Share-based payments <sup>(2)</sup>	3,095	926
TOTAL	15,134	11,444

(1) Excluding social charges (respectively  $\epsilon_{2,080}$  thousand as of 31 March 2015 and  $\epsilon_{3,160}$  thousand as of 31 March 2014), conditional remunerations subject to the completion of the transaction with General Electric, and which could eventually be borne by the Group, notably the Chairman and CEO exceptional conditional remuneration decided on 4 November 2014 and consisting of the cash equivalent of 150,000 shares of the Company valued on the basis of the market price on the day of the completion of the transaction, for which a provision of  $\epsilon_{2,771}$  thousand has been recorded as at 31<sup>st</sup> March 2015.

(2) Expense recorded in the income statement in respect of stock option plans and performance shares.

## **NOTE 34 · SUBSEQUENT EVENTS**

The Group has not identified any subsequent event to be reported.

## NOTE 35 • MAJOR COMPANIES INCLUDED IN THE SCOPE OF CONSOLIDATION

The major companies of the Group are listed below, based on the following selection criteria: significant holding companies or sales above €40 million for continued activities and €80 million for discontinued activities for the year ended 31 March 2015.

The list of all consolidated companies is available upon the request at the head office of the Group.

## **Continuing operations**

Companies	Country	Ownership %	<b>Consolidation Method</b>
PARENT COMPANY			
ALSTOM SA	France		Parent company
HOLDING COMPANIES			
ALSTOM Holdings	France	100%	Full consolidation
ALSTOM Power Holdings SA	France	100%	Full consolidation
ALSTOM T20	France	100%	Full consolidation
ALSTOM S.p.A.	Italy	100%	Full consolidation
ALSTOM Transport Holdings BV	Netherlands	100%	Full consolidation
ALSTOM Transport China Holding BV	Netherlands	100%	Full consolidation
ALSTOM Southern Africa Holdings (Pty) Ltd	South Africa	100%	Full consolidation
ALSTOM Espana IB, S.L.	Spain	100%	Full consolidation
ALSTOM Transport UK (Holdings) Ltd	United Kingdom	100%	Full consolidation
ALSTOM Transport Holding US Inc.	USA	100%	Full consolidation
INDUSTRIAL COMPANIES			
ALSTOM Algérie Spa	Algeria	100%	Full consolidation
ALSTOM Transport Australia (Pty) Ltd	Australia	100%	Full consolidation
ALSTOM Belgium SA	Belgium	100%	Full consolidation
ALSTOM Brasil Energia e Transporte Ltda	Brazil	100%	Full consolidation
ALSTOM Transport Canada Inc.	Canada	100%	Full consolidation
CASCO SIGNAL Ltd	China	49%	Equity method
ALSTOM Transport SA	France	100%	Full consolidation
ALSTOM Transport Deutschland GmbH	Germany	100%	Full consolidation
ALSTOM Hong Kong Ltd	Hong Kong	100%	Full consolidation
ALSTOM Transport India Ltd	India	100%	Full consolidation
ALSTOM Ferroviaria S.p.A	Italy	100%	Full consolidation
ALSTOM Transport Mexico, S.A. de C.V.	Mexico	100%	Full consolidation
The breakers Investments B.V. (Transmashholding)	Netherlands	25%	Equity method
ALSTOM Transport SA Romania	Romania	93%	Full consolidation
ALSTOM Transport (S) Pte Ltd	Singapore	100%	Full consolidation
GIBELA RAIL TRANSPORT CONSORTIUM (Pty) Ltd	South Africa	61%	Full consolidation
ALSTOM Transporte, S.A.	Spain	100%	Full consolidation
ALSTOM Transport AB	Sweden	100%	Full consolidation
ALSTOM Transport UK Ltd	United Kingdom	100%	Full consolidation
ALSTOM NL Service Provision Ltd	United Kingdom	100%	Full consolidation
ALSTOM Transportation Inc.	USA	100%	Full consolidation
ALSTOM Signaling Inc.	USA	100%	Full consolidation

### FINANCIAL INFORMATION CONSOLIDATED FINANCIAL STATEMENTS Notes to the consolidated financial statements

## **Discontinued operations**

Companies	Country	Ownership %	<b>Consolidation Method</b>
HOLDING COMPANIES			
ALSTOM Australia Holdings Ltd	Australia	100%	Full consolidation
ALSTOM (China) Investment Co.,Ltd	China	100%	Full consolidation
ALSTOM Renewable Holding France	France	100%	Full consolidation
ALSTOM Power AG	Germany	100%	Full consolidation
GRID Equipments Limited	India	100%	Full consolidation
ALSTOM BV	Netherlands	100%	Full consolidation
ALSTOM Grid Holding BV	Netherlands	100%	Full consolidation
ALSTOM Renewable Holding BV	Netherlands	100%	Full consolidation
ALSTOM Finance BV	Netherlands	100%	Full consolidation
ALSTOM SA Thermal Holdings (Pty) Ltd	South Africa	100%	Full consolidation
ALSTOM UK Holdings Ltd	United Kingdom	100%	Full consolidation
ALSTOM Renewable UK (Holdings) Ltd	United Kingdom	100%	Full consolidation
ALSTOM Inc.	USA	100%	Full consolidation
		100%	
INDUSTRIAL COMPANIES ALSTOM Limited	Australia	100%	Full consolidation
	Australia	100%	
ALSTOM Energias Renovaveis Ltda	Brazil	100%	Full consolidation
ALSTOM Grid Energia Ltda	Brazil	100%	Full consolidation
ALSTOM Power Canada Inc	Canada	100%	Full consolidation
ALSTOM Grid Canada Inc	Canada	100%	Full consolidation
ALSTOM Hydro China Co Ltd	China	99%	Full consolidation
ALSTOM Technical Services (Shanghai) Co Ltd	China	100%	Full consolidation
ALSTOM Power Systems SA	France	100%	Full consolidation
ALSTOM Grid SAS	France	100%	Full consolidation
ALSTOM Power Service	France	100%	Full consolidation
COGELEX	France	100%	Full consolidation
ALSTOM Hydro France	France	100%	Full consolidation
ALSTOM Grid GmbH	Germany	100%	Full consolidation
ALSTOM Power Systems GmbH	Germany	100%	Full consolidation
ALSTOM T&D India Ltd	India	75%	Full consolidation
ALSTOM India Ltd	India	69%	Full consolidation
ALSTOM Services Sdn Bhd	Malaysia	100%	Full consolidation
ALSTOM Mexicana S.A. de C.V.	Mexico	100%	Full consolidation
ALSTOM Power S.p.z.o.o	Poland	100%	Full consolidation
ALSTOM S&E Africa (Pty)	South Africa	100%	Full consolidation
ALSTOM Power Service (Pty) Ltd	South Africa	100%	Full consolidation
ALSTOM Renovables Espana, S.L.	Spain	100%	Full consolidation
ALSTOM Power Sweden AB	Sweden	100%	Full consolidation
ALSTOM (Switzerland) Ltd	Switzerland	100%	Full consolidation
ALSTOM Power O&M Ltd	Switzerland	100%	Full consolidation
ALSTOM Renewable (Switzerland) Ltd	Switzerland	100%	Full consolidation
ALSTOM Grid Enerji Endustrisi A.S.	Turkey	100%	Full consolidation
ALSTOM Middle East FZE	United Arab Emirates	100%	Full consolidation
ALSTOM Ltd	United Kingdom	100%	Full consolidation
ALSTOM Power Inc.	USA	100%	Full consolidation
ALSTOM Grid Inc.	USA	100%	Full consolidation
POWER SYSTEMS MFG, LLC	USA	100%	Full consolidation
ALSTOM Boilers US LLC	USA	100%	Full consolidation
ALSTOM Hydro Venezuela, S.A.	Venezuela	100%	Full consolidation

## STATUTORY AUDITORS' REPORT ON THE CONSOLIDATED FINANCIAL STATEMENTS

#### (For the year ended 31 March 2015)

This is a free translation into English of the Statutory Auditors' report issued in French and is provided solely for the convenience of English speaking users. The Statutory Auditors' report includes information specifically required by French law in such reports, whether modified or not. This information is presented below the opinion on the consolidated financial statements and includes an explanatory paragraph discussing the Auditors' assessments of certain significant accounting and auditing matters. These assessments were considered for the purpose of issuing an audit opinion on the consolidated financial statements assurance on individual account captions or on information taken outside of the consolidated financial statements.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

#### To the Shareholders,

In compliance with the assignment entrusted to us by your Annual General Meeting, we hereby report to you, for the year ended 31 March 2015 on:

- the audit of the accompanying consolidated financial statements of Alstom;
- the justification of our assessments;
- the specific verification required by law.

These consolidated financial statements have been approved by the Board of Directors. Our role is to express an opinion on these consolidated financial statements based on our audit.

### I - Opinion on the consolidated financial statements

We conducted our audit in accordance with professional standards applicable in France. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement. An audit involves performing procedures, using sampling techniques or other methods of selection, to obtain audit evidence about the amounts and disclosures in the consolidated financial statements. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made, as well as the overall presentation of the consolidated financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

In our opinion, the consolidated financial statements give a true and fair view of the assets and liabilities and of the financial position of the Group as at 31 March 2015 and of the results of its operations for the year then ended in accordance with International Financial Reporting Standards as adopted by the European Union.

Without qualifying our conclusion, we draw your attention to the following matters:

- Note 1.1 "Alstom strategic move", Note 3 "Comparability", Note 4 "Assets held for sale and discontinued operations" and Note 27.5 "Liquidity
  risk management" which set out the accounting treatment and impacts of the Group's Energy activities planned transaction with General Electric.
- Note 1.2 "Agreement between Alstom and the US Department of Justice" and Note 30.2 "Disputes Alleged illegal payments", which set out the consequences of the agreement concluded with the US Department of Justice.

### II - Justification of our assessments

In accordance with the requirements of article L.823-9 of the French Commercial Code (*Code de commerce*) relating to the justification of our assessments, we bring to your attention the following matters:

### 1. Energy Activities – planned transaction with General Electric

Note 2.3.4 to the consolidated financial statements sets out the criteria for classification and accounting treatment of assets held for sale and discontinued operations in accordance with IFRS 5. We have verified that this accounting policy has been adequately applied and ensured that Note 1.1 "Alstom strategic move", Note 3 "Comparability" and Note 4 "Assets held for sale and discontinued operations" to the consolidated financial statements give the appropriate information.

In addition, Note 27.5 "Liquidity risk management" to the consolidated financial statements sets out the main consequences of the planned transaction, considered highly probable as at March 31, 2015 and of the future anticipated key dates. We have examined the documentation relating to the Group's liquidity situation, notably cash flow forecasts for the next 12 months, based on the highly probable scenario and more remote ones. We have verified that Note 27.5 to the consolidated financial statements gives the appropriate information.

### 2. Construction contracts

As described in Notes 2.2, 2.3.6, 2.3.7, 2.3.18, 24 and 30.1 to the consolidated financial statements and related to the recognition of revenue and operating margin, Alstom makes estimates that may have a significant impact, notably when determining the margin at completion on each contract, determined on the basis of the latest information and contract status available. Those estimates are reflected on the balance sheet under "Construction contracts in progress, assets", "Construction contracts in progress, liabilities" and for contracts completed in "Current provisions". We have examined the processes applied by Alstom and considered the data and assumptions on which these estimates are based.

### 3. Goodwill and other long term assets – Continued operations

Alstom performed an impairment test on goodwill at year-end and also assessed whether there was any indication of impairment of other long-term assets, in accordance with the approach described in Note 2.3.13 to the consolidated financial statements. We have assessed the impairment test performed and verified that Note 11 to the consolidated financial statements gives the appropriate information.

### 4. Disputes

We have examined the procedures used by Alstom to identify, assess and account for disputes. We have ensured that the status of the disputes and the related uncertainties are adequately described in Note 30.2 to the consolidated financial statements.

As stated in Note 2.2 to the consolidated financial statements, several matters mentioned in the paragraphs above are based on estimates and assumptions which are uncertain by nature, and for which the final outcome may significantly differ from the initial forward looking data used, in particular given the current economical and financial environment.

These assessments were made as part of our audit of the consolidated financial statements taken as a whole, and therefore contributed to the opinion we formed which is expressed in the first part of this report.

### **III - Specific verification**

As required by law and in accordance with professional standards applicable in France, we have also verified the information presented in the Group's management report.

We have no matters to report as to its fair presentation and its consistency with the consolidated financial statements.

Neuilly-sur-Seine and Courbevoie, 6 May 2015 The Statutory Auditors

PricewaterhouseCoopers Audit

Olivier Lotz

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# STATUTORY ACCOUNTS

Year ended 31 March 2015

## **INCOME STATEMENT**

		Year ended	
(in € million)	Note	31 March 2015	31 March 2014
Management fees and other operating income		135	150
Administrative costs and other operating expenses		(76)	(81)
Depreciation and amortisation expense		(1)	-
OPERATING INCOME	(4)	58	69
Interest income		171	172
Interest expenses		(172)	(172)
Provisions		-	(900)
Bonds issuance costs and premiums recognised as income or expense		(7)	(5)
Change differences		-	-
Financial income	(5)	(8)	(905)
Current income		50	(836)
Non recurring result	(6)	(686)	(45)
Income tax credit	(7)	39	29
NET PROFIT		(597)	(852)
Total Income		443	353
Total Expenses		(1,041)	(1,205)

## **BALANCE SHEET**

### Assets

		At 31 March 2015	At 31 March 2014
FIXED ASSETS			
Intangible assets		2	2
Investments	(8)	8,316	8,316
Advances to subsidiary	(8)	6,943	7,121
Total fixed assets		15,261	15,439
CURRENT ASSETS			
Receivables	(9)	171	117
Cash		1	-
Deferred charges	(10)	15	21
Total current assets		187	138
TOTAL ASSETS		15,448	15,577

## Liabilities

		At 31 March 2015	At 31 March 2014
SHAREHOLDERS' EQUITY			
Share capital		2,169	2,161
Additional paid-in capital		879	876
Legal reserve		210	210
Restricted reserve		9	17
General reserve		7,267	7,470
Retained earnings		-	645
Net profit		(597)	(852)
Total shareholders' equity	(11)	9,937	10,527
Provisions for risks and charges	(12)	736	79
LIABILITIES			
Bonds	(14)	3,888	4,684
Other borrowings	(15)	741	188
Trade payables	(16), (17)	7	10
Other payables	(16), (17)	139	88
Deferred income	(18)	-	1
Total liabilities		4,775	4,971
TOTAL SHAREHOLDERS' EQUITY AND LIABILITIES		15,448	15,577

## **NOTES** TO THE STATUTORY FINANCIAL STATEMENTS

### **DETAILED SUMMARY**

Note 1	Basis of preparation of the statutory financial statements	151
Note 2	Description of accounting policies	151
Note 3	Significant events	152
Note 4	Operating income	153
Note 5	Financial income	153
Note 6	Non-recurring result	154
Note 7	Income tax	154
Note 8	Financial assets	154
Note 9	Receivables	155

Note 10	Deferred charges	155
Note 11	Shareholders' equity	156
Note 12	Provisions for risks and charges	156
Note 13	Bonds reimbursable with shares	159
Note 14	Bonds	159
Note 15	Other borrowings	_160
Note 16	Payables and related parties	_161
Note 17	Maturity of liabilities	161
Note 18	Deferred income	161
Note 19	Other information	161

## NOTE 1 · BASIS OF PREPARATION OF THE STATUTORY FINANCIAL STATEMENTS

The statutory financial statements for the year ended 31 March 2015 are established in compliance with the legal and regulatory rules applicable in France according to the regulation 2014-03 of "l'Autorité des Normes Comptables" of 5 June 2014 as well as subsequent comments and recommendations of "l'Autorité des Normes Comptables". These accounts have been prepared using the same accounting policies and measurement methods as at 31 March 2014.

## NOTE 2 • DESCRIPTION OF ACCOUNTING POLICIES

### 2.1. Investments

Investments are recorded at acquisition cost, excluding transaction costs.

Investments are measured based on a multi-criteria approach:

- investments are generally measured at their value in use, defined as the enterprise value net of the indebtedness. The enterprise value is the sum of the discounted cash flows and of the discounted terminal residual value, and represents the ability of the assets to generate profits and cash flows;
- when reference values in relation to current transactions exist, these values are also considered in the year-end measurement of the investments.

When the value in use is less than acquisition cost, a provision for impairment is recorded to cover the difference.

### 2.2. Share capital

A share capital increase is recorded at the nominal share price. If the issue price is higher than the nominal value, this difference is recorded as a paid-in capital.

Transaction costs on capital increase are offset against paid-in capital. If total transaction costs exceed the paid-in capital, the excess is recorded as intangible assets and amortised over a period of five years.

### 2.3. Provisions for risks and charges

### Provisions for litigations and disputes

The Company identifies and analyses on a regular basis current litigations in which it is engaged. When provisions are deemed necessary, they are measured on the basis of its best estimate of the expenditure required to settle the obligation at the balance-sheet date. These estimates take into account information available and different possible outcomes.

Due to changes in facts and circumstances, costs finally incurred may differ from those estimates.

### Provision for the conditional remuneration

The Chairman and Chief Executive Officer benefits from a long term conditional compensation plan linked to the achievement of certain Company performances, over several years.

The Board of Directors also decided to allocate an exceptional and conditional compensation within the meaning of the Article 23.2.3, 9<sup>th</sup> paragraph of the AFEP-MEDEF Code, to the Chairman and Chief Executive Officer. The payment of such compensation is subject to the approval of the transaction with General Electric by the General Shareholders' Meeting (this condition was met on 19 December 2014), to the receipt of all necessary approvals for this transaction, as well as to the actual presence of the executive officer as Chairman and Chief Executive Officer of the Company at the date of payment (see note 3).

At the year end, the commitment of the Company is recorded on the basis of real data or on the basis of the best estimates according to elements part of the plan.

### Provisions for post-employment benefits

The obligation arising from post-employment defined benefits granted to the Chairman and Chief Executive Officer is determined using the projected unit credit method and is wholly recognised as a liability.

### 2.4. Financial debt

Financial debt (bonds and commercial papers) is recorded at nominal value in the liabilities. Transaction costs and bonds premium are recorded as deferred charges or deferred income and amortised over the duration of the borrowings.

Financial instruments (swaps) may be used to hedge interest rate risks on bonds.

## 2.5. Tax Group

The Company is the parent company of a French tax group including ALSTOM Holdings and several French subsidiaries of ALSTOM Holdings.

Each company, member of the tax group, determines its income tax charge on the basis of its own pre-tax income for the year, as if it was not included in a tax group. The Company recognises a gain or a loss equal to the difference between the current income tax based on the Group pre-tax income and the sum of tax charges recognised by the entities members of the tax group.

When a subsidiary member of the tax group exits from the said tax group, it is not compensated for the loss of its tax credits, tax losses carried forward and/or long term losses derived during the period of time it belonged to the tax group and which are unused at the exit date.

## **NOTE 3 · SIGNIFICANT EVENTS**

### 3.1. The Energy Transaction

### 3.1.1. Presentation of the General Electric offer

On 26 April 2014, the Board of Directors of ALSTOM received from General Electric (GE) an offer, countersigned by Alstom on 29 April 2014, and updated by GE on 20 June 2014, to acquire its Energy activities. On 20 June 2014, the Board of Directors of the Company unanimously decided to issue a positive recommendation on the GE offer.

GE would acquire the Thermal Power, Renewable Power and Grid activities as well as central and shared services (legal entities ALSTOM and ALSTOM Holdings would not be disposed) (the "Energy Business") for a committed equity value of  $\epsilon 12.35$  billion, pursuant to a master agreement between GE and Alstom. By taking over Alstom's Energy activities, GE undertakes to take on all assets as well as all liabilities and risks exclusively or predominantly associated with the Energy Business (this will not apply to the agreement concluded with the US Department of Justice detailed in Note 3.2). In the context of the transaction, Alstom would get indemnified by GE for any liability pertaining to the Energy Business which Alstom may incur after closing of the transaction.

The completion of the transaction is subject to a limited number of conditions precedent, which essentially cover works council consultation, receipt of authorizations required from a regulatory and merger control standpoint. However, once the authorizations relating to entities being sold, which account for at least 85% of the turnover of all the entities subject to the sale, including authorizations in certain key countries (such as authorisations of the European Commission and the US authority), have been obtained, the parties may complete the transaction, with the remainder to be transferred in successive stages, provided there would be no violation of applicable law to do so.

In the framework of the acquisition of Energy activities by GE, three alliances would be created:

- the Grid alliance would consist of a combination of Alstom Grid and GE Digital Energy businesses to be held through two joint venture holding companies (Alstom would hold a 50%-1 stake in each Joint venture's share capital and voting rights);
- the Renewables alliance would consist of Alstom's hydro, offshore wind and tidal businesses; this alliance also would be held through two joint venture holding companies (Alstom would hold a 50%-1 stake in each Joint venture's share capital and voting rights);
- the scope of the Global Nuclear & French Steam alliance would include the production and servicing of the "ARABELLE™" steam turbine equipment for nuclear power plants worldwide, as well as Alstom's steam turbine equipment and servicing for applications in France. Alstom would hold 20% -1 share of the share capital into the joint venture company and would have 50% -2 votes of voting rights. The French State would hold a preferred share giving it veto and other governance rights over issues relating, *inter alia*, to security and nuclear plant technology in France.

The investment by Alstom in these alliances would amount to *circa*  $\epsilon$ 2.5 billion. The future joint venture companies would be accounted for under equity method in Alstom's consolidated financial statements.

In December 2014, GE and Alstom entered into an amendment to the original agreement. Alstom has agreed to an extension of the trademark licensing of its name from 5 years to 25 years as well as other contractual amendments for an additional consideration of *circa*  $\in$ 0.4 billion to be paid by GE.

GE would sell Alstom 100% of its signalling business, with sales of *circa* \$500 million in 2013 and 1,200 employees, and the companies would sign several collaboration agreements including a service agreement for GE locomotives outside of the United States of America, R&D, sourcing and manufacturing and commercial support in the United States of America.

### 3.1.2. Process

On 4 November 2014, on conclusion of the information-consultation procedure with personnel representative bodies, the Board of Directors of Alstom approved the signing of the master agreement which was signed on the same date, the 4 November 2014.

The application for the approval of the transaction under Article L. 151-3 of the Monetary and Financial Code relating to foreign investments in France has been filed by GE on 1 October 2014. Authorization was obtained on 4 November 2014.

In accordance with the AFEP-MEDEF Code, the transaction was approved by the shareholders with a majority of 99.2% during an Extraordinary General Meeting submitted to and convened on 19 December 2014.

Following the information-consultation procedure with works councils and the authorisation relating to foreign investments in France, the support expressed by shareholders during the EGM is a key milestone since the signing of the agreements with GE.

The completion of the transaction is now subject to receipt of authorizations required from a regulatory and merger control standpoint in a certain number of jurisdictions. The master agreement specifies that if the conditions precedents have not been met by 30 November 2015, either party shall be allowed to terminate the master agreement in accordance with its terms.

The European Commission opened on 23 February 2015 an in-depth investigation in the transaction (known as Phase II) on the European Union competition implications of merging the GE & Alstom heavy-duty gas turbine (HDGT) businesses, and the US Department of Justice, Antitrust Division, requested further documents. Several other jurisdictions are also continuing their analysis of the transaction. Such in-depth reviews by regulators are common in such transaction and Alstom remains confident on the positive final outcome.

Subject to obtaining the regulatory and merger control authorizations required, the closing of the transaction is expected to occur in the coming months.

The closing would be followed by a cash return to shareholders which could range between €3.5 billion and €4 billion and be implemented through a public share buy-back offer *(offre publique de rachat d'actions)*. The precise amount to be distributed and method of distribution would be specified at a later date and would be submitted to a shareholders' decision after closing of the transaction.

Once this transaction is completed, Alstom would refocus on its fully owned Transport activities and on its Energy alliances with GE.

### 3.2. Agreement between Alstom and the US Department of Justice

Alstom has concluded on 22 December 2014 an agreement with the US Department of Justice (DOJ) in order to put an end to the investigation conducted in the United States from 2010 on subsidiaries of the Group relating to alleged potential violations of the Foreign Corrupt Practices Act (FCPA).

Two US subsidiaries, Alstom Power Inc. and Alstom Grid Inc. (formerly known as Alstom T&D Inc.), have agreed to enter into deferred

prosecution agreements with the DOJ relating to FCPA charges. If these two US subsidiaries fulfil the terms of their deferred prosecution agreements, all criminal charges will be dismissed against them at the end of three years. Another Alstom subsidiary, Alstom Network Schweiz AG (formerly known as Alstom Prom AG), has agreed to plead guilty to FCPA antibribery charges. In relation to these underlying charges, the ultimate parent company of the Group, Alstom S.A. has agreed to plead guilty to violating the books and records and internal controls provisions of the FCPA and to pay a fine of approximately \$772 million.

The DOJ agreement has also stipulated that no part of the fine can be passed on to GE as part of the projected sale of Alstom's energy businesses.

The Plea agreements concluded with the DOJ are subject to approval by the competent American court.

Payment of the fine is expected to occur ten days after entry of judgement and pronouncement of sentence, based upon such approval. Sentencing is currently scheduled for June 2015 which schedule could be postponed by the Court.

## **NOTE 4 · OPERATING INCOME**

At the financial year ended 31 March 2015, operating income is essentially made of  $\epsilon$ 128 million management fees invoiced to the Group's Companies for the use of the ALSTOM name.

Administrative costs and other operating expenses include management fees invoiced by ALSTOM Holdings, external operating expenses, the

gross compensation paid to the Chairman and Chief Executive Officer ( $\epsilon$ 1,744,495 paid for the financial year ended 31 March 2015) and directors' fees due for the fiscal year ( $\epsilon$ 1,264,000 for the same financial year ended).

## NOTE 5 · FINANCIAL INCOME

(in € million)	Year ended at 31 March 2015	Year ended at 31 March 2014
Net interest income on advances made to ALSTOM Holdings	168	172
Interest expenses on bonds	(156)	(168)
Interest expenses on borrowings	(13)	(4)
Provision	-	(900)
Bonds issuance costs and premiums recognised as income or expense	(7)	(5)
<ul> <li>Amortisation expense on deferred charges</li> </ul>	(8)	(7)
Amortisation income on premium received	1	2
Change differences	-	-
TOTAL	(8)	(905)

At 31 March 2015, the Company has performed an impairment test of its investments in ALSTOM Holdings based on a multi-criteria approach (see Note 2.1 and Note 8.1).

In view of the sale by the Company of the Energy activities to General Electric, the projected transaction was taken into consideration, when necessary, to appraise the inventory value.

As a result of the test, no additional provision for impairment was recorded as at 31 March 2015.

The net interest charge of the year, amounts to €1 million.

The variation of net interest expenses is explained by:

- the repayment of bonds decreasing interest expenses on bonds (see Note 14).
- commercial papers issued or credit lines used within the last two financial years increasing interest expenses on borrowings (see Note 15).

## NOTE 6 • NON-RECURRING RESULT

	Yea	r ended at 31 March 20	15	Year ended at 31 March 2014
(in € million)	Non-recurring income	Non-recurring expense	Net amount	Net amount
Disposals of fixed assets	-	-	-	-
Addition or release of provisions	66	(722)	(656)	(30)
Other	-	(30)	(30)	(15)
TOTAL	66	(752)	(686)	(45)

Non-recurring costs are mainly related to litigations on:

 conclusion of the agreement with US Department of Justice (DOJ) in order to put an end to the investigation conducted in the United States relating to alleged potential violations of the Foreign Corrupt Practices Act (FCPA). Alstom S.A. has agreed to plead guilty to violating the books and records and internal controls provisions of the FCPA and to pay a fine of approximately USD772 million, corresponding to a provision of  $\epsilon$ 719 million (see Note 12.2);

• litigations on "Alleged anti-competitive activities" and "alleged illegal payments (see Note 12.1).

## NOTE 7 · INCOME TAX

The €39 million Income tax credit is mainly linked to the tax grouping.

In the absence of tax grouping, a  $\varepsilon 12$  million income tax charge would have been recorded at 31 March 2015.

The deferred tax position of the Company at 31 March 2015, amounting to €1,188 million is mainly composed of tax losses carried forward.

## NOTE 8 • FINANCIAL ASSETS

(in € million)	At 31 March 2014	Provision	Release	At 31 March 2015
Investments				
<ul> <li>ALSTOM Holdings</li> </ul>	9,216	-	-	9,216
• Impairment	(900)	-	-	(900)
TOTAL	8,316	-		8,316

### 8.1. Investments

ALSTOM Holdings is the Company's sole subsidiary and owns all operating entities of the Group Alstom.

At 31 March 2015, the Company has performed an impairment test of its investments in ALSTOM Holdings based on a multi-criteria approach (see Note 2.1) which took into account the results of an internal valuation and assumed values within the framework of the planned sale to General Electric.

As a result of the test, no additional provision for impairment was recorded as at 31 March 2015.

## 8.2. Advances

(in € million)	At 31 March 2014	Variation	At 31 March 2015
Advances to ALSTOM Holdings			
Gross value	7,068	(166)	6,902
Accrued interests	53	(12)	41
TOTAL	7,121	(178)	6,943

Advances to ALSTOM Holdings have a maturity of less than one year and can be cancelled by anticipation, which ensures their liquidity.

## NOTE 9 • RECEIVABLES

Current receivables can be broken down as follows:

		At 31 M	At 31 M	arch 2014		
(in € million)	Total	Within one year	One to five years	Out of which related parties	Total	Out of which related parties
Current account with ALSTOM Holdings	-	-	-	-	12	12
Trade receivables «Research tax credit & others» receivable from the	17	17	-	17	8	8
French Tax administration	145	39	106	-	95	-
Other receivables	9	9	-	8	2	-
TOTAL	171	65	106	25	117	20

## NOTE 10 · DEFERRED CHARGES

(in € million)	At 31 March 2014	Amount capitalised during the period	Amortisation expense of the period	At 31 March 2015
Bonds issuance costs and premiums	21	-	(7)	14

## NOTE 11 · SHAREHOLDERS' EQUITY

## 11.1. Share capital

At 31 March 2015, ALSTOM's share capital amounted to €2,168,547,479 consisting of 309,792,497 ordinary shares with a par value of €7 each and fully paid.

The variations of share capital during the period are the following:

	Number	Par value <i>(in €)</i>
Existing shares at beginning of year	308,702,146	7
capital increase	-	7
<ul> <li>reimbursement of bonds</li> </ul>	89	7
exercise of options	481,126	7
<ul> <li>subscription of shares under employee sharing program</li> </ul>	609,136	7
EXISTING SHARES AT YEAR END	309,792,497	7

At 31 March 2014, ALSTOM's share capital amounted to €2,160,915,022 consisting of 308,702,146 ordinary shares with a par value of €7 and fully paid.

## 11.2. Changes in shareholders' equity

		Shareholders' Meeting held	Other	
(in € million)	At 31 March 2014	1 July 2014	movements	At 31 March 2015
Capital	2,161	-	8	2,169
Additional paid-in capital	876	-	3	879
Legal reserve	210	-	-	210
Restricted reserve	17	-	(8)	9
General reserve	7,470	(207)	4	7,267
Retained earnings	645	(645)	-	-
Net profit	(852)	852	(597)	(597)
TOTAL	10,527	-	(590)	9,937

"Other movements" for the period arise from:

- €6 million cash contribution, resulting from the exercise of options;
- subscriptions of shares under employee sharing programme;
- the €(597) million net loss.

## NOTE 12 · PROVISIONS FOR RISKS AND CHARGES

## 12.1. Provisions for litigations and disputes

(in € million)	At 31 March 2014	Additions	Releases	At 31 March 2015
Litigations, disputes, and other	69	3	(66)	6
Fines	-	719	-	719
Post-employment defined benefits	10	1	-	11
TOTAL	79	723	(66)	736

### 12.1.1. Alleged anti-competitive activities

### **GIS** equipment

In April 2006, the European Commission initiated proceedings against Alstom, along with a number of other companies, based on allegations of anti-competitive practices in the sale of gas-insulated switchgears ("GIS equipment"), a product of its former Transmission & Distribution business sold to Areva in January 2004, following investigations that began in 2004.

On 24 January 2007, the European Commission levied a fine of  $\epsilon$ 65 million against Alstom which includes  $\epsilon$ 53 million on a joint and several basis with Areva T&D (subsequently renamed Alstom Grid). On 3 March 2011 the General Court of the European Union reduced the amount of fine levied against Alstom to  $\epsilon$ 58.5 million. The Court of Justice of the European Union issued its final decision on 10 April 2014. The amount of the reduced fine was confirmed, which, when adding the late payment interests due, makes the total amount paid by the Group at  $\epsilon$ 79.3 million.

The civil action initiated by National Grid in 2008 before the High Court of Justice in London following the 2007 the European Commission decision to obtain damages, ended with a full and final settlement agreed in June 2014. Two other civil actions which started in May and September 2010 are ongoing before national jurisdictions for a global amount of approximately  $\in$  32 million.

On 16 September 2013 the Israeli Antitrust Authority issued a decision whereby Alstom and other companies were held liable for alleged anti-competitive arrangement in the GIS equipment Israeli market. No fine will be imposed to Alstom arising out of this decision. Alstom appealed this decision in October 2014. Following the decision, the Israeli state-owned company for the power distribution started a civil action in December 2013 for an amount of ILS 3.8 billion (approximately  $\in$  800 million) against the members of the alleged anti-competitive arrangement. Alstom has submitted its defense. Two class actions for respective amounts of ILS 2 billion (approximately  $\in$  400 million) and ILS 2.8 billion (approximately  $\in$  600 million) have also been initiated against the members of the alleged anti-competitive arrangement for overcharge. Alstom vigorously contests these procedures on the merits and considers it has good arguments to defend these cases.

#### **Power transformers**

On 20 November 2008, the European Commission sent a statement of objections to a number of manufacturers of power transformers, including Alstom, concerning their alleged participation in anticompetitive arrangements. Alstom has contested the materiality of the alleged facts. On 7 October 2009, the European Commission levied a fine of €16.5 million against Alstom which includes €13.5 million on a joint and several basis with Areva T&D (subsequently renamed Alstom Grid). On 27 November 2014, the Court decided to maintain only the conviction for Alstom Grid in the amount of €13.5 million. In addition late payment interests is payable and therefore the total amount paid by Alstom in January 2015 was €15.5 million.

### 12.1.2. Alleged illegal payments

Certain companies and/or current and former employees of the Group are currently being investigated and/or subject to procedures, by judicial or administrative authorities (including in Brazil, in the United Kingdom and in France) or international financial institutions with respect to alleged illegal payments in certain countries.

With respect to these above mentioned matters, the Group is cooperating with the concerned authorities or institutions. These investigations or procedures may result in criminal sanctions, including fines which may be significant, exclusion of Group subsidiaries from tenders and thirdparty actions.

In Brazil, assets of two Group's subsidiaries and shares of these entities held by the Group were frozen following a preliminary decision ordered in February 2015 for an amount of BRL 287 million (approximately €80 million) in relation to an ongoing procedure related to an energy project originated in the 1990s. The Prosecutor of the State of Sao Paulo launched in May 2014 an action against a Group's subsidiary in Brazil, along with a number of other companies, for a total amount of approximately €800 million excluding possible damages in connection with a transportation project. The Group's subsidiaries are defending themselves.

In the United Kingdom, the Serious Fraud Office (SFO) began investigations in 2010. The SFO opened during fiscal year 2014/15 three criminal prosecutions against entities of the Group and certain current and past employees of the Group in connection with transportation projects located in Poland, Tunisia, India and Hungary, and with an energy project located in Lithuania. These proceedings are at an early stage and the Group is unable, at this stage, to predict their consequences.

The World Bank and Alstom entered into a negotiated resolution agreement on 21 February 2012. As part of this agreement, the World Bank announced its decision to debar ALSTOM Hydro France and ALSTOM Network Schweiz AG (Switzerland) and their affiliates from public tenders financed by the World Bank for a period of three years which ended on 21 February 2015. The World Bank determined that Alstom has implemented a corporate compliance program in line with the World Bank's integrity compliance policies and practices and has satisfied all of the other conditions of the February 2012 negotiated resolution agreement.

# **12.1.3.** Provision for the long-term conditional compensation plan and exceptional and conditional remuneration

The Chairman and Chief Executive Officer benefited from a long term conditional compensation plan linked to some Company's performances, over several years. This plan became null and void during the year ended 31 March 2014 further to the non-achievement of one of the conditions and is not any more the object of a provision.

Upon the proposal of the Nominations and Remuneration Committee and having obtained the opinion of the High Committee of Corporate Governance, the Board of Directors decided to allocate to Mr Patrick Kron an exceptional and conditional compensation within the meaning of the Article 23.2.3, 9<sup>th</sup> paragraph of the AFEP-MEDEF Code, consisting of the cash equivalent of 150,000 shares of the Company valued on the basis of the market price of the Company share on the day of the completion of the transaction with General Electric, capped at two years of his 2014/15 remuneration (fixed and variable "target"); the payment of such compensation is subject to the approval of the transaction by the General Shareholders' Meeting (this condition was met on 19 December 2014), to the receipt of all necessary approvals, as well as to the actual presence of the executive officer as Chairman and Chief Executive Officer of the Company at the date of payment.

### 12.2. Provisions for fines

## Agreement between Alstom and the US Department of Justice

Alstom has concluded on 22 December 2014 an agreement with the US Department of Justice (DOJ) in order to put an end to the investigation conducted in the United States from 2010 on subsidiaries of the Group relating to alleged potential violations of the Foreign Corrupt Practices Act (FCPA).

Two US subsidiaries, Alstom Power Inc. and Alstom Grid Inc. (formerly known as Alstom T&D Inc.), have agreed to enter into deferred prosecution agreements with the DOJ relating to FCPA charges. If these two US subsidiaries fulfil the terms of their deferred prosecution agreements, all criminal charges will be dismissed against them at the end of three years. Another Alstom subsidiary, Alstom Network Schweiz AG (formerly known as Alstom Prom AG), has agreed to plead guilty to FCPA antibribery charges. In relation to these underlying charges, the ultimate parent company of the Group, Alstom S.A. has agreed to plead guilty to violating the books and records and internal controls provisions of the FCPA and to pay a fine of approximately USD772 million.

The DOJ agreement has also stipulated that no part of the fine can be passed on to General Electric as part of the projected sale of Alstom's Energy businesses.

The Plea agreements concluded with the DOJ are subject to approval by the competent American court.

Payment of the fine is expected to occur ten days after entry of judgement and pronouncement of sentence, based upon such approval. Sentencing is currently scheduled for June 2015 which schedule could be postponed by the Court.

# **12.3.** Provisions for post-employment defined benefits

The provision related to post-employment benefits represents the present value at year end of the obligations arising from defined benefits granted by the Company to the Chairman and Chief Executive Officer.

The Chairman and Chief Executive Officer also benefits from the supplemental collective retirement scheme implemented in 2004, and taken into account in the determination of his overall compensation. This scheme is composed of a defined contribution plan and a defined benefit plan.

The defined benefit plan covers all persons exercising functions within the Group in France whose base annual remuneration exceeds eight times the annual French social security ceiling. The rights under the plan are vested only if the beneficiary retires from the Company and after claiming his or her retirement rights. Beneficiaries who, after reaching the age of 55 years, are dismissed for any reason other than an act of gross negligence, can also benefit from this scheme provided they do not exercise any professional activities prior to the liquidation of their pension.

Even though the plan does not set a minimum seniority requirement of two years to be met in order to benefit from it, the plan remains compliant with the intention behind the AFEP-MEDEF recommendation insofar as entitlements are acquired gradually and only represent, per year of seniority in the scheme, a limited percentage of the annual compensation corresponding to 0.6% of the annual reference remuneration within a range of 8 to 12 times the Social Security ceiling and to 1.2% of the annual reference remuneration in excess of 12 times the Social Security ceiling. The annual reference remuneration is equal to the average fixed and variable remuneration received over the course of the past three years prior to retirement. This annual reference remuneration is capped at  $\epsilon 2$  million. Since 1 January 2008, this cap is subject to an annual revaluation in accordance with the evolution of the reference salary used to determine the AGIRC retirement scheme.

As such, given his seniority within the Group and assuming a retirement age of 62, the Chairman and Chief Executive Officer could, when he retires, claim a gross retirement pension under the defined benefit scheme equal to approximately 12% of the capped annual reference remuneration.

The gradual accrual of potential rights based on seniority in the scheme represents a percentage that is lower than the 5% cap on the beneficiary's remuneration provided for under the AFEP-MEDEF Code. Similarly, the maximum income percentage over which the supplemental retirement scheme would grant a right is much lower than the cap set under the AFEP-MEDEF Code, which is equal to 45% of the reference income.

There has been no change to this supplemental collective retirement scheme during the fiscal year.

The benefit obligation for the defined benefits plan borne by the Group is equal to  $\epsilon$ 10,491,000 as at 31 March 2015, including an amount of  $\epsilon$ 2,031,000 of taxes applicable to supplemental retirement schemes as increased on 1 January 2013 and on 1 January 2015.

The defined contribution plan complements the defined benefit plan. The rights are acquired annually and correspond to 1% of the annual remuneration up to four times the Social Security ceiling, 4% of the annual remuneration within a range of 4 to 8 times the Social Security ceiling and 11% of the annual remuneration within a range of 8 to 12 times the Social Security ceiling. Since 1 July 2014, social contributions are borne by the Company up to 95%. The amount of contributions within the defined contribution plan was €24,109 for fiscal year 2014/15 of which €23,204 was paid by the Company. Assuming he retires at age 62, the Chairman and Chief Executive Officer could claim upon retirement a gross retirement pension under the defined contribution scheme equal to approximately 1% of the capped annual reference remuneration, which corresponds to an aggregate gross supplemental retirement pension equal to approximately 13% of the capped annual gross remuneration by combining the pension resulting from the defined benefit scheme and the pension resulting from the defined contribution scheme.

## **NOTE 13 · BONDS REIMBURSABLE WITH SHARES**

In December 2003, the Company had issued bonds reimbursable with shares maturing in December 2008.

At 31 March 2015, a balance of 78,242 bonds is still outstanding amounting to €0.1 million, in the absence of notification from bondholders regarding the redemption. Those bonds represent 4,913 shares to issue.

## NOTE 14 · BONDS

The movements in nominal amount of bonds over the past two years are as follows:

					1	Maturity dat	е			
(Nominal value in € million)	Total	23/09/2014	09/03/2015	05/10/2015	02/03/2016	01/02/2017	11/10/2017	05/10/2018	08/07/2019	18/03/2020
Annual nominal interest rate		4.00%	4.25%	2.88%	3.88%	4.13%	2.25%	3.63%	3.00%	4.50%
Outstanding amount										
at 31 March 2013	4,156	743	63	500	500	750	350	500	-	750
Bonds issued	500								500	
Currency adjustments	(5)		(5)							
Repurchase	(21)	(21)								
Bonds reimbursed at maturity										
date	-									
Outstanding amount										
at 31 March 2014	4,630	722	58	500	500	750	350	500	500	750
Bonds issued	-									
Currency adjustments	-									
Repurchase	-									
Bonds reimbursed										
at maturity date	(780)	(722)	(58)							
OUTSTANDING AMOUNT										
AT 31 MARCH 2015	3,850	-	-	500	500	750	350	500	500	750

During the year two bond issues were reimbursed for a total value of  $\varepsilon780$  million.

Accrued interests at 31 March 2015 amounting to  $\epsilon$ 38 million are added to the outstanding principal amount in the balance-sheet.

Alstom has a revolving credit facility maturing on the earlier of completion of the proposed transaction with GE and 16 December 2016, amounting to  $\epsilon$ 1.350 billion, which is fully undrawn as of March 2015. The lenders to this revolving credit facility have confirmed that the proposed transaction with GE will not create any event of default under this facility. Alstom also has additional facilities amounting to a total of  $\epsilon$ 1.600 billion fully undrawn as of 31 March 2015, available up to the completion (and subject to the non-cancellation) of the proposed transaction with GE and 1 December 2015 (the «Bridge Facilities» and together with the revolving credit facility the "Credit Facilities").

In light of the above and of the maturity of its debt described below, Alstom considers that, subject to below, it has sufficient financial flexibility to meet its financial obligations and needs in the difficult commercial context which adversely impacts its Energy activities since the announcement of the proposed transaction with GE, and which has resulted in a deterioration of the Group's net working capital. Alstom intends to replace the Credit Facilities with a new credit facility in an amount of \$\epsilon4000 million which it considers will be sufficient to cover its financial obligations and working capital requirements and which would be effective on the day of the completion of the proposed transaction with GE.

These facilities are subject to the following financial covenants, based on consolidated amounts:

Covenants	Minimum Interest Cover	Maximum total debt (in € million)	Maximum total net debt leverage
	(a)	(b)	(c)
	3	6,000	3.6

(a) Ratio of EBITDA (Earnings Before Interest and Tax plus Depreciation and Amortisation) to net interest expense (excluding interest related to obligations under finance lease).

(b) Total debt corresponds to borrowings, i.e. total financial debt less finance lease obligations. This covenant would apply if the Group is rated "non-investment grade" by both rating agencies, which is not the case at 31 March 2015.

(c) Ratio of total net debt (Total debt less short-term investments or trading investments and cash and cash equivalents) to EBITDA.

As of 31 March 2015, Alstom calculates covenants considering both continuing and discontinued activities. The key Group indicators used to calculate the financial covenants are detailed below:

(in € million)	For the year ended 31 March 2015	For the year ended 31 March 2014
EBITDA (excluding capital gain on disposal)	107	1,553
Net interest expense (excluding interests related to obligations under finance leases)	(200)	(194)
Total net debt (1)	2,850	2,956
INTEREST COVER RATIO	0.5	8.0
TOTAL NET DEBT LEVERAGE	26.6	1.9

(1) Total net debt of both continuing and discontinued activities.

In view of the proposed transaction with GE, the lenders to these facilities have agreed to waive any event of default linked to the breach of the financial covenants until the completion of the proposed transaction with General Electric (and subject to such completion) – until the earlier of 1 December 2015 or the completion of the proposed transaction – or the announcement date specifying the non-completion of the proposed transaction (the "Waiver").

In the event that it is announced that the proposed transaction with General Electric will not go ahead or, if the proposed transaction with General Electric does not complete by 1 December 2015, each of the Facilities would be in default as the Waiver of the financial covenants would lapse. This is likely to result in drawings under the Credit Facilities and requests for bonding guarantees under the Committed Bonding Facility being suspended and the possibility that all amounts outstanding under the Credit Facilities and the Committed Bonding Facility becoming immediately due and payable. This may also result in a significant part of the other debt of the Group becoming immediately repayable through the implementation of cross-default or cross-acceleration provisions contained in most of the Group's financing agreements and outstanding securities.

## NOTE 15 · OTHER BORROWINGS

During the year ended at 31 March 2015, Alstom has made use of commercial papers programme.

The outstanding value at 31 March 2015 is €741 million, with a maturity date under three months.

## NOTE 16 · PAYABLES AND RELATED PARTIES

	At 31 Ma	rch 2015	At 31 March 2014		
(in € million)	Total	Out of which related parties	Total	Out of which related parties	
Trade payables	7	1	10	2	
Payables to members of the tax group	127	127	76	76	
Payables to members of the VAT group	-	-	-	-	
Other tax and social security payables	4		2	-	
Other liabilities	8	7	10	9	
TOTAL	146	135	98	87	

The Company is the head of a "VAT Group", with 10 members. This group allows compensation between debit and credit statements of the 10 members.

## NOTE 17 · MATURITY OF LIABILITIES

(in € million)	At 31 March 2015	Within one year	One to five years	More than five years	Out of which related parties
Bonds	3,888	1,038	2,850	-	-
Other borrowings	741	741	-	-	-
Trade payables	7	7	-	-	1
Other payables	139	139	-	-	134
TOTAL	4,775	1,925	2,850	-	135

## NOTE 18 · DEFERRED INCOME

(in € million)	At 31 March 2014	Amount capitalised during the period	Amortisation income of the period	At 31 March 2015
Bonds issuance premiums	1	-	(1)	-

## **NOTE 19 · OTHER INFORMATION**

### 19.1. Off Balance-sheet Commitments

Total outstanding guarantees given by the Company amount to  ${\bf \epsilon}$ 574.3 million at 31 March 2015, of which  ${\bf \epsilon}$ 528.2 million are Parent guarantees detailed as follows:

- €27.9 million lease guarantees;
- €497.2 million guarantees of commercial obligations contracted by the Transport Sector; and
- €3.2 million rent guarantees.

In March 2015, by internal derivate subscribed to Alstom Holdings (Central Treasury), the Company has implemented currency hedges in connection with the agreement with the US Department of Justice (Notes 6 and 12.2).

The hedging amounts to \$400 million on a total amount of aproximatively \$772 million. The provision is adjusted according to exchange rates of those forward hedges.

## 19.2. Stock options and performance shares

### Key characteristics

	Plans issued by Shareholders Meeting on 9 July 2004			Plans issued by Shareholders Meeting on 26 June 2007			ting	
	Plan n°7	Plan n°8	Plan n°9	Plan n°10 Plan n°10 Plan n°11			Plan n°11	
	Stock options	Stock options	Stock options		Performance shares	Stock options	Performance shares	
Grant date	17/09/2004	27/09/2005	28/09/2006	25/09/2007	25/09/2007	23/09/2008	23/09/2008	
	17/09/2007	27/09/2008	28/09/2009	25/09/2010		23/09/2011		
Exercise period	16/09/2014	26/09/2015	27/09/2016	24/09/2017	N/A	22/09/2018	N/A	
Number of beneficiaries	1,007	1,030	1,053	1,196	1,289	411	1,431	
Adjusted number granted <sup>(1)</sup>	5,566,000	2,803,000	3,367,500	1,697,200	252,000	754,300	445,655	
Adjusted number exercised since the origin	5,048,533	2,087,456	526,967	1,000	220,320	-	-	
Adjusted number cancelled since the origin	517,467	263,800	438,750	265,500	31,680	754,300	445,655	
Ajusted number outstanding								
at 31 March 2015	-	451,744	2,401,783	1,430,700	-	-	-	
inc. to the present members			225 000	170 000				
of the Executive Committee	-	-	335,000	178,600	-	-	-	
Adjusted exercise price <sup>(2)</sup> (in $\epsilon$ )	8.60	17.88	37.33	67.50	N/A	66.47	N/A	
Fair value at grant date (in $\epsilon$ )	7.30	10.30	12.90	29.24	129.20	16.71	63.54	

(1) The number of options and performance shares and the exercise price of options have been adjusted as a result of transactions that have impacted the number of capital shares after grant dates.

(2) The exercise price corresponds to the average opening price of the shares during the twenty trading days preceding the day on which the options were granted by the Board (no discount or surcharge).

At 31 March 2015, stock options granted by plans 7, 8, 9, 10, 11, 12, 13 and 14 are fully vested. For plans 8, 9 and 10, options will expire seven years after the end of the vesting period of each plan. For plans 12, 13, 14, 15 and 16, options will expire five years after the end of the vesting period.

The long term incentive plans set up since 2007 combine the allocation of stock options with the allocation of performance shares.

The grant of these instruments is conditioned by the satisfaction of the performance indicators.

### LTI plan 15 granted on 10 December 2012

The total number of options exercisable and performance shares to be delivered depends on the Group's operating margin and the free cash flow for the fiscal years ended 31 March 2013, 31 March 2014 and 31 March 2015:

Year ended 31 March 2013		Year ended	31 March 2014	Year ended 31 March 2015		
	% of Conditional Options exercisable & performance shares to be delivered		% of Conditional Options exercisable & performance shares to be delivered		% of Conditional Options exercisable & performance shares to be delivered	
$FCF \ge 0$ and		FCF ≥ 0 and		FCF ≥ 0 and		
OM ≥ 7.4%	40%	OM ≥ 7.6%	40%	OM ≥ 8%	20%	
$FCF \ge 0$ and		$FCF \ge 0$ and		FCF ≥ 0 and		
$7.2\% \le 0M < 7.4\%$	30%	7.3% ≤ 0M < 7.6%	30%	7.5% ≤ 0M < 8%	10%	
$FCF \ge 0$ and		$FCF \ge 0$ and		FCF < 0 or		
7% ≤ 0M < 7.2%	10%	7% ≤ 0M < 7.3%	10%	OM < 7.5%	-	
FCF < 0 or		FCF < 0 or				
0M < 7%	-	0M < 7%	-	-	-	

FCF means Free Cash Flow and OM means Operating Margin.

Plans issued by Meeting on 2		Plans issued by Shareholders Meeting on 22 June 2010							
Plan n°12	Plan n°12	Plan n°13	Plan n°13	Plan n°14	Plan n°14	Plan n°15	Plan n°15	Plan n°16	Plan n°16
Stock	Performance		Performance		Performance		Performance		Performance
options	shares	options	shares	options	shares	options	shares	options	shares
21/09/2009	21/09/2009	13/12/2010	13/12/2010	04/10/2011	04/10/2011	10/12/2012	10/12/2012	01/10/2013	01/10/2013
21/09/2012		13/12/2013		04/10/2014		10/12/2015		03/10/2016	
20/09/2017	N/A	12/12/2018	N/A	03/10/2019	N/A	09/12/2020	N/A	30/09/2021	N/A
436	1,360	528	1,716	514	1,832	538	1,763	292	1,814
871,350	522,220	1,235,120	740,860	1,369,180	804,040	1,312,690	781,540	671,700	1,000,700
-	182,432	-	506,330	9,429	229,950	-		-	-
561,150	339,788	387,970	234,530	539,645	318,359	715,985	424,730	16,300	53,100
310,200	-	847,150	-	820,106	255,731	596,705	356,810	655,400	947,600
53,000	-	65,992	-	247,338	-	159,170	19,550	248,500	98,500
49.98	N/A	33.14	N/A	26.39	N/A	27.70	N/A	26.94	N/A
11.26	48.11	7.59	31.35	3.14	19.77	5.80	26.70	3.84	22.62

Based on consolidated financial statements for the fiscal years ended 31 March 2013 and 31 March 2014, the performance condition is achieved for 30% of an allotment of LTIP15 options and performance shares.

Moreover, in the context of the sale of the Energy activities the Board of Directors has considered that the performance condition set for fiscal year ended 31 March 2015, weighing 20% of the global award, will be deemed fully satisfied subject to and upon the completion of the transaction. As a result, 50% of the options will be exercisable under this plan and 50% of performance shares will be delivered.

50% of options and performance shares are cancelled.

#### Movements

#### LTI plan 16 granted on 1 October 2013

In the context of Energy transaction, the Board of Directors has considered that the performance conditions set for fiscal years ended 31 March 2015 and 31 March 2016 will be deemed fully satisfied subject to and upon the completion of the transaction.

As a consequence, all options will be exercisable under this plan and all performance shares will be delivered.

In addition, for both plans 15 & 16, the presence condition will be waived for the beneficiaries having left the Group as part of the Energy transaction on the condition they are employees of Alstom Group as at the date of the closing of the transaction.

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	Number of options	Weighted average exercise price per share (in $\epsilon$ )	Number of performance shares
Outstanding at 31 March 2013	8,743,578	36.58	2,124,847
Granted	671,700	26.94	1,000,700
Exercised	(122,912)	11.61	(340,344)
Cancelled	(442,434)	29.58	(279,007)
Outstanding at 31 March 2014	8,849,932	36.49	2,506,196
Granted	-	-	-
Exercised	(481,126)	13.06	(495,050)
Cancelled	(855,018)	27.23	(451,005)
OUTSTANDING AT 31 MARCH 2015	7,513,788	39.06	1,560,141
Of which exercisable	6,261,683		N/A

# **19.3.** Severance payment and other benefits arising upon the termination of the mandate

At its meeting dated 28 June 2011, which took place after the General Shareholders' Meeting held on the same day, the Board of Directors decided not to separate the functions of Chairman and Chief Executive Officer and to renew the term of office of Mr Patrick Kron as Chairman and Chief Executive Officer for the duration of his directorship, or until the end of the Ordinary Shareholders' Meeting called to approve the financial statements of the 2014/15 fiscal year, also decided that the commitments made to Mr Patrick Kron on 26 June 2007, as amended on 6 May 2008 and 4 May 2009 and approved by the General Shareholders' Meeting dated 23 June 2009, concerning benefits arising upon termination of the mandate described in Article L. 225-42-1 of the French Commercial Code, would be maintained without any change, and approved and authorised their renewal, insofar as necessary. These commitments were then approved once again at the General Shareholders' Meeting dated 26 June 2012.

Consequently, the commitments discussed in Article L. 225-42-1 of the French Commercial Code, undertaken with regard to Mr Patrick Kron, Chairman and Chief Executive Officer, concern, as in the past, (i) the potential entitlement to the supplemental collective retirement pension scheme composed of a defined contribution plan and a defined benefit plan from which benefit all persons exercising functions within the Group in France, the base annual remuneration of which exceeds eight times the French Social Security cap, above mentioned, as well as (ii) the upholding, in the event of termination of his mandate as initiated by

either the Company or himself, of only the rights to exercise the stock options and the rights to the delivery of the performance shares, that will have been definitively vested as of the end of his term of office following the fulfilment of the conditions set forth by the plans.

At its meeting dated 5 May 2015, the Board of Directors meeting that decided to renew the appointment of Mr Patrick Kron as Chairman and Chief Executive Officer, during its meeting to be held after the General Shareholders' Meeting convened on 30 June 2015 subject to the renewal of his mandate as a Director by the General Shareholders' Meeting, decided that these commitments would once again be maintained, and approved and authorised their renewal.

Consequently, it is proposed to the General Shareholders' Meeting dated 30 June 2015, subject to the renewal of his appointment by the General Shareholders' Meeting, that it approve these commitments, pursuant to the terms of Article L. 225-41-1 of the French Commercial Code, subject to the condition that the mandate of the Chairman and Chief Executive Officer of Mr. Patrick Kron be renewed by the Board of Directors' meeting to be held after this General Shareholders' Meeting. These commitments are also presented in the Statutory Auditors' special report.

### 19.4. Transactions with related parties

The decree n°2009-267 dated 9 March 2009 requires to give information about transactions with related parties contracted at conditions other than normal market conditions

The Company has not identified any transaction coming into the scope of this requirement.

## **19.5.List of subsidiaries**

ALSTOM Holdings is ALSTOM's sole subsidiary and is 100% owned.

### Information on ALSTOM Holdings

€9.2 billion
€8.3 billion
€6.9 billion
€6.9 billion
-
-
€5.4 billion
€4.5 billion

## **FIVE-YEAR SUMMARY**

Information as per Article L232-1 of the French Commercial Code.

			Year ended		
	31 March 2011	31 March 2012	31 March 2013	31 March 2014	31 March 2015
1. Share capital at year end					
a) Share capital <i>(in € thousand)</i>	2,060,935	2,061,736	2,157,107	2,160,915	2,168,547
b) Number of outstanding issued shares	294,419,304	294,533,680	308,158,126	308,702,146	309,792,497
c) Par value of shares (in $\epsilon$ )	7	7	7	7	7
<b>2.</b> Operations and income for the year (in $\epsilon$ million)					
a) Dividends received	-	-	-	-	-
b) Income before tax, depreciation,					
impairment and provisions	125	70	65	56	28
c) Income tax credit	85	67	11	29	39
d) Net income after tax, depreciation,					
impairment and provisions	216	136	67	(852)	(597)
e) Dividends (1)	183	236	259	-	-
3. Earnings per share <i>(in €)</i>					
a) Net earning after tax, but before depreciation,					
impairment and provisions	0.71	0.46	0.25	0.28	0.22
b) Net earning after tax, depreciation,					
impairment and provisions	0.73	0.46	0.22	(2.76)	(1.93)
c) Net dividend per share (1)	0.62	0.80	0.84	-	-
4. Personnel					
a) Average headcount of the year	-	-	-	-	-
b) Amount of remuneration of the Chairman and					
Chief Executive Officer (in € thousand) (2)	2,045	2,702	2,211	2,156	1,744
c) Amount of social charges and other welfare					
benefits for the year (in € thousand)	521	820	796	769	464

For the last year-end, subject to the approval of the General Shareholders Meeting.
 The amount mentionned at 31 March 2012 also includes the payment for the Deputy Chief Executive Officer present on the exercise.

## APPROPRIATION OF THE NET INCOME FOR THE PERIOD ENDED 31 MARCH 2015

Information as per Article 243-bis of the French Tax Code.

The following appropriation of the loss of the year ended 31 March 2015  $\in$  (597,443,935.86) will be proposed to the next Shareholders' Meeting:

Net income for the financial year	€ (597,443,935.86)
Allocation to General reserve	€ (597,443,935.86)

Dividend payouts in respect of the previous years were as follows:

- no dividend for the period ended 31 March 2014;
- a dividend of €0.84 per share for the period ended 31 March 2013;
- a dividend of €0.80 per share for the period ended 31 March 2012.

## COMMENTS ON STATUTORY ACCOUNTS

Information requested by the Article L.225-100 of the French Commercial Code.

The Company is the holding company of the Alstom Group. ALSTOM Holdings is Alstom's sole subsidiary .The Company centralises a large part of the external financing of the Group and directs the funds to its subsidiary ALSTOM Holdings through loans and a current account. Fees from its indirect subsidiaries for the use of the ALSTOM name are the Company's main other source of revenue.

## **Income statement**

The Company net loss amounted to €597 million and mainly comprised:

- €58 million operating income stemming from the fees for the use of ALSTOM name minus administrative costs and other external costs;
- €8 million financial charge;
- €686 million non-recurring expense; and
- €39 million net income tax credit mainly linked to the tax grouping.

## **Balance sheet**

Total of balance sheet amounts to €15,448 million and is made of:

- assets:
  - ALSTOM Holdings investments totalling €8,316 million in net value,
  - advances to ALSTOM Holdings amounting to €6,943 million;

- shareholders' equity and liabilities:
  - shareholders' equity amounts to €9,937 million and is made of:
    - share capital: €2,169 million,
    - paid-in capital: €879 million,
    - reserves: €7,486 million,
    - net loss of the period:  $\in$  (597) million,
  - provisions for risks and charges amounting to €736 million,
  - outstanding bonds amounting to €3,888 million,
  - other Borrowings amounting to €741 million,
  - tax and social payables (€131 million) out of which €127 million due to subsidiaries in accordance with the tax grouping agreements.

### Information on trade payables

In accordance with the Article D.441-4 of the French Commercial Code, it is stated that trade payables recorded on the balance-sheet are made up as follows:

- received invoices to be paid for €2 million (versus €6 million at 31 March 2014) all of which have a maturity under 60 days;
- invoices to come for €5 million (*versus* €4 million at 31 March 2014).

## STATUTORY AUDITORS' REPORT ON THE FINANCIAL STATEMENTS

(For the year ended 31 March 2015)

This is a free translation into English of the Statutory Auditors' report issued in French and is provided solely for the convenience of English speaking users. The Statutory Auditors' report includes information specifically required by French law in such reports, whether modified or not. This information is presented below the opinion on the financial statements and includes an explanatory paragraph discussing the Auditors' assessments of certain significant accounting and auditing matters. These assessments were considered for the purpose of issuing an audit opinion on the financial statements taken as a whole and not to provide separate assurance on individual account captions or on information taken outside of the financial statements.

This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

#### To the Shareholders,

In compliance with the assignment entrusted to us by your Annual General Meeting, we hereby report to you, for the year ended 31 March 2015, on:

- the audit of the accompanying financial statements of Alstom;
- the justification of our assessments;
- the specific verifications and information required by law.

These financial statements have been approved by the Board of Directors. Our role is to express an opinion on these financial statements based on our audit.

### I - Opinion on the financial statements

We conducted our audit in accordance with professional standards applicable in France. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit involves performing procedures, using sampling techniques or other methods of selection, to obtain audit evidence about the amounts and disclosures in the financial statements. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made, as well as the overall presentation of the financial statements. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

In our opinion, the financial statements give a true and fair view of the assets and liabilities and of the financial position of the Company at 31 March 2015 and of the results of its operations for the year then ended in accordance with French accounting principles.

Without qualifying our opinion, we draw your attention to Note 3.2 "Agreement between Alstom and the US Department of Justice" and Note 12.2 "Provisions for fines" to the financial statements which set out the consequences of the agreement concluded with the US Department of Justice.

### II - Justification of our assessments

In accordance with the requirements of article L.823-9 of the French Commercial Code (Code de commerce) relating to the justification of our assessments, we bring to your attention the following matters:

### 1. Energy activities

Note 3.1 "The Energy Transaction" to the financial statements describes the planned transaction with General Electric and the related process, and note 14 "Bonds" to the financial statements sets out the main consequences of the planned transaction and of the future anticipated key dates. We have examined the documentation relating to the company's liquidity situation, notably cash flow forecasts for the next 12 months, based on the highly probable scenario and more remote ones. We have verified that Note 14 to the financial statements gives the appropriate information.

#### 2. Investments

Investments are recorded as assets in your company's balance sheet for a net book value of  $\in$ 8,316 million. Note 2.1 "Description of accounting policies - Investments" to the financial statements describes the methods adopted for accounting for these investments as well as the methods used to calculate impairment losses. We have examined the methodology used and assessed the reasonableness of the estimates applied by Alstom to perform the impairment test, as described in Note 8 "Financial assets" to the financial statements. The data and assumptions underlying those estimates, are notably based on the conditions of the planned transaction with General Electric, as disclosed in Note 3.1.1 "Presentation of the General Electric offer" to the financial statements.

### 3. Disputes

We have examined the procedures used by Alstom to identify, assess and account for disputes. We have ensured that the status of the disputes and the related uncertainties are adequately described in the Note 12 "Provisions for risks and charges" and Note "Provisions for risks and charges – Provisions for litigations and disputes" to the financial statements.

These assessments were made as part of our audit of the financial statements, taken as a whole, and therefore contributed to the opinion we formed which is expressed in the first part of this report.

## **III** - Specific verifications and information

In accordance with professional standards applicable in France, we have also performed the specific verifications required by French law.

We have no matters to report as to the fair presentation and the consistency with the financial statements of the information given in the management report of the Board of Directors, and in the documents addressed to the shareholders with respect to the financial position and the financial statements.

Concerning the information given in accordance with the requirements of article L. 225-102-1 of the French Commercial Code relating to remuneration and benefits received by corporate officers and any other commitments made in their favour, we have verified its consistency with the financial statements, or with the underlying information used to prepare these financial statements and, where applicable, with the information obtained by your Company from companies controlling it or controlled by it. Based on this work, we attest to the accuracy and fair presentation of this information.

In accordance with French law, we have verified that the required information concerning the identity of shareholders and holders of the voting rights has been properly disclosed in the management report.

Neuilly-sur-Seine and Courbevoie, 6 May 2015 The Statutory Auditors

PricewaterhouseCoopers Audit Olivier Lotz Mazars Thierry Colin

## STATUTORY AUDITORS' SPECIAL REPORT ON RELATED-PARTY AGREEMENTS AND COMMITMENTS

(Annual General Meeting for the approval of the financial statements for the year ended 31 March 2015)

This is a free translation into English of the Statutory Auditors' special report on related-party agreements and commitments issued in French and is provided solely for the convenience of English speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

#### To the Shareholders,

In our capacity as Statutory Auditors of Alstom, we hereby report to you on related-party agreements and commitments.

It is our responsibility to report to shareholders, based on the information provided to us, on the main terms and conditions of agreements and commitments that have been disclosed to us or that we may have identified as part of our engagement, without commenting on their relevance or substance or identifying any undisclosed agreements or commitments. Under the provisions of Article R.225-31 of the French Commercial Code (*Code de commerce*), it is the responsibility of the shareholders to determine whether the agreements and commitments are appropriate and should be approved.

Where applicable, it is also our responsibility to provide shareholders with the information required by Article R.225-31 of the French Commercial Code in relation to the implementation during the year of agreements and commitments already approved by the Annual General Meeting.

We performed the procedures that we deemed necessary in accordance with professional standards applicable in France to such engagements. These procedures consisted in verifying that the information given to us is consistent with the underlying documents.

### Agreements and commitments to be submitted for the approval of the Annual General Meeting

### Agreements and commitments authorised after the year-end

We were informed of the following agreement, approved after the year-end, which was authorised by the Board of Directors.

## Commitments falling within the scope of Article L.225-42-1 of the French Commercial Code with Patrick Kron, Chairman and Chief Executive Officer of Alstom

Director concerned:

#### Patrick Kron, Chairman and Chief Executive Officer of Alstom

#### Nature and purpose:

At its meeting of 5 May 2015, the Board of Directors authorised, subject to the condition precedent of the renewal of Patrick Kron's term of office as Director by the Annual General Meeting called to approve the financial statements for the year ended 31 March 2015, and of the reappointment of his term of office as Chairman and Chief Executive Officer by the meeting of the Board of Directors to be held after said Annual General Meeting, the renewal of the related-party commitments made to Patrick Kron in relation to benefits following the termination of his term of office, as approved by the Annual General Meeting of 26 June 2012.

These commitments, which are identical to those in force prior to 5 May 2015, are as follows:

#### Stock options and performance shares

In the event of termination of his term of office as Chairman and Chief Executive Officer, by either the Company or himself, the Chairman and Chief Executive Officer will only retain the rights to exercise stock options subject to performance conditions, and to the delivery of performance shares, granted before the end of his term of office, and that have vested in full as of the end of his term of office following the fulfilment of the conditions set forth by the plans.

Stock options and performance shares that have not vested as of the end of his term of office may not be exercised or delivered.

#### Supplemental retirement schemes

The Chairman and Chief Executive Officer is entitled to a supplemental retirement scheme based on a defined contribution plan and a defined benefit plan, which was set up in 2004.

With regard to the defined benefit plan, the Chairman and Chief Executive Officer benefits from the supplemental collective retirement scheme which covers all persons exercising functions within the Group in France whose base annual remuneration exceeds eight times the French social security ceiling. Under the scheme, entitlements are acquired gradually and represent, per year of seniority in the scheme, a limited percentage of the annual remuneration corresponding to 0.6% of the annual reference remuneration within a range of 8 to 12 times the social security ceiling and to 1.2% of the annual reference remuneration in excess of 12 times the social security ceiling. The annual reference remuneration is equal to the average fixed and variable remuneration received over the course of the past three years prior to retirement. This annual reference remuneration is capped at  $\epsilon$ 2 million. Since 1 January 2008, this cap is subject to an annual revaluation in accordance with the evolution of the reference salary used to determine the AGIRC retirement scheme.

As such, given his seniority within the Group and assuming a retirement age of 62, the Chairman and Chief Executive Officer could, when he retires, claim a gross retirement pension under the defined benefit scheme equal to approximately 12% of the capped annual reference remuneration.

The defined contribution plan complements the defined benefit plan. The rights are acquired annually and correspond to 1% of the annual remuneration up to four times the social security ceiling, 4% of the annual remuneration within a range of 4 to 8 times the social security ceiling and 11% of the annual remuneration within a range of 8 to 12 times the social security ceiling. Since 1 July 2014, social contributions are borne by the Company up to 95%.

Assuming a retirement age of 62, the Chairman and Chief Executive Officer could claim upon retirement a gross retirement pension under the defined contribution scheme equal to approximately 1% of the capped annual reference remuneration, which corresponds to an aggregate gross supplemental retirement pension equal to approximately 13% of the capped annual gross remuneration by combining the pension resulting from the defined benefit scheme and the pension resulting from the defined contribution scheme.

### Agreements and commitments authorised during the year

In accordance with Article L.225-40 of the French Commercial Code, we were informed of the following agreement authorised by the Board of Directors.

## Exceptional remuneration granted to members of the Board of Directors' *ad hoc* committee in respect of the exceptional assignment entrusted to said committee

Directors concerned:

### Jean-Martin Folz, Gérard Hauser, James W. Leng and Alan Thomson

#### Nature and purpose:

At its meeting of 6 May 2014, the Board of Directors authorized the payment of exceptional remuneration, within the meaning of Article L.225-46 of the French Commercial Code, to each member of the ad hoc committee formed on 29 April 2014 to review the offer received from General Electric to acquire Alstom's Energy businesses.

#### Conditions of the authorisation:

- Remuneration of €15,000 for Jean-Martin Folz, chairman of the ad hoc committee, and €10,000 for Gérard Hauser, James W. Leng, and Alan Thomson. This exceptional remuneration could have been reassessed in the event that the ad hoc committee's assignment had been extended, but this was not the case. The remuneration was paid during the year ending 31 March 2015 in a total amount of €45,000.
- The members of the ad hoc committee were entitled, upon presentation of supporting documents, to the reimbursement of all expenses incurred through their participation in the *ad hoc* committee. Reimbursements in this respect amounted to a total of €8,562.

### Agreements and commitments already approved by the Annual General Meeting

### Agreements and commitments approved in previous years but not implemented during the year

We were informed of the following agreements and commitments that had already been approved by the Annual General Meeting in previous years, which remained in force but were not implemented during the year ended 31 March 2015.

#### Underwriting agreement in connection with the share capital increase without pre-emptive subscription rights

Directors concerned:

#### Jean-Martin Folz, Director of Société Générale

#### Georges Chodron de Courcel, Chief Operating Officer of BNP Paribas and Director of Alstom until 1 July 2014

#### Nature and purpose:

On 1 October 2012, Alstom entered into an underwriting agreement with a group of banks, including BNP Paribas and Société Générale, in connection with the share capital increase without pre-emptive subscription rights carried out through a private placement for a maximum amount of  $\epsilon$ 350 million including the issue premium. The banks undertook to underwrite the placement of the new shares. The remuneration paid to the four underwriters (including BNP Paribas and Société Générale) amounted to  $\epsilon$ 6,550 thousand. A total of 13,133,208 shares were issued on 4 October 2012 representing a share capital increase of  $\epsilon$ 350 million including the issue premium.

#### Conditions of the authorisation:

The underwriting agreement was authorised in advance by the Board of Directors on 1 October 2012.

#### Agreement for industrial, commercial and financial cooperation with Bouygues

#### Persons concerned:

#### Bouygues SA

#### Patrick Kron, Chairman and Chief Executive Officer of Alstom and Director of Bouygues SA

Georges Chodron de Courcel, Chief Operating Officer of BNP Paribas and Director of Alstom until 1 July 2014

#### Nature and purpose:

Alstom and Bouygues signed an agreement for industrial, commercial and financial cooperation on 26 April 2006. The purpose of this agreement is to develop cooperation between the commercial networks of the two groups and, where possible, to realise integrated projects combining the civil engineering activities of the Bouygues Group with the equipment activities of the Alstom Group.

#### Conditions of the authorisation:

The agreement was authorised in advance by the Board of Directors on 21 April 2006 and approved by the Annual General Meeting on 26 June 2007.

#### Underwriting agreement on the bond issue of 1 February 2010

Directors concerned:

#### Jean-Martin Folz, Director of Société Générale

Georges Chodron de Courcel, Chief Operating Officer of BNP Paribas and Director of Alstom until 1 July 2014

#### Nature and purpose:

On 28 January 2010, Alstom entered into, in particular with BNP Paribas and Société Générale, an underwriting agreement in connection with its  $\epsilon$ 750 million bond issue maturing on 1 February 2017, and for which the banks agreed to underwrite the placement of the bonds. The underwriting agreement carries a fee equal to 0.35% of the nominal amount, i.e.,  $\epsilon$ 2,625 thousand. The bonds were issued on 1 February 2010.

#### Conditions of the authorisation:

The underwriting agreement was authorised in advance by the Board of Directors on 22 December 2009 and approved by the Annual General Meeting on 22 June 2010.

## Commitments falling within the scope of Article L.225-42-1 of the French Commercial Code with Patrick Kron, Chairman and Chief Executive Officer of Alstom

Director concerned:

#### Patrick Kron, Chairman and Chief Executive Officer of Alstom

#### Nature and purpose:

At its meeting of 28 June 2011, the Board of Directors reappointed Patrick Kron as Chairman and Chief Executive Officer for the length of his term of office as Director, *i.e.*, until the end of the Ordinary Shareholders' Meeting called to approve the financial statements for the year ended 31 March 2015, and also renewed the commitments made to Patrick Kron on 26 June 2007 in relation to benefits following the termination of his term of office. These commitments were amended on 6 May 2008 and 4 May 2009, and were approved by the Annual General Meeting of 23 June 2009. These commitments, the renewal of which was approved by the Annual General Meeting of 26 June 2012, are as follows:

#### Stock options and performance shares

In the event of termination of his term of office as Chairman and Chief Executive Officer, by either the Company or himself, the Chairman and Chief Executive Officer will only retain the rights to exercise stock options subject to performance conditions, and to the delivery of performance shares, granted before the end of his term of office, and that have vested in full as of the end of his term of office following the fulfilment of the conditions set forth by the plans.

Stock options and performance shares that have not vested as of the end of his term of office may not be exercised or delivered.

#### Supplemental retirement schemes

The Chairman and Chief Executive Officer is entitled to a supplemental retirement scheme based on a defined contribution plan and a defined benefit plan, which was set up in 2004.

With regard to the defined benefit plan, the Chairman and Chief Executive Officer benefits from the supplemental collective retirement scheme which covers all persons exercising functions within the Group in France whose base annual remuneration exceeds eight times the French social security ceiling. Under the scheme, entitlements are acquired gradually and represent, per year of seniority in the scheme, a limited percentage of the annual remuneration corresponding to 0.6% of the annual reference remuneration within a range of 8 to 12 times the social security ceiling and to 1.2% of the annual reference remuneration in excess of 12 times the social security ceiling. The annual reference remuneration is equal to the average fixed and variable remuneration received over the course of the past three years prior to retirement. This annual reference remuneration is capped at  $\epsilon 2$  million. Since 1 January 2008, this cap is subject to an annual revaluation in accordance with the evolution of the reference salary used to determine the AGIRC retirement scheme.

At 31 March 2015, the Company's obligations under the defined benefit plan amounted to €10,491,000, including €2,031,000 of taxes applicable to supplemental retirement schemes, as increased on 1 January 2013 and on 1 January 2015.

The defined contribution plan complements the defined benefit plan. The rights are acquired annually and correspond to 1% of the annual remuneration up to four times the social security ceiling, 4% of the annual remuneration within a range of 4 to 8 times the social security ceiling and 11% of the annual remuneration within a range of 4 to 8 times the social security ceiling and 11% of the annual remuneration within a range of 8 to 12 times the social security ceiling. Since 1 July 2014, social contributions are borne by the Company up to 95%.

The contributions paid under the defined contribution plan for the year ended 31 March 2015 amounted to €24,109, of which €23,204 was paid by Alstom.

Neuilly-sur-Seine and Courbevoie, 6 May 2015

The Statutory Auditors

PricewaterhouseCoopers Audit Olivier Lotz Mazars Thierry Colin



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AND GROUP ACTIVITIES A BAFR	174
Economic and political environment	174
Competitive environment	175
Complex and long-term contract execution	176
Technological innovation	177
Design and use of complex technologies	177
Complex homologation procedures	
applicable to trains	178
OPERATING RISKS <i>"</i> ⊕AFR	178
Costs and conditions of access to certain manufactured goods and raw materials	178
Working capital management	179
Management of human resources	179
Cost reduction programmes	179
Risks in relation to railway accidents	180
Information systems and technology risks	180
Risks in relation to environmental, health and safety regulations	181
Specific risks associated with health and safety	181

FINANCIAL RISKS & AFR	182
Currency exchange, interest rate,	
credit and liquidity risks	182
Equity risks	185
Risks in relation to pension plans	185
Risks in relation to intangible assets	186
Risks in relation to deferred tax assets	186
RISKS IN RELATION TO ACQUISITIONS, DISPOSALS AND OTHER EXTERNAL GROWTH OPERATIONS & AFR	186
RISKS IN RELATION TO THE TRANSACTIONS CONTEMPLATED WITH GENERAL ELECTRIC & AFR	187
LEGAL AND TAX RISKS ତ AFR	188
Risks in relation to legal and tax regulations	188
Export control	188
Risks with respect to intellectual property	189
Disputes in the ordinary course of the group's business	189
Allegations of anti-competitive activities and illegal payments	189
RISK MANAGEMENT POLICY AND INSURANCE Definition	191

The Content of the Annual Financial Report is identified in the summary table with the help of the pictogram \*\*\*

The section below presents the main risk factors, applicable to Alstom and to its market environment. Together with the sections "Management report on consolidated financial statements – fiscal year 2014/15" and "Description of Group activities", it constitutes the Board of Directors' report on the Group's management for fiscal year 2014/15.

Internal control and risk management procedures are described in section "Corporate governance – Chairman's report" (the "Chairman's report"), which presents in particular the annual risk assessment process ("Group risk mapping") and the Internal Control Questionnaire ("self-assessment questionnaire").

As mentioned in Note 1 to the consolidated financial statements for the year ended 31 March 2015, the Energy activities are reported as "discontinued operations" in Alstom's consolidated financial statements and they are therefore not included in orders, sales, Income from Operations and are reported under the "Net profit from discontinued operations" line. In accordance with IFRS 5, the net income from the Energy activities (discontinued operations) has been presented on a separate line of the income statement of the comparative periods. The assets held for sale and the related liabilities are presented separately from other assets and liabilities on specific lines on the balance sheet. The net cash flows attributable to the operating, investing and financing activities of discontinued operation realized over the fiscal year ended 31 March 2015 are disclosed in the consolidated financial statements for the year ended 31 March 2015 as well as the adjustments made on data published in the 2013/14 *Document de Référence*, please refer to Note 3 and Note 4 to the consolidated financial statements for the fiscal-year ended 31 March 2015.

## RISKS IN RELATION TO THE **ECONOMIC ENVIRONMENT** AND **GROUP ACTIVITIES**

## ECONOMIC AND POLITICAL ENVIRONMENT

The evolution of the markets in which Alstom operates is driven by a variety of complex and inter-related external factors, such as economic growth, political stability, public policies, the availability of credit supply and, particularly for the Energy activities, the price and availability of the different sources of fuels, as well as future demand for electricity. The rail transportation market is highly dependent on public policy regarding the environment and transportation, on growth, and on the political, economic and financial environment.

Since the crisis of 2008, the macroeconomic and financial environment remains volatile and uncertain, particularly in Europe, where significant risks are still present. Financial markets and credit supply have been periodically negatively impacted by ongoing fears surrounding the sovereign debts and budget deficits of several countries, the possibility of further downgrading of financial ratings or defaults on sovereign debt, as well as concerns about a macroeconomic environment weakened in the long-term, or regional or global returns to recessions. The resurgence of a sovereign debt crisis in Europe, particularly in Greece, could again affect the financial markets and credit markets and more generally the European and global economy which could affect the Group's activities.

Government measures to reduce public expenditures in relation to the large sovereign debts and government budget deficits, particularly in Europe, may result in an increased reduction of public investments, notably in the rail transport market as described below (which could limit the financing of new projects), and an additional tax burden increase in some countries. In addition, economic hardships could lead to governments reconsidering their environmental policies, which is one of the compelling arguments in favour of developing rail transportation.

Should the current uncertain situation in Europe persist over time or deteriorate, should the economic slowdown in certain emerging countries intensify or spread to other countries, or should the global economic environment further deteriorate, this could, in particular, result in a deepened decline in electricity consumption, a reduction in public investment as well as increased difficulties in obtaining credit or a greater risk of insolvency for key customers, suppliers and subcontractors of Alstom, and therefore have an adverse effect on the business activities, financial position, results or future outlook of the Group.

The "BRICs" countries (Brazil, Russia, India, China), in which Alstom has developed a strategy to strengthen its presence, are now showing lower growth prospects and are also experiencing monetary or political instability. As in Europe, these factors may negatively impact public policies. Beyond this immediate impact, these developments may also negatively affect the evolution of the global economy. More generally, the activities in these countries expose Alstom to a number of risks, such as fluctuations in exchange rates, restrictions on the transfer of capital, and economic and political instability.

Regarding the Transport activities, the current strategy relies on the long-term growth of the rail transportation market, which is, in turn, most notably related to the economic and demographic growth particularly in emerging countries, a growing trend toward urbanisation, the saturation of infrastructure and environmental concerns aimed at drastically reducing CO<sub>2</sub> emissions in the transportation industry by 2050 (Source: IPCC – Intergovernmental Panel on Climate Change). However, economic hardships either in certain geographic zones or worldwide could affect the growth factors on which Transport activities depend, and call its growth strategy into guestion. The French and European markets represent a significant contribution to the Transport activities and their earnings of Alstom. Therefore, the Group is particularly sensitive to macroeconomic change and to challenges associated with sovereign debt in these markets and, as a result, sensitive to the reduction, the reconsideration, or the postponement of public investments in these regions. Alstom considers that this risk can be weighted to account for the diversity of its business activities and the geographic zones in which they are exercised. However, there can be no guarantee that this diversity will effectively reduce this risk, or that these other business activities and geographic zones in which they are exercised will not face challenges.

Most of the Group's railway transportation business relies on public institutions, in particular governmental institutions that, historically, represent more than two thirds of orders recorded by the Group in the Transport activities (the ratio of orders placed by public institutions can decrease during fiscal years in which private entities place a significant amount of orders). The amount they are able to invest and spend depends on complex political and economic factors and could vary from one fiscal year to the next. Economic slowdown and public budgetary restrictions can cause a decrease in infrastructure investments, delays in placing orders and delays in executing contracts or payments, as well as a decrease in incentive-based measures to promote research and development. In periods of over-indebtedness (or of a sovereign debt crisis), the implementation of austerity or public spending reduction programmes can lead to budgetary arbitrage that has a negative impact on the volume of orders placed for transportation infrastructure projects. The availability of financing for large transportation infrastructure projects and their cost also affects the amount of public orders placed. In particular, securing this financing can be either more difficult or more expensive during a financial crisis. As a result, these factors could potentially have a significant adverse impact on the business activities, the financial position, the earnings, or the future outlook of Alstom.

Regarding the Transport activities, Alstom furthermore exercises its business activities, takes advantage of its production capacities and has developed partnerships throughout the entire world, including in non-member countries of the European Union. Alstom is present in Russia and in the CIS, in Latin America, Africa and in Asia. These geographic zones may be subject to higher political and social instability. Investment policies regarding the infrastructure are closely linked to political and regulatory changes in these regions. The commercial success of Alstom or the outlook and earnings of the partnerships put in place could, as a result, be directly or indirectly affected by an unfavourable political or economic slowdown occurring within these geographic zones.

Alstom has notably established a presence in the CIS through its 25% equity interest in the share capital of Transmashholding (TMH), the historic Russian manufacturer of railway trains, and has developed a partnership strategy with this company since May 2011 (please refer to the section entitled "Description of Group activities").

Growth projections in Russia have been subject to a downward adjustment. This has a negative impact on the investments planned by RzD, a Russian public operator, to renew its fleet of railway trains and thus on the business activities of TMH and Alstom in Russia.

In addition, the political developments in Ukraine could further affect such economic growth projections, as well as the business activities of TMH and Alstom in Russia, in particular if the international community decides to maintain or reinforce the measures aimed directly at Russia. These events could also impact the business activities of TMH's international competitors on the Russian market.

Finally, in its Transport activities, Alstom does not hedge the exchange rate risk resulting from converting TMH's earnings to Euros in the financial statements of the Group. Consequently, any decrease in the value of the Russian Ruble would have an adverse effect on TMH's contribution to the net income in Euros of Alstom, on the Euro-converted amount of dividends received by Alstom in connection with its equity interest in TMH, as well as on TMH's net carrying value (please refer notably to the section entitled "Management report on consolidated financial statements – fiscal year 2014/15" and to the Note 13.1 to the consolidated financial statements for the fiscal year ended 31 March 2015).

Worldwide demand analysis on the different markets on which Alstom operates and key drivers for each Alstom's businesses, as well as Alstom's assessment of the impact of the economic situation on its business activities are presented in sections "Description of Group activities" and "Management report on consolidated financial statements – fiscal year 2014/15".

## **COMPETITIVE ENVIRONMENT**

Alstom faces intense competition, both from large historical international competitors and regional players as well as new ones from emerging countries (particularly in Asia), where they benefit from more competitive cost structures. The consolidation initiatives on certain transport market segments that have already occurred, such as the German company Siemens' acquisition of the British company Invensys's signaling business or Hitachi's acquisition of the railway businesses of the Italian company Finmeccanica, or the consolidation of the Chinese companies

CSR and CNR, could increase this competition. This may put pressure on prices and profit margins, and also on payment terms and conditions, the manufacturing time frame, the technologies proposed and the services provided to the client, which could weaken Alstom's position in certain of its markets and, as a result, have an adverse impact on its business activities, financial position, results or future outlook.

In addition, particularly in an unfavourable economic environment, competition could further intensify.

Furthermore, although Alstom has developed and continues to develop its presence on many geographic markets, including *via* alliances and partnerships, access to certain markets can prove to be difficult, particularly if there is a local competitor benefiting from a stronghold in its home market. These types of situations could put Alstom in an unfavourable position relative to some of its competitors and slow down its expansion strategy in certain zones.

Alstom's competitive position is described in the section "Description of Group activities".

The Group considers that its strong order backlog as well as all the measures it has taken, in particular for reducing costs and adapting

headcount to demand, should enable it to remain efficient and face the current competition and the economic environment, which remains uncertain and contrasted across geographies and business activities. The initiatives taken by the Group may prove to be insufficient in case of a long-lasting downturn of the world economy, drop in demand and increasing and continued competitive pressures.

Any unfavourable development of any of the aforementioned factors may have an adverse impact on Alstom's markets and as a consequence an adverse effect on its business activities, financial position, results or future outlook.

## COMPLEX AND LONG-TERM CONTRACT EXECUTION

Alstom's business activities may lead the Group to engage in very large complex long-term contracts. Regarding the Transport activities, these complex long-term contracts may be signed by several players, *via* a consortium or the creation of a project company, particularly in the case of PPP projects (public-private partnerships) or the like, which take on concession and project financing responsibilities. Due to the complexity and the length of the projects in which Alstom participates, the actual costs and productivity could potentially differ from what the Group had initially projected. The profit margins generated by Alstom with respect to some of its contracts can, as a result, prove to be lower than those initially projected, or even lead to zero or negative profits. The variation in costs and profitability of certain contracts during their execution can also significantly affect the earnings and cash flows of the Group over a given period.

The revenue, cash flow and profitability of a long-term project vary significantly in accordance with the progress of that project and depend on a variety of factors, some of which are beyond the Group's control, such as unanticipated technical problems with equipment being supplied, postponement or delays in contract execution or in contract bidding process, financial difficulties of customers, withholding of payment by customers, and performance defaults by or financial difficulties of suppliers, subcontractors or consortium partners with whom Alstom may sometimes be jointly liable.

In addition, Alstom has signed many contracts containing requirements to comply with mandatory performance levels for the equipment it delivers or a rigorous delivery schedule. If the Group were unable to comply with these obligations, Alstom's clients could request the payment of contractual penalties, or terminate the contract in question, or even claim compensation for damages, which could have an adverse impact on the business activities, financial position, results or future outlook of Alstom.

In addition, although these cases remain extremely rare, Alstom may have to face calls of first demand bank guarantees in relation to its contracts for potentially significant amounts. As of 31 March 2015, the aggregate outstanding amount of guarantees over contract granted by banks and insurance companies totals  $\in$ 18.9 billion, including  $\in$ 7 billion for Transport activities (please refer to Note 30.1 to the Consolidated financial statements for the year ended 31 March 2015). Alstom has established strict risk control procedures applying from tendering to contract execution and monitoring, through its Risk Committees as well as procedures implemented within the Group, as described in the Chairman's report in the section "Corporate governance". However, Alstom can give no assurance that these measures enable it to accurately predict the profitability of a new contract, or to avoid or limit the deterioration of the conditions under which a contract is executed. Certain projects are or may be subject to delays, cost overruns, or performance shortfalls which may lead to the payment of penalties or damages. Such difficulties may have a significant adverse impact on the Group business activities, financial position, results or future outlook.

In addition, unfavorable geopolitical events in the geographic areas in which Alstom operates can increase difficulties relative to the conditions under which the contracts the Group has signed are executed, extend execution periods, or trigger unexpected legislative or regulatory changes that could significantly increase the costs of execution initially projected by Alstom for these contracts. As a result, these events could have an adverse impact on the business activities, financial position, earnings or future outlook of Alstom.

In Transport's activities these long-term contracts are signed with customers that, for the most part, are public entities. These types of customers require that the Group comply with project bidding and open market specificities, which limit its ability to negotiate certain contractual terms and conditions and can force it to accept less favourable conditions. For example such customers may insist on a payment schedule that reduces or eliminates advance payments or that leads to negative cash-flow during the execution of the project, mandatory technical performance levels and requirements associated with the issuance of parent company guarantees. Indeed, public procurement procedures often take the form of adherence contracts that cannot be amended, causing bidders to risk disqualification if they attempt to include special considerations in their offers. These particularities could potentially expose Alstom to significant additional risks or costs that could affect the profitability of its projects and have an adverse impact on its business activities, financial position, earnings, or future outlook. Furthermore, a growing portion of Alstom's order backlog includes significant contracts that can impose manufacturing or purchasing requirements in countries in which the project is being executed, particularly in emerging countries such as South Africa or Brazil, but also in other countries such as the

United States or Russia. In order to win contract bids and to complete the projects associated with these contracts, Alstom must build local production capacities, or either secure or increase its volume of third party purchases from new local suppliers. At times, these contracts also restrict Alstom's freedom to select its own partners, which can lead to constraints regarding costs, refinancing, target volumes and execution. Finally, the political instability that exists in certain countries can have an impact on the public entities with which long-term contracts are signed in the Transport activities and, as a result, have the consequences above mentioned.

## **TECHNOLOGICAL INNOVATION**

The Group designs and manufactures high-technology solutions in the power generation and transmission and rail transport sectors. These markets are already extremely competitive with very powerful international conglomerates and in addition have new comers from the new economy showing up.

The Group develops modular and flexible offers covering components to complete systems in order to meet customers' expectations. This positioning puts technological innovation as a key lever for competitiveness.

The markets in which the Group operates quickly evolve with the development of new technologies, products and services; their transformation is enhanced by newcomers especially from the fields of digital and big data. Alstom has to anticipate these changes and integrate new technological enablers or new solutions into its sales offer. This requires, on the one hand, significant expenditures and investments of which the future profitability cannot be guaranteed and, on the other hand, a strategy of innovation increasingly developed through partnerships.

As part of that strategy, the Group has launched very large research and development programmes, internally and also externally, taking clearly into account the so-called digital transformation and also an increasing demand in the fields of services. Regarding the Energy activities, these innovation programmes are primarily related to:

- materials, architectures and control-command technologies aiming towards the improvement of electricity generators in terms of yield, flexibility and functionality;
- the continued improvement of Alstom's range of electricity generation equipment;

- development of new system architectures for turnkey infrastructures;
- research on multiscale power transmission solutions;
- development of new control architectures for grids where generation and storage are increasingly distributed, non-homogeneous and intermittent;
- high and ultra high-voltage transmission technologies;
- smart grid systems; and
- development of wind turbine technologies.

Regarding the Transport activities, the Group has implemented a very large research and development and innovation programme addressing:

- the renewal of its offer for railway trains and their adaptation to the needs of emerging countries;
- the development of advanced signalling systems;
- the improvement of the environmental performance of rail systems;
- the development of innovative service solutions based on predictive maintenance.

In a highly competitive environment, the Group remains however exposed to the risk that more innovative or more competitive products or services technologies are developed by competitors or introduced on the market more quickly or that the products it develops are not accepted by the market. This may have a material adverse impact on the business activities, financial position, results or future outlook of the Group.

## DESIGN AND USE OF COMPLEX TECHNOLOGIES

The Group designs, manufactures and sells several high-value products and solutions of large individual value that are used particularly in major infrastructure projects. Increasingly important expectations are facing the Group in terms of environmental performance. Flexibility requirements are also enhanced, resulting in significant evolution of the specifications for both Transport and the Energy solutions. Regarding the Transport activities, Alstom is required to address the evolution of customers' demands for more and more complex tenders with increasing constraints and uncertainties in homologations. Alstom is also required to introduce new, highly sophisticated and technologically complex products on increasingly short time scales. This necessarily limits the time available for testing and increases the risk of product defects and their financial consequences. It is sometimes necessary to fine-tune or modify products during the production cycle or while the client is using them. Because Alstom manufactures some of its products in series, it may then need to make such modifications throughout the production cycle. In addition to the direct cost of such modifications or of managing returned products, Alstom could be found liable for delays and corresponding operational losses suffered by its clients, which could trigger the payment of penalties or damages.

In addition, Alstom is increasingly using or combining complex technologies that evolve very quickly, or components developed by third parties that integrate such technologies. This evolution requires the implementation of a design and approval process that is more robust in order to shorten the development phase, monitor technological evolution, and comply with product safety requirements. This could trigger additional costs that are more significant than initially anticipated, or cause delays in delivery. At the same time, when it sells its products or enters into maintenance contracts, Alstom may be required to accept onerous contractual penalties, in particular related to performance, availability and delay in delivering its products, as well as after-sales warranties. Alstom's contracts may also include clauses allowing the customer to terminate the contract or return the product if performance specifications or delivery schedules are not met. As a result of these contractual provisions and the time needed for the development, design and manufacturing of new products, potential problems encountered with Alstom's products may result in significant unanticipated expenditures, including without limitation additional costs related to securing replacement parts and raw materials, delays and cost overruns in modifying the products and the related negotiations or litigation with affected clients. In instances where such difficulties occur, Alstom cannot ensure that the total costs that it ultimately incurs will not exceed the amount that it has provisioned. Furthermore, given the technical sophistication of its products, Alstom can give no assurance that it will not encounter new problems or delays in spite of the design and technical approval process in place. Any significant problem occurring in connection with the development, manufacturing, reliability, or the performance of Alstom's products could have an adverse impact on the business activities, financial position, results, or future outlook of the Group, as well as on its reputation and that of its products.

## **COMPLEX HOMOLOGATION PROCEDURES APPLICABLE TO TRAINS**

Regarding the Transport activities, the marketing of the Alstom's products depends, most notably, on compliance with rail transportation security standards that differ widely at the global level and are governed by many regulatory authorities. This creates a complex environment, especially in Europe, and disrupts the process of securing the homologation of trains.

The process for securing the homologation of trains may last longer and be more costly than initially anticipated due to the extent of testing and other supporting technical elements required by the authorities. In the past, Alstom has faced difficulties associated with complex homologation procedures, particularly in Germany. In addition, contracts increasingly include language that requires Alstom to bear the risks and obligations associated with the homologation process. The materialisation of these risks could trigger cost overruns and the payment of significant penalties or damages, service interruptions affecting the products, or even the risk of cancellation of the contract in extreme cases of prolonged delays. However, the situation varies by country and technology.

No guarantee can be made regarding the time frame required for obtaining homologations, and any significant problem in this domain could have an adverse impact on the business activities, financial position, earnings, or future outlook of Alstom.

## OPERATING **RISKS**

## COSTS AND CONDITIONS OF ACCESS TO CERTAIN MANUFACTURED GOODS AND RAW MATERIALS

In the course of its business, Alstom uses raw materials and manufactured goods in amounts which vary according to the project and which may represent a significant part of the contract price signed by Alstom. Given the difficulties and delays in the delivery of certain manufactured goods and the extreme volatility of the prices of raw materials such as steel, stainless steel or copper, the Group cannot guarantee that corresponding variations in cost will be fully reflected in contract prices, and may be unable to recoup these raw material price increases, which could affect the profitability of such contracts.

Any unexpected unfavourable evolution in this area may create a negative pressure on profit margins and adversely affect the business activities, financial position, the results or the future outlook of the Group. In addition, Alstom could be dependent on certain suppliers that satisfy the criteria set by the Group. If a dependent relationship exists,

the facilities are clearly identified and existing suppliers are subject to action plans for development. Plans aimed at securing a larger number of supply sources are put in place and the option of having the Group manufacture these products can be envisaged. However, Alstom cannot guarantee that these development plans will prove sufficient or ensure a timely availability.

Certain suppliers or subcontractors could experience financial difficulties or be unable to comply with the quality standards or deadlines set by Alstom, or refuse to accept certain key conditions relative to the technical specifications imposed by Alstom's end client. If one of these suppliers or subcontractors fails to fulfil its obligations, or if contractual relations with one of them are severed, delivery delays, unexpected costs, or reduced technical performance that could lead to the payment of penalties or damages might occur. Even though the Group has a system to detect these failures, Alstom cannot guarantee that it may not be affected by delays in deliveries, quality defects or the financial difficulties that its suppliers or subcontractors may face. Such events could have an adverse impact on the business activities, financial position, results or future outlook of Alstom, as well as on its reputation and that of its products.

Note 27.6 to the consolidated financial statements for the fiscal year ended 31 March 2015 presents the exposure to raw materials and manufactured goods and the management policy of this risk.

# WORKING CAPITAL MANAGEMENT

The structure and duration of Alstom's projects may result in the disbursement of significant sums before the contract begins to generate any cash flow. As a result, Alstom's ability to negotiate and collect customer advances and progress payments is therefore an important element of its working capital management. Unexpected events associated with the execution of the contracts signed by the Group, which are described in the various risk factors above, increase the scope of this risk. Additional information regarding customer deposits and advances and working capital are given in Notes 17, 18 and 21 to the consolidated financial statements for the fiscal year ended 31 March 2015. Finally, the development of the Group in emerging

countries, often through the implementation of partnerships, notably for the Transport activities, may also generate the risk that working capital needs related to these developments further increase, particularly in the launch phase. Any unexpected discrepancy between the Group's disbursements and amounts received on orders placed, or even any reduction in the overall volume of orders placed or a deterioration of the payment terms on these orders has an automatic adverse impact on the evolution in working capital requirements and, as a result, can have a negative effect on the business activity, financial position, results or future outlook of Alstom and its cash flow needs (please refer to the section "Financial risks" below).

# MANAGEMENT OF HUMAN RESOURCES

Employment market competition is fierce when it comes to hiring the highly qualified managers and specialists needed to complete the work Alstom requires, particularly in certain emerging countries. The success of Alstom's development plans depends, in part, on its ability to develop skills, to retain its employees, and to recruit and integrate additional managers and skilled employees. The Group can give no assurance that it will be successful in recruiting, integrating and retaining such employees as needed to accompany its business development, in particular in emerging countries. Conversely the measures to adapt headcount to the evolution of demand may result in significant social risks which may have an adverse impact on the expected costs reductions and Group production capacities.

# **COST REDUCTION PROGRAMMES**

In recent years, Alstom has undertaken a number of continuous improvement measures (costs reduction and adaptation of the production and non-production employee base) in order to adapt to changes in client demand, to competitive pressures, and to improve its operating performance and, as a result, its competitiveness. These plans are aimed at reaching its profitability goals while remaining competitive on the market. Due to the intensification of competition and to an economic climate that remains uncertain and contrasted across geographic zones, Alstom has accelerated its savings plans within the framework of a plan launched in November 2013 at the Group level called the "d2e" ("dedicated to excellence") programme.

Staff reduction measures in markets in which demand has decreased could expose Alstom to significant social risks that could have an adverse impact on both the expected savings and the production capacities of Alstom.

Even though Alstom has reduced costs in preceding fiscal years, it cannot be guaranteed that further cost reductions will enable it to reach the savings objectives set under the "d2e" performance plan, or that the measures will be implemented successfully or within the set time frame. The measures could also prove to be insufficient in the event of a sustained slowing down of the global economy. Any one of these factors could have an adverse impact on the business activities, financial position, results, or the future outlook of the Group.

# **RISKS IN RELATION TO RAILWAY ACCIDENTS**

In the event of a railway accident involving equipment supplied by Alstom, the customer, potential victims, or their insurers could take action against Alstom in the context of legal proceedings with respect to damages suffered. Even if the cause of the accident cannot be immediately attributed to the failure of the equipment supplied by Alstom, the simple fact that Alstom supplied equipment involved in a railway accident could suffice to implicate Alstom in legal proceedings for as long as the circumstances surrounding the accident have not been clarified. This type of accident may also cause the authority responsible for transportation safety to decide on the temporary cancellation of a granted homologation. Furthermore, railway accidents are typically subject to intense media coverage, which could potentially affect Alstom's reputation as well as its public image regarding the reliability of its products. Alstom relies on many internal verification and approval procedures that enable it to control the quality and the safety of its equipment before it is made operational, in order to avoid the risk of an accident and to ensure the safety of passengers (please refer to section entitled "Risk management policy and insurance").

Despite the existence of these procedures, Alstom cannot guarantee that railway safety will be risk-free. The occurrence of a railway accident involving equipment supplied by Alstom could, in the event that equipment failure is found to be the cause of such accident, have an adverse impact on the business activities, financial position, earnings, or future outlook of Alstom, as well as on its reputation and that of its products.

# **INFORMATION SYSTEMS AND TECHNOLOGY RISKS**

The Group relies on state of the art information systems and technology to support its business activities and promote operational efficiency. The Group's broad geographic footprint, its diverse businesses and ranges of products, and the integration of successive business activities all makes for a complex environment. The Group has also set up partnerships to carry out the management of certain IT infrastructures and the support of some applications.

The main issues relating to the information systems and technologies used by the Group are ensuring business continuity, protecting sensitive data and intellectual property rights, maintaining systems availability and managing IT assets compliance.

Within the framework of a centralised management of the Group's information systems and infrastructures, Alstom develops global common practices to reinforce the control and security of information technology within the Group, including when facing the risk of a cyberattack. The technologies used to gain unauthorised access, damage or sabotage systems change frequently and are often not recognised before launch against their target.

Alstom has defined risk management rules, particularly with respect to data protection, access to confidential data, security of its applications and infrastructures, and Alstom has so far not experienced significant difficulties in this area. However, Alstom can give no assurance that these rules will be sufficient to prevent any risks in this domain, and the occurrence of complications affecting any one of them could have an adverse impact on the business activities, financial position, results or the future outlook of the Group. Alstom is also involved in a multi-year programme for the renewal of certain of its important applications aimed at adapting the planned obsolescence of systems, deploying standardised solutions for its main units and rationalising its operation processes. The magnitude of the programme and the complexity of the environment create an intrinsic risk, which precludes Alstom from guaranteeing, without reservations, that its objectives will be reached within the set time frame, the quality level, and the allocated budgets.

Alstom cannot guarantee that the technological level of the information systems it uses will be appropriate given its business activities and development projects, or that these systems will not be subject to technical failures. In addition, the external service providers contracted for these projects could prove to be defaulting.

In the event that the systems used by Alstom do not operate at a satisfactory level, this could alter the quality of its products and result in claims being filed against it, a deterioration of the brand and, more generally, of its reputation. In addition, technical failures or unsatisfactory levels of performance of the information systems used by Alstom could require additional investments, which could affect the financial position and results of Alstom.

The Information Systems & Technology function is presented in the Chairman's report, section "Corporate governance – Chairman's report – Internal control and risk management procedures' report".

# RISKS IN RELATION TO ENVIRONMENTAL, HEALTH AND SAFETY REGULATIONS

Alstom's business activities are industrial activities involving potentially dangerous processes and pollutants, which are used not only in its factories, but also during the construction phase of the projects in which it participates, as well as in the context of the services it offers. Alstom is subject to a broad range of laws and regulations relating to environment, health and safety in each of the jurisdictions in which it operates. These laws and regulations impose increasingly stringent environmental and employee protection standards regarding, among other things, air emissions, wastewater discharges, the use and handling of hazardous waste or materials, waste disposal practices and depollution, working conditions, exposure to hazardous chemical agents, compliance with applicable regulations for machine s and equipment used for fire safety purposes. These standards expose the Group to the risk of substantial environmental costs and liabilities, including in relation to divested assets and past activities.

In most of the jurisdictions in which the Group operates, its industrial activities are subject to obtaining permits, licences and/or authorisations, or to prior notification. Alstom's facilities must comply with these permits, licences or authorisations and are subject to regular inspections by competent authorities. The Group believes that its facilities are in compliance with their operating permits and that its operations are generally in compliance with environmental laws and regulations.

The Group invests to ensure it conducts its business activities while reducing the risk of harm to the environment or health and safety of its employees. It regularly makes the necessary investments to meet the requirements of the regulations in force.

Alstom uses in its manufacturing processes chemical agents or manufacturing components that include chemical agents. Regulatory changes (such as the REACH regulations in Europe or other equivalent regulations particularly in the United States, in China and in Russia) could ban these products from the European market or the world market. This could force Alstom to modify its manufacturing processes, face interruptions in supply, carry out chemical substance substitution programmes, or offset the lack of availability of the spare parts necessary for the maintenance of its products and, as a result, could generate significant cost overruns that are not currently quantifiable. Alstom implements monitoring processes in order to anticipate these risks, but yet cannot guarantee that its entire supply chain does the same, and cannot anticipate all of the regulatory changes that might occur in the future.

In the Transport activities, the regulations and technical norms applicable to the market introduction of railway systems impose increasingly stringent guidelines regarding the environment in countries in which the Group operates. These requirements could trigger significant investments or impose technical constraints, which could affect the financial position and earnings of Alstom's Transport activities.

It is not possible to provide any assurance that the Group will not be required to bear the costs of or will not be found liable for environmental matters, including in relation to past cases of pollution caused by thirdparties, past activities or assets sold, to the business activities of its subsidiaries or subcontractors, or to its obligations concerning health and safety. Furthermore, the Group cannot guarantee that amounts budgeted or provisioned for renovations and investments in projects associated with the environment, health and safety will be sufficient enough to cover such an unforeseen expense or necessary investment. In addition, the discovery of new conditions or facts, or future changes in environmental, health and safety laws, regulations or case law may result in increased liabilities or the required costs to bear that are likely to have a material effect on the business activities, financial position, earnings or future outlook of the Group, as well as on its reputation.

The Group has provisions of  $\$ 43.8 million to cover environmental risks linked to its activities as of 31 March 2015, including  $\$ 19 million for the Transport activities.

# SPECIFIC RISKS ASSOCIATED WITH HEALTH AND SAFETY

The very large diversity and nature of the business activities carried out by Alstom, the heterogeneity of safety norms and regulations in the countries in which Alstom operates, the diversity of the locations in which it operates (such as factories, infrastructure worksites, or railway network), as well as the potential application of different safety standards by Alstom's partners and clients, create risks that could lead to serious accidents. These risks could potentially cause harm to human lives or to the physical integrity of persons. Such risks can also trigger various criminal, civil or administrative sanctions, including the temporary shutdown of an installation while authorities conduct their investigation. Although Alstom has developed strict rules on health and safety, and conducts training sessions and audits to minimise these risks, their occurrence cannot be totally excluded. These elements could have an adverse impact on the business activity, financial position, earnings or future outlook of the Group, as well as on its reputation.

Furthermore, Alstom has been the target of statements on behalf of employees alleging work-related illnesses caused by past exposure to asbestos, as well as legal action under which compensation is sought based on claims of an alleged exposure to asbestos as indicated under the Note 30.2 to the consolidated financial statements for the year ended 31 March 2015. Alstom cannot guarantee that no new liability cases will be filed against it in France or outside of France on behalf of current or former employees who may have been exposed. More generally, Alstom's business activities could expose employees to substances that are not currently considered as likely to cause health problems but that could, as our knowledge evolves, be analysed differently in the future and lead employees to investigate the potential liability of Alstom in the future. Similarly, it is important to note that regulations setting the tolerance levels and thresholds for the exposure to certain substances have become increasingly stringent and call for levels that are lower than those specified in applicable regulations with which Alstom complies. The surveillance and security procedures implemented by Alstom or changes in regulations can also lead Alstom to relinquish the use of certain substances currently considered risk-free, to modify its industrial installations, or to make significant investments, which could generate additional costs that are not currently quantifiable. These factors could potentially have an adverse impact on the business activities, financial position, earnings, or future outlook of Alstom, as well as on its reputation.

# FINANCIAL **RISKS**

# CURRENCY EXCHANGE, INTEREST RATE, CREDIT AND LIQUIDITY RISKS

The Group is significantly exposed to currency exchange risks. Note 27 to the consolidated financial statements for the fiscal year ended 31 March 2015 presents the Group's exposure and sensitivity to currency exchange and interest rate, the exposure to credit and liquidity risks, as well as the management policy of these risks. Detailed information on the Group financial debt amounting to €5,186 million as of 31 March 2015 is also given in Note 26 to the consolidated financial statements for the fiscal year ended 31 March 2015.

# **Currency risk**

# **Operational risk**

In the course of its operations, the Group is exposed to currency risk arising from tenders submitted in foreign currency, awarded contracts and any future cash out transactions denominated in foreign currency. Currency risk exists when the currency of the contract or disbursement is different from the functional currency of the subsidiary concerned by the offer or contract. Main currencies triggering a significant exposure for the fiscal year ended 31 March 2015 are the American Dollar and the South African Rand for the Transport activities and the American Dollar and the Swiss Franc for the Energy activities. The hedging taken by the Group during tender periods or during contract execution is presented in Note 27.2 to the consolidated financial statements for the fiscal year ended 31 March 2015.

All hedges are negotiated by ALSTOM Holdings acting as a central treasury of the Alstom Group ("Alstom Treasury Center") and recorded as an internal hedge contract between Alstom Treasury Center and the relevant subsidiary. When local regulations do not allow internal hedges, hedging contracts are recorded directly between banks and the Group's legal entities.

Although the Alstom's policy is to systematically hedge its foreign currency risks and if almost all hedging instruments qualify for hedge accounting, changes during the performance of contracts can lead Alstom to terminate some hedges or take new ones. No assurance can be given that these hedges will be sufficient.

# **Risk of conversion**

The Group does not hedge the currency risk related to investments in foreign subsidiaries and arising from the conversion into euros of the financial statements of its subsidiaries consolidated in the Group's consolidated financial statements.

The following table shows the breakdown of the consolidated net equity in the main currencies as of 31 March 2015.

(in € million)	Transport activities Consolidated net equity	Energy activities Consolidated net equity
Indian Rupee	43	836
US Dollar	298	556
Brazilian Real	132	572
Chinese Yuan	234	464
Euro	(2,928)	3,473
Other Currencies	754	(211)
TOTAL	(1,466)	5,690

The following table shows the sensitivity of the Group consolidated sales (Transport activities) to a change in the exchange rate of the currencies below:

	Impact on sales (in € million)		
Fiscal year 2014/15	Variation of 1%	Variation of 5%	
Indian Rupee	0.4	2.1	
US Dollar	3.4	17.0	
Brazilian Real	1.7	8.5	
Chinese Yuan	0.6	3.1	
Sterling	5.0	25.1	

In the fiscal year ended 31 March 2015, the change in exchange rate had an impact of €45 million on the amount of consolidated sales of Alstom.

The following table shows the sensitivity of the Group equity (Energy and Transport activities) to a change in the exchange rate of the currencies below:

	Impact on equity before tax (in € millio		
Fiscal year 2014/15	Variation of 1%	Variation of 5%	
Indian Rupee	8.8	43.9	
US Dollar	8.5	42.7	
Brazilian Real	7.0	35.2	
Chinese Yuan	7.0	34.9	
Sterling	0.2	1.1	

In the fiscal year ended 31 March 2015, the change in exchange rate had an impact of €292 million on Alstom's equity.

# Liquidity risk

In addition to its available cash and cash equivalents, amounting to €2,269 million as of 31 March 2015 (of which €1,599 million for Transport activities), the Group has a revolving credit facility maturing on the earlier of completion of the proposed transaction with General Electric and 16 December 2016, amounting to €1.350 billion, which is fully undrawn. The lenders to this revolving credit facility have confirmed that the proposed transaction with General Electric will not create any event of default under this facility. The Group also has additional facilities amounting to a total of €1.600 billion fully undrawn as of 31 March 2015, available up to the completion (and subject to the non-cancellation) of the proposed transaction with General Electric, maturing on the earlier of the completion of the proposed transaction with General Electric.

with General Electric and 1 December 2015 (the "Bridge Facilities" and together with the revolving credit facility the "Credit Facilities").

In light of the above and of the maturity of its debt described below, the Group considers that, subject to below, it has sufficient financial flexibility to meet its financial obligations and needs in the difficult commercial context which adversely impact its Energy activities since the announcement of the proposed transaction with General Electric, and which has resulted in a deterioration of the Group's net working capital. The Group intends to replace the Credit Facilities with a new credit facility in an amount of  $\epsilon400$  million which it considers will be sufficient to cover its financial obligations and working capital requirements and which would be effective on the day of the completion of the proposed transaction with General Electric.

## **BONDS ISSUANCE MATURITIES**

Instrument	Amount (in € million)	Maturity	Interest rate
Capital market			
Bonds	500	5 October 2015	2.875%
EMTN	500	2 March 2016	3.875%
Bonds	750	1 February 2017	4.125%
EMTN	350	11 October 2017	2.250%
Bonds	500	5 October 2018	3.625%
EMTN	500	8 July 2019	3.000%
Bonds	750	18 March 2020	4.500%

Pursuant to its bonds and guarantees programs, the Group has a committed bonding guarantee facility allowing for the issuance of bonds expiring, subject to below, on 27 July 2016 and of which the maximum amount is  $\epsilon$ 9 billion (the "Committed Bonding Facility"). The ability to obtain sufficient sources of bonding is for the Group a condition to bidding, obtaining new orders and receiving advances and progress payments from the clients. The banks to the Committed Bonding Facility have confirmed that the proposed transaction with General Electric will not create any event of default under this facility. As of 31 March 2015 the available amount under the Committed Bonding Facility is  $\epsilon$ 2 billion. In addition the Group has non-committed bilateral lines in numerous countries of up to a total amount of  $\epsilon$ 25.4 billion of which an available amount of  $\epsilon$ 13 billion as of 31 March 2015. The Group will not be entitled

to make requests for the issue or extension of bonding guarantees under the Committed Bonding Facility following completion of the proposed transaction with General Electric. The Group intends to replace the Committed Bonding Facility with new bonding guarantee facilities in an amount corresponding to its business needs and which would be effective on the day of the completion of the proposed transaction with General Electric.

The Credit Facilities and the Committed Bonding Facility (together the "Facilities") are subject to the following financial covenants on the basis of consolidated data, also disclosed in Note 27.5 to the consolidated financial statements for the fiscal year ended 31 March 2015. Alstom complied with these covenants as at 30 September 2014.

Covenants	Minimum Interest	Maximum total debt <sup>(2)</sup>	Maximum total net debt
	Cover <sup>(1)</sup>	(in € million)	leverage <sup>(3)</sup>
	3	6,000	3.6

 Ratio of EBITDA (Earnings Before Interest and Tax plus Depreciation and Amortisation) to net interest expense (excluding interest related to obligations under finance lease). It amounts to 0.6 as of year end 31 March 2015 (8.0 as of year end 31 March 2014).

(2) Maximum Total debt corresponds to borrowings, i.e. total financial debt less finance lease obligations. This covenant would apply if the Group has no longer an "Investment grade" rating which is not the case as of 31 March 2015.

(3) Ratio of total net debt (Total debt less short-term investments or trading investments and cash and cash equivalents) to EBITDA. The net debt leverage as of 31 March 2015 is 26.6 (1.9 as of 31 March 2014).

As Alstom would not comply with some of these financial covenants as of 31 March 2015, it took the initiative to obtain and has obtained a consent from the lenders to the Facilities to waive compliance with the financial covenants in each of the Facilities and any event of default in relation with their breach until the completion of the proposed transaction with General Electric (and subject to such completion) - until the earlier of 1 December 2015 or the completion of the proposed transaction - or the announcement date specifying the non-completion of the proposed transaction with General Electric (the "Waiver").

In the event that it is announced that the proposed transaction with General Electric will not go ahead or, if the proposed transaction with General Electric does not complete by 1 December 2015, each of the Facilities would be in default as the Waiver of the financial covenants would lapse. This is likely to result in drawings under the Credit Facilities and requests for bonding guarantees under the Committed Bonding Facility being suspended and the possibility that all amounts outstanding under the Credit Facilities and the Committed Bonding Facility becoming immediately due and payable. This may also result in a significant part of the other debt of the Group becoming immediately repayable through the implementation of cross-default or cross-acceleration provisions contained in most of the Group's financing agreements and outstanding securities. In such circumstances, in the current state the Group would not have the funds required to immediately repay these debts or might not have access to new bonding guarantee capacity. Although the Group would attempt to raise liquidity from other sources and to negotiate with its financial partners to seek a waiver of such right or an amendment to the relevant agreements, the Group cannot ensure that the outcome of these negotiations would be successful and that liquidity would be raised at acceptable conditions and time frame.

Alstom is rated by the rating agencies Moody's Investors Services and Standard & Poor's since May 2008. The ratings below are regularly reviewed and the Group cannot ensure that they will remain at the same level.

Agencies		
Moody's Investors Services <sup>(1)</sup>		
Short-term rating	Р-3	
Long-term rating	Baa3 (outlook positive)	
Standard & Poor's <sup>(2)</sup>		
Short-term rating	А-з	
Long-term rating	BBB - (outlook negative)	
(1) Moody's Investors Services revised the long-term credit rating from		

Baa2 to Baa3 (outlook stable) on 20 June 2013, and revised the longterm outlook from stable to negative on 23 January 2014 and then from negative to positive on 25 June 2014.

(2) Standard & Poor's revised the long-term credit rating from BBB (outlook negative) to BBB - (outlook stable) and revised the short-term credit rating from A-2 to A-3 on 24 April 2014, and then revised the long-term outlook from stable to negative on 23 December 2014.

As of today the Group believes it faces no major risk to its access to financial markets. The non-completion of the transaction contemplated with General Electric would however in all likelihood entail a downgrading of Alstom's rating. Any downgrading of Alstom's rating would unfavourably impact the financial conditions of the Group's financings and the access to certain financings, in particular the access to the commercial paper market which is used by the Group on a regular basis to finance its working capital requirements. This would result in a substantial deterioration of the Group's financial situation.

Additional information regarding the specific management of financial risks is presented in the Chairman's report in the section "Corporate governance".

# **Interest rate risk**

The Group has a fixed-rate debt policy on interest rate risk. The exposure to interest rate fluctuations is primarily related to the management of free cash flow. Accordingly, the Group does not implement a policy of active management of its interest rate risk. However it may enter into transactions in order to hedge its interest rate risk on a case-by-case basis according to market opportunities. Additional information is given in Note 27.3 to the consolidated financial statements for the fiscal year ended 31 March 2015.

# Credit and/or counterparty risk

Credit risk and/or counterparty risk is the risk that one party to a contract with Alstom fails to meet its contractual obligations, causing a financial loss for Alstom.

To reduce its exposure in this area, Alstom analyses credit risks and political risks over projects execution, particularly with regard to the funding scheme used by its customers, and secures the identified

# **EQUITY RISKS**

The Group holds majority shareholdings in listed companies it controls and it consolidates, and whose market values are continuously fluctuating. In the context of its current cash management, Alstom does not use share instruments. In addition, Alstom has to finance pension plans in several countries (mainly in the United Kingdom and in Germany for the Tranport activities) in which a portion of their assets is financial exposure through *ad hoc* payment securities or by taking out public or private credit insurance. No external customer represents individually 10% or more of the Groups consolidated sales as indicated in Note 5.3 to the consolidated financial statements for the fiscal year ended 31 March 2015. Alstom also analyses the financial solvency of its partners, suppliers and subcontractors to ensure their financial capacity to meet their contractual obligations. Regarding banking counterpart risk, the Group cash and cash equivalents are entirely invested deposits with banks of first rank. The Group accesses financial markets *via* banking counterparts of first rank.

However, among Alstom's counterparties (including clients, partners in consortium or in joint venture, suppliers and subcontractors), a significant credit and/or political risk deterioration may occur during contract execution which may cause them to be unable to pay upon delivery, or to stop an ongoing order. Cancellation of orders may also occur. These risks could have adverse effects on revenues, profitability, financial position or the results of the Group.

invested in equity securities. Any change in the stock market may have an impact on the valuation of the assets and hence on the Company's shareholders' equity and liquidity needs. Alstom considers that it has no significant exposure to equity risks, except risks in relation to defined benefit pension plans described below. See also Note 25 to the financial statements for the fiscal year ended 31 March 2015.

# **RISKS IN RELATION TO PENSION PLANS**

Pursuant to certain of the Group's defined benefit schemes, notably in the United Kingdom and in Germany, Alstom is committed to providing cash to cover differences between the market value of the plan's assets and required levels of coverage for such schemes over a defined period. The Group projected benefit obligations are based on certain actuarial assumptions that vary from country to country, including, in particular, discount rates, rates of increase in compensation levels and rates of mortality.

Changes in market conditions may change substantially, up or down, the financial coverage of the Group's obligations on pensions (see above). Thus, unfavorable market conditions may have a negative effect on the Group's financial position. As at 31 March 2015, provisions for pension obligations totaled €2,215 million (against €1,504 million as at 31 March 2014) including €454 million for Transport activities (against €335 million as at 31 March 2014).

Further details on the methodology used to assess and to allocate pension assets and liabilities together with the annual pension costs are included in Notes 2.3.22 and 25 to the consolidated financial statements for the fiscal year ended 31 March 2015.

The Pension Committee supervises and monitors pension plans and other employee benefits as described in the Chairman's report (section "Corporate governance – Chairman's report – Internal control and risk management procedures' report").

# **RISKS IN RELATION TO INTANGIBLE ASSETS**

Intangible assets of Transport activities consist primarily of goodwill and capitalised development costs. As of 31 March 2015, goodwill of Transport activities amounted to €688 million (see Note 11 to the consolidated financial statements for the fiscal year ended 31 March 2015) from the acquisition of companies in recent years. As of 31 March 2015, the capitalised development costs of Transport activities amounted to €377 million from the resources generated by the Group to develop new technologies/products. Every year, the Group tests for the impairment of its non-amortised intangible assets. In addition, the Group also carries out impairment tests if an event likely to cause the impairment of certain capitalised development costs occurs. Alstom believes that its consolidated financial statements give a true picture of its assets with respect to the IFRS rules. However, the Group cannot exclude that future events, unpredictable by nature, are likely to result in the impairment of certain intangible assets on its balance sheet. Significant impairments (following changes in market appreciation, development opportunities, growth rate or profitability, resulting from either exogenous or endogenous factors to the business activity) could have an adverse effect on the assets, financial position and results of the Group. In compliance with IFRS 5, the assets of the Energy activities have been assessed in the light of the transaction contemplated with General Electric. If this transaction would not be completed, the Group cannot exclude that it may have to record potential impairments.

# **RISKS IN RELATION TO DEFERRED TAX ASSETS**

As of 31 March 2015, the deferred tax assets of the Group amounted to  $\epsilon$ 1,913 million including  $\epsilon$ 732 million for Transport activities. These deferred tax assets are recognised in the Group's balance sheet for an amount that the Group expects to be able to recover. However, the Group may be unable to realise the expected amount of deferred tax assets if future taxable income is less than expected. Alstom also bases its estimates regarding the collection of deferred tax assets on its understanding of the application of tax regulations, which could be called into question as a result of either changes in tax and accounting regulations, or tax audits or litigation likely to affect deferred taxes. If the Group believed that it could not realise its deferred taxes in the future, it should no longer recognise these assets on its balance sheet, which would have an adverse effect on the assets, financial position and net results of the Group.

# RISKS IN RELATION TO **ACQUISITIONS, DISPOSALS** AND OTHER **EXTERNAL GROWTH OPERATIONS**

As part of its development strategy, Alstom may complete acquisitions of businesses and/or companies, as well as joint ventures and partnerships. The Group has notably implemented an important number of joint ventures and partnerships in emerging countries, in particular Russia, Kazakhstan, Algeria, India, South Africa and China, in order to enter and develop these new markets. The Group also contemplates to acquire General Electric's Signalling business ("GE Signalling") and to create joint-ventures as part of the transactions envisaged with General Electric mentioned below.

These operations include risks, in particular in relation to the difficulties that may arise in evaluating assets and liabilities relating to these operations, in integrating people, activities, technologies and products, in implementing governance and compliance systems and procedures, as well as in relation to potential political or economic instability depending on the countries as the case may be. Although the Group monitors the risks relating to these operations, no assurance can be given that acquired businesses or companies do not contain liabilities which were not identified at the time of the operation for which Alstom would have no or insufficient protection from the seller or partner. No assurance can also be given that such acquisitions, joint ventures and partnerships may not result in additional financing needs, increased acquisition and integration costs, as well as industrial property risks, disagreements or deadlocks between partners, or that the actual financial performance shall be in line with the original assumptions. Thus, the risks associated with the valuation, as well as undeclared liabilities and the integration of operations (management of complex procedures for the integration of employees, products, technologies and other assets of the acquired company to ensure expected value and expected synergies) may be significant. The occurrence of such events is likely to have an adverse effect on the business activities, financial position, results or future outlook of Alstom.

Moreover, in joint ventures in which Alstom is a minority participant, no assurance can be given about the long-term ability of the Group to benefit from access to the operational activities of the joint venture. Alstom is not involved in daily operations of the legal entities in which it is a minority participant, and can therefore only have limited knowledge of their activities and performances. Certain businesses activities of the Group have been disposed of in the past, are being sold or could be sold in the future. As applicable, Alstom may make or may have made certain warranties or retained certain contracts and liabilities regarding the business activities sold. As a result, it cannot be excluded that the Group may be required to bear increased costs on retained contracts and liabilities, to pay indemnities or purchase price adjustments to the acquirer, or, even in the case where the liabilities associated to the business activities sold are transferred to the acquirer, to be required to bear some of these liabilities. The occurrence of such events may have a material adverse effect on Alstom's results and financial position.

# RISKS IN RELATION TO THE **TRANSACTIONS** CONTEMPLATED WITH **GENERAL ELECTRIC**

Alstom signed on 4 November 2014 a set of agreements with General Electric, including notably the contract of sale to sell the Alstom's Energy businesses, namely Power (electricity generation) and Grid (the "Energy businesses"), as well as shared and central services of Alstom. The agreements included formation agreements relating to the joint ventures in the nuclear, grid and renewables activities and the agreements related to the acquisition of GE Signalling and the global alliance in the rail sector, as well as framework agreements with EDF (service of EDF's existing nuclear fleet) and with EDF and Areva (for new nuclear projects) (see Section "Management report on consolidated financial statements fiscal year 2014/15" and Note 1 to the consolidated financial statements for the fiscal year ended 31 March 2015). On 5 November 2014, the French government gave its authorisation for the transaction under Article L. 151-3 of the French Monetary and Financial Code relating to foreign investments in France. The Extraordinary Shareholders' Meeting of Alstom held on 19 December 2014 approved the proposed sale of Alstom's Energy businesses to General Electric.

The completion of the transaction is now subject to receipt of authorisations required from a regulatory and merger control standpoint in a certain number of jurisdictions. However, once the authorisations relating to entities being sold, which account for at least 85% of the turnover of all the entities subject to the sale, including authorisations in certain key countries (such as authorisations of the European Commission and the US authority), have been obtained, the parties may complete the transaction, with the remainder to be transferred in successive stages, provided there would be no violation of applicable law to do so. In addition, although the Energy businesses on one hand and Transport businesses on the other hand are generally separate within the Alstom group, carve-out operations must be carried out in a certain number of countries before the completion of the transaction to ensure that the entities sold to General Electric consist solely of Energy businesses.

The contract of sale executed on 4 November 2014 specifies that if the conditions precedent have not been met by 30 November 2015, either party shall be allowed to terminate the contract of sale in accordance with its terms. To date the parties have received a certain number of the required regulatory and merger control approvals; however, the European Commission opened an in-depth investigation in the transaction (known as Phase II), the US Department of Justice, Antitrust Division, requested further documents and other jurisdictions are also continuing their analysis of the transaction. Delays in obtaining the regulatory and merger control authorisations required may prevent the parties from satisfying the conditions precedent by the above date. Regulatory and merger control authorities may also request that, as a condition to their clearance of the transaction, the parties accept or offer remedies or other undertakings. No assurance can be given that unconditional clearances would be procured or that, in the event of such conditions, requested remedies or undertakings would be acceptable to the parties, which could prevent the completion of the transaction (for a discussion on the consequences of the non- completion of the transaction on the exposure of the Group on liquidity risks, see the section "Financial risks – Liquidity risks").

The acquisition by Alstom of GE Signalling is also conditional upon on regulatory and competition authority clearances, as well as upon the completion of the acquisition by General Electric of Alstom's Energy business.

This section is to be read in relation to Note 30.2 to the consolidated financial statements for fiscal year ended 31 March 2015.

# **RISKS IN RELATION TO LEGAL AND TAX REGULATIONS**

# Legal regulations

Alstom's business activities are conducted in a varied, complex and changing legal and regulatory environment that covers both national and international areas. Due to its established presence in many countries, Alstom is subject to national legislation, particularly that resulting from the transposition of international agreements as well as to international norms and standards in place to fight against corruption and money laundering, in particular. These latter regulations have not only considerably widened their scope and gained in strength in recent years, for example, with the 2010 ratification of the UK Bribery Act (British law on repression and the prevention of corruption ratified by the British Parliament on 8 August 2010 and effective on 1 July 2011), but authorities and jurisdictions responsible for their application have also increased their efforts to hunt and track down offenders and have enforced increasingly tougher sanctions.

Despite the measures Alstom has taken to comply with the regulations applicable to its business activities, it cannot guarantee that it will remain risk-free in this regard. If the Group or its employees were to commit any voluntary or involuntary act of violation of, or non-compliance with, applicable provisions and guidelines, this could potentially cause civil, criminal, or administrative liability issues for the Group, exclude or eliminate the Group from project bidding or manufacturer selection procedures, or even prohibit the Group from accessing public contracts or exercising its business activities and, as a result, have an adverse impact on its business activities, financial position, earnings, or future outlook, as well as on its reputation.

# Tax regulations

Due to its established presence in many countries, Alstom is subject to many different national tax laws. Insofar as the tax laws and regulations in force in the various countries in which Alstom conducts its business activities do not always provide clear and definitive guidelines, Alstom's structure, the operation of its business, and its tax regime are based on its interpretation of laws and regulations applicable with respect to fiscal matters. Alstom cannot guarantee that these interpretations will not be questioned by the relevant tax authorities or that the laws and regulations applicable in certain countries will not be subject to changes, fluctuating interpretations, and contradictory applications. More generally, any violation of the tax laws and regulations of countries in which the companies of the Group are located or operate could trigger tax reassessments, or the payment of late fees, fines, and penalties. These measures could have an adverse impact on the tax rate, cash position, results or future outlook of Alstom.

# **EXPORT CONTROL**

The act of exporting products from the markets in which they are produced can be restricted or subject to checks or to the receipt of an export licence. Certain countries are subject to export control regulations, embargoes, economic sanctions or other form of trade restrictions imposed by the U.S.A, the European Union or other countries or organisations (the "Sanctions"). These Sanctions or expanded Sanctions imposed on countries may restrict or prevent the business of the Group in such countries or result in amendments of the Group's policies and practices. No assurance can be given that checks on export goods, to which the Group is subject, will not be made more stringent, that new generations of products developed by the Group will not also be subject to similar checks, or even more rigorous checks, and that geopolitical factors or changes in the international context will not prohibit the receipt of export licences for certain customers or will not reduce the Group's ability to execute previously signed contracts. Limited access to exported goods could have an adverse impact on the business activities, financial position, earnings, or future outlook of the Group.

# **RISKS WITH RESPECT TO INTELLECTUAL PROPERTY**

With respect to intellectual property, Alstom is mainly exposed to two categories of risks: risks associated with technology transfers and licensing agreements and risks of third party intellectual property rights violations which could lead to legal actions being taken against Alstom.

Every year, Alstom commits significant investments to innovation and research and development in order to offer the state-of-the-art products and technologies necessary for its business and for preserving the competitiveness of its offer. Protecting Alstom's intellectual property rights is necessary in the context of heightened competitiveness and market globalisation. Therefore, Alstom is a key player in the domain of innovative partnerships and the protection of innovation through patents. Alstom has negotiated and set up licenses for technologies, patents, or know-how in order to avoid dependency on third party rights.

However, Alstom cannot guarantee that its patents and other intellectual property rights provide adequate protection, or that the application of its guidelines concerning technology transfers will shelter it from all potential risks.

The risks of violating third party intellectual property rights is handled through technological monitoring programmes and patents (published patent requests and granted patents), and by acknowledging the existence of such third party patents while executing research and development programmes.

# DISPUTES IN THE ORDINARY COURSE OF THE GROUP'S BUSINESS

The Group is involved in court, administrative or arbitration proceedings in the context of its regular business activities. These contract-related disputes, often involving claims for contract delays or additional work, are common in the areas in which the Group operates, particularly for large and long-term projects. Additional information is given in Note 30.2 to the consolidated financial statements for the fiscal year ended 31 March 2015.

In addition, the Group cannot guarantee that new litigation procedures will not surface, and the risk of which cannot, therefore, be determined or quantified as of today. These procedures could cause significant

uninsured losses or losses exceeding the insurance coverage caps of purchased policies, as well as the amount of provisioned for losses incurred in connection with this litigation. These procedures can also harm the reputation or the image of the Group. Furthermore, any disputes with customers could affect on-going existing commercial relationships with these customers, and affect the Group's ability to sign new contracts with these customers. As a result, such procedures could have an adverse impact on the business activities of the Group, its financial position or its earnings.

# ALLEGATIONS OF ANTI-COMPETITIVE ACTIVITIES AND ILLEGAL PAYMENTS

The Group is subject to procedures for alleged anti-competitive practices described in Note 30.2 to the consolidated financial statements for the fiscal year ended 31 March 2015. Anti-competitive practices can lead to significant sanctions, such as fines, the payment of damages, criminal charges, civil proceedings, sales restrictions, or statutory prohibitions such as a temporary ban on making project bids. Any business restriction or sanction could have an adverse impact on the business activities, financial position, earnings, or future outlook of the Group.

Certain companies and/or current or former employees of the Group are currently being investigated and/or subject to procedures in various countries by judicial or administrative authorities or international financial institutions with respect to alleged illegal payments in certain countries. The Group cooperates with the concerned authorities and institutions. These procedures and investigations are described in Note 30.2 to the consolidated financial statements for the fiscal year ended 31 March 2015. At this stage, Alstom is not able to predict the outcome of the on-going procedures and investigations. These procedures and investigations, as well as any future procedures and investigations that may take place, could result in criminal sanctions, fines that could be significant, the payment of damages, the implementation of compliance programmes and other corrective measures, as well as a potential ban on Alstom's subsidiaries, preventing them from conducting all or part of their business activities or participating in public markets in certain countries, for periods of varying lengths. Civil actions are also possible. Such procedures could also prevent the Group from taking advantage of certain sources of financing. The Group could also record significant provisions in respect of these procedures.

On 22 December 2014, Alstom reached an agreement with the US Department of Justice (DOJ) which resolved the investigations into alleged violations of the U.S Foreign Corrupt Practices (FCPA) conducted by the DOJ for several years on foreign subsidiaries of the Group. For more information, see also Note 30.2 to the consolidated financial statements for the fiscal year ended 31 March 2015.

After many years of investigations and extensive discussions with the US authorities, two US subsidiaries, Alstom Power Inc. and Alstom Grid Inc. (formerly known as Alstom T&D Inc.), have agreed to enter into deferred prosecution agreements with the DOJ relating to FCPA charges. If the two US subsidiaries fulfil the terms of their deferred prosecution agreements, all criminal charges will be dismissed against them at the end of three years. An Alstom subsidiary, Alstom Network Schweiz AG (formerly known as Alstom Prom AG), has agreed to plead quilty to FCPA antibribery charges. In relation to these underlying charges, ALSTOM has agreed to plead guilty to violating the books and records and internal controls provisions of the FCPA and to pay a fine of approximately USD 772 million. The DOJ has also stipulated that no part of the fine can be passed on to General Electric as part of the projected sale of Alstom's Energy businesses. The Group recorded a provision of approximately €720 million in the accounts for the fiscal year ended 31 March 2015 which corresponds to the fine imposed to Alstom by the DOJ. The plea agreements are subject to competent US court approval.

Alstom has made significant progress in the area of compliance. The conduct referred to in the agreement with the DOJ mainly arose from the use of external success fee based Sales Consultants hired by Alstom to support its commercial teams. In order to ensure that Alstom strives for the best compliance procedures, Alstom has discontinued the hiring of such Sales Consultants. Further, pursuant to a negotiated resolution agreement with the World Bank dated 21 February 2012, Alstom committed to continue to improve its internal compliance programme, including by retaining a monitor to oversee its efforts in this regard. On 21 February 2015 the World Bank determined that Alstom has implemented a corporate compliance program in line with the World Bank's integrity compliance policies and practices. The World Bank also concluded that Alstom has satisfied all of the other conditions of its 21 February 2012 settlement agreement. As a consequence, and although the companies which are the subject of the DOJ agreements will have the obligation to maintain an adequate compliance programme and have self reporting obligations, they will not be required to engage any compliance monitor.

The Group's implication in investigations and procedures concerning anti-competitive or corruption practices, or any other illegal activities, as well as any harmful development relative to these investigations and procedures, including possible civil action, could have a significant adverse impact on the reputation and image of the Group, as well as on the business activities, results and financial position of the Group, particularly considering the severity of the sanctions that can be imposed in this domain.

Strict procedures are in place to ensure compliance with all laws and regulations, and in particular those relating to competition rules and prohibited payments. As part of this objective, the Group communicates to each employee the Alstom Code of Ethics, which prescribes strict compliance with rules of conduct to prevent in particular anti-competitive activities and corruption and which highlights the Alert Procedure and the role of Alstom employees in this area, and conducts training programmes and international communication tools. The Group's internal control rules and procedures to manage the risks linked to illegal activities and anti-competitive practices have been constantly reinforced over the last years and Alstom actively strives to ensure that it appropriately addresses any problems that may arise.

However, given the extent of its activities worldwide, Alstom cannot be assured that such difficulties will not arise or that such difficulties will not have a material adverse effect on its reputation and/or results and financial position. For more information on the internal control system put in place within the Group, the Alstom Code of Ethics and the measures taken by the Ethics & Compliance Department and the Legal function to prevent illegal activities and anti-competitive practices, see sections "Corporate governance – Chairman's report – Internal control and risks management procedures' report – Ethics & Compliance Department" and "Corporate governance – Chairman's report – Internal control and risks management procedures' report – Legal function".

# **RISK MANAGEMENT** POLICY AND **INSURANCE**

Alstom's Internal Control Department annually updates its risk map in the context of the three-year plan reporting cycle and the preparation of the annual budget.

The risk management policies are described in section "Corporate Governance – Chairman's report – Internal control and risk management procedures' report".

# Insurance

The Group policy is to purchase insurance policies from insurers presenting excellent solvency criteria. The amount of insurance purchased varies according to Alstom's estimation of the maximum foreseeable loss, both for Property Damage & Business Interruption as well as for Civil Liability Insurance.

This estimate is made within the framework of Industrial Risk Management Audits that are conducted for property damage and business interruption. For civil liability, the estimation of insurance needs depends on the evaluation of the maximum legal risk considering the various Group activities. The annual risk assessment process which results in the Group risk mapping, has allowed the Group to confirm that the appropriate level of insurance was purchased for insurable risks. For more information see also section "Corporate governance – Chairman's report – Internal control and risk management procedures' report".

The main risks covered are the following, subject to certain customary limitations, exclusions and declarations in relation of each type of insurance:

- property damage and business interruption caused by fire, explosion, natural events or other perils as well as machinery breakdown;
- liability incurred because of damage caused to third parties by operations, products and services;
- transit, covering transportation risks from start to unloading of goods at warehouse, construction site or final destination; and
- construction and installation, covering risks during execution of contracts.

In addition to these Group policies, Alstom purchases, in the various countries where it is present, policies of a mandatory nature or designed to cover specific risks such as automobile, worker's compensation or employer's liability.

The presentation below is a summary of the main Group insurance policies and does not reflect all applicable restrictions and limits. These policies are usually negotiated for one- to two-year periods. For reasons of confidentiality and protection of the interests of the Group, it is not possible to describe exhaustively all policies.

# Property damage and business interruption

The insurance programme covers accidental damage and consequent business interruption caused by fire, explosions, impact of vehicles and aircraft, storm, hail, snow, riot, civil commotion, water damage and natural events to industrial, commercial and administrative sites of the Group declared to insurers:

- the programme has an overall limit of €410 million per event;
- sub-limits apply in particular for natural events (these sub-limits vary according to the insured sites and the type of events) for machinery breakdown and accidental events other than those named in the policy;
- coverage is subject to usual limitations and exclusions, in particular: war, civil war, terrorism, nuclear reaction, and certain natural events normally insured in national pools;
- the policy is in force in all countries where the Group has significant industrial sites with the exception of India and China, where specific local policies are in place.

# Civil liability resulting from operations or products and services

The Group Insurance Programme covers the financial consequences of liability of the Group resulting from damages caused to third parties because of its operations or products and services:

- the programme has several layers of insurance for an overall limit of €700 million per event and in annual aggregate; sub-limits are applicable;
- the policy is subject to usual limitations and exclusions of policies of this type, in particular, war, nuclear reactions, work accidents, Directors' and Officers' liability, automobile liability, consequences of contractual obligations more stringent than trade practice, as well as damages caused by products such as asbestos, formaldehyde, lead, organic pollutants as well as those caused by toxic mould, magnetic fields and electronic viruses.

The Group Cargo policy covers damages to transported goods irrespective of the mode of transportation: sea, land or air, anywhere in the world; coverage is extended to war risks (however, some territories are excluded):

- the policy limit is €70 million per event, with sub-limits notably during storage at packers or sub-contractors;
- the policy is subject to limitations and exclusions generally applicable to policies of this type.

# Damage during installation and construction

For the Thermal Power and Renewable Power Sectors, a construction and installation policy covers damage to equipment being installed, with an insurance limit of  $\epsilon$ 250 million per event for contracts having values of less than  $\epsilon$ 1 billion and for which the duration of works is less than 60 months. For the Transport Sector, a policy with a limit of  $\epsilon$ 100 million per event is in place to cover contracts of the French entities. The Grid Sector has a policy with a limit of  $\epsilon$ 50 million per event, to cover contracts less than  $\epsilon$ 150 million and 60 months. Contracts and activities, notably Wind, not covered under these policies are insured specifically according to need. Construction and Installation policies are subject to customary limitations and exclusions, in particular war, radioactive contamination and terrorism.

# **Directors' and Officers' civil liability**

The policy covers the financial consequences and defence costs incurred individually or jointly by Directors and Officers of companies belonging to the Group by reason of claims made against them for civil liability due to wrongful act committed in their capacity as Directors and Officers.

It also covers the financial consequences and defence costs incurred by the Company by reason of claims for breach of securities laws applicable to stock market operations and securities issuers in relation to securities issued by companies belonging to the Group.

This programme is subject to limitations and exclusions generally applicable to this type of insurance.

# Self-insurance

The Group owned a reinsurance vehicle, created in 2000 and no longer used since 2004, to self-insure property damage and business interruption, civil liability and transportation risks. This vehicle was dissolved in December 2013. A new reinsurance vehicle was opened in June 2007 to self-insure a primary layer of  $\notin$ 2 million of the construction and installation risk policy of the Power Sector. This vehicle, for which the maximum commitment was  $\notin$ 10 million per year, has not been used since 1 January 2010.

The costs of the main Group policies represent approximately 0.5% of the annual consolidated sales for the fiscal year 2014/15.

# CORPORATE GOVERNANCE

5

CHAIRMAN'S REPORT	194
Corporate Governance Code	194
Corporate governance and Executive	
and Non-Executive Directors' compensation report	195
Internal control and risk management procedures' report	228
EXECUTIVE COMMITTEE	238
Composition as of 5 May 2015	238
Compensation of members of the Executive Committee	238
STATUTORY AUDITORS' REPORT PREPARED IN ACCORDANCE WITH ARTICLE L. 225-235 OF THE FRENCH COMMERCIAL CODE ON THE REPORT PREPARED BY THE CHAIRMAN OF THE BOARD OF ALSTOM & AFR	239
OF THE BOARD OF ALSTOM ~	233
INTERESTS OF THE OFFICERS AND EMPLOYEES	
IN THE SHARE CAPITAL	240
Stock options and performance share plans	240
Free share plan for subscribers to "Alstom Sharing 2009" offer located outside of France	247
Employee profit-sharing, specific profit-sharing and employee savings plan	247
Summary of the operations of Executive and Non-Executive Directors or people mentioned in Article L. 621-18-2 of the French Monetary and Financial Code on the securities of the Company performed	
during fiscal year 2014/15	248
RELATED-PARTY AGREEMENTS AND COMMITMENTS	248
STATUTORY AUDITORS	249
Statutory Auditors	249
Deputy Statutory Auditors	249
Statutory Auditors' fees for fiscal year 2014/15 🕀	249
New mandates	250
External Audit Charter	250

The Content of the Annual Financial Report is identified in the summary table with the help of the pictogram \*\*\*

For many years, the Company has committed itself to carrying out the corporate governance principles published by the AFEP and the MEDEF.

The latest version of the Corporate Governance Code by which the Company abides is the AFEP-MEDEF Corporate Governance Code updated in June 2013.

In its first section, which is dedicated to corporate governance, the Chairman of the Board of Directors' report, as presented below pursuant to Article L. 225-37 of the French Commercial Code, presents the decisions made by the Board of Directors in that respect.

# **CHAIRMAN'S REPORT**

pursuant to Article L. 225-37 of the French Commercial Code

Pursuant to the provisions of Article L. 225-37 of the French Commercial Code, the Chairman of the Board of Directors presents, in this report for the fiscal year ended on 31 March 2015, the composition of the Board of Directors, the application of the principle of balanced representation of men and women, the Corporate Governance Code by which the Company abides, the conditions for the preparation and organisation of the Board of Directors' duties, the limitations that the Board can impose on the Chief Executive Officer's powers, the principles and rules set by the Board to determine the compensation and benefits of any kind to be paid to the Company's Executive and Non-Executive Directors (mandataires sociaux), other disclosure required pursuant to Article L. 225-37 of the French Commercial Code, as well as the internal control and risk management procedures implemented by the Company at the Group level.

This report was reviewed and approved by the Board of Directors at its meeting held on 5 May 2015, after the Audit Committee reviewed the chapter relating to the internal control and risk management procedures, after the Nominations and Remuneration Committee reviewed the chapter relating to corporate governance and after the Ethics, Compliance and Sustainability Committee reviewed the parts within its field of expertise only.

In a separate report, the Statutory Auditors present their observations on the content of this report, and more specifically on the internal control procedures relating to the preparation and the processing of accounting and financial information and on the compliance with the disclosure of other information required pursuant to Article L. 225-37 of the French Commercial Code.

# **CORPORATE GOVERNANCE CODE**

The AFEP-MEDEF Corporate Governance Code for listed companies updated in June 2013 represents the Corporate Governance Code applicable to the Company for the purpose of this report (the "AFEP-MEDEF Code"). This code is available on the AFEP Internet site (www. afep.com) and on the Company Internet site (www.alstom.com, section "About us / Corporate governance").

Upon the report of the Nominations and Remuneration Committee, the Board of Directors annually reviews the Company corporate governance practices in order to ensure that it applies correctly these recommendations or to explain the discrepancies, if any. The Board of Directors also reviews specific topics upon recommendation of its Committees.

Pursuant to Article L. 225-37 of the French Commercial Code, some differences relative to the recommendations of the AFEP-MEDEF Code as interpreted by the Application Guide Code published by the High Committee for Corporate Governance in December 2014 are provided in this report and summarized in a table included on page 227.

# CORPORATE GOVERNANCE AND EXECUTIVE AND NON-EXECUTIVE DIRECTORS' COMPENSATION REPORT

Representatives of the Legal Department, the Human Resources Department, and the Finance Department contributed to the drafting of this section.

# **Board of Directors**

# **Composition of the Board of Directors**

As of 5 May 2015, the Board of Directors is composed of fourteen members, of whom eight are non-French nationals and ten are independent within the meaning of the AFEP-MEDEF Code (71%). Mr Patrick Kron, the Chairman and Chief Executive Officer, is the only Director who performs executive duties.

Since 2002, the Directors are appointed for a four-year period. Staggered terms of office were never planned for under the terms of the Internal Rules, since the renewal of such terms of office is distributed over three consecutive years. The Internal Rules do not specify an age limit applicable to Directors beyond the legal limit.

Upon the Nominations and Remuneration Committee's report, the Board of Directors examines the Board and Committees' composition at the time of renewal of Directors' mandates. Directors are also invited to indicate their views on this topic during the annual assessment of the Board and Committees' functioning. The Nominations and Remuneration Committee provide recommendations on proposals for new candidates or on the renewal of Directors' mandates submitted to the Board of Directors.

The Board of Directors has an on-going objective to increase the diversity and complementarity of skills required for service on the Board, to maintain a diversity of nationalities and to increase the presence of women.

The mandates of Ms Candace Beinecke, Mr Patrick Kron, Mr Jean-Martin Folz, Mr James W. Leng, Mr Klaus Mangold, and Mr Alan Thomson will expire after the General Shareholders' Meeting convened on 30 June 2015.

The Board of Directors acknowledged the decisions of Mr Jean-Martin Folz and Mr James W. Leng not to seek the renewal of their mandates after having spent, respectively, eight and twelve years in office exercising their duties. In addition, Ms Amparo Moraleda informed the Board that she would be putting an end to her responsibilities as Board Director, effective 30 June 2015, in order to comply with the rules concerning cumulative mandates to which she is subject.

The Board of Directors thanked them for their respective contributions to the Board's activities since their appointment.

Based on the Nominations and Remuneration Committee's recommendation, at the General Shareholders' Meeting convened on 30 June 2015, the Board of Directors will suggest the renewal, for a fouryear term, of the mandates of Mr Patrick Kron, Ms Candace Beinecke, Mr Klaus Mangold, and Mr Alan Thomson.

In compliance with the Nominations and Remuneration Committee's recommendation, in order to replace the three Directors whose mandates are expiring, the Board of Directors will propose to the General Shareholders' Meeting that it nominate Mr Henri Poupart-Lafarge, currently the President of the Group's Transport sector whose biography

is presented below, as Director for a four-year term. Following a selection process led by the Nominations and Remuneration Committee with the assistance of an outside firm, at its meeting of 5 May 2015, the Board of Directors, upon the recommendation of the Nominations and Remuneration Committee, also decided to recommend the appointments of Ms Géraldine Picaud and Ms Sylvie Rucar for a four-year period at the aforementioned general meeting.

The Board of Directors considered that Ms Géraldine Picaud and Ms Sylvie Rucar, whose biographies are also presented below, would contribute their experience as executive managers of international firms and their additional expertise in the financial field, while meeting all of the AFEP-MEDEF criteria to qualify as independent Directors.

Mr Henri Poupart-Lafarge, age 46, is a graduate of *École polytechnique, École nationale des ponts et chaussées* and the Massachusetts Institute of Technology (MIT). He started his career in 1992 at the World Bank, Washington DC, before joining the French Ministry of Economy and Finance in 1994. He joined Alstom in 1998 as the Head of Investor Relations and responsible for management control. In 2000, he became the Transmission and Distribution Sector's Senior Vice President Finance, a position he held until the sale of the Sector in 2004. From 2004 to 2010 he was Chief Financial Officer of the Alstom Group, and from 2010 to 2011 President of the Alstom Grid Sector. He is Senior Vice-President of the Alstom Group and President of Alstom's Transport Sector since 4 July 2011. He is a member of the Alstom's Executive Committee.

Ms Géraldine Picaud, age 45 and graduate of the Reims Management School (ESC Reims), is the Chief Financial Officer of the Essilor Group, the global leader in ophthalmic optics. Prior to joining Essilor, Géraldine Picaud worked for the ED&F Man group (a key player in the international coffee industry) where she arrived in 2007. Initially, she joined the London Office as the Head of Global Finance Responsible for Mergers & Acquisitions, then transferred to Switzerland, where she headed the Financial Management team of Volcafe Holdings. Prior to this, she was first responsible for Management Control then the Chief Financial Officer at Safic Alcan (international distribution group of specialty chemicals). Ms Géraldine Picaud began her professional career in 1991 at Arthur Andersen Audit.

Ms Sylvie Rucar, age 58 and graduate of the ESCP-Europe Business School (*École supérieure de commerce de Paris*, ESCP-Europe), has been since 2010 an advisor in financial management, mergers and acquisitions and corporate restructuring for her own firm and a Senior Advisor of the advisory firm Alix Partners. She began her career in 1978 at Citroën (PSA Group), and then joined the PSA group Finance Department from 1984 to 2007. There, she worked in the fields of mergers and acquisitions, financial controlling, and international finance, and was Group Treasurer before becoming the Chief Financial Officer and Chairman of the PSA Finance Bank. She was a member of the PSA Group's Management Committee. Early 2008, Ms Rucar joined Société Générale where she was the Deputy CFO and Chief Operating Officer of the Group's Investor Services business, then integrated Family Office Cogepa in mid-2009.

Following these renewed terms of office and these appointments, the Board would be comprised of fourteen Directors, nine of which would be independent Directors (64%), and the ratio of women on the Board would grow from 36% (5/14) to 43% (6/14).

shares, which corresponds to approximately one year of Director's fees. Each Director shall have a period of two years from 1 January 2015 or the beginning of his or her mandate if later, to increase his or her number of shares at this minimum level. As of 5 May 2015, an aggregate amount of 30,963 Company shares was held by Directors as individuals while Bouygues held 90,543,867 shares.

The Board's Internal Rules, amended on 17 March 2015, increased the minimum number of shares to be held by a Director from 500 to 2,000

The tables below provide summaries of the composition of the Board and its Committees as of 5 May 2015 and details on how they have changed:

SUMMARY OF THE COMPOSITION OF THE BOARD ON 5 MAY 2015 AND AREAS OF EXPERTISE OF ITS MEMBERS

				Comm	ittee meml	pership				
Name	Title	Age	Independent Director	Audit	N&R (1)	EC&S (2)	First Term Start	Current Term End		Experience
Patrick Kron	Chairman and CEO Director	61					2003 2001	2015	14	Industry, International
Candace K. Beinecke	Director	68			٧		2001	2015	14	Law, International
Olivier Bouygues	Director	64			٧		2006	2018	9	Industry, International
Bi Yong Chungunco	Director	52	V			V	2014	2018	1	Law, International
Pascal Colombani	Director	69	v	V		√ Chairman	2004	2016	11	Industry, Technology, International
Jean-Martin Folz	Lead Director	68	V		√ Chairman		2007	2015	8	Industry, International
Lalita D. Gupte	Director	66	V	V			2010	2018	5	Bank, Finance, International
Gerard Hauser	Director	73	V		٧		2003	2016	12	Industry, International
Katrina Landis	Director	55	٧			V	2010	2018	5	Industry, International
James W. Leng	Director	69	V		٧		2003	2015	12	Industry, International
Klaus Mangold	Director	71	V		٧		2007	2015	8	Industry, International
Bouygues SA represented by Philippe Marien	Director	59		V			2008	2018	7	Finance
Amparo Moraleda	Director	51	V	٧			2013	2017	2	Industry, International
Alan Thomson	Director	68	٧	√ Chairman			2007	2015	8	Finance, International

(1) Nominations and Remuneration Committee.

(2) Ethics, Compliance and Sustainability Committee.

The information relating to the Directors' mandates and functions held in other companies are presented below.

# Summary of the changes in the composition of the Board of Directors and Committees

The following provides a summary of the changes in the Board of Directors' composition that occurred over the course of the 2014/15 fiscal year as well as the changes submitted to the next General Shareholders' Meeting:

	General Meeting dated 1 July 2014	General Meeting dated 30 June 2015
Departure/End of mandate	Mr Georges Chodron de Courcel	Mr Patrick Kron
		Ms Candace K. Beinecke
		Mr Jean-Martin Folz (*)
		Mr James W. Leng <sup>(*)</sup>
		Mr Klaus Mangold (*)
		Ms Amparo Moraleda (*)
		Mr Alan Thomson (*)
Reappointment	Bouygues SA represented by Philippe Marien	Mr Patrick Kron
	Mr Olivier Bouygues	Ms Candace K. Beinecke
	Ms Lalita Gupte <sup>(*)</sup>	Mr Klaus Mangold (*)
	Ms Katrina Landis <sup>(*)</sup>	Mr Alan Thomson (*)
Appointment	Ms Bi Yong Chungunco (*)	Ms Géraldine Picaud (*)
		Mr Henri Poupart-Lafarge
		Ms Sylvie Rucar <sup>(*)</sup>

(\*) Independent Director.

Over the course of the 2014/15 fiscal year, the composition of the Committees has changed as follows:

	Until 1 July 2014	From 1 July 2014
AUDIT COMMITTEE		
Chairman	Mr Alan Thomson (*)	Mr Alan Thomson <sup>(*)</sup>
Members	Mr Pascal Colombani (*)	Mr Pascal Colombani (*)
	Mr Chodron de Courcel	Ms Lalita D. Gupte (*)
	Ms Lalita D. Gupte (*)	Mr Philippe Marien (**)
	Mr Philippe Marien (**)	Ms Amparo Moraleda (*)
	Ms Amparo Moraleda (*)	
NOMINATION AND REMUNERATION COMMITTEE		
Chairman	Mr James W. Leng <sup>(*)</sup>	Mr Jean-Martin Folz (*)
Members	Ms Candace Beinecke	Ms Candace Beinecke
	Mr Olivier Bouygues	Mr Olivier Bouygues
	Mr Gérard Hauser (*)	Mr Gérard Hauser (*)
	Mr Klaus Mangold (*)	Mr James W. Leng (*)
		Mr Klaus Mangold (*)
ETHICS, COMPLIANCE AND SUSTAINABILITY COMMITTEE		
Chairman	Mr Jean-Martin Folz (*)	Mr Pascal Colombani (*)
Members	Mr Pascal Colombani (*)	Ms Bi Yong Chungunco (*)
	Ms Katrina Landis <sup>(*)</sup>	Ms Katrina Landis (*)

(\*) Independent Director.

(\*\*) Permanent representative of Bouygues SA.

# **Executive management**

# Combination of the positions of Chairman and Chief Executive Officer – Limitations on the Chairman and Chief Executive Officer's powers

Following its January to March 2014 review of the operation of the Board of Directors, which was conducted with the assistance of an external advisor, at its meeting of 19 March 2014 the Board of Directors confirmed its decision to keep the functions of Chairman and Chief Executive Officer combined as one. Based on the recommendations of the Chairman and Chief Executive Officer and the Nominations and Remuneration Committee, the Board of Directors chose to proceed with the appointment of a Lead Director whenever the functions of Chairman of the Board of Directors and Chief Executive Officer are combined as one, in order to provide additional guarantees on the existence of a well-balanced and controlled system of corporate governance.

At its meeting dated 5 May 2015, the Board of Directors decided to uphold this decision to combine functions, and renew the appointment of Mr Patrick Kron as Chairman and Chief Executive Officer at its meeting to be held after the General Shareholders' Meeting dated 30 June 2015, subject to the renewal of his Director's mandate.

In addition to the duties assigned to the Lead Director presented below, various factors contribute to achieving a balanced and controlled corporate governance, including:

- a strong presence of independent Directors within the Board of Directors and the Committees, the chairing of which has been entrusted to independent Directors as from their creation;
- information disclosed on a regular basis to the Board of Directors, both at its meetings and outside of its meetings, detailing the business activities of the Group and any significant events;
- the developed practice of enabling all Directors to jointly participate in determining the agenda of a Board of Directors' meeting once per year;
- the development of interactions between the Board of Directors and the members of the Executive Committee or the functional or operational executives holding key positions within the Group, in particular in the context of their participation in, and presentations given at, Board of Directors and Committee meetings, or during worksite visits organised annually;
- an annual review of the corporate governance practices and of the operation of both the Board of Directors and the Committees, which enables the identification, on a regular basis, of the desired focus points for improvement and the priorities associated therewith, and to assess the follow up of the recommendations; the annual meeting of Directors who are external to the Company in order to assess the performance of the Executive Officer (*dirigeant*), as directed by the Chairman of the Nominations and Remuneration Committee;
- the availability of the Chairman and Chief Executive Officer and Chairmen of the Board of Directors Committees, independent Directors, in order to discuss with institutional investors the key subjects of corporate governance of the Company and sustainable development;
- a routine review of the Internal Rules of the Board of Directors and the Committees, and the adaptation of their provisions, as the case may be.

The restrictions imposed by the Board on the powers of the Chairman and Chief Executive Officer are specified in the Internal Rules of the Board which also indicate that the Board of Directors' prior approval is required for:

- any operation that is not part of the Group's announced strategy or that could significantly affect it;
- any operation that could materially modify the financial structure or results of the Group;

- any acquisition or divestiture insofar as the amount exceeds €250 million, any decision to set up a partnership or joint venture where the contribution of the Group exceeds €250 million, as well as any financing operation which exceeds €1 billion;
- organic growth investments in an amount higher than €250 million and requiring significant internal restructuring undertakings in particular at the time of the annual review of the Group's budget and strategy.

For acquisitions and divestitures, "amount" means the enterprise value, whatever the terms of payment (immediate or differed, in cash or in shares...). For a partnership or a newly created company, "the contribution of the Group" means the financial undertaking of the Group (contribution to the share capital or shareholder's loan, exposure to external financings...).

It also indicates that the Board of Directors examines and approves the annual budget and the medium-term plan.

# Lead Director

Since May 2014, when the functions of Chairman and Chief Executive Officer were combined, the Board of Directors must, pursuant to the terms of its own Internal Rules, appoint a Lead Director, the main responsibility of which is to ensure the proper functioning of the corporate governance bodies of the Company. The Internal Rules, as amended at the Board meeting dated 6 May 2014, set the following terms and conditions applicable to acting as Lead Director:

# Extract from the Internal Rules of the Board of Directors on the Lead Director (Article 6)

Whenever the functions of Chief Executive Officer and Chairman of the Board of Directors are combined and entrusted to the same individual, the Board of Directors shall appoint a Lead Director from among the independent Directors. This Lead Director is appointed for a two-year term, which cannot exceed his or her term of office as Director. He or she is eligible for reappointment. The Board of Directors can terminate the Lead Director's functions at any time.

The main duty of the Lead Director is to ensure the proper functioning of the corporate governance bodies of the Company.

In this context, he or she exercises his or her duties and has the following privileges:

- 6.1. Functioning of the Board of Directors and of the Board of Directors' Committees
- The Chairman of the Board of Directors consults with the Lead Director regarding the matters on the agenda of Board of Directors' meetings and can recommend including additional matters to the agenda.
- The Lead Director can approach the Chairman of the Board of Directors and request that a meeting of the Board of Directors be convened to discuss a predetermined agenda.
- The Lead Director ensures that the Internal Rules are applied when the meetings of the Board of Directors are prepared and held, and also ensures that the Directors comply with such Internal Rules.
- The Lead Director makes sure that the Directors are able to exercise their duties under the best possible conditions and, in particular, that they can rely on a high level of information prior to the meetings of the Board of Directors.

- The Lead Director can, at his or her own initiative, call for and preside over meetings of Directors who do not exercise executive or salaried functions within the Group (Non-Executive Directors).
- The Lead Director can be the Chairman of the Nominations and Remuneration Committee. As such, he or she is responsible, in particular, for managing the succession plan for Executive Directors, selecting new Directors, and for securing the balance with respect to the composition of the Board of Directors and the Committees.
- The Lead Director can attend any of the meetings of any Committee of which he or she is not a member and has access to the work completed by such Committees and to the information made available to them.
- 6.2 Relations with Directors
- The Lead Director maintains a regular dialogue with Directors and is, if need be, their spokesperson to the Chairman of the Board of Directors.

## 6.3. Conflicts of interest

- The Lead Director plays a preventive role to raise the awareness of all Directors with respect to conflicts of interest.
- Together with the Chairman of the Board of Directors, he or she reviews situations that could potentially trigger conflicts of interest.

#### 6.4. Relations with shareholders

 The Lead Director is kept abreast of any comments and suggestions submitted by shareholders in relation to governance and the remuneration of corporate officers. He or she ensures that their questions are answered, makes him or herself available to communicate with such shareholders at the request of the Chairman of the Board of Directors, and keeps the Board of Directors abreast of these communications.

The Lead Director reports annually to the Board of Directors and to the Shareholders' meeting regarding his or her work.

The Secretariat of the Board of Directors makes itself available to the Lead Director to assist in the completion of his or her assignments.

As from 7 May 2014, the Board of Directors entrusted the position of Lead Director to Mr Jean-Martin Folz, an independent Director. Later, on 1 July 2014, he was entrusted with the chairmanship of Nominations and Remuneration Committee, specifically the Committee responsible for matters of corporate governance. The Lead Director's activity report can be found in this report on pages 213 and 214.

Since Mr Jean-Martin Folz's mandate as Director expires at the end of the General Shareholders' Meeting convened on 30 June 2015, the Board of Directors shall appoint a new Lead Director at the time of the renewal of Mr Patrick Kron's appointment as Chairman and Chief Executive Officer at the end of the General Shareholders' Meeting subject to the effective renewal of his appointment as Director.

# Governance of Alstom on completion of the contemplated transaction with General Electric

On 4 November 2014, on conclusion of the information-consultation procedure with personnel representative bodies, the Board of Directors unanimously approved the signing of an agreement with General Electric to sell Alstom's Energy businesses, namely Power (electricity generation) and Grid (the "Energy businesses"), as well as shared and central services. This agreement materializes the revised offer received from General Electric, which was unanimously accepted by the Board of Directors on 21 June 2014. The agreements were signed by Alstom and General Electric on 4 November 2014 following the Board held the same day. On 5 November 2014, the French government gave its authorisation for the transaction under Article L. 151-3 of the Monetary and Financial Code relating to foreign investments in France. The Board of Directors then submitted the transaction to a vote at the General Shareholders' Meeting, in accordance with the terms of the AFEP-MEDEF Code. The Extraordinary General Shareholders' Meeting dated 19 December 2014 voted 99.2% in favour, and the transaction is now essentially subject to receiving the necessary regulatory and merger control authorisations applicable in a certain number of jurisdictions.

The Board of the Company will not be changed as a result of the completion of the contemplated sale of Alstom's Energy businesses, which will be accompanied by the reinvestment by Alstom of part of the sale proceeds in joint ventures to be formed with General Electric and Alstom's acquisition of General Electric's Signalling business, and will be followed by the distribution to the shareholders of a proportion of the proceeds received from General Electric.

The Board also noted that under the memorandum of understanding signed on 22 June 2014 between the French Republic and Bouygues, Bouygues and the French Republic have agreed to make their best efforts to ensure that the Board of Directors of the Company comprises, following the completion of the distribution to the shareholders of a proportion of the proceeds from the sale of the Energy's activities, a Director designated by Bouygues, provided that Bouygues holds at least 1% of the share capital of the Company, and two Directors proposed by the French Republic.

The Board of Directors will decide on its composition and on the governance of the Company after the distribution to the shareholders following the completion of the contemplated transaction, after which Mr Patrick Kron has decided he will no longer exercise his functions.

# Information on the Board members

The information provided below also constitutes the information of the Board of Directors' Report to the Shareholders' Meeting requested by the paragraph 4 of Article L. 225-102-1 of the French Commercial Code. The information is accurate as of 5 May 2015.

# PATRICK KRON

Age: 61.

## Nationality: French.

**Professional address:** Alstom – 3, avenue André-Malraux – 92300 Levallois-Perret (France).

Principal function: Chairman and Chief Executive Officer of Alstom.

#### Other current directorships and positions:

## In France:

Director of Bouygues <sup>(\*)</sup>; Director of Sanofi <sup>(\*)</sup>; Director of *Association Française des Entreprises Privées* (AFEP); Director of the Association of the choral society *"Les Arts Florissants"*.

Within the Alstom Group: Chairman of ALSTOM Resources Management.

#### Abroad:

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## Past directorships and positions (held during the past five years):

#### In France:

Within the Alstom Group: Chairman and Chief Executive Officer of ALSTOM Transport (2014).

#### Abroad:

Within the Alstom Group: Director and Managing Director of ALSTOM Asia Pte. Ltd (2012-2014); Director of ALSTOM UK Holdings Ltd (2003-2012).

## CANDACE K. BEINECKE

Age: 68.

Nationality: American.

Professional address: Hughes Hubbard & Reed LLP – One Battery Park Plaza, New York, NY 10004 – 1482 (USA).

Principal function: Chair of Hughes Hubbard & Reed LLP.

# Other current directorships and positions:

## In France:

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# Abroad:

Chairperson of the First Eagle Funds  $^{(\star)}$ , a leading US public mutual fund family;

Member, Board of Trustees, Vornado Realty Trust (NYSE) <sup>(\*)</sup>; Member, Board of Directors, Rockefeller Financial Services, Inc. and Rockefeller & Co., Inc.

# Non-profit organisations:

Director, Vice-Chair, the Partnership for New York City; Trustee, The Wallace Foundation; Trustee, The Metropolitan Museum of Art.

(\*) Listed company.

End of current mandate: AGM 2015. First mandate: 2001-2007.

Holds 16,011 shares.

#### **Biography:**

Mr Patrick Kron is a graduate of École polytechnique and the Paris École des mines. He started his career in the French Ministry of Industry where he served from 1979 to 1984 before joining the Pechiney group. From 1984 to 1988, Patrick Kron held operational responsibilities in one of the group's most important factories in Greece, becoming manager of this Greek subsidiary. From 1988 to 1993, he occupied several senior operational and financial positions within Pechiney, first managing a group of activities in the processing of aluminium and then as Chairman and Chief Executive Officer of Pechiney Electrometallurgie. In 1993, he became a member of the Executive Committee of the Pechiney group and was appointed Chairman and Chief Executive Officer of the Carbone Lorraine Company from 1993 to 1997. From 1995 to 1997, he ran the Food and Health Care Packaging Sector of Pechiney and held the position of Chief Operating Officer of the American National Can Company in Chicago (USA). From 1998 to 2002, Mr Patrick Kron was Chairman of the Executive Board of Imerys before joining Alstom. He has been Chief Executive Officer of Alstom since 1 January 2003 and Chairman and Chief Executive Officer since 11 March 2003.

End of current mandate: AGM 2015. First mandate: 24 July 2001 – 26 June 2007.

Member of the Nominations and Remuneration Committee. Holds 600 shares.

Past directorships and positions (held during the past five years):

# In France:

#### Abroad:

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# Biography:

Ms Candace K. Beinecke, Chair of Hughes Hubbard & Reed LLP, was named to her current position in 1999, the first woman to chair a major New York law firm. Ms Beinecke is also a practicing partner in Hughes Hubbard's Corporate Department. Ms Beinecke serves as Chairperson of First Eagle Funds, a leading US public mutual fund family. She is a Board member of Vornado Realty Trust (NYSE), Rockefeller Financial Services, Inc. and Rockefeller & Co., Inc. She also serves as a Director, Vice-Chair and Executive Committee member of the Partnership for New York City, as a Trustee of The Wallace Foundation, and as Trustee of The Metropolitan Museum of Art. She is also a member of the Board of Advisors, Yale Law School Center for the Study of Corporate Law. She has been included in The Best Lawyers in America, in Chambers, and in the *National Law Journal's* 100 Most Influential Lawyers in America, and one of the "25 New York executives whose contributions in and beyond business changed the City".

#### **OLIVIER BOUYGUES**

Age: 64.

Nationality: French.

**Professional address:** Bouygues – 32, avenue Hoche – 75378 Paris Cedex 08 (France).

Principal function: Deputy Chief Executive Officer of Bouygues (\*).

## Other current directorships and positions:

#### In France:

Chief Executive Officer of SCDM;

Standing representative of SCDM on the Board of Bouygues (\*); Chairman of SCDM Énergie; Chairman of SAGRI-E and SAGRI-F; Director of Eranove (formerly Finagestion); Manager of SIR.

Within Bouygues group: Director of TF1  $^{(\star)}$ , Bouygues Telecom, Colas  $^{(\star)}$  and Bouygues Construction.

## Abroad:

Within Bouygues group:

Chairman and Director of Bouygues Europe (Belgium);

Outside Bouygues group:

BI YONG CHUNGUNCO

Chairman and Chief Executive Officer and Director of SECI (formerly Saur Énergie de Côte d'Ivoire);

Director of Compagnie Ivoirienne d'Électricité (CIE) <sup>(\*)</sup>, of Société de Distribution d'Eau de la Côte d'Ivoire (Sodeci) <sup>(\*)</sup>, and of Société Sénégalaise des Eaux.

End of current mandate: AGM 2018. First mandate: 28 June 2006 – 22 June 2010.

Member of the Nominations and Remuneration Committee.

Holds 2,000 shares.

Past directorships and positions (held during the past five years) outside Bouygues group:

## In France:

Permanent representative of SCDM, Chairman of the Board of SCDM Investcan and SCDM Investur (2010); Member of the Executive Committee of Cefina (2010); Permanent representative of SCDM, Chairman of the Board of SCDM Énergie (2011); Manager of SIB (2011); Director of Eurosport (2014).

# Abroad:

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#### **Biography:**

Mr Olivier Bouygues is a graduate of *École nationale supérieure du pétrole* (ENSPM). Mr Olivier Bouygues joined the Bouygues group in 1974. He began his career in the group's public works branch. From 1983 to 1988, he worked at Bouygues Offshore as Director of the Cameroon subsidiary Boscam and then Director for the France Works and Special Projects division. From 1988 to 1992, he held the position of Chairman and CEO of Maison Bouygues. In 1992, he was appointed group Executive Vice President for Utilities Management, a division covering the French and international activities of Saur. In 2002, Mr Olivier Bouygues was appointed Deputy Chief Executive Officer of Bouygues.

Age: 52.	End of current mandate: AGM 2018 (appointed on 1 July 2014).		
Nationality: Filipino.	Independent Director. Member of the Ethics, Compliance and Sustainability Committee.		
Professional address: Lafarge – 61, rue des Belles-Feuilles – 75116			
Paris.	Holds 500 shares.		
<b>Principal function:</b> Group General Counsel and Corporate Secretary of Lafarge (*).			
Other current directorships and positions:	Past directorships and positions (held during the past five years):		
In France:	In France:		
Chairman of Société Financière Immobilière et Mobilière (Lafarge	-		
subsidiary).	Abroad:		
Abroad:	Director of the Malaysian French Chamber of Commerce (2010-2012);		
Director of Lafarge Republic Inc. (*) (Philippines).	Chairman and Chief Executive Officer of Lafarge Malayan Cement Berhad (2008-2012).		

(\*) Listed company.

#### **Biography:**

Ms Bi Yong Chungunco is currently the Senior Vice President, Group General Counsel and Corporate Secretary of Lafarge S.A. based in Paris, France. She joined the Lafarge Group in 2002 as Senior Vice President for Legal, Corporate Governance & External Relations of the Lafarge affiliated company in the Philippines. From 2004 to 2007, she was Group Regional Counsel and then Deputy General Counsel of Lafarge, overseeing from Paris the merger and acquisition transactions of the group and coordinating the worldwide legal network. From 2008 to 2012, she was Chief Executive Officer and Director of Lafarge Malayan Cement Berhad one of the largest industrial companies listed on the Malaysian Stock Exchange (a 51% owned subsidiary of Lafarge, with operations in Malaysia and Singapore). From 2010 to 2012, she was also a Director of Malaysian French Chamber of Commerce. Before joining Lafarge Group, she was a Director, Treasurer and Senior Vice President-Legal of Jardine Davies Inc., a subsidiary of Jardine Matheson Group listed in the Philippines. During this period, she was President of the Tax Management Association of the Philippines, a national organisation of tax practitioners in the Philippines. A lawyer by training, she worked in various law firms prior to joining companies' position.

Age: 69.       End of current mandate: AGM 2016.         Nationality: French.       First mandate: 9 July 2004 - 24 June 2008.         Professional address: TII Stratégies, 3, rue de Logelbach - 75017       Independent Director.         Principal function: Non-Executive Chairman       Holds 600 shres.         Principal function: Non-Executive Chairman       Holds 600 shres.         Dther current directorships and positions:       Biography:         Dr Pascal Colombani is a graduate of École normale supérieure (Saint Cloud) and holds a doctorate in Nuclear Physics. His career has been balanced between research and industry. Is started as a research is saignment, while President of Schumberger Win Physis. His Corent for Scientific Research (ICNRS the piecer Started in Startegic Council for Research.         Abroad:       National Strategic Council for Research.         Non-Executive Director of Rhodia <sup>(4)</sup> (2005-2011).       Barcan of the Board of Noordzee Helikopters Vlaanderen (NHV)         Abroad:       Non-Executive Director of EnergySolutions Inc <sup>(4)</sup> (USA) (2009-2013).		
Professional address: TII Stratégies, 3, rue de Logelbach – 75017         Paris (France).         Principal function: Non-Executive Chairman of the Board of Directors of Valeo <sup>(1)</sup> .         Other current directorships and positions:         In France:         Chairman of the Advisory Board of A.T. Kearney Paris;         Member of the Advisory Board of A.T. Kearney Paris;         Member of the European Advisory Board of A.T. Kearney Paris;         Member of the European Advisory Board of JPMorgan Chase;         Non-Executive Director of Echipi <sup>(1)</sup> ;         Vice- Chairman of the Board of Noordzee Helikopters Vlaanderen (NHV)         Readitive Director of Rhodia <sup>(2)</sup> (2005-2011).         Abroad:         Non-Executive Director of Echipis Energy Group plc (subsidiary of EDF)         Non-Executive Director of British Energy Group plc (subsidiary of EDF)         Non-Executive Director of EnergySolutions Inc <sup>(4)</sup> (USA) (2009-2013).         Non-Executive Director of EnergySolutions Inc <sup>(4)</sup> (USA) (2009-2013).         Non-Executive Director of Companies.         EAN_MARTIN FOLZ         Age: 88.         Nationality: French.         Principal function: Director of companies.         EAN_Marcent directorships and positions:         Directors of companies.         EAN_MARTIN FOLZ         Age: 88.         Nationality: French.<	PASCAL COLOMBANI	
Nationally, Freich,       Independent Director.         Principal function: Non-Executive Chairman of the Board of Directors of Valeo (%).       Biography:         Dther current directorships and positions:       Independent Director.         In France:       Chairman of the Advisory Board of A.T. Kearney Paris;         Wember of the European Advisory Board of PMorgan Chase;       Drescutive Director of Technip (%);         Virce-Chairman of the National Strategic Council for Research.       Bakroad:         Abroad:       Non-Executive Director of Rhodia (%) (2005-2011).         Non-Executive Director of British Energy Group plc (subsidiary of EDF)       CEAN-MARTIN FOLZ         Reg: 68.       End of mandate: AGM 2015.         First manader: Z6 June 2007 – 28 June 2011.       Independent Director.         Principal function: Director of companies.       End of mandate: AGM 2015.         End of mandate: AGM 2015.       First mandate: Z6 June 2007 – 28 June 2011.         Independent Director.       Chairman of the Nominations and Remuneration Committee.         Holds 1,000 shares.       Dther current directorships and positions:	Age: 69.	
Principal function: Non-Executive Chairman       Chairman of the Ethics, Compliance and Sustainability Committee.         Principal function: Non-Executive Chairman       Holds 600 shares.         Dther current directorships and positions:       Biography:         Drace:       Drace:         Chairman of the Advisory Board of A.T. Kearney Paris;       Principal function: Non-Executive Director of Technip (*);         Wiree-Chairman of the National Strategic Council for Research.       Biography:         Drace:       Dr Pascal Colombani is a graduate of École normale supérieure (Saint Chairman of the Board of Noordzee Helikopters Vlaanderen (NHV)         Relegium).       Dreater in function: Non-Executive Director of Rhodia (*) (2005-2011).         Pabroad:       Non-Executive Director of British Energy Group plc (subsidiary of EDF)         Non-Executive Director of British Energy Group plc (subsidiary of EDF)       Board of Directors of Valeo, a member of the Board of Technigo (*) (USA) (2009-2013).         Non-Executive Director of EnergySolutions Inc (*) (USA) (2009-2013).       Board of Areva until 2003. Dr Pascal Colombani is Chairman of the Board of Directors of Valeo, a member of the Board of Technigo (*) (USA) (2009-2013).         Non-Executive Director of EnergySolutions Inc (*) (USA) (2009-2013).       Bealgum. He is also non-executive Chairman of the Board of Directors of Valeo, a member of the French National Strategic Council for Research.         EAN-MARTIN FOLZ       End of mandate: AGM 2015.         Reist Bair Chairman o	Nationality: French.	First mandate: 9 July 2004 – 24 June 2008.
Principal function: Non-Executive Chairman       Holds 600 shares.         Dther current directorships and positions:       Biography:         Dr Pascal Colombani is a graduate of <i>École normale supérieure</i> (Saint Chairman of the Advisory Board of A.T. Kearney Paris;       Dr Pascal Colombani is a graduate of <i>École normale supérieure</i> (Saint Chairman of the European Advisory Board of JPMorgan Chase;         Non-Executive Director of Technip <sup>(A)</sup> ;       Dr Pascal Colombani is a graduate of <i>École normale supérieure</i> (Saint Chairman of the National Strategic Council for Research.         Abroad:       Dater current directorships and positions (held during the past five years):         Reference:       Non-Executive Director of Rhodia ( <sup>(A)</sup> (2005-2011).         Abroad:       Non-Executive Director of British Energy Group plc (subsidiary of EDF) (2003-2011);         Non-Executive Director of British Energy Group plc (subsidiary of EDF) (2003-2011);       Prench Mainal (USA) (2009-2013).         Non-Executive Director of EnergySolutions Inc <sup>(A)</sup> (USA) (2009-2013).       End of mandate: AGM 2015.         First mandate: AGM 2015.       First mandate: AGM 2015.         First mandate: AGM 2015.       First mandate: AGM 2015.         First mandate: AGM 2015.       First mandate: AGM 2015.         Principal function: Director of companies.       End of mandate: AGM 2015.         Principal function: Director of companies.       End of mandate: AGM 2015.         Principal function: Director of companies.	<b>Professional address:</b> TII Stratégies, 3, rue de Logelbach – 75017 Paris (France).	Chairman of the Ethics, Compliance and Sustainability Committee.
In France:       Dr Pascal Colombani is a graduate of École normale supérieure (Saint Cloud) and holds a doctorate in Nuclear Physics. His career has beer balanced between research and industry: he started as a research associate at the French National Centre for Scientific Research (CNRS three Chairman of the National Strategic Council for Research.         Abroad:       Dr Pascal Colombani is a graduate of École normale supérieure (Saint Cloud) and holds a doctorate in Nuclear Physics. His career has beer balanced between research and industry: he started as a research associate at the French National Centre for Scientific Research (CNRS then joined Schlumberger where he spent almost twenty years in various management positions in Europe, the USA and Japan. In this last assignment, while President of Schlumberger KK in Tokyo, he also initiated the implantation of an R80 term in China. Director on Technology at the French Ministry of Research from 1997 to 1999, he decame Chief Executive Director of Rhodia (*) (2005-2011).         Abroad:       Dr Pascal Colombani is a graduate of École normale supérieure (Saint Cloud) and holds a doctorate in Nuclear Physics. His career has beer balanced between research and industry: he started as a research associate at the French National Centre in China. Director on Technology at the French Ministry of Research from 1997 to 1999, he desard file free free free free free free free fr	<b>Principal function:</b> Non-Executive Chairman of the Board of Directors of Valeo (*).	
Chairman of the Advisory Board of A.T. Kearney Paris;       Cloud) and holds a doctorate in Nuclear Physics. His career has beer balanced between research and industry: he started as a research associate at the French National Centre for Scientific Research (CNRS thrie chairman of the National Strategic Council for Research.         Abroad:       Cloud) and holds a doctorate in Nuclear Physics. His career has beer balanced between research and industry: he started as a research associate at the French National Centre for Scientific Research (CNRS thriad Science).         Abroad:       Cloud) and holds a doctorate in Nuclear Physics. His career has beer balanced between research and industry: he started as a research associate at the French National Centre for Scientific Research (CNRS thriad Science).         Abroad:       Cloud) and holds a doctorate in Nuclear Physics. His career has beer balanced between research and industry: he started as a research associate at the French National Centre in Chain. Director on Technology at the French Ministry of Research from 1997 to 1999, he last assignment, while President of Schlumberger KK in Tokyo, he also initiated the implantation of an R80 term in China. Director on Technology at the French Atomic Energy Commission (CEA) in 2000 until December 2002. He initiated the restructuring of the Recent in 2003. Dr Pascal Colombani is Chairman of the Advisory Board of Areva unil 2003. Dr Pascal Colombani is Chairman of the Board of IPMorgan Chase. He is also non-executive Chairman of the Board of Noordzee Helikopters Vlaanderen (NHV)         Non-Executive Director of EnergySolutions Inc (*) (USA) (2009-2013).       End of mandate: AGM 2015.         Nationality: French.       First mandate: 26 June 2007 - 28 June 2011.         Independent	Other current directorships and positions:	Biography:
Linking of the Auxiosity Board of JPMorgan Chase; Wone-Executive Director of Technip <sup>(A)</sup> ; Vice-Chairman of the National Strategic Council for Research.balanced between research and industry: he started as a research associate at the French National Centre for Scientific Research (CNRS) 	In France:	Dr Pascal Colombani is a graduate of École normale supérieure (Saint-
Abroad:       Last assignment, while President of Schlumberger KK in Tokyo, he also initiated the implantation of an R&D centre in China. Director on Technology at the French Ministry of Research from 1997 to 1999, he became Chief Executive Officer of the French Atomic Energy Commission (CEA) in 2000 until December 2002. He initiated the restructuring on the CEA industrial holdings, resulting in the creation of Areva in 2000 the nuclear engineering conglomerate. He chaired the Supervisor Board of Areva until 2003. Dr Pascal Colombani is Chairman of the Advisory Board of A.T. Kearney in Parsa and a member of the European Advisory Board of JPMorgan Chase. He is also non-executive Chairman of the Board of Directors of Valeo, a member of the Board of Technologies and of the French National Strategic Council for Research.         EAN-MARTIN FOLZ         Age: 68.         Nationality: French.         Principal function: Director of companies.         EAN-martin folz         Age: 68.         Nationality: French.         Principal function: Director of companies.         EAN-mart directorships and positions:         Abtroad:         Abtroad:	Chairman of the Advisory Board of A.T. Kearney Paris; Member of the European Advisory Board of JPMorgan Chase; Non-Executive Director of Technip (*); Vice-Chairman of the National Strategic Council for Research.	Cloud) and holds a doctorate in Nuclear Physics. His career has been balanced between research and industry: he started as a research associate at the French National Centre for Scientific Research (CNRS) then joined Schlumberger where he spent almost twenty years in various management notitions in Europe, the USA and Japan. In this
Chairman of the Board of Noordzee Helikopters Vlaanderen (NHV)       also initiated the implantation of an R&D centre in China. Director of Technology at the French Ministry of Research from 1997 to 1999, he became Chief Executive Officer of the French Atomic Energy Commission (CEA) in 2000 until December 2002. He initiated the restructuring of the CEA industrial holdings, resulting in the creation of Areva in 2000 the nuclear engineering conglomerate. He chaired the Supervisor Board of Areva until 2003. Dr Pascal Colombani is Chairman of the Advisory Board of Ar. Kearney in Paris and a member of the European Advisory Board of JPMorgan Chase. He is also non-executive Chairman of the Board of Directors of Valeo, a member of the Board of Technologies and of the French National Strategic Council for Research.         EAN-MARTIN FOLZ       End of mandate: AGM 2015.         Principal function: Director of companies.       First mandate: 26 June 2007 – 28 June 2011.         Independent Director.       Lead Director.         Chairman of the Nominations and Remuneration Committee.         Holds 1,000 shares.       Abroad:	Abroad:	
Past directorships and positions (held during the past hve years):       (CEA) in 2000 until December 2002. He initiated the restructuring of the CEA industrial holdings, resulting in the creation of Areva in 2000 the nuclear engineering conglomerate. He chaired the Supervisory Board of Areva until 2003. Dr Pascal Colombani is Chairman of the Advisory Board of Areva until 2003. Dr Pascal Colombani is Chairman of the Advisory Board of Areva until 2003. Dr Pascal Colombani is Chairman of the Advisory Board of JPMorgan Chase. He is also non-executive Chairman of the Board of Directors of Valeo, a member of the Board of Technipg and Chairman of the Board of Directors of Valeo, a member of the Board of Technipgies and of the French National Strategic Council for Research.         EAN-MARTIN FOLZ       End of mandate: AGM 2015.         First mandate: 26 June 2007 – 28 June 2011.       Independent Director.         Lead Director.       Chairman of the Nominations and Remuneration Committee.         Holds 1,000 shares.       Holds 1,000 shares.	Chairman of the Board of Noordzee Helikopters Vlaanderen (NHV) (Belgium).	also initiated the implantation of an R&D centre in China. Director of Technology at the French Ministry of Research from 1997 to 1999, he
In France:       the CEA industrial holdings, resulting in the creation of Areva in 2000         Non-Executive Director of Rhodia <sup>(*)</sup> (2005-2011).       broad:         Abroad:       Board of Areva until 2003. Dr Pascal Colombani is Chairman of the Advisory Board of A.T. Kearney in Paris and a member of the European Advisory Board of JPMorgan Chase. He is also non-executive Chairman of the Board of Directors of Valeo, a member of the Board of Technip and Chairman of the Board of Nordzee Helikopters Vlaanderen (NHV in Belgium. He is a member of the French Academy of Technologies and of the French National Strategic Council for Research.         EAN-MARTIN FOLZ       End of mandate: AGM 2015.         Principal function: Director of companies.       First mandate: 26 June 2007 – 28 June 2011.         Independent Director.       Lead Director.         Lead Director.       Chairman of the Nominations and Remuneration Committee.         Holds 1,000 shares.       Abroad:	Past directorships and positions (held during the past five years):	
Non-Executive Director of Rhodia (*) (2005-2011).the nuclear engineering conglomerate. He chaired the Supervisory Board of Areva until 2003. Dr Pascal Colombani is Chairman of the Advisory Board of A.T. Kearney in Paris and a member of the European Advisory Board of JPMorgan Chase. He is also non-executive Chairman of the Board of Directors of Valeo, a member of the Board of Technip and Chairman of the Board of Noordzee Helikopters Vlaanderen (NHV in Belgium. He is a member of the French Academy of Technologies and of the French National Strategic Council for Research.EAN-MARTIN FOLZEnd of mandate: AGM 2015. First mandate: 26 June 2007 – 28 June 2011.Mationality: French. Principal function: Director of companies.End of mandate: AGM 2015. First mandate: 26 June 2007 – 28 June 2011.Dther current directorships and positions:Abroad:	In France:	
Abroad:Board of Areva until 2003. Dr Pascal Colombani is Chairman of the Advisory Board of A.T. Kearney in Paris and a member of the European Advisory Board of JPMorgan Chase. He is also non-executive Chairman of the Board of Directors of Valeo, a member of the Board of Technip and Chairman of the Board of Noordzee Helikopters Vlaanderen (NHV in Belgium. He is a member of the French Academy of Technologies and of the French National Strategic Council for Research.EAN-MARTIN FOLZEnd of mandate: AGM 2015. First mandate: 26 June 2007 – 28 June 2011.Mationality: French. Principal function: Director of companies.First mandate: 26 June 2007 – 28 June 2011. Independent Director. Lead Direct	Non-Executive Director of Rhodia (*) (2005-2011).	the nuclear engineering conglomerate. He chaired the Supervisory
Non-Executive Director of British Energy Group plc (subsidiary of EDF)       Advisory Board of JPMorgan Chase. He is also non-executive Chairmar of the Board of Directors of Valeo, a member of the Board of Technip and Chairman of the Board of Nordzee Helikopters Vlaanderen (NHV in Belgium. He is a member of the French Academy of Technologies and of the French National Strategic Council for Research.         EAN-MARTIN FOLZ       End of mandate: AGM 2015.         Mationality: French.       First mandate: 26 June 2007 – 28 June 2011.         Independent Director.       Lead Director.         Lead Director.       Chairman of the Nominations and Remuneration Committee.         Holds 1,000 shares.       Holds 1,000 shares.	Abroad:	
in Belgium. He is a member of the French Academy of Technologies and of the French National Strategic Council for Research. EAN-MARTIN FOLZ Age: 68. Nationality: French. Principal function: Director of companies. Principal function: Director of companies. Dther current directorships and positions: He is a member of the French Academy of Technologies and of the French National Strategic Council for Research. End of mandate: AGM 2015. First mandate: 26 June 2007 – 28 June 2011. Independent Director. Lead Director. Chairman of the Nominations and Remuneration Committee. Holds 1,000 shares. Dther current directorships and positions:	Non-Executive Director of British Energy Group plc (subsidiary of EDF) (2003-2011);	Advisory Board of A. I. Kearney in Paris and a member of the European Advisory Board of JPMorgan Chase. He is also non-executive Chairman of the Board of Directors of Valeo, a member of the Board of Technip,
Age: 68.       End of mandate: AGM 2015.         Nationality: French.       First mandate: 26 June 2007 – 28 June 2011.         Principal function: Director of companies.       Independent Director.         Lead Director.       Chairman of the Nominations and Remuneration Committee.         Holds 1,000 shares.       Holds 1,000 shares.	Non-Executive Director of EnergySolutions Inc $^{(\star)}$ (USA) (2009-2013).	and Chairman of the Board of Noordzee Helikopters Vlaanderen (NHV) in Belgium. He is a member of the French Academy of Technologies and of the French National Strategic Council for Research.
Nationality: French.       First mandate: 26 June 2007 – 28 June 2011.         Principal function: Director of companies.       Independent Director.         Lead Director.       Chairman of the Nominations and Remuneration Committee.         Holds 1,000 shares.       Holds 1,000 shares.	JEAN-MARTIN FOLZ	
Principal function: Director of companies.       Independent Director.         Lead Director.       Chairman of the Nominations and Remuneration Committee.         Holds 1,000 shares.       Holds 1,000 shares.	Age: 68.	
Principal function: Director of companies.       Lead Director.         Chairman of the Nominations and Remuneration Committee.         Holds 1,000 shares.         Other current directorships and positions:	Nationality: French.	<b>First mandate:</b> 26 June 2007 – 28 June 2011.
Other current directorships and positions: Abroad:	Principal function: Director of companies.	Lead Director.
		Holds 1,000 shares.
In France: –	Other current directorships and positions:	Abroad:
	In France:	-

Director of Saint-Gobain <sup>(\*)</sup>; Director of Société Générale <sup>(\*) (1)</sup>; Director of AXA <sup>(\*)</sup>.

(\*) Listed company.

(1) Mandate ending on 19 May 2015.

# Past directorships and positions (held during the past five years):

# In France:

Member of the Supervisory Board of ONF Participations (SAS) (2008-2011);

Director of Carrefour <sup>(\*)</sup> (2007-2011);

Chairman of *Association Française des Entreprises Privées* (AFEP) (2007-2010);

Chairman and member of the Board of Directors of Eutelsat Communications  $^{(\star)}$  (2011-2013).

## Abroad:

Director of Solvay (\*) (Belgium) (2002-2014).

## LALITA D. GUPTE

Age: 66.

Nationality: Indian.

Professional address: Mhaskar Building, 153 C Matunga, Sir Bhalchandra Road – Mumbai 400019, India.

**Principal function:** Non-Executive Chairman, ICICI Venture Funds Management Company Limited.

Other current directorships and positions:

In France:

#### Abroad:

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Non-Executive Director of the Board of Bharat Forge Ltd (\*), Pune (India);

Non-Executive Director of the Board of Kirloskar Brothers Ltd (\*), Pune (India);

Non-Executive Director of the Board of Godrej Properties Ltd (\*), Mumbai (India);

Non-Executive Director of Vedanta Limited (\*), Mumbai (India);

Chairperson and Non-Executive Director of India Infradebt Limited, Mumbai (India)

She is also a Member of the CAPP (Center for Asia Pacific Policy) Board of RAND.

## Past directorships and positions (held during the past five years):

## In France:

# Abroad:

Non-Executive Chairman of Swadhaar FinServe Pvt. Ltd, Mumbai (India) (2008-2014);

Non-Executive Member of the Board of HPCL-Mittal Energy Ltd, Delhi (India) (2007-2013);

Non-Executive Member of the Governing Board of Welham Girl's School (2007-2013);

Member of the Dean's Advisory Board of the Rotman School of Management, University of Ontario (2007-2013).

Non-Executive Member of the Board of Management of Narsee Monjee Institute of Management Studies (SVKM's NMIMS) (2003-2013);

## **Biography:**

Mr Jean-Martin Folz is a graduate of *École polytechnique* and *ingénieur des mines.* He started his career in the French Ministry of Industry where he served from 1972 to 1978. Then he joined the Rhône-Poulenc group in 1978. He became Chairman and Chief Executive Officer of Jeumont-Schneider between 1984 and 1987. He then joined Pechiney as Chief Operating Officer up to 1991, and was appointed Chairman of Carbone Lorraine. He was Chief Executive Officer of Eridania Béghin-Say and Chairman of Béghin-Say from 1991 to 1995. In 1995, he joined PSA Peugeot Citroën group and was appointed Chairman of AFEP from 2007 to 2010.

#### End of current mandate: AGM 2018. First mandate: 22 June 2010 – 1 July 2014.

Independent Director. Member of the Audit Committee.

Holds 500 shares.

Non-Executive Member of the Indian Advisory Council of Rothschild (India) Private Limited (2007-2012);

Non-Executive Member of the Board of Directors of Firstsource Solutions Ltd (\*) (India) (2006-2010);

Non-Executive Member of the Board of Nokia Corporation  $^{(\star)}$  (Finland) (2007-2011).

# **Biography:**

Ms Lalita D. Gupte is currently Chairperson of ICICI Venture Funds Management Company Limited. She retired at the end of October 2006 as Joint Managing Director and Member of the Board of ICICI Bank Limited. Ms Lalita D. Gupte was responsible for setting up the International business of ICICI Bank since 2001.

Beginning her career with ICICI Limited in 1971 in the project appraisal division, Ms Lalita D. Gupte has held various leadership positions in areas of Corporate and Retail Banking, Strategy, Human Resources, and International Banking and other areas. She was instrumental in transforming ICICI Bank from a primarily term lending institution into a technology led diversified financial services group. Ms Lalita D. Gupte was at the helm of ICICI Bank's global foray, which includes operations in over seventeen countries.

Ms Lalita D. Gupte joined the Board of ICICI Ltd in 1994 as Executive Director and remained on the Board including as Joint Managing Director until 2002 when it merged with ICICI Bank and she became Joint Managing Director of ICICI Bank from 2002-2006.

Ms Lalita D. Gupte has received numerous awards and recognitions. Ms Lalita D. Gupte holds a Bachelor's Degree in Economics (Hons) and a Master's degree in Management Studies. She attended the Advanced Management Programme (AMP) at Insead.

# GÉRARD HAUSER

Age: 73. Nationality: French. Principal function: Director of companies.

#### Other current directorships and positions:

#### In France:

Director of Technip (\*); Director of Delachaux; Chairman of Supervisory Board of Stromboli Investissement (SAS).

#### Abroad:

Director of Mecaplast (Monaco).

## Past directorships and positions (held during the past five years):

#### In France:

Director of Ipsen (March 2006 – 1 July 2014); Chairman and Chief Executive Officer of Nexans <sup>(\*)</sup> (17 October 2000 – 26 May 2009) and Director of Nexans until October 2011.

#### KATRINA LANDIS

## Age: 55.

Nationality: American.

**Professional address:** BP International Ltd – 1 St James Square, London, UKSW1Y 4PD (United-Kingdom).

Principal function: Executive Vice President BP Group (\*)

Other current directorships and positions:

## In France:

#### Abroad:

Member of the Advisory Council of the American Center of Renewable Energy.

Past directorships and positions (held during the past five years):

#### In France:

#### Abroad:

Chief Executive Officer and Group Vice President of BP Alternative Energy (2009-2013).

## End of current mandate: AGM 2016. First mandate: 11 March 2003 – 9 July 2004.

Independent Director. Member of the Nominations and Remuneration Committee.

Holds 5,002 shares.

## Abroad:

Biography:

From 1965 to 1975, Mr Gérard Hauser occupied several high-level positions in the Philips Group. From 1975 to 1996, he worked for the Pechiney group, as Chairman and Chief Executive Officer of Péchiney World Trade first and of Péchiney Rhénalu later; he was later appointed Senior Executive Vice President of American National Can and member of the Péchiney group Executive Board. Mr Gérard Hauser joined Alcatel in 1996 and became President of its Cable and Component Sector in 1997. From October 2000 to May 2009, he was Chairman and Chief Executive Officer of Nexans.

## End of current mandate: AGM 2018. First mandate: 22 June 2010 – 1 July 2014.

Independent Director.

Member of the Ethics, Compliance and Sustainability Committee.

Holds 500 shares.

## Biography:

Ms Katrina Landis is an Executive Vice President for the BP Group. Her portfolio of businesses includes BP Shipping, Integrated Supply and Trading, Group Technology, Alternative Energy and Remediation Management. Prior to her appointment as an Executive Vice President in 2013, she served in a variety of senior roles as the Chief Executive Officer of Alternative Energy from 2009 to 2013, Chief Operating Officer of BP Alternative Energy from 2008 to 2009, Group Vice President of BP Integrated Supply and Trading from 2007 to 2008, and Chief Executive Officer of BP Integrated Supply and Trading – Oil America from 2003 to 2006. Before joining the BP Group in 1992, Ms Katrina Landis owned and operated a consulting company.

Ms Katrina Landis serves on Earth Day Network's Global Advisory Committee for the "Women and the Green Economy"® programme, and was named as an Ambassador to the U.S. Department of Energy's U.S. Clean Energy Education & Empowerment. She holds a degree in Psychology from the University of Mary Washington and a degree in Computer Science from the University of Alaska. In addition, she has received executive level MBA training at the University of Michigan and Stanford.

(\*) Listed company.

## IAMES W. LENG

Age: 69.

# Nationality: British.

Professional address: AEA Investors (UK) Limited - 78 Brook Street - London, W1K 5EF (United Kingdom).

Principal function: European Chairman of AEA Investors.

## Other current directorships and positions:

In France:

#### Abroad:

Senior Independent Director of Genel Energy plc (\*) and Chairman of the Remuneration Committee; Non-Executive Director of Aon plc (\*).

Past directorships and positions (held during the past five years):

#### In France:

#### Abroad:

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Non-Executive Director of CforC Limited (29 April 2009 – 15 December 2010):

Non-Executive Director of Vallares Holding Co. Limited (2 June 2011 -21 November 2011);

Non-Executive Director of TNK-BP Limited (15 January 2009 -31 December 2011):

Non-Executive Director to the Ministry of Justice (4 January 2011 -2 August 2012):

Non-Executive Director of JO Hambro Investment Management Ltd (12 October 2010 – 10 August 2012);

Non-Executive Director of HSBC Bank plc (\*) (12 October 2010 -31 December 2013):

Non-Executive Chairman of HSBC Bank plc (\*) (6 August 2012 -31 December 2013);

Director of Pregis Holding I Corporation (12 October 2005 -15 May 2014);

Director of Pregis Holding II Corporation (12 October 2005 -15 May 2014).

End of current mandate: AGM 2015. First mandate: 18 November 2003 - 26 June 2007.

Independent Director. Member of the Nominations and Remuneration Committee.

Holds 1.150 shares.

## **Biography:**

Mr James William Leng is European Chairman of AEA, an American private equity partnership. He sits on the Boards of three listed companies as a Non-Executive Director: Alstom SA, Genel Energy PLC (an oil and gas company) as a Senior Independent Director and Chairman of the Remuneration Committee and Aon plc, the leading global provider of risk management services, insurance brokerage, and human resource consulting and outsourcing.

From 2010 to December 2013 he was a Director and Chairman of HSBC Bank plc. From 2001 to 2009 he was Chairman of Corus Group plc, a global steel company sold to Tata Steel of India in 2007 and where he was also Deputy Chairman until July 2009. Other past Non-Executive Directorships include, Lead Non-Executive Director at the Ministry of Justice, one of the UK Government's principal ministries, TNK-BP, the largest independent Russian oil and gas company, Chairman of Doncasters Group Ltd., (Precision Engineering), Pilkington plc (Glass), Hanson plc (Aggregates & Building Products) and Chairman of IMI plc (Engineering).

In an executive capacity he was CEO of two publicly quoted companies: from 1995 to 2001, Laporte plc, an international speciality chemical company, and before that Low & Bonar plc a diverse materials and packaging company. His early business years were spent at John Waddington plc where he was Managing Director of a number of their subsidiaries including consumer goods and packaging companies.

Together with his wife Carole, in 2011 they established their own charity, The Guyll-Leng Charitable Trust, to assist young children from disadvantaged backgrounds with their education and sporting interests.

KLAUS MANGOLD					
Age: 71.	End of current mandate: AGM 2015. First mandate: 26 June 2007 – 28 June 2011. Independent Director. Member of the Nominations and Remuneration Committee. Holds 500 shares.				
Nationality: German.					
Professional address: Mangold Consulting GmbH – Leitz-Strasse 45 – 70469 Stuttgart (Germany).					
<b>Principal function:</b> Chairman of the Supervisory Board of Rothschild GmbH (Frankfurt).					
Other current directorships and positions:	Chairman of the Supervisory Board of TUI AG $^{(\star)}$ , Hannover, Germany;				
In France:	Chairman of the Supervisory Board of ALSTOM Deutschland AC Germany;				
-	Member of the Supervisory Board of Swarco AG, Austria;				
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Vice-Chairman Europe of Rothschild, Paris/London; Member of the Supervisory Board of Continental AG  $^{(\star)}$ , Hannover, Germany:

Member of the Global Governance Council of Ernst & Young Global Ltd., United States;

Member of the European Advisory Council of Rothschild, Paris/London.

Ahroad:

#### Past directorships and positions (held during the past five years):

# In France:

## Abroad:

Member of the Supervisory Board of Metro AG  $^{(*)}$  (until May 2013); Member of the Supervisory Board of Drees & Sommer AG, Stuttgart (until November 2012);

Member of the Supervisory Board of Universitätsklinikum, Freiburg (until May 2011).

## **Biography:**

Prof. Klaus Mangold is a former Member of the Board of Management of DaimlerChrysler AG, former Chairman of the Board of Management of DaimlerChrysler Services AG and former Executive Advisor to the Chairman of DaimlerChrysler AG. He studied law and economics at the

#### AMPARO MORALEDA

Age: 51.

# Nationality: Spanish.

Professional address: Rodriguez Marín, 21-3º – 28002 Madrid – Spain.

Principal function: Non-Executive Director of companies.

# Other current directorships and positions:

#### In France:

Non-Executive Director of Faurecia SA (\*)

#### Abroad:

Non-Executive Director of Solvay SA <sup>(\*)</sup> (Belgium); Non-Executive Director of Meliá Hotels International SA <sup>(\*)</sup> (Spain); Non-Executive Director of Caixabank <sup>(\*)</sup> (Spain); Member of the Supervisory Board of CSIC *(Consejo Superior de Investigaciones Cientificas)* (Spain); Member of the Advisory Board of KPMG (Spain);

Member of the Advisory Board of SAP Ibérica (Spain).

#### Past directorships and positions (held during the past five years):

#### In France:

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Universities of Munich, Geneva, London, Heidelberg and Mainz and
finished his studies with a law degree at Heidelberg University. After graduating, he held different functions in German industry before being
nominated a Member and Chairman of the Board of Management of
Rhodia AG, a branch of the French Rhône-Poulenc group (1983-1990),
and Chairman and Chief Executive Officer of Quelle-Schickedanz AG
(1991-1994). He joined the Daimler-Benz group as a Member of the
Board of Management in charge of its Services Division and Central
and Eastern European markets (1995-2003). Prof. Mangold is
Chairman of the Supervisory Board of TUI AG, Germany and member
of a number of Supervisory and Advisory Boards, including those of
Alstom, Ernst & Young (United States) and Continental AG (Germany).
He is also Chairman of the Supervisory Board of Rothschild GmbH
(Frankfurt) and Chief Executive Officer of Mangold Consulting GmbH.
Until November 2010 he was Chairman of the Committee on Eastern
European Economic Relations of German Industry.

End of current mandate: AGM 2015 (Appointed on 2 July 2013).

Independent Director. Member of the Audit Committee.

Holds 1,100 shares.

#### Abroad:

Non-Executive Director of Corporación Financiera Alba, S.A. <sup>(\*)</sup> (Spain) (March 2012 – November 2014).

#### Biography:

Ms Amparo Moraleda graduated as an engineer from the ICAI (*Escuela Técnica Superior de Ingenieria Industrial*) Madrid and holds a MBA (*Programa de Dirección General*) from IESE Business School in Madrid. She was from January 2009 and until February 2012 Chief Operating Officer – International Division of Iberdrola SA, one of the world's leading power utilities.

Previously, from 1988 to 2008, she held various positions within the IBM group she joined as Systems Engineer. From June 2001 to June 2005, she was notably General Manager of IBM Spain and Portugal. Between June 2005 and December 2008, she was General Manager of IBM Spain, Portugal, Greece, Israel and Turkey.

ALAN THOMSON					
Age: 68.	End of current mandate: AGM 2015.				
Nationality: British.	First mandate: 26 June 2007 – 28 June 2011.				
<b>Professional address:</b> HAYS plc – 250 Euston Road, London (United Kingdom).	Independent Director. Chairman of the Audit Committee. Holds 1,500 shares.				
Principal function: Non-Executive Chairman of HAYS plc (*).					
Other current directorships and positions:	Past directorships and positions (held during the past five years):				
Other current directorships and positions:	Past unectorships and positions (new during the past live years).				
In France:	In France:				

(\*) Listed company.

## **Biography:**

Mr Alan Thomson studied Economics and History at Glasgow University graduating with a Master of Arts degree in 1967. He qualified as a Chartered Accountant in 1970 and became a member of the Institute of Chartered Accountants of Scotland. From 1971 until 1975, he was Audit Manager with Price Waterhouse in Paris. From 1975 until 1979, he was Financial Director then Chief Executive Officer of Rockwell International SA in Paris, and from 1979 until 1982, he was Financial Director in the Automotive Division of Rockwell International firstly in the USA (1979-1980) then in the United Kingdom (1980-1982). From 1982 until 1984, he was UK Financial Director of Raychem Ltd, a division of a US public Materials Science company listed in the UK. From 1984 until 1992, he was a Divisional Finance Director within Courtaulds plc, a UK listed company. From 1992 to 1995, Mr Alan Thomson was employed as the Group Financial Director and Main Board Director of The Rugby Group plc, a UK listed Building Materials company and from 1995, until his retirement in September 2006, he held the position of Group Financial Director of Smiths Group plc a UK listed engineering company. Mr Alan Thomson was elected Chairman of Bodycote plc, a listed engineering company, in April 2008. Mr Alan Thomson was appointed in November 2010, Chairman of HAYS plc a listed recruitment company. Mr Alan Thomson served as President of the Institute of Chartered Accountants of Scotland in 2010-2011. Mr Alan Thomson was appointed in March 2014, Chairman of Polypipe Group plc a UK listed building materials company. Mr Alan Thomson was a Director of HSBC Bank plc until 31 October 2014.

PHILIPPE MARIEN					
Age: 59.	<i>Member of the Audit Committee.</i> Designated by Bouygues <sup>(*)</sup> as its permanent representative.				
Nationality: French.					
Professional address: Bouygues – 32, avenue Hoche – 75378 Paris Cedex 08 (France). Principal function: Chief Financial Officer of Bouygues group <sup>(*)</sup> .	End of Bouygues' mandate: AGM 2018 (mandate renewed on 1 July 2014). Bouygues SA				
	French société anonyme with a share capital of €336,086,458. Head Office: 32, avenue Hoche – 75378 Paris Cedex 08 (France). Holds 90,543,867 shares as of 5 May 2015.				
Other current directorships and positions of Bouygues SA: In France:	Current directorships and positions of Mr Philippe Marien as a permanent representative of Bouygues SA:				
Director of Bouygues Construction; Director of TF1 <sup>(*)</sup> ; Director of Colas <sup>(*)</sup> ; Director of Bouygues Telecom; Director of C2S; Director of Bouygues Immobilier; Director of 32 Hoche; Member of the Board of the managing entity of the Gustave-Eiffel Center;	Permanent representative of Bouygues, Director of Bouygue Construction; Permanent representative of Bouygues, Director of TF1 <sup>(*)</sup> ; Permanent representative of Bouygues, Director of Colas <sup>(*)</sup> ; Permanent representative of Bouygues, Director of Bouygue Immobilier; Permanent representative of Bouygues, Director of C2S.				
	Other current directorships and positions of Mr Philippe Marien inside Bouygues Group:				
Member of the Board of the Dauphine Foundation; Member of the Board of GIE Registrar.	Director of Bouygues Telecom; Director of Bouygues Europe (Belgium).				
Past directorships and positions of Bouygues SA (held during the past five years):	Current directorships and positions of Mr Philippe Marien outside Bouyques Group:				
In France: -	Chief Executive Officer of SCDM; Liquidator of Finamag. Director of Uniservice				
	Past directorships and positions of Mr Philippe Marien (held during the past five years):				

Chairman of the Board of Bouygues Telecom (2013).

# Absence of conviction or conflicts of interest

The present section is based on the information provided by the members of the Board in answer to the annual questionnaire sent to them by the Company.

To the Company's knowledge, no member of the Board of Directors:

- has been convicted for fraud during the last five years and/or has been the subject of any official public investigation and/or sanction by statutory or regulatory authorities;
- has been associated in his/her capacity of manager in any bankruptcy, receivership or liquidation for the past five years;
- has been disqualified by a court from acting as a member of an administrative, management or supervisory body of an issuer or from acting in the management or conduct of the business of any issuer for the past five years.

To the Company's knowledge there is no conflict of interest between any duty of the members of the Board of Directors and their private interests and/or other duties. The potential conflicts of interest are essentially those that could, as the case may be, originate from agreements that Bouygues SA and Alstom have entered into. Bouygues SA or companies of its group may be in a position to sign various contracts with Alstom or its subsidiaries pursuant, in particular, to the non-exclusive cooperation protocol signed between both groups on 26 April 2006, and the purpose of which is the creation of infrastructures for transport or the production of electricity. The cooperation protocol was submitted for approval at the General Shareholders' Meeting in the context of the procedure applicable to regulated agreements.

In the event of a conflict of interest, according to the Director's Charter annexed to the Board of Directors' Internal Rules, any Director must inform the Board as soon as he/she is aware of any, even potential, conflict of interests and he/she must abstain from participating in discussions on the conflicting subject matter and from voting on the corresponding resolution. In case of conflict of interest that cannot be resolved to the satisfaction of the Board, the Director must resign.

During the fiscal year, the Company received a notification of conflict of interest from Mr Georges Chodron de Courcel, Alstom Director until 1 July 2014, who was Deputy Chief Executive Officer of BNP Paribas which acted as an advisor to Siemens in the context of the alternative proposal submitted by Siemens and Mitsubishi Heavy Industries following the announcement of General Electric's firm offer to acquire Alstom's Energy businesses. Mr Georges Chodron de Courcel did not attend any of the Board meetings during which this transaction was discussed.

Besides, to the Company's knowledge:

- no settlement or agreement has been reached with shareholders, clients, suppliers or others to appoint a member of the Board of Directors;
- there is no family relationship among the members of the Company's Board of Directors;
- there is no service contract linking any members of the Board of Directors to the Company or to any of its subsidiaries and granting them any benefits.

To the Company's knowledge, and with the exception of what is described concerning Bouygues in section "Additional Information" of the Registration Document for the 2014/15 fiscal year, there is no restriction applicable to any of the other members of the Board of Directors relative to the sale of their equity stake in the capital of the Company other than the internal rules set by the Group or, more generally, all applicable legal or regulatory provisions governing refraining from trading in the Company's securities in the context of insider trading prevention.

# Evaluation of the Directors' independence

According to the AFEP-MEDEF Code and as set forth in the Board of Directors' Internal Rules, the Board of Directors re-examines annually the situation of each Director in the light of the independence criteria. The Board meeting of 5 May 2015 performed this review based on the proposals made by the Nominations and Remuneration Committee that the Board had accepted.

As in the previous year, the Board followed the definition contained in the AFEP-MEDEF Code and considered that a Director is independent when he or she has no relationship of any kind with the Company, its Group or its Management that could compromise the independence of his or her judgement.

The Board took into account all the criteria recommended by the AFEP-MEDEF Code to assess the independence of its members, and established that in order to be qualified as independent, a Director must not:

- criteria 1: be an employee or an Executive Corporate Officer (dirigeant mandataire social) of the Company, or an employee or Director of its parent company, or of one of the subsidiaries it consolidates, and has not been in such a position in the past five years;
- criteria 2: be an Executive Corporate Officer (dirigeant mandataire social) of a company in which the Company holds, either directly or indirectly, a directorship, or in which a directorship is held or has been held within the past five years by an employee designated as such or an Executive Corporate Officer (dirigeant mandataire social) of the Company;
- criteria 3: be, either directly or indirectly, a significant customer, supplier, investment banker or commercial banker or for which the Company or its Group represents a material proportion of the entity's activity;
- criteria 4: have any close family ties with a Corporate Officer (mandataire social) of the Company;
- criteria 5: have been a Statutory Auditor of the Company for the past five years;
- criteria 6: have been a Director of the Company for more than twelve years (the loss of the independent status can only take place at expiration of mandate during which he would have exceeded the period of twelve years);
- criteria 7: be, control, or represent a shareholder who holds alone or in concert more than 10% of the Company's share capital or voting rights in Shareholders' Meetings.

Each Director is invited to transmit annually to the Company a statement with respect to each of these criteria.

In compliance with the AFEP-MEDEF Code's recommendation, the Board of Directors may consider that a Director may not be qualified as independent even though the criteria are satisfied and conversely.

In particular, the Board of Directors checked the criteria of key business relationships (criterion #3). Whenever flows of business or relationships have been identified between Alstom and the companies in which those Directors considered independent exercise their functions or mandates, their nature, the non significant amount of their volume assessed from each party's point of view or the fact that the relevant Director does not hold an executive position within the company or group concerned, have generally been taken into consideration by the Board to confirm the independence of the relevant Directors.

The Board's view that Mr Jean-Martin Folz should be considered to be independent took into account the fact that despite the relationship that exists between the Group and, on the one hand, Société Générale (one of the banks with which the Group does business on a regular basis) and, on the other, AXA (one of the Group's main insurers), and for both of which Mr Folz is a Director, the latter had never held an executive position within Société Générale or AXA. In addition, Mr Folz refrains from participating in the decisions of the Board which would involve one of these companies.

The Board's view that Mr James W. Leng should be considered to be independent took into account the fact that he had been appointed Non-Executive Director of Aon plc in 2014, with which the Group entertains a relationship in some countries and that the Board considered non-significant.

The Board decided that the functions exercised by Mr Klaus Mangold as Chairman of the Supervisory Board of one of the Group's German subsidiaries, would not compromise the exercise of his independence of judgment within the Board insofar as this entity is a wholly-owned subsidiary and that this mandate did not create any hierarchical relationship with the Company's management. The Board acknowledged that up to now, Mr Mangold has not informed the Board of any conflict of interest, even potential arising from this mandate, even though, upon his appointment, he had committed to do so, if need be. In accordance with the terms of the Board's Internal Rules and the AFEP-MEDEF Code's application guide published in December 2014, he would also not participate in the Board's decisions in the event of a conflict of interest between the Company and its subsidiary.

The Board also acknowledged that the appointment of Mr Pascal Colombani as Member of the European Advisory Board of JP Morgan Chase, a bank with which the Group has relationships that the Board has also considered non significant, would not compromise Mr Pascal Colombani's independence of judgment.

Thereby, after reviewing all the criteria, the Board of Directors decided to renew the qualifications set in 2014, considering that ten Directors of the fourteen comprising the Board should be qualified as independent Directors (71%), which exceeds the proportion of one half recommended by the AFEP-MEDEF Code for those non-controlled companies with a widely spread share capital and the rule adopted by the Board set forth in its Internal Rules.

#### Criteria AFEP/ MEDEF (\*)

Criterion 1	Criterion 2	Criterion 3	Criterion 4	Criterion 5	Criterion 6	Criterion 7	Classification made by the Board of Directors
	V	v	V	V		V	Non independent
v	V		V	V		V	Non independent
v		V	V	V	V		Non independent
v	V	V	V	V	V	V	
v	V	V	V	V	v	V	
v	V	V	V	V	v	V	
v	V	V	V	V	V	V	
v	V	V	V	V	V	V	
v	V	V	٧	٧	٧	V	
v	V	V	٧	٧	٧	V	
v	V	V	٧	٧	٧	V	
v	V	V	٧	٧	٧	V	
v	V	V	V	V	٧	V	
V	V	٧	V	V	V		Non independent
	Criterion 1 √ √ √ √ √ √ √ √ √ √ √ √ √	· · · · · · · · · · · · · · · · · · ·	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

(\*) The criteria is considered completed when marked with a "v".

At the end of the General Shareholders' Meeting dated 30 June 2015, called to deliberate on proposed appointments and renewals of Directors, the Board of Directors will include nine independent Directors out of fourteen (64%) (see page 195).

# **Rules of conduct – Ethics for Directors**

# **Director's Charter**

Attached to the Board of Directors' Internal Rules is the Director's Charter, defining the Directors' rights and obligations, and the content of which is for the most part compliant with the recommendations of the AFEP-MEDEF Code. The Internal Rules of the Board and the Director's Chart were updated on 6 May 2014, and on 17 March 2015 (the Charter only), in order to greater formalise the recommendations of the AFEP-MEDEF Code and provide for the appointment of a Lead Director, for which

the Internal Rules define the duties and prerogatives (please refer to pages 196 and 198).

Before accepting their appointment, all Directors must make themselves aware of the legal and regulatory requirements relating to their office, as well as of the Company Articles of Association, the Group's Code of Ethics, the internal procedures for the Board of Directors, Board Committees and the Director's Charter. Any Director can refer to the Secretary of the Board at any time, regarding the application of these rules and the rights and obligations of their role.

Any Director shall dedicate to her/his function all the required time and attention and shall attend – unless prevented to do so – all meetings of the Board of Directors and of the Committees which he is a member of, as well as all Shareholders General Meetings.

Pursuant to the Charter, each Director has a duty to inform the Board as soon as she/he is aware of a conflict of interest, even a potential

one, and to abstain from attending discussions and from voting on the corresponding resolution. It specifies that the Director must consult with the Chairman of the Board of Directors (or, whenever the Director in question is the Chairman of the Board of Directors, the Chairman of the Nominations and Remuneration Committee) prior to committing to any responsibilities or accepting to exercise any functions or fulfil any obligation that could, according to him or her, create a conflict of interest for him or her, including a potential one. After consulting with the Lead Director, the Chairman can submit such questions to the Nominations and Remuneration Committee, or the Board of Directors. The Lead Director will analyse any potential conflicts of interest with the Chairman of the Board of Directors. In the event of a conflict that cannot be resolved to the satisfaction of the Board, the Director must resign. Upon taking office, then once a year, the Director must submit a statement to the Company on the existence of or the potential for any conflicts of interest by answering a questionnaire provided by the Company. She or he must notify the Company if ever this submitted information becomes inaccurate, and is required to answer to the Chairman of the Board of Directors' information request at any time, in accordance with the Directors' Charter.

Pursuant to the Charter, each Director is bound by professional secrecy and must personally protect the confidentiality of any information she/ he obtains in connection with her/his office that has not been made public.

In addition, the Charter states that the Director must also comply with the provisions of the AFEP-MEDEF Code and the legal provisions in force concerning rules applicable to the combination of mandates. Each Director must provide information to the Company regarding the mandates he or she holds in other companies, including his or her participation in Committees of the Boards of such French or foreign companies. He or she must disclose any new mandate or professional responsibility to the Company as soon as possible. When he or she exercises executive functions within the Company, he or she must also solicit the opinion of the Board of Directors prior to accepting a new corporate mandate in a company outside the Group.

The Director's Charter also reminds the Directors' duty to comply with the Group's Internal Rules and, more generally, with the applicable legal or regulatory provisions regarding the Directors' abstention from dealing in the Company's securities, as set forth in the Group's Code of Conduct on the misuse of inside information designed to prevent insider trading.

# Code of Conduct on the misuse of inside information designed to prevent insider trading

The Code of Conduct on the misuse of inside information designed to prevent insider trading (the "Code of Conduct") defines the situations in which certain individuals must refrain from carrying out transactions involving the Company's securities. These principles are also contained in the Group's Code of Ethics presented in the second part of this report.

The Group's Code of Ethics and Code of Conduct are also delivered to each Director at the beginning of her/his mandate and following each amendment. Compliance with confidentiality rules is also among the essential rules of the Group's Code of Ethics.

The Code of Conduct approved by Board of Directors, applies to the managers (Executive and Non-Executive Directors) and assimilated persons, and to employees of the Group who have regular or occasional access to inside information.

The Code allows managers to resort to trading plans managed by third parties (mandats de gestion programmée) and allows them to continue the execution of such trading plans during the black-out trading periods provided for in the Code. To the Company's knowledge, as of today, there is no trading plan managed by third parties outstanding.

The schedule of these blackout periods, like the Code of Conduct, can be accessed online on the Company's intranet site.

In addition, the opening of each blackout-trading period is notified by email to the interested persons together with an updated timetable of all such periods.

The Board Internal Rules, as well as this Code of Conduct to which the Internal Rules of the Board refer, also remind the managers and persons related to them of their legal obligations to report dealings in the Company's securities completed either by them or by persons close to them.

Pursuant to the Code of Conduct, transactions involving the Company's securities are not allowed:

- during the 30 calendar days before Alstom's first six-month and annual results are disclosed to the public and until the second trading day included after the date when the information has been disclosed to the public;
- during the 15 calendar days before the public disclosure of the sales and orders (or other results) for the first and third quarters of the financial year and until the second trading day included after the date when the information has been disclosed to the public, and in any case;
- when inside information is held and until the second trading day included after the date when this information has been disclosed to the public.

# Conditions of preparation and organisation of the work of the Board of Directors

# Organisation and functioning of the Board of Directors

# **Internal Rules**

The procedures governing the organisation and functioning of the Board of Directors are defined by the Internal Rules of the Board which purpose is to complete applicable laws and regulations.

The rules are regularly reviewed by the Board to determine whether its provisions need to be amended or detailed in order to better comply with regulations in force or to improve the efficiency and operation of the Board and its Committees. During the fiscal year, amendments made, aimed at specifying and further guaranteeing good governance practices, were incorporated in May 2014 and March 2015, based on recommendations made by the Nominations and Remuneration Committee (see pages 196 and 198).

#### The Internal Rules notably state that the Board of Directors:

- shall be comprised of independent Board members numbering not less than half of its total members, as determined and reviewed annually by the Board on the basis of a proposal to be made by the Nominations and Remuneration Committee;
- shall define, upon the proposal of the Chief Executive Officer, the Group's strategy, and shall regularly review the Group's strategic options as previously defined, supervise management and verify the quality of information supplied to shareholders and the financial markets;

- shall examine and approve the annual budget and the mediumterm plan;
- shall consider prior to implementation, any operation that is not part of the Group's announced strategy or that could significantly affect it or materially modify the financial structure or results of the Group;
- shall approve before implementation any acquisition or divestiture insofar as the amount exceeds €250 million, any decision to set up a partnership or a joint venture where the contribution of the Group exceeds €250 million, as well as any financing operation which exceeds €1 billion;
- shall approve before implementation organic growth investments in an amount higher than €250 million and the significant internal restructuring undertakings in particular at the time of the annual review of the Group's budget and strategy;
- shall be kept regularly informed of developments in the Group's business activities and results, the Group's significant risks, its financial position, indebtedness, cash position and, more generally, any Group commitments, and may request information about the foregoing at any time;
- shall create one or more specialised Committees and shall define their composition and responsibilities;
- shall approve the composition of the Group's Executive Committee;
- shall set the remuneration of the Executive and Non-Executive Directors (mandataires sociaux) and assess each year the Chief Executive Officer's performance outside of his presence;
- shall review and approve annually the information published in the Company's Annual Report on its practices and structure of corporate governance, including the presentation of the policy that is followed with respect to the remuneration of Executive and Non-Executive Directors.

The Board shall examine its operation at least once a year and implement a formal assessment every three years.

Every year, the Board conducts a formal assessment of its functioning and of the Committees' functioning and entrusts the preparation of such assessment to external consultants every three years.

A minimum of six meetings is scheduled each year.

# **Training of Directors**

At the beginning of her/his mandate, each Director receives all information needed to perform her or his duties and may request any document she or he considers appropriate.

Interviews with those responsible for the Group's main central functions are organised, as well as meetings in the Group's Sectors, with detailed presentation of the businesses and the visits of production sites in order for the Directors to gain initial contact with management teams and develop a more thorough understanding of elements that are specific to the Company, its activities and the markets in which it operates.

Within the framework of the development of continuing training initiatives, it is also proposed to all Directors the option to participate in these induction and training programs intended for new Directors. During the annual evaluations of the Board's operation, the members are requested to indicate whether they feel the need to update their knowledge or broaden their skills.

The Board's Internal Rules have been supplemented to clarify that any further training a Director may request, if she or he considers it necessary, may cover not only Group activities and product lines, but also accounting and financial aspects.

Each year, one Board meeting is held on one of the main Group sites and provides in depth presentations of the business concerned, visits of production sites and exchanges with operational executives.

# Information to be provided to Directors

Prior to each Board or Committee meeting, the Directors shall receive, sufficiently in advance and with proper notice (generally one week advance notice), a report on the agenda items that require prior examination and consideration.

In addition to Board meetings, the Chairman regularly informs the Directors of any event or development that may have a material impact on operations or on any information previously communicated to the Board or on any matters discussed during the meetings; the Chairman also regularly forwards to the Directors any material information regarding the Company. The Board Internal Rules, notably provide for the prior notice and data to be given to the Board for any acquisition, disposal or any decision to set up a partnership or a joint venture in excess of €100 million.

The Directors also receive copies of any press release, as well as the main articles appearing in the press and reports by financial analysts.

The Directors may at any time request further information from the Chairman of the Board, who shall assess the relevance of the request. Any Director is also entitled to meet with the Group's Senior Executives outside of the presence of the Executive and non-Executive Directors (*"mandataires sociaux"*) of the Company.

The Directors can also be asked to join workgroups organised by the Company whose subject matters will then be presented to the Board.

The operational or functional executives of the Group, as well as persons outside the Group, participate in meetings at the request of the Chairman, based on the matters on the agenda.

# **Board Committees**

Since the Company's listing in 1998, the Board of Directors has operated two Committees, the Audit Committee and the Nominations and Remuneration Committee, invested with the responsibility to study and prepare the Board's main deliberations in order to improve the Board's efficiency, which is the only body duly authorised to make decisions.

In September 2010, the Board of Directors decided to establish a third Committee, the Ethics, Compliance, and Sustainability Committee (the "EC&S Committee").

Each Board meeting is generally preceded by a meeting of one or more of these Committees depending on the items on the Board meeting agenda. The Committees report to the Board on their work and observations, and submit their opinions, proposals or recommendations. Given the travelling requirements foreign Directors are faced with, Audit Committee meetings are usually held the day prior to Board meetings and not two days ahead as recommended by the AFEP-MEDEF Code, on the basis of documents that have already been sent to participants (a week before the meeting). However, with respect to the approval of the annual financial statements, the Audit Committee has, on occasion, met several days before the Board meeting.

In addition, the Board can at any time decide to create an *ad hoc* Committee of Directors to examine a specific matter. As such, on 29 April 2014, it appointed an *ad hoc* Committee of Independent Directors in order to conduct the review of the offer received from General Electric (please refer to the Board's Activity Report for the 2014/15 fiscal year, presented hereafter).

A Director's professional career and skills are taken into account as selection criteria in deciding on his or her presence on a given Committee.

According to the Audit and EC&S Committees' Internal Rules, these Committees shall consist of at least three members of whom at least two-thirds must be independent Directors including the Chairman of the Committee. As for the Nominations and Remuneration Committee, the Rules recommend that it shall consist of at least three members and that at least a majority of the Committee's members are independent among whom the Chairman of the Committee who shall have a casting vote in case of a tie vote.

In the context of its work, each Committee can meet any Group executive it wishes, resort to the services of experts on its own initiative and ask for any information useful for it to perform effectively.

Moreover, each member of a Committee may propose that a meeting be held if he or she considers this necessary in order to discuss a particular issue.

The Committees' work is subject to an oral report during the Board meeting, followed by a report in writing made available to Directors. Each Committee prepares a report presenting its work during the past fiscal year; this report is included in the Registration Document (see hereinafter).

The Internal Rules of the Board of Directors and its Committees and the Director's Charter appended to the Board Internal Rules of which large extracts are provided herein, as well as the Code of Conduct to which the Board Internal Rules refer, are available on the Alstom Internet site (www.alstom.com, section "Corporate governance").

# Activity report of the Board for fiscal year 2014/15

The Board of Directors met fifteen times during the fiscal year (seven times during the previous fiscal year). The attendance rate was 93% (94% in 2013/14).

One of the key events of the 2014/15 fiscal year was the review of the firm offer submitted by General Electric in late April 2014 and aimed at acquiring Alstom's Energy businesses, namely Power (electricity generation) and Grid businesses, as well as Alstom's central and shared services, for a price of  $\epsilon$ 12.35 billion. The receipt of this offer suspended the contemplated sale of a minority stake in Alstom Transport and the sale of other non-strategic assets. On 29 April 2014, the Board of Directors decided to create an *ad hoc* Committee of independent Directors chaired

by Lead Director Mr Jean-Martin Folz, for the purpose of analysing this offer in the context of Alstom's strategic considerations, as well as any other alternative proposals the Company were to receive, as the case may be. The *ad hoc* Committee, assisted by external consultancy firms, conducted an in-depth review of both General Electric's offer and the proposal received by Siemens and Mitsubishi Heavy Industries, as the offers were updated in June, while taking into account the corporate interest of the Company and the interests of all stakeholders.

Based on the recommendation made by the ad hoc Committee, on 21 June 2014, the Board recognising the offer's benefits from both a strategic and industrial standpoints, voted in favour of the General Electric's offer which had been updated to also include, on the one hand, the creation of joint ventures between General Electric and Alstom, dedicated to Grid, renewable energy (Alstom's offshore Wind and Hydroelectric businesses), nuclear, and steam turbines in France, respectively and, on the other hand, Alstom's acquisition of General Electric's signalling business and the creation of a global railway alliance between the two groups. Once discussions with employee representative bodies, which began in July 2014, were finalised, on 4 November 2014 the Board of Directors authorized the execution of all contracts with General Electric and, in accordance with the AFEP-MEDEF Code's recommendations, called for an Extraordinary Shareholders' Meeting in order to deliberate on the contemplated transaction with General Electric, for which the Board approved the resolutions and its report on such resolutions.

The Board also studied the terms and conditions of the distribution to shareholders of a portion of the amounts received from General Electric, which will be decided after the completion of the transaction with the main objective to ensure that the new Alstom will have the ability to meet its operating needs, to finance itself through a sound balance sheet, and to support its development strategy.

Based on the Nominations and Remuneration Committee's recommendation, the Board of Directors made changes to the LTI No. 15 and LTI No. 16 stock option and performance share plans, subject to the completion of the transaction with General Electric. Furthermore, based on the Nominations and Remuneration Committee's recommendation, and after having received the opinion of the High Committee for Corporate Governance, the Board of Directors also decided to allocate conditional and exceptional compensation to the Chairman and Chief Executive Officer in the meaning of Paragraph 9 of Article 23.2.3 of the AFEP-MEDEF Code. A synopsis of the status of each step necessary to the completion of the transaction with General Electric was presented at each Board meeting.

In addition, on 19 December 2014, the Board approved the agreement entered into with the American Department of Justice (DOJ), which put an end to the investigation of alleged violations of the U.S. Foreign Corrupt Practices Act (FCPA), under the terms of which Alstom agreed, in particular, to plead guilty to violating the books and records and internal controls provisions of the FCPA and to pay a fine of USD 772 million.

Along with this major strategic transaction with General Electric, the Board continued to pay close attention to the review of the Transport Sector's strategy on which the Group would be refocused post completion of the contemplated transaction with General Electric. This occurred during meetings convened to discuss the budget, planning, and in-depth review of the development prospects for certain key markets as well as growth opportunities for Alstom Transport. A Board meeting held in New Delhi was followed by a presentation of Alstom in India and visits of its Transport worksites. These visits and discussions with local management teams allowed Directors to better understand the locally implemented strategic actions taken by the Group in the Transport Sector.

The Board discussed and passed resolutions on all other main topics regarding the Group.

Based on the Audit Committee's recommendation, the Board reviewed and approved the consolidated and parent company accounts for the fiscal year 2013/14, the consolidated accounts for the first half of the fiscal year 2014/15, as well as the related management reports. The Board reviewed the draft press releases on these accounts before their publication.

Each time it reviewed the half-year and full year accounts and also on a regular basis, the Board reviewed the financial situation of the Group, the evolution of the cash flow, debt, liquidity position and its financial rating. The Board received information on the significant risks faced by the Group and the action plans launched, and discussed and approved the description of the main risks faced by the Group that were included in the Company's 2013/14 Registration Document (*Document de Référence*). A report on the development of the Group's activities has been presented at each meeting.

Regarding corporate governance, the Board confirmed its decision to maintain the combination of the functions of Chairman of the Board and Chief Executive Officer, and decided, based on the proposal submitted by the Chairman and Chief Executive Officer and the Nominations and Remuneration Committee, to appoint a Lead Director whenever the functions of Chairman and Chief Executive Officer are combined. Furthermore, in March and May 2014, the Board also deliberated on the Company's application of the AFEP-MEDEF Code's recommendations. In May 2014, it decided to amend the Board's internal rules in order to, on the one hand, create the position of Lead Director and define his or her duties and, on the other hand, to more accurately reflect the AFEP-MEDEF Code, as updated in June 2013.

The Board voted on the composition of the Board of Directors in the context of Mr Georges Chodron de Courcel's succession, then voted on the composition and chairmanship of the Committees.

In May 2014, the Board also analysed the Group's policies with respect to professional and wage equality as well as environmental, health, and safety matters. It discussed about Directors' independence status and, more generally, approved the Chairman's report pursuant to Article L. 225-37 of the French Commercial Code and the section "Corporate governance" of the 2013/14 Registration Document before its filing with the AMF (*Autorité des marchés financiers*). It approved the "Sustainable Development" section after having heard the Ethics, Compliance and Sustainability Committee's report.

The Board also determined, on the proposal of the Nominations and Remuneration Committee the amount of the Chairman and Chief Executive Officer's variable compensation for fiscal year 2013/14 based on the achievement of the financial and personal objectives and on the terms of calculation previously set by the Board. The Board also fixed the objectives for the determination of his variable compensation for fiscal year 2014/15 and the basis for its calculation depending on the achievements and fixed the annual fixed compensation of the Chief Executive Officer for fiscal year 2014/15.

Every year, the Board completes an evaluation of its composition and functioning in accordance with the provisions of Article 10 of the AFEP-MEDEF Code. For fiscal year 2013/14, the Board had decided to conduct a comprehensive and formal evaluation, entrusted to an external firm. Thus, and also taking into account the exceptional event that was the

offer made by General Electric to acquire Alstom's Energy businesses, the Board decided during its meeting held on 13 January 2015 that, for the 2014/15 fiscal year, it would conduct an evaluation mainly focused on an *ex post* evaluation of the management by the Board of Directors of the offer received from General Electric as well as competing offers as well on a first discussion on the evolution of the Company's governance post-completion of the on-going transaction with General Electric. In practice, the Board of Directors entrusted the Lead Director with the responsibilities of questioning each Non-Executive Director individually regarding both of these matters and of presenting a summary report at its meeting dated 5 May 2015.

During the fiscal year, the Board of Directors also:

- adopted the resolutions and the documents required by law concerning the annual Shareholders' General Meeting including the elements related to the remuneration of the Chairman and Chief Executive Officer, which were submitted to the shareholders' advisory vote;
- renewed the financial delegation of powers to the Chairman and Chief Executive Officer for the issue of bonds;
- authorised the implementation of a Company's share purchase programme;
- followed the evolution of the main on-going investigations and disputes, and received, on a regular basis, information on the internal control and risk management systems through reviewing the Audit Committee's work reports, and on the procedures, actions, and organisation of the Group relative to ethics, compliance, and sustainable development through monitoring the work of the Ethics, Compliance and Sustainability Committee;
- noted the career development plans of some executives and discussed the evolution of the governance of the new Alstom;
- set the remuneration to be paid to the Directors, the Lead Director, and the exceptional remuneration to be paid to members of the *ad hoc* Committee of independent Directors;
- reviewed the Chairman and Chief Executive Officer's performance during its annual meeting in March outside of his presence;
- approve the reappointment of the Statutory Auditors based on the Audit Committee's proposal.

The Committees' Chairmen submitted their Committee work reports to the Board for discussion.

The Independent Auditors were invited to the two Board meetings dedicated to the review and approval of the annual and half-yearly accounts.

# Lead Director: activity report during fiscal year 2014/15

The Lead Director took office on 7 May 2014 and, since 1 July 2014, chairs the Nominations and Remuneration Committee. He participated in all of the Board of Directors meetings and chaired all of the Nominations and Remuneration Committee's meetings ever since he was appointed to such Committee. In addition, he chaired the *ad hoc* Committee of Independent Directors created by the Board of Directors on 29 April 2014 for the purpose of reviewing General Electric's offer.

Over the course of the 2014/15 fiscal year:

 the Lead Director led the works of the *ad hoc* Committee of Independent Directors, which met seven times, and reviewed, together with financial and legal consultants it selected, General Electric's offer to acquire Alstom's Energy businesses as well as Siemens and Mitsubishi Heavy Industries' proposal, and unanimously recommended to the Board, at its meeting dated 20 June 2014, to issue a favourable opinion relative to General Electric's updated offer. In particular, the Lead Director ensured that the Directors received all of the necessary information prior to the Board Meetings held in the context of this transaction;

- the Lead Director, together with the Chairman of the Board of Directors, reviewed any potential conflicts of interest and, in particular, the conflict of interest pertaining to a Director who was a member of the Audit Committee in the context of the review process of General Electric's acquisition of Alstom's Energy businesses, and shared their conclusions with the Board;
- as Chairman of the Nominations and Remuneration Committee, the Lead Director ran the discussions relative to the renewal of the Directors' mandates expiring at the Annual General Meeting dated 30 June 2015 and to the overall balance of the Board's composition, and led the selection process for new Directors. He also began discussions with the Committee concerning the governance structure and organisation of the Board of Directors of the new Alstom post completion of the planned transaction with General Electric. He led the annual self-evaluation of the Board's operation, which was conducted at the end of the 2014/15 fiscal year by way of individual interviews with each Director. The Lead Director also conducted the Governance Practices Committee's annual review relative to the AFEP-MEDEF Code, its application guide, and the AMF's report. He gathered the opinion of the High Committee for Corporate Governance regarding the payment, subject to the successful completion of the transaction with General Electric, of exceptional remuneration that the Committee recommended the Board should allocate to the Chairman and Chief Executive Officer:
- the Lead Director chaired the Annual Meeting of Non-Executive Directors held to evaluate the performances of the Chairman and Chief Executive Officer;
- the Lead Director consulted with the Chairman and Chief Executive Officer on a regular basis concerning the preparation of Board meetings and all of the important matters that were presented or decisions made at such meetings. He made himself available to Directors and entertained discussions on a regular basis with those who required it;
- the Lead Director submitted a report of his work to the Board of Directors at its meeting dated 5 May 2015.

# **Audit Committee**

The Audit Committee, formed in 1998, is currently composed of five members: Mr Alan Thomson, Chairman of the Committee as from 2 July 2013, Ms Lalita D. Gupte, Mr Pascal Colombani, Mr Philippe Marien and Ms Amparo Moraleda.

**Four members out of five** are independent, including the Chairman. This corresponds to the two-thirds of Directors recommended by the AFEP-MEDEF Code.

Ms Lalita D. Gupte, Mr Philippe Marien and Mr Alan Thomson have specific expertise in financial or accounting matters due to their qualification or professional expertise as set forth in their biographies. Ms Lalita D. Gupte and Mr Alan Thomson are also independent members.

# **Duties**

Acting under the authority of the Board of Directors, the general purpose of the Committee is to assist the Board of Directors in overseeing issues relating to the development and management of financial and accounting information. In particular, the Committee is responsible for monitoring (i) the process according to which the financial information is developed, (ii) the efficiency of internal controls and risk management systems, (iii) the legal auditing of annual account statements and consolidated account statements as carried out by the External Auditors, and the independence of such External Auditors.

In fulfilling its role, as stated in its Internal Rules, the Committee is responsible for the following:

- to review the scope of consolidation and examine all draft consolidated and corporate financial statements and related reports which will be submitted to the Board for approval and to discuss them with Management and the External Auditors;
- to review with Management and the External Auditors the generally accepted accounting principles used in the preparation of the accounts including the review of alternative accounting principles, as well as any change in accounting principles, methods or rules while monitoring that such principles are still relevant;
- to examine and monitor the production process and the treatment of financial and accounting information used in the preparation of account statements;
- to evaluate the validity of the methods chosen for processing significant transactions as well as those transactions through which a conflict of interest could have occurred;
- to examine Management's presentation on risk exposure (including legal risks) and significant off-balance sheet commitments and contingencies at the time of the Committee's review of the accounts;
- to review and evaluate at least annually, the efficiency of internal control procedures and risk management procedures in place, including those associated with the development and treatment of financial and accounting information; the Committee monitors that the main risks are identified and managed, and that it is kept informed of their existence and status, it being specified that it shall receive the opinion of the Ethics, Compliance, and Sustainability Committee on the risk map concerning ethics and compliance, social responsibility and sustainable development and on the procedures in place for preventing the identified risks;
- to examine and review, on an annual basis, the organisation and operation of the internal audit; the Committee approves the internal audit programme, monitors its development and the results of its plans of action;
- to review with the External Auditors the nature, scope, and results of their audit and work performed; and to review their comments and suggestions, in particular those relating to internal control and risk management procedures, to accounting practices and to the internal audit programme;
- to examine and provide the Board of Directors with its opinion on the Chairman of the Board of Director's draft report to shareholders at the general Shareholders' Meeting on the internal controls and risk management procedures implemented by the Company;

- to review and control if any the call for tenders procedure associated with the selection of External Auditors and provide the Board of Directors with a recommendation on the External Auditors proposed for appointment by shareholders at the general Shareholders' Meeting and on the amount of fees that the Company intends to pay them;
- to approve the External Audit Charter governing relations with the External Auditors and examine, on an annual basis, the amount of the fees paid by the Group to the networks to which such External Auditors belong, including fees that are not directly linked to the External Auditors' duties;
- to see to the External Auditors' independence, to examine with them, if applicable, the risks that are impacting such independence and the safety measures undertaken to mitigate these risks and grant its prior approval to any external audit performed that is accessory to or directly complementary to the audit of the accounts they are responsible for (excluding all other duties).

The Committee may also perform any other activity as the Committee or the Board of Directors deems necessary or appropriate. The Committee is entitled to seek any external assistance it may deem necessary.

Once a year, the Committee dedicates one of the items on its agenda to a debate concerning its functioning. Unless the Committee decides differently, the External Auditors will attend meetings.

## Activity report of the Audit Committee for fiscal year 2014/15

The Audit Committee met four times during fiscal year 2014/15 (four times during fiscal year 2013/14). The attendance level was 95% (96% for previous fiscal year).

The Chief Financial Officer, the Senior Vice President of Internal Audit, the Group Controller, the Group General Counsel and the representative of the two independent audit firms were in attendance at the meetings. Other Senior Management including the Chief Information Officer, the Head of Treasury and representatives of Sectors' Financial Departments attended the Committee meetings.

The Committee reviewed the Statutory and Consolidated Financial Statements as of 31 March 2014 as well as the half-year consolidated accounts as of 30 September 2014 (financial statements, notes and management or activity reports) in May and November 2014 respectively. In May 2014, the Committee also reviewed the Registration Document (*Document de Référence*) for the fiscal year ended 31 March 2014 prior to its filing with the French Stock Market authority (*Autorité des marchés financiers*) and especially the section concerning risks as well as the section concerning the internal control and risk management procedures of the Chairman's Report, which the Committee approved.

On the basis of the presentations by the General Management and the independent audit firms, the Committee checked the relevance of the accounting methods and treatments used in the financial statements.

As in prior years, the annual and half-year closing of accounts led to detailed presentations from the Financial Management of each Sector, of the Group's major risks (risks linked to the activity, to contract execution, to the main disputes), of cash flow evolution, of the off-balance sheet commitments and of provisions. At the end of each meeting to review the accounts, the Chairman of the Audit Committee met with the independent audit firms without management being present to enquire as to whether all the relevant issues have been raised by them.

In September 2014, the reporting and accounting treatment in the condensed interim consolidated financial statements linked to the transaction contemplated with General Electric were presented by the Group Controller and External Auditors to the Audit Committee. The Senior Vice President of Internal Audit also presented an Internal Audit/ Internal Control update.

During November 2014, the Committee reviewed the existing internal control procedures put in place in the Group and the internal control evaluation carried out by the Company through an annual evaluation questionnaire. The Committee was informed of the detailed results of the annual internal control campaign and of the action plans aiming to improve internal controls and risk control, to eliminate weaknesses and to ensure compliance with applicable regulations. The results of the action plans were presented to the Committee. The Committee also heard the Statutory Auditors' observations and recommendations on internal control in March 2015.

In March 2015, the Chief Information Officer presented in detail the evolution of internal controls related to Alstom Information Systems and Technology.

During the same meeting in March 2015, the Risk Mapping methodology – a risk identification and follow-up tool embedded in the Budget/Three year plan – as well as the action plans implemented were examined. The Senior Vice President of Internal Audit presented the updated results at Sector levels.

The Senior Vice President of Internal Audit presented the Internal Audit half-year and full year activity reports for 2014 and the proposed internal audit plan for the next year was reviewed and approved.

The Committee examined the amount of fees paid out to the independent audit firms during the fiscal year 2014/15. The External Auditors' Charter includes the listing of pre-approved services that can be performed within defined limits by the independent audit firms. The Committee ensured that the work performed by the independent audit firms was within their guidelines. The Committee also recommended to the Board to propose to Annual Shareholders' Meeting the renewal of the mandates of the auditors.

After each meeting, the Committee reported to the Board on its work and provided comments on key issues and proposals for improvements.

# The Nominations and Remuneration Committee

The Nominations and Remuneration Committee, formed in 1998, is currently composed of six members: Mr Jean-Martin Folz, Chairman of the Committee, Mr James W. Leng, Ms Candace K. Beinecke, Mr Olivier Bouygues, Mr Gérard Hauser and Mr Klaus Mangold. At the end of the Shareholders' Meeting dated 1 July 2014, the Board decided to appoint Lead Director Mr Jean-Martin Folz as Chairman of the Committee. Mr Folz thereby replaces Mr James W. Leng who had chaired the Committee since November 2003.

**Four members of the Committee out of six** are independent, including the Chairman, which complies with the AFEP-MEDEF Code's recommendation to have a majority of independent members in Remuneration Committees.

As stated in its Internal Rules, the Committee reviews and makes proposals or gives its opinion to the Board of Directors on the following subjects:

- the separation or combining of the functions of Chairman of the Board and Chief Executive Officer of the Company;
- the nomination (or revocation) of the Chairman of the Board and of the Chief Executive Officer;
- the nomination of new Directors including in case of unforeseeable vacancy; in particular, the Committee organises an appropriate procedure for selecting future independent Directors and makes its own independent research on potential candidates prior to their being approached;
- the nomination (or revocation), upon proposal of the Chief Executive Officer, of any other Executive Directors (dirigeants mandataires sociaux) and members of the Executive Committee;
- the succession plans for the Company's Executive Directors;
- the compliance by the Company with corporate governance principles that the Company abides by, notably regarding the policy with respect to the remuneration of the Executive Directors. The Committee advises the Board on the part of the Annual Report dedicated to the shareholders' information on these matters and on Board's work;
- the Board and Committees' composition and functioning (including the Nominations and Remuneration Committee);
- the Company's definition of an independent Director and the list of independent Directors to be inserted in the Company's Annual Report;
- the whole of the elements comprising the compensation to be paid to the Executive Directors of the Company, including any award of stock options or performance-based shares, as well as compensation and benefits of any kind (including pensions and termination benefits) also paid to them by the Company or companies belonging to the Group. The Committee notably reviews and defines the rules for determining the variable part of such compensation, ensures their coherence with the annual performance evaluation and the strategy of the Company, and thereafter controls the implementation of these rules;
- the Company's general policy relating to stock option plans including the granting, timing and frequency of allocations, and any proposed stock option plans including the proposed beneficiaries;
- the Company's general policy relating to employee share purchase schemes and any proposed schemes;
- the Directors' fees and the conditions for their award.

The Committee decides whether it will define, upon proposal of the Chief Executive Officer, the compensation and benefits of all or some of the members of the Executive Committee, including the principles and criteria used for their annual performance evaluation, in particular those for determining the variable part of their remuneration, or whether it will simply be informed of these.

The Committee also develops and recommends to the Board for its approval, a formal process for evaluating the functioning of the Board and its Committees to be implemented at least every three years and, outside of the presence of the Directors concerned, prepares the annual performance evaluation of the Chairman of the Board and of the Company's Executive Directors based on the principles applied to other Senior Corporate Executives.

Once a year, the Committee dedicates one of the items on its agenda to a debate concerning its functioning.

The Committee reviews any other matter that the Committee or the Board deems necessary or appropriate.

## Activity report of the Nominations and Remuneration Committee for fiscal year 2014/15

The Nominations and Remuneration Committee met five times during fiscal year 2014/15 (four times during the previous fiscal year) and the Members' attendance rate at these meetings was 83% (88% for fiscal year 2013/14).

In the context of its corporate governance duties and its annual review of the Company's practices, the Committee, together with the Chairman and Chief Executive Officer, recommended the creation of a Lead Director position, for which it reviewed the duties and compensation. It approved all of the other proposed changes to the Board's Internal Rules, which allowed to better reflect the June 2013 updated version of the AFEP-MEDEF Code. The independence qualification of Directors was also reviewed while taking into account all of the AFEP-MEDEF criteria.

The Committee reviewed potential candidates for the succession of a Director, selected a candidate, and recommended such candidate to the Board in May 2014 in the context of the upcoming July 2014 General Meeting. In November 2014, in order to select new members to be proposed in June 2015, the Committee also launched a search for new candidates for consideration as Director.

The Committee recommended an increase in the aggregate amount of attendance fees to be available for Board and Committee meetings as a result of the forecasted exceptional increase in the frequency of meetings associated with the receipt and review of the General Electric's offer.

The Committee also recommended that the Board allocates an exceptional remuneration to those Directors appointed as members of the *Ad Hoc* Committee created for the purpose of reviewing the General Electric's offer.

With respect to the remuneration of the Chairman and Chief Executive Officer, the Committee submitted proposals to the Board regarding his variable remuneration for the 2013/14 fiscal year and the objectives for his variable remuneration in 2014/15. The Committee also examined the draft versions of the resolutions and Board of Directors' report concerning the advisory vote of shareholders on the elements of remuneration of the Chairman and Chief Executive Officer, presented at the General Shareholders' Meeting convened in July 2014. It also received information concerning the remuneration of other members of the Executive Committee, and approved such remuneration.

The Committee also discussed the treatment of long term incentive plans in the context of the transaction with General Electric and recommended the modification of LTI Plans 15 and 16, in order to ensure that the performance conditions relative to a reference period which had not ended on 1 April 2014 would be deemed fulfilled as a result of and subject to the successful completion of the transaction with General Electric, subject to the Extraordinary Shareholders' Meeting's approval of the transaction.

After having received the opinion of the High Committee for Corporate Governance, the Committee recommended to the Board to allocate an exceptional and conditional compensation to the Chairman and Chief Executive Officer, in the meaning of Paragraph 9 of Article 23.2.3 of the AFEP-MEDEF Code, capped at two years of fixed and variable remuneration, and subject to the effective completion of the transaction with General Electric as well as the executive's actual presence at the time of payment.

Following the execution of the agreements with General Electric, the Committee also began to discuss the composition and organisation of the future Board of Directors and the corporate governance of the new Alstom post-completion of the contemplated transaction with General Electric.

After each meeting, the Committee submitted a report of its work to the Board of Directors.

# The Ethics, Compliance and Sustainability Committee

The **EC&S Committee**, created on 28 September 2010, consists of three members: Mr Pascal Colombani, Chairman of the Committee (who is also a member of the Audit Committee), Ms Katrina Landis and Ms Bi Yong Chungunco.

At the end of the Shareholders' Meeting on 1 July 2014, the Board decided to appoint Mr Pascal Colombani as Chairman of the Committee, who replaces Mr Jean-Martin Folz, Lead Director appointed Chairman of the Nominations and Remuneration Committee, and appointed Ms Bi Yong Chungunco as a member of the Committee.

All three members of the Committee are independent.

# Duties

As stated in its Internal Rules, the Committee reviews and makes proposals or recommendations to the Board on the following subjects:

With respect to ethics and compliance, the Committee reviews and monitors the Company's policies on ethics and compliance matters and the systems and procedures in place to effectuate these policies and provides the Board of Directors with its views.

The Committee is responsible for the following:

- to review the definition of the Group's core values and ethics and compliance policy;
- to review the organisation of the Ethics and Compliance function and make recommendations if any;
- to review the Group's Code of Ethics, rules and procedures (including procedures with third parties); the Committee is informed of the plans for their promotion and implementation;
- to receive on an annual basis, the presentation of the Group's risk map concerning ethics and compliance; it reviews the risks thus identified and is kept informed of their evolution and of the characteristics of their management systems;

- to receive from the Head of Ethics & Compliance function the annual activity report on the Company's ethics and compliance policy and actions undertaken; to review and recommend the proposed compliance action plan for the following year and to monitor its development;
- the Committee is informed of any possible cases of non-compliance with respect to the ethics and compliance policy, and reviews the actions plans carried out as a result of such cases;
- to review the liaison with stakeholders over ethical issues.

With respect to sustainable development, the Committee is responsible for:

- reviewing the Group's environmental policies and management systems, the human resource policies, policies with respect to relationships with stakeholders (customers, suppliers, local communities);
- receiving on an annual basis, the presentation of the Group's risk map concerning social responsibility and sustainable development and reviewing the risks thus identified while being kept informed of their evolution and of the characteristics of their management systems;
- reviewing and assessing the reporting and control procedures on non-financial indicators (environmental, health and safety, social reporting and indicators);
- reviewing the main lines of the Company's communication on corporate responsibility and sustainable development; the Committee is also responsible for reviewing the annual Board of Directors' draft report on the social and environmental impact of the Company's operations and providing the Board with its views on such report;
- reviewing and monitoring the ratings received by the Group from non-financial rating agencies.

The Committee provides an opinion to the Audit Committee on the risk map for ethics, compliance, social responsibility, and sustainable development, and on the procedures for preventing such risks from occurring.

# Activity report of the EC&S Committee for fiscal year 2014/15

The EC&S Committee met three times during fiscal year 2014/15 (five times during the previous fiscal year). The attendance level was 100% as for the previous fiscal year.

The EC&S Committee reviewed and approved:

- the Ethics & Compliance key figures and statistics for the fiscal year 2014/15;
- the update of the Alstom Integrity Programme, including the new version of the Code of Ethics, the new Group Instruction on facilitation payments, the revised Group Instruction on joint ventures and consortia, the new e-Ethics module, the increase of the resources of the Ethics & Compliance Department with the designation of additional Compliance Officers in Brazil and in China;
- the renewed certification of the Alstom Integrity Programme by ETHIC Intelligence;

- the results of the Yearly Integrity Review during fiscal year 2013/14. The objective was to measure the efforts made by approximately 600 Senior Managers of Alstom to implement the Alstom Integrity Programme within the Group;
- the organisation principles of the Ethics & Compliance function of the new Alstom post-completion of the transaction contemplated with General Electric (and subject to such completion).

The EC&S Committee was informed of the positive outcome to the World Bank Monitor's three-year monitoring, which was concluded on 21 February 2015, and put an end to the exclusion of some of the Group's subsidiaries from public projects financed by the World Bank. The Committee reviewed the bi-monthly reports of the World Bank.

It was provided at each meeting with updates on the significant on-going procedures and investigations, including investigations conducted by the U.S. Department of Justice and the UK Serious Fraud Office.

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The Committee also reviewed and approved the Group's Corporate Social Responsibility (CSR) activity and, in particular:

- the development of the CSR actions in the countries with a specific focus on the organization, governance and projects of CSR function in India in order to comply with the new legislation;
- the initiative launched in the European rail industry to adopt a common approach to support sustainable sourcing among all the suppliers with a common evaluation tool which was previously in place at Alstom (Ecovadis);
- the action in place to manage the CSR activity in the new Alstom after (and subject to) the completion of the transaction contemplated with General Electric.

It was kept informed of and reviewed the evaluations prepared by non-financial rating agencies.

It received detailed information on the functioning and objectives of the Alstom foundation. It reviewed the projects selected supported by the foundation in 2014. It also reviewed the proposals related to the evolution of the foundation to be submitted to the Board of the foundation in the context of the General Electric transaction.

It reviewed the Group's occupational safety performance to which it continued to pay strict attention. More specifically, the results about severe accidents were presented and discussed at each meeting of the Committee. Initiatives about tracking Potential Severe Events (PSE) and specific training for people dealing with contractors were also presented.

It reviewed the main non-financial indicators used by the Group.

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The Committee received and discussed the Group's risk map concerning ethics, compliance, social responsibility and sustainable development and provided its opinion to the Audit Committee and the Board of Directors.

The EC&S Committee also approved its activity report for fiscal year 2013/14 and the "Sustainable Development" section of the Registration Document 2013/14, which includes the Board's report on social and environmental information and provides the objectives and indicators of the Group in these fields.

The Committee reported to the Board on its work regarding these matters.

# Annual evaluation of the functioning of the Board and of the Committees and the follow up

Since 2004, the Board carries out annually a formal evaluation of its organisation and functioning pursuant to its Internal Rules, which is typically based on a questionnaire prepared by the Nominations and Remuneration Committee, sent to each Director, and processed independently. Every three years, it entrusts the preparation of these evaluations to a specialised independent expert, in compliance with the recommendations of the AFEP-MEFEF Code.

These Board evaluations cover notably the composition of the Board, the frequency and length of the meetings, the issues discussed and time devoted, the quality of the debates, the works of Committees, the information and the training provided to the members, their remuneration and their interaction with the Group's managers. Directors are also requested to give their opinion and proposals on each topic including on the individual contribution of members to the Board works. A summary of the individual assessments collected by the Committee on an anonymous basis is prepared by the Committee and then discussed by the Board of Directors in May. A similar procedure is simultaneously conducted to evaluate the workings of each Committee.

In accordance with the terms of the AFEP-MEDEF Code, the review and assessment of the functioning of the Board and its Committees are entrusted to external consultants, every three years, selected by the Nominations and Remuneration Committee. For fiscal year 2013/14, the Board of Directors decided to conduct a comprehensive and formal evaluation, entrusted to an external firm. Thus, and also taking into account the exceptional event that was the offer made by General Electric to acquire Alstom's Energy businesses, the Board decided at its meeting held on 13 January 2015, that the evaluation to be conducted for fiscal year 2014/15 would mainly focus on the following two topics:

- an ex post evaluation of the management by the Board of Directors of the offer received from General Electric as well as the competing offers;
- a first discussion on the evolution of the governance of the Company post-completion of the on-going transaction with General Electric.

In practical terms, the Board entrusted the Lead Director to discuss these two topics with each Non-Executive Directors during one-on-one meetings and to present to the Board a summary report which was reviewed and discussed during its meeting held on 5 May 2015.

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If the Directors deeply regret that a press agency made public a contemplated transaction with General Electric, they all agree that this project is well consistent with the diagnosis made on the worrying medium-term prospects of Alstom Energy businesses and the need to seek structural solutions.

On the actual management of General Electric's offer and subsequent offers by the Board in a restless media and political context, the Directors' judgment is unanimously very positive; they consider that the establishment of an *ad hoc* Committee of independent Directors and the use of financial and legal advisors to the Board allowed them to fully and objectively assess the offers received and then make their decision in complete independence. The Directors noted that they were able to make themselves available as much as required to review the offers and were able to get all the information needed; they are very satisfied with the quality of the debates they had, consider they have fully satisfied their fiduciary duties and are pleased to have reached a unanimous decision.

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Regarding the future governance of the Company, the Directors first underline the necessity to keep unchanged the current structure until the closing of the transaction with General Electric and the distribution to the shareholders of part of the cash proceeds of the sale of the Energy businesses, after which the Chairman and Chief Executive Officer announced he would give up his duties in light of the changes in the scope of the Company's businesses.

Thus, there is a consensus on the scenario envisaged for the General Shareholders' Meeting of 30 June 2015 and the subsequent Board meeting: renewal or replacement of directors whose term expires, renewal of the mandate of the Chairman and Chief Executive Officer, appointment of a new Lead Director and a new Chairman of the Nominations and Remuneration Committee.

Directors initiated a discussion on the different governance structures of the Company given its size and its challenges post-completion of the transaction with General Electric and began to assess their respective merits. They agreed not to take at this stage any final decision which moreover is under the responsibility of the Board of Directors in its composition that will result from the General Shareholders' Meeting of 30 June 2015.

# Compensation of Executive and Non-Executive Directors *(mandataires sociaux)*

Alstom's Executive and Non-Executive Directors are the fourteen members of the Board. The Chairman and Chief Executive Officer, Mr Patrick Kron, is the only Executive Director of Alstom.

The information presented below also constitutes the elements of the Board of Directors' report to the Shareholders' Meeting referred to in Article L. 225-102-1 (related to remuneration of Executive and Non-Executive Directors) and in Article L. 225-185 of the French Commercial Code (related to retention obligations applicable to stock options and performance shares).

The principles and rules set by the Board of Directors for the determination of Executive and Non-Executive Directors' compensation and benefits of any kind are as set out below.

At the Shareholders' Meeting dated 1 July 2014, the shareholders approved by a majority of 96.71% the elements of the compensation due or attributed to Mr Patrick Kron for the 2013/14 fiscal year submitted to the advisory vote of the Shareholders' Meeting in accordance with the AFEP-MEDEF Code.

# Principles and rules set by the Board of Directors for the determination of the remuneration paid to the Executive Director

The remuneration of the Chairman and Chief Executive Officer is fixed by the Board of Directors upon the Nominations and Remuneration Committee's proposal and comprised of a fixed part and of a variable part linked to the performance of the Company. It generally comes with an entirely conditional grant of stock options and performance shares. All of the potential or acquired elements of compensation are made public after the Board meeting during which they were determined.

The remuneration policy and all the components of the Chairman and Chief Executive Officer's remuneration, including the supplemental retirement scheme, are reviewed annually by the Nominations and Remuneration Committee and the Board of Directors based, in particular, on analyses prepared by independent external consultants that assist the Board in developing a better understanding of market practices.

These analyses offer a comparison of the level and the structure of the remuneration paid to the Executive Director with that of other similar size companies of the CAC 40 (level and evolution of the remuneration, respective ratio of each of the components of the remuneration) and of international companies operating in similar sectors.

The remuneration policy is then defined in such a way as to take into account the interest and the strategy of the Company, its performance and the evolution of the Executive Director's remuneration over several years. It takes specific situations into account and, as such, can trigger the grant of exceptional remuneration under exceptional circumstances. It is consistent with the remuneration policy applicable to all of the executive managers of the Group.

# **Annual remuneration**

**Fixed remuneration** 

The gross amount of the total fixed part of Mr Patrick Kron's remuneration in respect of fiscal year 2014/15 amounts to €1,200,000 unchanged compared to the previous fiscal year.

Since 2006, the annual fixed and variable remuneration of Mr Patrick Kron changed as follows:

	Fiscal year 2006/07 (in €)	Fiscal year 2007/08 <i>(in €)</i>	Fiscal year 2008/09 (in €)	Fiscal year 2009/10 (in €)	Fiscal year 2010/11 <i>(in €)</i>	Fiscal year 2011/12 (in €)	Fiscal year 2012/13 (in €)	Fiscal year 2013/14 <i>(in €)</i>	Fiscal year 2014/15 (in €)
Fixed remuneration	1,035,000	1,035,000	1,035,000	1,065,000	1,100,000	1,130,000	1,130,000	1,200,000	1,200,000
Annual variable remuneration	1,430,000	1,500,000	1,300,000	1,000,000	1,075,000	1,160,000	1,420,000	1,034,000	1,268,000
(fixed %)	(138%)	(145%)	(125%)	(94%)	(98%)	(103%)	(126%)	(86%)	(106%)
TOTAL	2,465,000	2,535,000	2,335,000	2,065,000	2,175,000	2,290,000	2,550,000	2,234,000	2,468,000

## Variable remuneration

The variable part of the Chairman and Chief Executive Officer's remuneration is a maximum percentage of the fixed part. It varies along with the achievement of objectives for the fiscal year predetermined by the Board of Directors upon proposal of the Nominations and Remuneration Committee. These objectives are comprised of, on one hand, a number of the Group's financial objectives and, on the other hand, specific qualitative objectives linked to the achievement of personal objectives that are reviewed every year and determined based on the strategic priorities defined for the Group. The Board of Directors determines the level of completion of these objectives and the amount of the variable part of the remuneration, based on the Nominations and Remuneration Committee's proposal, at the meeting during which the Board approves the accounts for the fiscal year.

Since 2006, the variable remuneration of the Chairman and Chief Executive Officer is capped at 160% of his fixed remuneration and, provided he meets the set objectives, the variable remuneration target represents 100% of the fixed remuneration.

For the 2014/15 fiscal year, at its meeting dated 22 July 2014, the Board of Directors decided, while taking into account the specific circumstances resulting from the offer received by General Electric and accepted on 20 June 2014, that the variable part linked to the Group's financial objectives would range from 0 to 80% of his fixed remuneration with a 40% target, and would have two separate components – one for Transport activities and the other for Energy activities. The variable part linked to specific qualitative objectives would range from 0 to 80% with a 60% target.

The financial objectives associated with the Transport Sector would count for one fourth of the financial component, or a 0 to 20% range of his fixed remuneration with a 10% target, it being specified that the indicators retained are the gross margin on orders received, income from operation, and free cash flow. The financial objectives associated with the Energy Sector would count for the three fourths of the financial component, or a 0 to 60% range with a 30% target, the indicators being sales, income from operation, and free cash flow.

The personal objectives would take into account, for 60% of the total, indicators linked to the status of the transaction with General Electric, and the remaining 40% would be based on indicators assessing the management of the Company during the current transitory period.

At its meeting dated 5 May 2015, and based on the Nominations and Remuneration Committee's proposal, the Board of Directors noticed that the level of completion of the financial objectives associated with the Transport sector amounted to 11.7% within a 0 to 20% range. For the Energy sector, and taking into account the very particular conditions of that fiscal year, the Board of Directors decided that the level of completion would be considered as having met its target, or half of the maximum amount (30% within a 0 to 60% range). As such, the variable part of the remuneration linked to financial objectives is equal to 41.7% of the fixed remuneration within the 0 to 80% range.

A the same meeting, the Board of Directors established that the levels of completion of personal objectives were 40% within a 0 to 48% range (with a 36% target) for the status of the transaction with General Electric and 24% within a 0 to 32% range (with a 24% target) for the management of the Company during the current transitory period, respectively. Therefore, the variable part linked to personal objectives is equal to 64% of the fixed remuneration within the 0 to 80% range. Therefore, on aggregate, Mr Patrick Kron's variable remuneration for the 2014/15 fiscal year is equal to 105.7% of his fixed remuneration, or  $\epsilon$ 1,268,000.

### Benefits in kind

The Chairman and Chief Executive Officer benefits from a Company car representing a benefit in kind of  $\epsilon$ 3,495 per year and, as other employees in France beyond a certain level of responsibility, from supplemental medical, death and disability coverage, which costs are partly borne by the Company.

### Exceptional and conditional remuneration

At its meeting of 4 November 2014, the Board noted with satisfaction the progress of steps prior to the conclusion of the transaction with General Electric, transaction it had unanimously approved the proposed offer on 20 June 2014. The Board also discussed the steps that remain to be taken before the completion of this transaction in particular its approval by an extraordinary general meeting and the receipt of various approvals, and noted the complexity and the particular difficulties of the execution of this project.

Upon the proposal of the Nominations and Remuneration Committee and having obtained the opinion of the High Committee of Corporate Governance, the Board of Directors decided to allocate to Mr Patrick Kron an exceptional and conditional compensation within the meaning of the Article 23.2.3, 9<sup>th</sup> paragraph of the AFEP-MEDEF Code, consisting of the cash equivalent of 150,000 shares of the Company valued on the basis of the market price of the Company share on the day of the completion of the transaction with General Electric, capped at two years of his 2014/15 remuneration (fixed and variable "target"); the payment of such compensation is subject to the approval of the transaction by the General Shareholders' Meeting (this condition was met on 19 December 2014) and the receipt of all necessary approvals, as well as the actual presence of the executive officer as Chairman and Chief Executive Officer of the Company at the date of payment.

## Allocation of conditional stock options and/or performance shares

The Chairman and Chief Executive Officer did not receive any grants of conditional stock options or rights to performance shares over the course of the 2014/15 fiscal year. No plan of this type was decided on over the course of the fiscal year due to the planned transaction with General Electric.

#### General characteristics of the allocation policy

The main characteristics of the allocation policy applied to the Chairman and Chief Executive Officer over the course of the previous fiscal years are presented hereafter.

The overall amount of the allocation, as determined by the Board of Directors based on the Nominations and Remuneration Committee's proposal, takes into account all of the elements of compensation of the Chairman and Chief Executive Officer as well as the market practices of comparable listed companies.

The main characteristics of the allocation policy applied to the Chairman and Chief Executive Officer comply with the June 2013 recommendations of the AFEP-MEDEF Code (with the exception of the acquisition requirement, as indicated below) and are the following:

- frequency: allocation usually carried out by end September subject to exception;
- no discount: yes (stock options);
- performance requirements: yes, since fiscal year 2006/07, 100% of the options or shares are allocated subject to the satisfaction of Group performance conditions over the course of three fiscal years following the grant date (see hereafter);
- limits applicable to the allocation: yes, since fiscal year 2009/10 (see hereafter);
- holding requirement: yes, stricter requirements applied during fiscal year 2013/14 (see hereafter);
- acquisition requirement associated with the grant of performance shares: no, eliminated during fiscal year 2013/14 as a result of implementing stricter holding requirements on the Chairman and Chief Executive Officer (see hereafter);
- use of hedging instruments prohibited: yes;
- periods during which the exercise of options and sale of shares is prohibited: yes.

The general characteristics of the conditional stock options and performance shares allocated to the Chairman and Chief Executive Officer are identical to those offered in all other allocations made by the plan. To these general characteristics shall be added, the specific limitations or obligations fixed by the Board of Directors in compliance with the applicable regulations and recommendations of the AFEP-MEDEF Code on the remuneration of Executive Directors. These general characteristics remuneration, including the performance conditions, appear on pages 240 to 246 of the Registration Document for the 2014/15 fiscal year filed with the AMF. In addition, grants are carried out in compliance with allocation sub-ceilings applicable to Executive Officers and set in the resolutions of the General Shareholders' Meeting.

Within the framework of these plans, which combine since fiscal year 2007/08, allocations of conditional stock options and of performance shares, the ratio of allocated stock options over the total number of stock options and performance shares increases as one's hierarchical position and individual performance at the Company increases. Consequently, the Chairman and Chief Executive Officer receives a larger percentage of stock options than performance shares as compared with other plan beneficiaries.

The Board of Directors, at its meeting dated 1 October 2013, reiterated the following principles regarding grants to Executive Officers *(mandataires sociaux dirigeants)* based on the June 2013 AFEP-MEDEF Code:

- the IFRS 2 value of any allocation shall be capped at one year of fixed and targeted variable remuneration, the latter of which corresponds to the remuneration obtained when accomplishments are strictly compliant with set objectives;
- the aggregate amount of annual allocations granted to Executive Officers cannot exceed 2.5% of the overall amount authorised by the General Shareholders' Meeting for grants of stock options and free shares within the Group, or 5% of the aggregate annual allocation (calculated, as the case may be, based on stock option equivalents in the event of a combined allocation of stock options and performance shares).

In accordance with the law and the AFEP-MEDEF Code, since 2007 the Board of Directors also sets, for each allocation, the number of shares that the Executive Officer must hold until he or she no longer exercises his duties. Until now, the holding requirement was applicable to a number of shares equal to 25% of the theoretical net gain calculated whenever stock options were exercised or shares were definitively granted.

The Board of Directors, at its meeting dated 1 October 2013, decided to apply stricter holding requirements and, with the Chairman and Chief Executive Officer's approval, to substitute these stricter requirements for those previously set by the Board. Therefore, they apply to LTI Plans No. 10, No. 12, No. 14, No. 15 and No. 16. Pursuant to these new holding requirements, the Chairman and Chief Executive Officer will be required to hold, in registered form:

- with respect to performance shares, a number of shares corresponding to 50% of the performance shares definitively granted to him at the end of the vesting period;
- with respect to stock options, a number of shares resulting from each exercise of stock options, corresponding to 50% of the theoretical net gain (net of tax and social security withholdings) calculated on the stock options exercise date.

These holding requirements will cease to apply when the Chairman and Chief Executive Officer reaches a retention target of shares held in registered form until the end of his term of office, corresponding to a value of three years of his last annual gross fixed remuneration. The calculation will be made while taking into account the market price of the share at the time the performance shares are definitively granted, and at the time of each exercise of stock options.

After reading the recommendations of the Nominations and Remuneration Committee, the Board of Directors, at its meeting dated 1 October 2013, also decided that given this significant amount of new applicable custody and holding requirements, there was no need to require the Chairman and Chief Executive Officer to acquire a set quantity of Company shares when performance shares become available, as is recommended under the terms of the AFEP-MEDEF Code. Consequently, the Board of Directors decided to eliminate the requirement to acquire a number of Company shares equal to 25% of the number of performance shares effectively delivered and applicable to previous LTI Plans.

Moreover, internal rules of conduct of the Group applicable where inside information is held, prevent any sale of shares, during 30 calendar days before Alstom's first six-months and annual results are disclosed to the public (the period being reduced to 15 calendar days with respect to quarterly results) and up to the second trading day included after the date when this information has been disclosed to the public, and, in any case, when inside information is held until the second trading day after the date when this information has been disclosed to the public. During periods where trading is not prohibited, these internal rules create an obligation to consult the Group's legal counsel and the Chief Financial Officer in case of doubt on the ability to trade prior to any such transaction.

In accordance with the terms of the AFEP-MEDEF Code, during these blackout periods the Executive Director is also prohibited from exercising the stock options granted to him or her, including in the event of a simple exercise of stock options not followed by a sale of shares.

In accordance with the terms of the June 2013 version of the AFEP-MEDEF Code, in October 2013 Mr Patrick Kron also confirmed his commitment, applicable during the full length of his term of office, to refrain from using hedging instruments on the stock options, the underlying shares or the performance shares granted by the Company. To the Company's knowledge, no hedging instrument has been set up.

## Performance conditions

Since 2007, all of the stock options and performance shares granted to Mr Patrick Kron and to all other beneficiaries are subject to demanding and predetermined internal performance conditions. The performance criterion retained since 2006 is the future operating margin of the Group, which is the same criterion used to condition the grant of performance shares and the Group's objectives. As from 2012, the requirement to generate positive free cash flow was added to this criterion.

The performance criteria retained by the Board of Directors, based on the Nominations and Remuneration Committee's recommendation, are set consistently with the published three-year projections of the Group.

The rights to the allocation of performance shares and the conditional stock options previously granted to Mr Patrick Kron that have definitively vested based on the performance conditions specified in the plans are provided in page 226.

### Supplemental retirement scheme

The Chairman and Chief Executive Officer also benefits from the supplemental collective retirement scheme implemented in 2004, and taken into account in the determination of his overall compensation. This scheme is composed of a defined contribution plan and a defined benefit plan.

The defined benefit plan covers all persons exercising functions within the Group in France whose base annual remuneration exceeds eight times the annual French social security ceiling. The rights under the plan are vested only if the beneficiary retires from the Company and after claiming his or her retirement rights. Beneficiaries who, after reaching the age of 55 years, are dismissed for any reason other than an act of gross negligence, can also benefit from this scheme provided they do not exercise any professional activities prior to the liquidation of their pension.

Even though the plan does not set a minimum seniority requirement of two years to be met in order to benefit from it, the plan remains compliant with the intention behind the AFEP-MEDEF recommendation insofar as entitlements are acquired gradually and only represent, per year of seniority in the scheme, a limited percentage of the annual compensation corresponding to 0.6% of the annual reference remuneration within a range of 8 to 12 times the Social Security ceiling and to 1.2% of the annual reference remuneration in excess of 12 times the Social Security ceiling. The annual reference remuneration is equal to the average fixed and variable remuneration received over the course of the past three years prior to retirement. This annual reference remuneration is capped at  $\epsilon 2$  million. Since 1 January 2008, this cap is subject to an annual revaluation in accordance with the evolution of the reference salary used to determine the AGIRC retirement scheme.

As such, given his seniority within the Group and assuming a retirement age of 62, the Chairman and Chief Executive Officer could, when he retires, claim a gross retirement pension under the defined benefit scheme equal to approximately 12% of the capped annual reference remuneration.

The gradual accrual of potential rights based on seniority in the scheme represents a percentage that is lower than the 5% cap on the beneficiary's remuneration provided for under the AFEP-MEDEF Code. Similarly, the maximum income percentage over which the supplemental retirement scheme would grant a right is much lower than the cap set under the AFEP-MEDEF Code, which is equal to 45% of the reference income.

There has been no change to this supplemental collective retirement scheme during the fiscal year.

The benefit obligation for the defined benefits plan is equal to  $\epsilon$ 10,491,000 as at 31 March 2015, including an amount of  $\epsilon$ 2,031,000 of taxes applicable to supplemental retirement schemes as increased since 1 January 2013 and then since 1 January 2015.

The defined contribution plan complements the defined benefit plan. The rights are acquired annually and correspond to 1% of the annual remuneration up to four times the Social Security ceiling, 4% of the annual remuneration within a range of 4 to 8 times the Social Security ceiling and 11% of the annual remuneration within a range of 8 to 12 times the Social Security ceiling. Since 1 July 2014, social contributions are borne by the Company up to 95%. The amount of contributions within the defined contribution plan was €24,109 for fiscal year 2014/15 of which €23,204 was paid by the Company. Assuming he retires at age 62, the Chairman and Chief Executive Officer could claim upon retirement a gross retirement pension under the defined contribution scheme equal to approximately 1% of the capped annual reference remuneration, which corresponds to an aggregate gross supplemental retirement pension equal to approximately 13% of the capped annual gross remuneration by combining the pension resulting from the defined benefit scheme and the pension resulting from the defined contribution scheme.

# Severance payment and other benefits arising upon the termination of the mandate

At its meeting dated 28 June 2011, which took place after the General Shareholders' Meeting held on the same day, the Board of Directors that decided not to separate the functions of Chairman and Chief Executive Officer and to renew the term of office of Mr Patrick Kron as Chairman and Chief Executive Officer for the duration of his directorship, or until the end of the Ordinary Shareholders' Meeting called to approve the financial statements of the 2014/15 fiscal year, also decided that the commitments made to Mr Patrick Kron on 26 June 2007, as amended on 6 May 2008 and 4 May 2009 and approved by the General Shareholders' Meeting dated 23 June 2009, concerning benefits arising upon termination of the mandate described in Article L. 225-42-1 of the French Commercial Code, would be maintained without any change, and approved and authorised their renewal, insofar as necessary. These commitments were then approved once again at the General Shareholders' Meeting dated 26 June 2012.

Consequently, the commitments discussed in Article L. 225-42-1 of the French Commercial Code, undertaken with regard to Mr Patrick Kron, Chairman and Chief Executive Officer, concern, as in the past, (i) the potential entitlement to the supplemental collective retirement pension scheme composed of a defined contribution plan and a defined benefit plan from which benefit all persons exercising functions within the Group in France, the base annual remuneration of which exceeds eight times the French Social Security cap, above mentioned, as well as (ii) the upholding, in the event of termination of his mandate as initiated by either the Company or himself, of only the rights to exercise the stock options and the rights to the delivery of the performance shares, that will have been definitively vested as of the end of his term of office following the fulfilment of the conditions set forth by the plans. At its meeting dated 5 May 2015, the Board of Directors meeting that decided to renew the appointment of Mr Patrick Kron as Chairman and Chief Executive Officer, during its meeting to be held after the General Shareholders' Meeting convened on 30 June 2015 subject to the renewal of his mandate as a Director by the General Shareholders' Meeting, decided that these commitments would once again be maintained, and approved and authorised their renewal.

Consequently, it is proposed to the General Shareholders' Meeting dated 30 June 2015, subject to the renewal of his appointment by the General Shareholders' Meeting, that it approve these commitments, pursuant to the terms of Article L. 225-41-1 of the French Commercial Code, subject to the condition that the mandate of the Chairman and Chief Executive Officer of Mr. Patrick Kron be renewed by the Board of Directors' meeting to be held after this General Shareholders' Meeting. These commitments are also presented in the Statutory Auditors' special report.

### TABLE FOR MONITORING THE IMPLEMENTATION OF THE AFEP-MEDEF CODE WITH RESPECT TO THE REMUNERATION OF EXECUTIVE DIRECTORS

Executive Directors as of 31 March 2015	Employment	contract	Additional retireme pension scheme (*		or that could termination	r benefits owed be owed due to or a change in a duties	Indemnities a with a non-c clause	ompete
	Yes	No	Yes	No	Yes	No	Yes	No
Patrick Kron		No	Yes			No		No
Chairman and Chief Executive			(see above)			(see above)		
Officer								
Term of office began in: 2003								
Term of office ends in: 2015								

(\*) The additional pension plans in which the Executive Director (*dirigeant mandataire social*) participates are described above.

# Directors' fees paid to the Directors

The Directors do not receive any compensation other than an attendance allowance ("Directors' fees"). Since 1 April 2005, the Chairman of the Board of Directors has waived his Directors' fees.

The Ordinary and Extraordinary Shareholders' Meeting of 1 July 2014 set at €1,300,000 the maximum annual amount of Directors' fees which can be distributed among the members of the Board of Directors. This increase in the maximum amount decided last year proved necessary in order to take into account the forecasted increase in the number of Board of Directors and Committees meetings during the fiscal year in connection with the receipt and review of the binding offer received from General Electric to acquire Alstom's Energy activities.

The Board of Directors sets the terms of granting the Directors' fees upon the Nominations and Remuneration Committee's proposal. The principles set in the Internal Rules of the Board are that the Directors' fees are made up of a fixed part and of a variable part for attending the meetings of the Board or of the Committees and that the Chairmen of the Committees are paid an additional fixed fee. Half of the fixed and variable parts are paid in the fiscal year concerned, while the balance is paid the following fiscal year. According to the current terms of granting as modified by the Board of Directors as from 1 October 2012, the Directors' fees were made of a fixed part worth €27,500 paid to each Director (previously €22,500). The Chairman of the Audit Committee and each Chairman of the Nominations and Remuneration Committee and of the Ethics, Compliance and Sustainability Committee receive an additional amount of respectively €15,000 and €10,000 per year. In addition, each Director is paid €3,500 (previously €3,000) for attending the meetings of the Board and €3,000 for attending the meetings of the Committees of which she or he is a member.

In addition, based on the Nominations and Remuneration Committee's proposal, at its meeting held on 6 May 2014 the Board of Directors decided to fix the annual amount of the Director's fees payable to the Lead Director at  $\notin$ 27,500.

Based on these terms, the aggregate amount of Directors' fees paid during fiscal year 2014/15 is equal to  $\epsilon$ 1,211,437.50 ( $\epsilon$ 844,813 in the previous fiscal year). The amount due in respect of the fiscal year represented approximately 97% ( $\epsilon$ 1,264,000) of the maximum annual amount authorised and at 61.5% the variable portion represented a predominant portion of the aggregate amount. Half of the fixed and variable parts were paid in fiscal year 2014/15, with the balance paid in fiscal year 2015/16.

# Summary tables of the remunerations of Executive and Non-Executive Directors pursuant to AFEP-MEDEF recommendations and to the AMF position – recommendation No. 2009-16 dated 10 December 2009

The whole gross compensation and benefits of any kind paid (or due) by the Company and the companies controlled by the Company to the Executive and Non-Executive Directors pursuant to Article L. 233-16 of the French Commercial Code as requested by Article L. 225-102-1 of the French Commercial Code are contained in the Tables 2 and 3 below.

TABLE 1 – SUMMARY TABLE OF THE COMPENSATION, CONDITIONAL STOCK OPTIONS AND PERFORMANCE SHARES ACCRUING TO EACH EXECUTIVE DIRECTOR AS OF 31 MARCH 2015

<b>Patrick Kron</b> Chairman and Chief Executive Officer <sup>(2)</sup>	Fiscal year 2012/13 (in €)	Fiscal year 2013/14 (in €)	Fiscal year 2014/15 (in €)
Compensation due in respect of the fiscal year (detailed in table 2)	2,555,794	2,236,917	2,471,495
Valuation of the conditional stock options awarded during the fiscal year $^{\scriptscriptstyle(1)}$	529,000	315,900	-
Valuation of the performance shares awarded during the fiscal year $^{(1)}$	244,000	400,400	-
TOTAL	3,328,794	2,953,217	2,471,495

(1) These amounts correspond to the valuation of the stock options and performance shares on the grant date of Plan according to IFRS 2, after taking into account a discount associated with the probability of presence within the Company and before taking into account the spread-out effect of the charge (see Note 23 to the consolidated financial statements as of 31 March 2015).

(2) The Chairman and Chief Executive Officer also benefits from an exceptional variable compensation decided on 4 November 2014, and which is conditional upon the completion of the transaction with General Electric expected to take place over the course of the 2015/16 fiscal year (please refer to page 220 above). This compensation will be paid, as the case may be, over the course of the 2015/16 fiscal year. It is capped at two years of his 2014/15 remuneration (fixed and variable "target"). A provision has been accounted in respect of this remuneration in the financial statements established as of 31 March 2015.

TABLE 2 - SUMMARY TABLE OF THE COMPENSATION OF EACH EXECUTIVE DIRECTOR AS OF 31 MARCH 2015

Chairman and Chief Executive Officer	Amounts for fiscal year 2012/13 $(in \ \epsilon)$		Amounts for fisca (in		Amounts for fiscal year 2014/15 (in €)		
	Due in respect of the fiscal year	Due in respect of the fiscal year	Due in respect of the fiscal year	Paid in during the fiscal year	Due in respect of the fiscal year	Paid in during the fiscal year	
Fixed gross compensation	1,130,000	1,130,000	1,200,000	1,200,000	1,200,000	1,200,000	
Variable gross compensation <sup>(1)</sup>	1,420,000	1,160,000	1,034,000	1,420,000	1,268,000	1,034,000	
Extraordinary gross compensation <sup>(2)</sup>	-	-	-	-	-	-	
Directors' fees (3)	-	-	-	-	-	-	
Fringe benefits (4)	5,794	5,794	2,917	2,917	3,495	3,495	
TOTAL	2,555,794	2,295,794	2,236,917	2,622,917	2,471,495	2,237,495	

(1) The variable compensation in respect of a fiscal year is paid on the following fiscal year. The criteria according to which the variable remuneration was calculated and the terms and conditions for setting the amount are described above on page 220.

(2) The Chairman and Chief Executive Officer also benefits from an exceptional variable compensation decided on 4 November 2014, and which is conditional upon the completion of the transaction with General Electric expected to take place over the course of the 2015/16 fiscal year (please refer to page 220 above). This compensation will be paid, as the case may be, over the course of the 2015/16 fiscal year. It is capped at two years of his 2014/15 remuneration (fixed and variable "target"). A provision has been accounted in respect of this remuneration in the financial statements as of 31 March 2015.

(3) Since 1 April 2005, the Chairman and Chief Executive Officer waived his Directors' fees.

(4) Company car.

TABLE 3 - TABLE OF NON-EXECUTIVE DIRECTOR'S FEES AND OTHER COMPENSATION AS OF 31 MARCH 2015 (4)

		Fiscal year	2013/14	Fiscal yea	r 2014/15
Non-Executive Directors		Amounts due in respect of the fiscal year $(in \epsilon)$	Amounts paid in during the fiscal year $(in \epsilon)$	Amounts due in respect of the fiscal year (in €)	Amounts paid in during the fiscal year (in €)
Jean-Paul Béchat <sup>(2)</sup>		17,125.00	61,375.00	-	-
Candace K. Beinecke		61,000.00	60,500.00	85,500.00	88,500.00
Olivier Bouygues		51,000.00	60,500.00	85,500.00	75,500.00
Georges Chodron de Courcel (3)		57,500.00	57,500.00	13,375.00	47,125.00
Bi Yong Chungunco (4)		-	-	47,625.00	13,875.00
Pascal Colombani		79,000.00	75,500.00	108,500.00	103,000.00
Lalita D. Gupte		64,000.00	60,500.00	92,000.00	91,500.00
Jean-Martin Folz		77,000.00	73,500.00	147,500.00	127,250.00
Gérard Hauser		64,000.00	60,500.00	105,000.00	101,500.00
Katrina Landis		67,000.00	63,500.00	85,500.00	85,500.00
James W. Leng		74,000.00	70,500.00	104,000.00	105,500.00
Klaus Mangold <sup>(5)</sup>		64,000.00	60,500.00	88,500.00	85,000.00
Amparo Moraleda (6)		47,125.00	13,813.00	92,000.00	84,562.50
Alan Thomson		75,250.00	66,125.00	117,000.00	114,625.00
Bouygues (7)		60,500.00	60,500.00	92,000.00	88,000.00
	TOTAL	858,500.00	844,813.00	1,264,000.00	1,211,437.50

(1) Gross amounts. The Non-Executive Directors do not receive any other compensation from the Company or companies of the Group, with the exception of Mr Klaus Mangold (see (5) below). Over the course of the fiscal year, each of Mr Folz, Mr Hauser, Mr Leng, and Mr Thomson has received an exceptional compensation in connection with their participation in the *ad hoc* Committee of Independent Directors created following the receipt of the firm offer submitted by General Electric. These exceptional remunerations amount to €15,000 for Mr Folz and €10,000 for Mr Hauser, Mr Leng, and Mr Thomson and will be subject to the approval of the General Shareholders' Meeting convened on 30 June 2015 in the context of the regulated agreements procedure.

(2) Director up to 2 July 2013.

(3) Director up to 1 July 2014.(4) Appointed at the General Shareholders' Meeting dated 1 July 2014.

(5) Mr Klaus Mangold as Chairman of the Supervisory Board of a Group's German subsidiary, since December 2010, is entitled to a gross annual remuneration set at €50,000.

(6) Appointed at the General Shareholders' Meeting dated 2 July 2013.

(7) Director whose permanent representative is Mr Philippe Marien.

Half of the Director's fees distributed among the Non-Executive Directors are paid during the fiscal year (fees in respect of the first half of the fiscal year) and the remaining part during the following fiscal year (fees in respect of the second half of the fiscal year), as indicated in the above table.

TABLE 4 – STOCK OPTIONS AWARDED DURING THE FISCAL YEAR 2014/15 TO EACH EXECUTIVE DIRECTOR AS OF 31 MARCH 2015 BY THE COMPANY OR BY EACH COMPANY OF THE GROUP

No options were granted to Mr Patrick Kron during the fiscal year 2014/15.

TABLE 5 — STOCK OPTIONS EXERCISED DURING FISCAL YEAR 2014/15 BY EACH EXECUTIVE DIRECTOR AS OF 31 MARCH 2015

Options exercised by the Executive Directors (nominative list)	Number and date of the plan	Number of options exercised during the fiscal year	Exercise price $(in \epsilon)$	Award year
Patrick Kron	None	-	-	-
Chairman and Chief Executive Officer				

	Number of options initially granted	Number of options	Unit exercise price (in €)	Maturity date of options
Plan 2006 No. 9 (1)	240,000 <sup>(2)</sup>	240,000 (4)	37.33	27 September 2016
Plan 2007 No. 10 (LTI No. 10) (1)	115,000 <sup>(3)</sup>	115,000 (4)	67.50	24 September 2017
Plan 2009 No. 12 (LTI No. 12)	80,000 <sup>(3) (5)</sup>	32,000 (4)	49.98	20 September 2017
Plan 2011 No. 14 (LTI No. 14)	100,000 <sup>(3) (6)</sup>	70,000 <sup>(4)</sup>	26.39	3 October 2019
Plan 2012 No. 15 (LTI No. 15)	100,000 <sup>(3) (7)</sup>	50,000 <sup>(7)</sup>	27.70	9 December 2020
Plan 2013 No. 16 (LTI No. 16)	90,000 (3) (8)	90,000 <sup>(8)</sup>	26.94	30 September 2021

The summary of the total number of stock options held by Mr Patrick Kron as of 5 May 2015 is the following:

(1) Figures adjusted to take into account the two-for-one stock split completed on 7 July 2008.

(2) 144,000 options were conditional (condition completed as of 31 March 2008).

(3) 100% of the options are subject to Group's performance conditions and a portion of the shares subscribed as a result of these options are subject to a holding requirement until the expiry of Mr Patrick Kron's duties and until a target shareholding level is reached.

(5) Initially the allocation concerned 80,000 options. After applying the performance conditions, 60% of these options were cancelled (see Note 23 to the consolidated financial statements as of 31 March 2015). The number of remaining options are fully vested is therefore equal to 32,000.

(6) Initially the allocation concerned 100,000 options. As a result of the application of the performance conditions linked to the results of the 2011/12, 2012/13 and 2013/14 fiscal years (see Note 23 to the consolidated financial statements as of 31 March 2015), 30,000 options (i.e. 30% of the initial allocation) were cancelled. As such, the number of remaining stock options fully vested is equal to 70,000.

(7) Initially the allocation concerned 100,000 options. As a result of the application of the performance conditions linked to the results of the 2012/13 and 2013/14 fiscal years approved by the Board of Directors on 6 May 2014 (see Note 23 to the consolidated financial statements as of 31 March 2015), 50,000 options (i.e. 50% of the initial allocation) were cancelled and 30,000 options (i.e. 30% of the initial allocation) are as of today fully vested. The remaining part (i.e. 20% of the initial allocation) will vest as a result (and under the condition) of the completion of the transaction with General Electric.

(8) The full amount of the initial allocation will definitively vest as a result (and under the condition) of the completion of the transaction with General Electric.

The summary of all stock options plans appears on pages 242 and 243 of the Registration Document for the 2014/15 fiscal year filed with the AMF.

TABLE 6 – PERFORMANCE SHARES AWARDED DURING THE FISCAL YEAR 2014/15 TO EACH EXECUTIVE DIRECTOR AS OF 31 MARCH 2015 BY THE COMPANY OR THE GROUP

No right to performance shares was granted to Mr Patrick Kron over the course of the 2014/15 fiscal year. Over the course of the fiscal year, in connection with LTI Plan No. 14, 7,000 shares were delivered to Mr Patrick Kron on 15 May 2014 at expiration of the vesting period. These shares are subject to a two-year holding period.

The total numbers of rights to performance shares held by Mr Patrick Kron as of 5 May 2015 are as follows:

Plan	Number of rights to performance shares initially granted	Number of performance shares	Valuation of the share at the time of the grant $(in \epsilon)^{(a)}$	Date of final delivery shares
Plan 2012 (LTI No. 15)	10,000 (1)	5,000 <sup>(2)</sup>	24.40	The fifth business day following (i) the day of publication of the 2014/15 consolidated accounts for 30% of the initial grant and (ii) the day of completion of the contemplated transaction with General Electric for 20% of the initial grant
Plan 2013 (LTI No. 16)	20,000 <sup>(1)</sup>	20,000 <sup>(3)</sup>	20.02	The fifth business day following the day of publication of the 2015/16 consolidated accounts

(1) Entirely conditional allocations and a portion of the shares delivered is subject to a holding requirement until the expiry of Mr Patrick Kron's functions and until a target shareholding level is reached.

(2) Initial allocation based on 10,000 rights. By application of the performance conditions linked to the results of the 2012/13 and 2013/14 fiscal years (see Note 23 to the consolidated financial statements as of 31 March 2015), 5,000 rights to performance shares (50% of the initial number) were cancelled and the final delivery of 3,000 shares (30% of the initial allocation) have as of today vested. The balance, or 20% of the initial allocation, will definitively vest as a result (and under the condition) of the completion of the transaction with General Electric.

(3) The full amount of the initial allocation will definitively vest as a result (and under the condition) of the completion of the transaction with General Electric.

(4) The performance shares are valued on their grant date according to IFRS 2, after taking into account a discount associated with the probability of presence within the Company and before taking into account the spread-out effect of the charge (see Note 23 to the consolidated financial statements as of 31 March 2015).

The summary of all performance shares plans appears on pages 245 and 246 of the Registration Document for the 2014/15 fiscal year filed with the AMF.

<sup>(4)</sup> These options are fully vested.

TABLE 7 – PERFORMANCE SHARES THAT HAVE BECOME AVAILABLE DURING THE FISCAL YEAR FOR EACH EXECUTIVE DIRECTOR AS OF 31 MARCH 2015

Performance shares that have become available	Number and	Number of shares that have become available		
for the Executive Directors (nominative list)	date of the plan	during the financial year	Acquisition terms	Delivery date
Patrick Kron	-	None	-	-
Chairman and Chief Executive Officer				

# Summary table of the differences relative to the recommendations of the AFEP-MEDEF Code

Article of the AFEP-MEDEF Code	Explanations
Article 16.2.1 (Review of the accounts) The Code states, "The time frames for the review of the financial statements must be sufficient (at least two days prior to their review by the Board of Directors)."	This recommendation cannot be complied with. However, draft versions of the financial statements are sent to Directors very early in the review process. Indeed, given the travelling requirements foreign Directors are faced with, Audit Committee meetings are usually held the day prior to Board meetings and not two days ahead as recommended by the AFEP-MEDEF Code, on the basis of documents that have already been sent to participants (a week before the meeting). However, with respect to the approval of the annual financial statements, the Audit Committee have on occasion met several days before the Board meeting.
	(See paragraphs "Information to be provided to Directors" and "Board Committees" on pages 211 and 212.)
Article 23.2.6 (Supplemental Retirement Scheme) The Code states, "in order to benefit from the services of a defined benefit pension plan, the beneficiaries must satisfy reasonable conditions of employee seniority within the Company, as set by the Board of the Directors or the Management Board. Such seniority cannot be less than two years."	Even though the plan does not set any minimum seniority requirement to be met in order to benefit from it, the plan remains compliant with the intention behind the AFEP-MEDEF recommendation insofar as entitlements are acquired progressively per year of seniority, and only represent each year a limited percentage of the compensation corresponding at maximum to a rate of 1.2% per year on a capped amount. (See paragraph "Supplemental retirement scheme" page 222.)
Article 23.2.4 (Purchase obligation following the grant of performance shares) The Code states, "In addition according to terms and conditions set by the Board and made public on their grant date, the performance shares granted to Executive Directors should be subject to the purchase	At its meeting dated 1 October 2013, after hearing the recommendations of the Nominations and Remuneration Committee, the Board of Directors decided that given the significant amount of new applicable custody and holding requirements set at the time of the grant of LTI Plan No. 16, there was no need to require the Chairman and Chief Executive Officer to acquire a set quantity of Company shares when performance shares become available, as is recommended under the terms of the AFEP-MEDEF Code.
of a predetermined quantity of shares whenever the granted shares have vested."	(See the section entitled "Allocation of conditional stock options and/or performance shares," page 221.)

# Participation at Shareholders' Meetings

Any shareholder has the right to participate at Shareholders' Meetings under the conditions set forth by law and in Article 15 of the Company's Articles of Association. The provisions of Article 15 of the Articles of Association appear pages 317 and 318 of the Registration Document for the 2014/15 fiscal year filed with the AMF and posted online on the Company's website.

Generally speaking, the members of the Board of Directors are present at Shareholders' Meetings.

# Elements that could have an impact in the event of a public offer

These elements of the Board of Directors' report to the Shareholders' Meeting set forth by Article L. 225-100-3 of the French Commercial Code appear pages 332 to 334 of the Registration Document for the 2014/15 fiscal year filed with the AMF.

# INTERNAL CONTROL AND RISK MANAGEMENT PROCEDURES' REPORT

As part of its operational activities, the Alstom Group is confronted by a number of risks both external and internal, as stated in the Risks Factors section of the Registration Document 2014/15 filed with the *Autorité des marchés financiers* ("AMF") (see page 173).

The Group put therefore in place an organisation, procedures and processes with the objective of identifying, quantifying and mitigating risks, and to assign resources to control risks in accordance with its business objectives both strategic and operational.

The present part of the report was prepared with the contributions from the Internal Audit and Internal Control Department, the Finance function including the Tenders & Projects Control Department, the Information Systems and Technology Department, the Human Resources Department, the Legal Department, the Ethics & Compliance Department, the Environmental, Health & Safety Department and the Sector Research & Development Departments.

# Perimeter of internal control

The internal control system described herein covers the parent company ALSTOM and all its consolidated companies (the "Group" or "Alstom").

# **Reference framework**

The Group has put in place a system of internal control procedures and evaluations initially based on control guidelines prepared by a recognised body, COSO (Committee of Sponsoring Organisations of the Treadway Commission).

The procedures are compliant with the AMF "Reference Framework" published in July 2010 and updated from time to time.

# Objectives

The system of internal control put in place provides reasonable assurance that:

- the Group's Internal Rules and instructions including applicable laws and regulations are complied with at all times;
- information is complete, accurate and to the required quality, particularly financial information;
- operations are completed in an optimal manner and internal control processes are effective, particularly those concerning the safeguard of assets;
- achievement of business objectives are reached with identification and control of risk;
- the risk of fraud is minimised; and
- controls, including controls over risks, are widely understood at all levels within the Group and appropriate actions are taken to mitigate and minimise these risks.

Internal control consists of five inter-related components, which have been implemented within the Group:

- control environment covering integrity, ethics, competencies, authorities, responsibilities and staff development;
- risk assessment including the identification, analysis and minimisation of relevant risks;
- control activities, namely policies and procedures that ensure that Management's instructions are applied;
- information and reporting: information must be identified, captured and communicated in a format and timeframe to enable the relevant persons to carry out their responsibilities; and
- monitoring, including internal check and internal control procedures as well as internal audit: a process that assesses the quality of the systems performance over time and within a defined schedule.

By essence, an internal control system cannot provide a guarantee that such risks have been totally eliminated. It must bring them down to an acceptable level.

# **Components of internal control**

# **Control environment**

# Organisation

The Group has put in place a structured organisation which is responsible for defining the internal control requirements, writing the Internal Control Manual, producing and updating the Internal Control Questionnaire and monitoring the results.

Where internal control weaknesses are identified, detailed action plans are put in place to correct these weaknesses in a timely manner with the support of the Sector Internal Control teams, and overseen by the central Internal Control team under the responsibility of the Senior Vice President of Internal Control.

A community of experts in internal control composed of the central and Sector Internal Control teams with relays in the reporting units ("unit") has been developed. This group communicates regularly to share good practices and drive the required change management. Moreover, each Sector President defines the internal organisation of his Sector in a way that ensures efficiency and performance of the businesses.

Sectors are organised in businesses composed of a certain number of units each headed by a Managing and Finance Director responsible and accountable for their affairs including the control environment. In addition, a continuous improvement approach is taken with internal control regularly monitored at business review meetings.

## **Group Instructions and codes**

The Group's control environment is governed by a series of Group Instructions that constitute the body of Internal Rules (the "Group Instructions") and are posted on the Group's intranet site.

The Group Instructions deal with issues of importance throughout the Company and are mandatory for the whole Group, including Sectors, businesses, units, countries and functions. Once a Group instruction is issued, all units must ensure that any pre-existing procedures, policies, directives or other communications at any level are revised to comply with the said Corporate Instruction.

The Group Instructions define the Group's management organisation as well as the responsibilities and organisation of the various functions within the Group. They also require compliance with the Group's Code of Ethics, Internal Control Manual and Reporting and Accounting Manual.

Since its listing, the Group has implemented a Group Instruction which includes a Code of Conduct for preventing insider dealing. This code defines the situations where concerned persons must refrain from making any transactions on the Company's securities.

In its appendix, this Code includes a reminder of the legal provisions and sanctions. The Code, which is updated when necessary, is applicable to all managers and employees of Alstom who have regular or occasional access to inside information (defined as "insiders").

It is available on the Group's intranet and sent to all new insiders of whom the Company keeps an updated list. These persons are kept informed and must confirm receipt of their registration on the list of insiders.

This information includes the Group Instruction and Code of Conduct, along with the schedule of the general blackout periods during which the securities cannot be traded. The persons are also kept informed when they are removed from the list.

The Group has a Code of Ethics which applies to every employee within the Group. It promotes honest and ethical conduct with all stakeholders: customers, suppliers and contractors, competitors, shareholders, governments, regulatory authorities and the public.

The Code of Ethics prescribes fundamental rules of conduct, relating in particular to:

- full compliance with laws, regulations and requirements in all countries where the Group operates;
- prevention of corruption and prohibition of all unlawful payments and practices;
- competition compliance and prohibition of agreements with competitors; and
- internal control and disclosure of information, to ensure the quality and reliability of financial information.

Also the Code of Ethics prescribes essential rules of conduct with regards to the way Alstom deals with its business partners, its role in the environment, the promotion of a team spirit and the commitments to protect the Group's assets.

Following the update of the contents in 2014, the topics addressed include the way Alstom deals with the customers, suppliers and contractors, sales partners, government procurement, export controls and trade restrictions, anti-money laundering, conflicts of interest, gifts and hospitality, the environmental protection, community relations, political contributions and activity, charitable contributions, sponsorship, respect of human rights, relationships with employees, career management for employees, equal opportunity and diversity, health and safety, security of employees, data privacy, the Group communication resources, respect for confidential information, intellectual property, prevention of insider dealing, communication with analysts and/or investors, communication with the media and the use of social networks.

The Code of Ethics details the Alert Procedure which allows any employee or any person or third party in relationship with Alstom to report violations of prevention of corruption, competition and securities and accounting laws and regulations.

It introduces the Alstom Integrity Programme, implemented and monitored throughout the Group under the responsibility of the Senior Vice President Ethics & Compliance.

It refers to the Group Instructions and lists the most relevant for each topic. The Group Instructions treat in more detail the defined rules and procedures put in place to ensure the compliance with its fundamental principles and values.

The Code of Ethics is distributed to each employee and delivered to the Group's external stakeholders. It is available on the intranet website and Alstom's website (www.alstom.com/ethics). It has been translated into 23 languages: English, French, Arabic, Brazilian-Portuguese, Chinese, Croatian, Czech, Dutch, Finnish, German, Greek, Hindi/ English, Hungarian, Indonesian, Italian, Japanese, Polish, Portuguese, Romanian, Russian, Spanish, Turkish and Vietnamese.

## Internal Control Manual & Reporting and Accounting Manual

The Internal Control Manual defines the requirements, instructions and necessary practices to create and maintain a satisfactory control environment and covers over Group financial reporting. The Internal Control Manual is posted on Alstom's intranet site.

The Internal Control Manual contains a number of principles that are mandatory and to be complied with at all times by all business units, notably:

- segregation of duties with internal check to be performed continuously;
- delegation of authorities, mandatory on all units.

The management of the respective entity, unit, business, Sector, country or Corporate is responsible for developing, implementing, operating and monitoring systems of internal control in compliance with the Internal Control Manual and for providing assurance that it has done so.

The Reporting and Accounting Manual defines the Group's policies and procedures regarding accounting and consolidation, definition of main financial indicators, reporting process and three-year plan, budget and forecasting processes. Since 2006 Alstom University develops appropriate trainings in order to ensure the requirements and basics of internal control are understood.

The training sessions on internal control are part of a continuous improvement initiative which involves the Sectors, Alstom International Network and the Corporate functions. Initially concentrated mainly on the finance community, an e-learning module specifically targeting the non-finance community has also been developed.

## Risk mapping & risk management process

## **Objectives**

Since fiscal year 2006/07, a yearly risk mapping review is undertaken, as part of the annual budget and three-year plan process.

The objective is to identify, analyse and to anticipate, the significant risks of the Group, and measure their evolution. And to ensure that the main identified risks are taken into account by the Group and to be sure that strategy and the mitigation actions implemented are efficient to control and to reduce these risks.

The risk assessment review was prepared with the contributions of the four Sectors and of the Corporate functions including the Sectors' management teams, the Internal Audit and Internal Control Department, the finance function including the Departments Tenders & Projects Control, Information Systems and Technology, Human Resources, Legal, Ethics & Compliance and Environment Health & Safety. Corporate role is to ensure overall coordination between risk assessment owners.

### Evaluation

The update of the cartography of risks and the main characteristics of the risk management system are presented during the fiscal year to the Audit Committee.

The Ethics, Compliance and Sustainability Committee reviews the cartography of risks regarding ethics, compliance, sustainable development and social responsibility in order to advise Audit Committee about identified risks and existing risks prevention process.

The risk assessment process allows the Group to take into consideration the impact that uncertain events may have on the achievement of business objectives.

Such events are considered from two perspectives, likelihood and impact. Likelihood represents the possibility that a given event will occur and impact represents its effect. A combination of qualitative and quantitative methods is used in making an assessment.

The cartography of risks exercise also allows to confirm that the appropriate insurance have been subscribed with regards to the insurable risks (see "Insurance" in the Risks section of the Registration Document 2014/15 filed with the AMF). By essence, risk assessment process is not meant to provide a guarantee on the risks assessment performed or on the full achievement of Group's objectives.

## **Risk management**

Under the coordination of the Internal Control Department, Sectors and Corporate functions update the risk assessment as part of the budget and three-year plan process.

For each Sector, the risk assessment is approved by the management team under the control of the Sector President. Risk assessment for transverse Corporate activities is made by the relevant Senior Corporate officer. Each Sector President is responsible for the effective management of risks within his Sector. In addition, functional Vice Presidents (within finance, legal, human resources, ethics and compliance) are responsible for managing risks pertaining to their own processes.

Risk maps are presented to and reviewed by the Audit Committee.

## Monitoring of internal control

Unit Management has the responsibility of maintaining internal control at all times. An Internal Control Questionnaire (or "Self-assessment Questionnaire") has been developed which differentiates requirements to units based on their contribution to the Group's financial statements, using a risk based approach and covering the Group consolidation perimeter. This Self-assessment Questionnaire is regularly reviewed in relation with the Group risks evolution.

Where the results of the Self-assessment Questionnaire indicate that controls are not at the required level, corrective action plans are required to be put in place. The progress of action plans is regularly followed up. The Self-assessment Questionnaire results are approved by unit Management (Finance and Managing Directors) and are subject to review both by quality reviewers at Sector level and by Internal Audit. The results are presented annually to the Audit Committee.

Good practices identified during this self-assessment process are promoted and broadcasted on Sector intranet sites in order to ensure large information coverage to the units.

During the October 2014 Self-assessment Questionnaire review, more than 4,000 users have been mobilised, as well as the Internal Control Department comprised of 31 persons including four IT specialists which brought support to the units.

# Main actors of internal control and risk management

# Main actors of internal control

### Senior Management

The Chairman and Chief Executive Officer is responsible for the internal control and risk management systems and for ensuring that internal control and risk management procedures are designed and operated effectively within the Group. Management is responsible for developing, operating and monitoring the systems of internal control and for providing necessary assurance that it has done so.

### Audit Committee

The Audit Committee reviews and evaluates twice a year the internal control procedures including those relating to financial information, contributing to the preparation of the financial statements of the Group. A review and evaluation of the cartography of risks, including risk assessment and risk management is also made.

Within the Audit Committee, the scope of planned internal audit activities is reviewed in advance and the Internal Audit Department develops a plan and determines the allocation of resources.

The Audit Committee provides a report to the Board of Directors. For more information regarding the Audit Committee, see the first part of the corporate governance report.

# **Disclosure Committees**

The Chairman and Chief Executive Officer and the Chief Financial Officer have established Disclosure Committees at Corporate and Sector levels in order to assist them in evaluating the effectiveness of the Group's disclosure controls and procedures that are designed to ensure that material financial and other information required to be disclosed is recorded, processed, summarised and reported on a timely basis and that appropriate information is communicated to the Management to allow timely decisions.

The Corporate Disclosure Committee is composed of the Chief Financial Officer, the General Counsel, the Senior Vice President of Internal Control, the Vice President Finance Corporate Controller, the Vice President Tenders & Projects Control, and a member from each of the Sector Managements.

Each Sector has established its own Disclosure Committee, which reports to the Corporate Disclosure Committee as to the results of its review of the disclosure controls and procedures, and on its evaluation of the effectiveness within its Sector.

The Group Corporate Disclosure Committee met twice during fiscal year 2014/15 under the Chairmanship of the Chief Financial Officer.

The consolidated financial statements for the fiscal year ended 31 March 2014 and the Management and other financial information disclosed in the Annual Report were reviewed. The interim consolidated financial statements for the six-month period to 30 September 2014 were reviewed. In the reviews of the consolidated financial statements the Committee considered the disclosures made to determine and confirm their relevance, accuracy, completeness and presentations.

## **Finance function**

The finance function controls business, operations and projects to optimise the Group's profitability and cash generation whilst providing internal and external stakeholders with reliable information including financial information.

The finance function defines the Group's principles and financial policies in terms of tenders and projects control, funding, treasury, internal control, accounting, tax and management control, designs and leads key financial processes.

More specifically, the Group's Finance Corporate Control Department is responsible for designing and issuing the relevant accounting procedures, ensuring that they are in compliance with accounting principles and policies, analysing Group performance and forecast, and producing consolidated and parent company financial statements, as well as financial information for external stakeholders.

The Tax Department defines the overall tax policy and planning for the Group and ensures proper compliance with regard to tax returns and payments.

### **Internal Audit Department**

The Senior Vice President of Internal Audit, who is in charge of the Department, reports to the Chairman and Chief Executive Officer and works in close cooperation with the Chief Financial Officer, the General Counsel and with the Senior Vice President Ethics and Compliance.

Since 2008, the Internal Control function is under the supervision of the Senior Vice President of Internal Audit to increase synergies between internal control and internal audit.

The main role of the Internal Audit Department is to advise the Chairman and Chief Executive Officer and the Audit Committee on the adequacy and effectiveness of the internal control system in all phases of the Group's business. The Internal Audit Department operates in accordance with the terms of an Internal Audit Charter approved by the Audit Committee and has the authority to examine any and all aspects of operations.

In particular, the Internal Audit Department evaluates controls that promote:

- compliance with applicable laws and with internal policies and procedures;
- physical safeguarding of assets including risk identification;
- availability, reliability, integrity, confidentiality of information and reporting; and
- efficiency of business processes, functions, and activities.

Since 2009, competencies in information systems have been progressively developed.

Internal Audit may participate in specific assignments such as acquisition and disposal operations, information system implementation, assistance mission or investigations. An additional role is to recommend improvement in the Group's procedures and whenever possible promote good practices.

The Internal Audit Department takes into account the cartography of risks and risk profiles in assessing its audit programmes.

After each internal audit assignment, a report is issued setting out the audit findings and recommendations. The results are also summarised in the bi-annual internal audit activity reports, which are presented to the Audit Committee on the overall results of the internal audits as well as on any other matter which affects internal control. These reports provide the basis for the Audit Committee to review the effectiveness of the work performed by the Internal Audit Department.

Alstom Internal Audit was awarded IFACI certification in October 2007 which was renewed in November 2013 for a 3-year period. IFACI is the French branch of the international Institute of Internal Auditors (IIA). The certification demonstrates that Alstom Internal Audit is compliant with the IIA standards, including independence and objectivity, proficiency and due professional care, quality assurance and improvement programme, nature of work, communication of results.

## **Internal Control Department**

The Internal Control function at Group level is responsible for promoting and coordinating all actions and projects aiming at defining the Group's requirements in terms of internal control, and updating the Internal Control Manual and Internal Control Questionnaire. It is also in charge of following the global results of the Self-assessment campaigns, the main deficiencies identified in the Group's internal control and their respective action plans.

The Group Internal Control Department is relayed in each Sector by a team of professionals in internal control.

The Sector Internal Control teams assist unit and business management in implementing internal control rules and instructions, remediating deficiencies, and improving in general the internal control level. They closely follow the results of the Self-assessment campaigns, participate to the major projects of their respective Sector (such as the implementation of a new information system or integration of new entities) in order to bring in their expertise, and propose various initiatives to address internal control challenges specific to their Sector.

### **Ethics & Compliance Department**

Ethics and Compliance stands as a top priority for Alstom, and the Department has the responsibility of the Alstom Integrity Programme aiming at implementing the culture of integrity as well as the application of all the rules in relation to Business Ethics and Personal Integrity. In September 2010, the Board of Directors created the Ethics, Compliance and Sustainability Committee. Since its creation, it is comprised of three independent Directors.

The EC&S Committee reviews Alstom's policies on ethics and compliance matters and the systems and procedures in place to effectuate these policies and provides the Board of Directors with its views. Alstom Senior Vice President Ethics & Compliance is secretary for the Ethics and Compliance part.

The main role of Ethics & Compliance at Group and Sector level is to:

- promote and explain Alstom's culture of integrity ensuring that the highest standards of integrity and ethics are applied throughout the Group;
- ensure compliance with international and national laws and regulations together with internal Group rules;
- prevent all illegal activity and unlawful payments;
- control the process of qualification of business advisor proposed by the Sectors in relation to the development of business and sales, and monitor the corresponding due diligence;
- implement all necessary rules and policies; and
- monitor the performance of the Alstom Integrity Programme on a continuous basis.

The Ethics & Compliance Department comprises 40 people. Ethics & Compliance has full authority and independence through its reporting to the Group General Counsel. Moreover, the Senior Vice President Ethics & Compliance has a direct access to Alstom Chairman and Chief Executive Officer and to the EC&S Committee. The Senior Vice President Ethics & Compliance is then fully independent and has an unfiltered access to the governing authorities of Alstom.

In addition to the Senior Vice President Ethics & Compliance, the Ethics & Compliance Department comprises a Compliance Officer in charge of the Alstom Integrity Programme Development, a Compliance Officer in charge of the prior due diligence on the sales partners ("Due Diligence Manager") and a Compliance Officer in charge of checking & control of the payment to the sales partners ("Final Checking Manager").

The Sector Compliance Officers in charge of the application of the Ethics & Compliance policy in their Sectors report directly to the Senior Vice President Ethics & Compliance with a functional reporting to the respective Sector General Counsel. Compliance Officers are also appointed in countries where Group activities are important.

During fiscal year 2014/15, an additional Compliance Officer has been appointed in Brazil.

The Sector Compliance Process Managers, dealing with the process in relation to the qualification of sales partners report functionally to their respective Sector Compliance Officer.

To reinforce the resources of Ethics & Compliance Department a community of approximately 300 Ethics & Compliance Ambassadors as of today, all volunteers to promote the integrity culture of the Group, exists since May 2010.

Ethics & Compliance liaises regularly with Alstom Corporate functions in particular Legal, Finance, Internal Audit, Human Resources and Communication to better determine and promote Alstom ethical principles throughout the whole organisation. E&C Group Instructions provide detailed guidance to employees on rules and procedures to strictly apply in the areas of gift and hospitality, political contributions, charitable contributions, sponsorship, sales partners, consulting companies, conflicts of interest, prevention of corruption with suppliers and contractors and in joint ventures and consortium. In 2014 an additional Group Instruction on facilitation payments was released. It reminds that Alstom prohibits facilitation payments.

During fiscal year 2014/15, approximately 7,600 attendees have been trained on ethics and compliance, bringing the total population trained worldwide to approximately 17,500 attendees since the launch of the training programme in 2009.

To ensure that Managers and Professionals understand and adhere to the principles expressed in the Code of Ethics, the e-learning module called e-Ethics has been launched in 2010 in all countries. In March 2012, it was officially deployed within Grid sector. A new version of e-Ethics has been deployed in March 2015. As of end of March 2015, over 70,400 employees have completed e-Ethics. The completion of e-Ethics is mandatory for all Managers & Professionals in the Group. Henceforward they must retake and complete the module every two years.

Extensive communications have been deployed for employees and external stakeholders.

For employees to be well-informed:

- a dedicated, and regularly updated section on Altair, Alstom's intranet, called "Ethics & Compliance", containing not only the E&C Group Instructions but also information on Prevention of Corruption, a monthly Newsletter and Case studies providing tips to help employees to know how to react when facing an ethical dilemma;
- regular news in Alstom's weekly newspaper, Newsflash, and articles in local internal newspaper, whether at country or site levels;
- an educational video, available in English and French on the internet and the intranet, was released to address the topic of prevention of corruption;
- posters displayed in all locations.

For external stakeholders:

 a dedicated section, entitled "Ethics" on Alstom's internet web site, www.alstom.com. In this section, all the translations of the Code of Ethics are available and can be downloaded.

The Alert Procedure allows any employee or any person or third party in relationship with Alstom to report violations of anticorruption, competition, securities and accounting laws and regulations. It was modernized in July 2013 to add two additional means of reporting: a secure website (www.alstom.ethicspoint.com) and the toll-free hotline, both reachable 24 hours a day, 7 days a week, 365 days a year.

In May 2014 the Alstom Integrity Programme has been certified again by ETHIC Intelligence following an audit undertaken by the Swiss company SGS beginning of 2014. The renewed certification covers the entirety of the Alstom Integrity Programme, including respect for laws and rules, management of conflict of interest, gifts and hospitality, political contributions, charitable contributions, sponsorship, relationships with sales partners, consulting companies, suppliers, contractors, joint venture and consortium partners. All the measures, such as the Code of Ethics, the Group Instructions and the extensive internal communication and training efforts, have been taken into account.

# Information Systems function

The Information Systems and Technology (IS&T) function is composed of a Corporate team (IS&T), Sectors Information Systems (IS) Departments and Information Technology Shared Service Centers (ITSSC).

Its main mission is to provide IS&T solutions and services aiming at:

- support Alstom businesses, operations and projects;
- meet the strategic evolution of the Group, support business efficiency, process excellence and overall Sectors productivity using optimised and innovative technology in a cost effective, secure and compliant way.

The Chief Information Officer (CIO) and IS&T Executive Committee launched the IS&T 2015 Programme, validated by Alstom Executive Committee. The IS&T 2015 Programme vision aims at making IS&T the Group solution integrator and innovative business partner by focusing on three main pillars: added value to the businesses, quality of service and IS&T cost efficiency.

Many initiatives have been launched to reinforce IS&T internal control:

- IT assets management centralisation;
- infrastructures upgrade (WAN, LAN, telephony, Windows 7, Unified communication);
- rationalization of the application landscape, decommissioning of legacy systems;
- new tool deployment to secure the workplace environment (Single-Sign-On, shared folders management systems, automatic password reset); and
- adaptation of the IS&T security policy to new disruptive trends (Cloud, BYOD, social network...).

In terms of organisation, ITSSC is now covering all Sectors and countries where Alstom operates.

The governance bodies addresses the IS&T risk through a central monitoring of Group systems and Infrastructure, and a better control of IS&T activities. A Strategy and Transformation Department assists the CIO to control Company-wide elements, to set IS&T principles, architecture, processes and rules, and to enforce common practices, services and standards.

# Management of specific risks

### **Risks in relation to contracts**

### **Corporate Risk Committee**

The Corporate Risk Committee is chaired by the Chairman and Chief Executive Officer and aims to report on the main project risks both at tender stage and during execution, as well as internal audit results and other specific matters.

The Corporate Risk Committee is composed of the Chairman and Chief Executive Officer, the Chief Financial Officer, the General Counsel, the Senior Vice President of Internal Audit and Internal Control, the Senior Vice President Alstom International Network, the Project and Export Finance Director and the Vice President Tenders and Projects Control, and meets on a monthly basis in order to:

- highlight risks essentially from major tenders reviewed in the preceding month and exceeding a threshold in size or deviating from defined criteria. The tenders reviewed by the Tenders & Projects Control Department are required to be approved by the Chairman and Chief Executive Officer or the Chief Financial Officer or the Vice President Finance Corporate Controller before the bid date;
- be briefed on the project reviews particularly those attended by the Tenders & Projects Control Department during the preceding month;
- review matters reported by Internal Audit, the International Network Department; and/or Project and Export Finance Department;
- be briefed on specific concerns and topics (*e.g.* Risk mapping, bidding policy for specific sensitive countries) which may arise from time to time and have an impact on the Sectors activities.

The Internal Control Manual specifies that the Sectors project reviews must be held and reported every three months for contracts which could have a major effect on the relevant unit's financial performance, or every six months in other circumstances.

In a similar way, each Sector has established risk review procedures, which are consistent with the Group's principles.

In particular, the relevant Sector's Management must be advised of:

- important changes occurring after tender submission regarding tender assumptions and of the related impact on the assessment of relevant risks;
- material changes within project execution which could impinge significantly on the project result.

The Sector risk review procedures on tenders include a checklist of major risk elements to be systematically addressed. These elements include in particular, but are not limited to: customer profile, project contractual organisation and partnership, supplier/subcontracting risk, technical & technology risk, costs solidity, project schedule, contract terms & conditions, payment security, bank guarantees, foreign exchange exposure, country risk, tax aspects, bid financials (selling price, margins, risks & opportunities, provisions, project cash profile, etc.).

The implementation of the procedures and the formalisation of the review and approvals are supported in each Sector by a specific reporting and validation tool.

# **Risks in relation to financial markets**

### Corporate funding & treasury

The Funding and Treasury Department defines rules and procedures regarding cash management, currency risk hedging, as well as bonds and guarantees. In addition, it manages the related risks (market, liquidity, foreign exchange and interest rate), the relationships with subsidiaries, the cash pooling structure and the netting process.

The Funding and Treasury Department is solely entitled to raise loans and invest cash surplus except when local regulations do not permit it. In such cases, the involvement and approval from the Funding and Treasury Department remain mandatory before any commitment.

It has also defined a detailed list of authorised banks which the units are authorised to operate with. For further information regarding the management of financial risk, see Note 27 to the consolidated financial statements for the fiscal year ended 31 March 2015.

#### **Corporate Pension Committee**

Pensions and other employee benefits are governed and monitored by the Corporate Pension Committee which is composed of the Corporate Treasury, Consolidation and Compensation & Benefits functions, according to the following principles:

- assets/liabilities management approach so that only risks necessary to cover Alstom's liabilities are taken;
- simplicity in the investment strategy to ensure visibility on the portfolio risk;
- a global policy on employee benefits to address principles for pension plan design, funding & investment, administration and governance;
- a responsibility chart whereby changes to plan design, funding & investment and administration must be authorised by designated Corporate officers.

The Committee holds quarterly meetings to monitor the schemes' evolution.

### Risks in relation to international trade

Until January 2014, Alstom has been using commercial advisors (sales consultants) to support its own commercial teams in a number of countries. Such commercial advisors were compensated on a "success fee" based for the specific project they were selected for. Over the recent years, the use of such commercial advisors has been very substantially reduced, as the strong development of the Group's international operations has led to a sharp increase of its internal commercial resources. In an effort to further reduce compliance risks to the Group, the Company has discontinued the hiring of such commercial advisors since 17 January 2014.

Alstom has deployed all its efforts since early 2000 to strengthen its internal procedures, increasing centralisation of control. In this perspective the Group Instruction for Dealing with Business Advisors has been revised and renamed into Group Instruction for Dealing with Sales Partners.

Additionally a Group Instruction on Facilitation payments was released in 2014. It reminds that Alstom prohibits facilitation payments and describes the preventive steps for minimising the risk of being requested to pay a facilitation payment.

### Legal risks

### Legal function

The Legal Function is responsible for monitoring and mitigating risks arising out of the activities of the Group, as well participating in the Group's efforts to ensure full compliance with applicable laws and the Alstom Code of Ethics. Legal is comprised of Sector Legal Departments, Country Counsels and the Corporate Legal Department. The Sector Legal Departments are headed by General Counsels, who report functionally to the Group General Counsel and operationally to his Sector President. The Sector Legal Departments are responsible for handling legal matters for their Sector. They are in particular involved in the negotiation of contracts, from tendering to signature. They also participate in contract management risks and legal support throughout the project execution.

The main risks in relation to contract performance are presented in the Risks Factors section of the Registration Document 2014/15 filed with the AMF.

The Country Counsels, appointed in several countries where the Group is present, provide legal support to one or more Sectors and are responsible for corporate law matters in their country. The Country Counsels report functionally to the Group General Counsel and to senior members of the legal function and operationally to their Country President.

The Corporate Legal Department is headed by the Group General Counsel, reporting to the Chief Executive Officer. The Corporate Legal Department provides legal assistance to the Board of Directors and senior management, to other corporate functions, Sectors and Countries, as appropriate, in dispute resolution, acquisitions and disposals of businesses, finance and stock market law, insurance, intellectual property, competition law, sourcing and criminal law. The Ethics & Compliance Department reports to the Group General Counsel.

The Group General Counsel attends all Board, Audit, and EC&S Committees meetings to which he provides on a regular basis an update on ongoing legal proceedings and investigations.

The Corporate Legal Department handles notably major disputes affecting the whole Group and compliance matters involving criminal investigations. It monitors the Group exposure reporting relating to disputes and prepares the Group Annual Litigation Report concerning the status of the main potential and pending law suits which is submitted annually to the Corporate Disclosure Committee, the Audit Committee and the Group Statutory Auditors. Legal provides at all levels of the Group (Sector, Country, and Corporate) training on the management of legal risks.

The Corporate Legal Department is responsible for the implementation of the programme developed by the Group aiming to prevent any anticompetitive activity in the course of the Group's activities and to ensure the compliance by all employees with the Code of Ethics, the laws and regulations in the area of competition law in the countries where Alstom carries out its activities.

This programme which has been reinforced since 2012, applies to all Group employees who are involved directly or indirectly in the management of Group companies, in commercial activities or who are in contact with competitors, customers, suppliers, sub-contractors, distributors or resellers. Under the responsibility of the Legal department, it is deployed on a continuous basis in the countries where the Group carries out its activities *via* awareness and training sessions of officers and employees. These trainings, based on the Group instruction "Compliance with competition or antitrust rules" available in various languages on the Alstom intranet site, are adapted to each local legal environment. This programme aims to permanently follow up and inform on the evolution of applicable American, European or other local regulations, and to improve the internal rules implemented to ensure strict compliance with all applicable regulations. The major legal risks and disputes are presented respectively in the Risks Factors section and Note 30.2 to the Consolidated Financial Statements of Registration Document 2014/15 filed with the AMF.

## Risks in relation to Environment, Health and Safety (EHS)

The Corporate Environment, Health, Safety (EHS) Department is responsible for defining and following environment, health and working safety policy. It is supported in its mission by the EHS managers' network at Sectors, businesses and sites levels to ensure deployment of the policy.

Based on the Group EHS roadmap internal and external assessors network validate EHS actions and advice on deployment plans.

Through the programme the Group seeks to:

- ensure high standard level of monitoring industrial risks at least equal or above local regulations;
- evaluate environment and employee health impact of new industrial processes prior to implementation, as well as, discontinuation of existing processes;
- develop a continuous improvement process to reduce energy and water consumption Greenhouse gas and Volatile Organic Compounds emission and to minimize risks related to waste and pollution;
- ensure to its employees, suppliers and contractors, involved in contract execution the best protection regarding safety and health.

A particular attention is given to high risk activities performed by Group employees, suppliers or contractors during contracts execution.

A specific prevention plan is supervised by the Group VP EHS aiming to reduce the occurrence of severe accidents. This plan is regularly reported to the Executive Committee and the EC&S Committee of the Board ("Zero deviation plan").

The assets & business interruption management is designed to minimise exposure to loss or damage and to ensure business continuity. This includes exposure to fire, breakdown, and natural catastrophes, as well as theft or deliberate damage.

External specialized assessors regularly perform audits and selfevaluation of fire prevention and natural disasters. During the fiscal year 14/15, 23 sites have been audited by an independent third party.

The EHS coordination guarantees the consistency of the prevention programmes at a central level and the EHS Roadmap update. The EHS performance indicators are gathered on a regular basis by a reporting system covering all the business and operational centres in order to guide the risk management approach.

During fiscal year 2014/15, 181 EHS audits were performed, in the plan to reduce serious accidents and control of high-risk activities: "Zero Deviation Plan" and conducted by Internal Auditors specifically trained. In addition, each site has achieved a monthly self-evaluation based on the safety guidelines of the plan. By 31 March 2015, 100% of the industrials sites over 200 people have confirmed their ISO 14001 certification.

## Risks in relation to the design of complex technology

The management of risks related to the design and use of complex technology is governed by an instruction that defines how Alstom manages development of goods and services, in particular the mandatory gate reviews to be held along each development phase from technology to product development and contract execution.

Each Sector has developed and implemented its own procedures and organisation to manage the R&D process in compliance with the Group instruction.

In the Transport Sector, the program Review Board governs up-stream new technologies and product development for Platforms, ensuring that product/system developments meet quality/cost/delivery performances. All gate reviews of the technology and product phases are validated by the above Boards.

Concerning Transport Information Solutions (TIS) Activity, the review of R&D programs is done by the S&P (Systems & Products) reviews, which are also monitoring applicative projects.

In Thermal Power and Renewable Power Sectors, an R&D Investment Board is in charge of ensuring that the Power development portfolio is reviewed and controlled. The Technology function is responsible for deploying and implementing processes to make sure that R&D programs are executed timely achieving the specified performance and within budget and that appropriate reporting is done.

In the Grid Sector, each Business is responsible for identifying the risks associated with its projects, as well as defining the means used to mitigate and eliminate these risks, in respect of Grid Quality processes.

Technology Development Quality process, which applies to new technologies, is supervised by Steering Committees involving R&D and Marketing management at the Sector and Product Line levels.

### Main identified risks related to use of complex technology

The use of complex technologies exposes the Group to a number of risks. The functions of R&D and Engineering implemented mitigation plans to reduce, anticipate and contain their effects.

In the Thermal Power Sector, industrial & technology risk related to turnkey plants is mainly mitigated by the:

- use of mature technology implemented in a specific configuration where operation and performance require an adaptation of the standard components;
- choice of new suppliers which requires confirmation of technology mastering;
- risk exposures of major component failure or low performing equipment delivered by external suppliers, several approaches have been put into place aiming to reduce probability of risk occurring and potential impact.

The response to risk regarding the use of complex technology is also differentiated based on the type of component involved.

New developments and upgrades have been validated by testing in our laboratories, test centres and on sites as scaled and full size models. Model test for steam turbines and the test power plant for the large gas turbine products are available. Tests are accomplished to validate the customer requirements.

The platform and modularization initiative has gathered pace in the last year. It was established to substantially increase the reuse of subsystems and modules to improve quality, reduce costs and lead time, resulting in lower overall risk. In particular, the use of the platform approach on the development of the very large gas turbine has resulted in accelerated development with lower risk.

In the Renewable Sector, in the area of hydraulic components supply, the main risk is generated by the environment and the way water flows to the equipment. In such unsteady conditions the turbine has to deliver a specified performance.

In order to reduce that risk, model processes have been put in place to optimise the hydraulic shape with the aim to obtain a validation of the prototype by the client.

This reduces the risk of technology problems further into project execution. Mechanical elements are designed following mature technologies, and the design evolves based on the contract performances defined by the contract. Quality and validation tests are performed on the electrical systems at the various manufacturing steps.

In the Grid Sector, R&D processes are based on several steps (pre-studies, R&D and validation) closed by a gate review achieved by the product line management and Sector for major projects. This reduces the risk from complex and new technologies. A R&D handbook gathering tools, controls and good practices has been implemented.

Risks related to conception and use of complex technologies have been managed at several levels:

- standards are designed and applied by the competency centres across the product and production sites;
- identification process to manage the risk during the development and engineering phase.

In the Transport Sector, risks occurring due to complex technologies are evaluated during each step of the R&D process. The validation steps of the new technologies allow the creation of new internal reference data base that reduce risks arising in new projects.

Concerning Transport Information Solutions (TIS) Activity, risks can be related to availability of the new systems and the products sold to customers, or can be related to the performance of delivered security systems such as high density traffic management systems. In order to meet the situation TIS has put in place, a strict methodology of development, validation, qualification and certification of its products which aims to ensure integrity and safety of operated products.

Technological, industrial, and contractual risks can occur when R&D competencies are commonly executed with a third party mainly during two main steps:

- innovative technology collaboration;
- licensing on technologies and products.

In both cases the choice of the scientific, technical, or manufacturing third party partner is significant and is subject to a strict evaluation.

All Sectors are managing the risks of complex technologies through various mechanisms across all stages of R&D and technology development through to project execution. This is an ongoing improvement process. However, the risk assessment process in place is not a full guarantee that all objectives of managing risk at Group level can be achieved.

# Risk management procedures pertaining to the safety of products and railway accident risk

The Transport sector has several procedures to control the quality of its equipment before they are suitable for use, which are intended to limit the risk of a railway accident and ensure the safety of passengers. The analysis and demonstration processes put in place are used for all of the products/systems Transport designs or integrates. In addition, they can be modified or adapted based on regulatory and/or contractual requirements.

The Transport sector follows a procedure for managing technical failures that combines:

- a process for managing safety threats, which relies on risk assessment;
- a notification and monitoring process that includes the identification and manager notification of technical failures based on their impact on safety, as well as a routine follow-up of the resolution status of these problems, applicable at the various levels of the Transport sector organisation.

This procedure also includes a crisis management process that takes into account the communication and public image aspects of such problems as well as their legal ramifications.

In addition, specific training on "Railway Safety" is provided to managers who have responsibilities in the manufacturing and market launch of equipment in order to introduce them to the challenges and requirements associated with the safety of its products.

# Procedures for the production of the Group financial statements and other accounting and financial information

The accounts of reporting units are prepared in accordance with the Group's accounting policies. The data is then adjusted, where necessary, to produce the local statutory and tax accounts. Integrated consolidation software is used for both management reporting purposes and also to produce the Group financial statements. The consolidation software allows the reconciliation between contract data and financial reporting. The main reporting processes facilitate consolidation of financial data to produce the consolidated financial statements and forecast data, as well as regular management information.

## Accounting standards

The consolidated financial statements are prepared in accordance with IFRS as adopted by the European Union. The consolidated financial statements comply with accounting policies as detailed in Note 2 of the consolidated financial statements at 31 March 2015.

# Accounts closing process

The reporting units produce monthly statements which are used to determine the Group's monthly operating income, cash flow and balance sheet.

# Role of the Group's Finance Corporate Control Department

The list of entities to be accounted for by the equity or line by line methods or fully consolidated is drawn up by the Finance Corporate Control. This Department also checks the quality of the reporting packages submitted by the units, focusing primarily on inter-company eliminations, and the accounting treatment of non-recurring transactions for the period, and movements between the opening and closing balance sheet used to prepare the statement of cash flows and reconciliations between legal entities and reporting entities.

The Department also checks the results of procedures, including foreign exchange, inter-company eliminations, transfers to minority interests and recognition of the effects of changes in scope of consolidation. The Group's consolidated financial statements are also analysed in detail, to understand and check the main contributions by Sectors, businesses or subsidiaries, as well as the transactions reflected in the accounts.

# Financial information and reporting

Application and compliance with these principles, rules and procedures are under the direct responsibility of each unit Finance Director. All Finance Directors report directly to the financial officers of the relevant businesses and Sectors and ultimately to the Group Chief Financial Officer.

Unit Finance Directors must ensure that information provided *via* the Group accounting and reporting information system covering the complete Group perimeter reflects required disclosures, the results of the period and the financial position at the end of the period.

The preparation of the consolidated financial statements in conformity with IFRS requires management to make various estimates and use assumptions regarded as realistic and reasonable. These estimates or assumptions could affect the value of the Group's assets, liabilities, equity, net profit and contingent assets and liabilities at the date of the financial statements. Management reviews estimates on an on-going basis using currently available information. Actual results may differ from those estimates, due to changes in facts and circumstances.

For more information regarding the use of estimates and critical accounting policies, see Note 2.2 to the consolidated financial statements for the fiscal year ended 31 March 2015.

Estimates of future cash flows reflect Management's current best estimates of the probable outflow of financial resources that will be required to settle contractual obligations. The estimates are therefore subject to change, due to changes in circumstances surrounding the execution of contracts.

Management regularly reviews the effectiveness of internal control over financial reporting, in particular to ensure the timeliness and accuracy of accounting for transactions and assets in circulation, it verifies that transactions have been recorded consistently, in accordance with IFRS as applied by the Group and as set out in the Reporting and Accounting Manual.

> Levallois-Perret, 5 May 2015 The Chairman of the Board of Directors

# **EXECUTIVE** COMMITTEE

# **COMPOSITION AS OF 5 MAY 2015**

The Executive Committee is composed of the following persons:

		Entered Executive	
	Main Function	Committee Date	Age
Patrick Kron	Chairman and Chief Executive Officer	January 2003	61
Philippe Cochet	Executive Vice President; President of Thermal Power Sector	July 2011	55
Jérôme Pécresse	Executive Vice President; President of Renewable Power Sector	July 2011	48
Henri Poupart-Lafarge	Executive Vice President; President of Transport Sector	October 2004	46
Grégoire Poux-Guillaume	Executive Vice President; President of Grid Sector	July 2011	45
Jean-Jacques Morin (*)	Chief Financial Officer	December 2014	54
Keith Carr	General Counsel	July 2011	49
Bruno Guillemet	Senior Vice President Human Resources	July 2011	58

(\*) Mr Jean-Jacques Morin succeeded Mr Nicolas Tissot on 1 December 2014.

The Executive Committee met 11 times during the 2014/15 fiscal year.

# COMPENSATION OF MEMBERS OF THE EXECUTIVE COMMITTEE

The compensation of the Executive Committee members, excluding the Chairman and Chief Executive Officer, is decided annually by the Chairman and Chief Executive Officer and reviewed by the Nominations and Remuneration Committee. It consists of a fixed component and a variable component tied to the realisation of performance objectives determined at the beginning of the fiscal year.

For fiscal year 2014/15, the variable compensation is tied on the one hand, to the realisation of Group objectives related to free cash flow, operational margin and the level of margin in the backlog and also to the same objectives related to their only Sector for Sectors' Presidents, and on the other hand, to the realisation of specific objectives for each Sector or function. These specific objectives refer to the programmes of priority actions included in the budgets and strategic plans, and are evaluated by the Nominations and Remuneration Committee.

For Sector Presidents, if the set objectives are met, the financial objectives represent 36% and the specific objectives 24% of the annual base salary. The financial objectives can vary in a 0-72% range, and the specific objectives can vary in a 0-24% range, depending on performance. Therefore, their variable salary varies in a 0-96% range of their annual fixed salary.

For functional officers, if the set objectives are met, the financial objectives represent 30% and the specific objectives 20% of the annual base salary. The financial objectives can vary in a 0-60% range, and the specific objectives can vary in a 0-20% range, depending on performance. Therefore, their variable salary varies in a 0-80% range of their annual fixed salary.

Total compensation packages are tied to both the Company's financial performance and individual and team contributions. They are based on best practices within the industry, compensation surveys and advice from specialised international counsels.

The overall amount of the gross compensation due to the members of the Executive Committee, excluding the Chairman and Chief Executive Officer's remuneration detailed on pages 219 and 220, by the Company and the companies controlled by the Company within the meaning of Article L. 233-16 of the French Commercial Code in respect of fiscal year 2014/15 amounted to  $\epsilon$ 5,760,000. The fixed component represents  $\epsilon$ 3,546,000 (seven members of the Executive Committee concerned for fiscal year 2014/15, excluding the Chairman and Chief Executive Officer) and the variable component linked to the results of fiscal year 2014/15 represents  $\epsilon$ 2,214,000 (seven members of the Executive Committee concerned for fiscal year 2014/15, excluding the Chairman and Chief Executive Officer). These amounts include all the remunerations paid to the people concerned in respect of their membership in the Executive Committee during the fiscal year, excluding the Chairman and Chief Executive Officer's remuneration.

The total corresponding amount paid in respect of fiscal year 2013/14 to the members of the Executive Committee (seven members of the Executive Committee concerned as of 31 March 2014, excluding the Chairman and Chief Executive Officer) was  $\epsilon$ 5,641,000.

The members of the Executive Committee benefit from supplementary retirement schemes (defined contribution plan and defined benefit plan). The total amount of the defined benefit obligation as of 31 March 2015 for the members of the Executive Committee (excluding the Chairman and Chief Executive Officer) is  $\epsilon$ 7,806,000 including the legal retirement indemnities plus the taxes applicable to supplemental retirement schemes as increased since 1 January 2013 and then 1 January 2015. The total amount of contributions paid by the Group, within the defined contribution plan, was  $\epsilon$ 112,753 for the fiscal year 2014/15 (excluding the Chairman and Chief Executive Officer).

# **STATUTORY AUDITORS' REPORT** PREPARED IN ACCORDANCE WITH ARTICLE L. 225-235 OF THE FRENCH COMMERCIAL CODE ON THE REPORT PREPARED BY THE CHAIRMAN OF THE BOARD OF ALSTOM

### (For the year ended 31 March 2015)

This is a free translation into English of the Statutory Auditors' report issued in the French language and is provided solely for the convenience of English speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

## To the Shareholders,

In our capacity as Statutory Auditors of Alstom, and in accordance with article L. 225235 of the French Commercial Code, we hereby report to you on the report prepared by the Chairman of your company in accordance with article L. 225-37 of the French Commercial Code for the year ended 31 March 2015.

It is the Chairman's responsibility to prepare, and submit to the Board of Directors for approval, a report describing the internal control and risk management procedures implemented by the company and providing the other information required by article L. 225-37 of the French Commercial Code in particular relating to corporate governance.

It is our responsibility:

- to report to you our observations on the information set out in the Chairman's report on internal control and risk management procedures relating to the preparation and processing of financial and accounting information, and
- to attest that the report sets out the other information required by article L. 225-37 of the French Commercial Code, it being specified that it is not our responsibility to assess the fairness of this information.

We conducted our work in accordance with professional standards applicable in France.

# Information concerning the internal control and risk management procedures relating to the preparation and processing of financial and accounting information

The professional standards require that we perform procedures to assess the fairness of the information on internal control and risk management procedures relating to the preparation and processing of financial and accounting information set out in the Chairman's report. These procedures mainly consisted of:

- obtaining an understanding of the internal control and risk management procedures relating to the preparation and processing of financial and
  accounting information on which the information presented in the Chairman's report is based, and of the existing documentation;
- obtaining an understanding of the work performed to support the information given in the report and of the existing documentation;
- determining if any material weaknesses in the internal control and risk management procedures relating to the preparation and processing of financial and accounting information that we may have identified in the course of our work are properly described in the Chairman's report.

On the basis of our work, we have no matters to report on the information given on internal control and risk management procedures relating to the preparation and processing of financial and accounting information, set out in the Chairman of the Board's report, prepared in accordance with article L.225-37 of the French Commercial Code.

# Other information

We attest that the Chairman's report sets out the other information required by article L. 225-37 of the French Commercial Code.

Neuilly-sur-Seine and Courbevoie, 6 May 2015 The Statutory Auditors

PricewaterhouseCoopers Audit

Mazars Thierry Colin

# **INTERESTS OF THE OFFICERS** AND EMPLOYEES IN THE SHARE CAPITAL

# STOCK OPTIONS AND PERFORMANCE SHARE PLANS

# **Granting policy**

Generally every year, the Company sets up a stock options and performance share plan in France and outside France within the framework of the authorisation granted by the General Shareholders' Meeting, pursuant to Articles L. 225-177 and *seq.* and to Articles L. 225-197 and *seq.* of the French Commercial Code.

The Board of Directors grants stock options plans upon the proposal of the Nominations and Remuneration Committee, which reviews all terms of these plans, including the granting criteria. The awards are made with a regular frequency, at the end of September each year. Exceptionally, the awards of the 2010 plan (LTI plan No. 13) and 2012 plan (LTI plan No. 15) were allocated in December due to the matters on the agenda of the end September Board meetings.

Through the Long-term Incentive Plans that were put in place starting in the 2007/08 fiscal year, the Board of Directors wanted to combine the allocation of stock options with the free allocation of shares and subject the exercise of all stock options and the delivery of all shares to identical performance conditions and attendance requirements (please refer to the characteristics of these plans, as set forth in subsequent pages).

The respective proportions of stock options and performance shares allocated vary according to beneficiaries' level of responsibility and performance, it being specified that the proportion of stock options increases as responsibility and performance levels increase. With respect to the lowest hierarchical positions, only performance shares are allocated in this way within the framework of the LTI plans offered since fiscal year 2008/09.

Beneficiaries of stock options and performance shares are generally selected among the executives of profit centres, functional executives, country presidents, managers of large projects and, more generally, holders of key salaried positions in Alstom, which have made a significant contribution to the Group's results.

Since 2004, the number of beneficiaries totals approximately 2% of total Group employees.

Individual grants to members of the Executive Committee are based on the level of responsibilities and are in line with market practice. They are granted under the terms of the plan and implemented annually; the characteristics of the options and/or performance shares granted to members of the Executive Committee are similar to those of all the other grants.

No LTI Plan was implemented over the course of the 2014/15 fiscal year.

The previous long term incentive plan (LTI No. 16 dated 1 October 2013) bears on a total amount of conditional stock options and free performance shares corresponding to 0.54% of the share capital as of the grant date. For information on the grants awarded to the Chairman and Chief Executive Officer over the course of previous fiscal years, please refer to the section on the Compensation of Executive and Non-Executive Directors in the Chairman's report (see pages 219 to 227).

# Main characteristics of the stock options

- Frequency: annual allocation at the end of September or early October of each year. In 2010 and 2012, the allocations have been exceptionally completed in December.
- No discount: yes.
- Term of the options: eight years (since the LTI plan No. 12).
- Exercise deferral: three years.
- Shares can be sold: at expiration of a three-year period since the LTI Plan No. 16 (except in the cases described below).
- Performance conditions: yes (since fiscal year 2006/07, all options are granted subject to Group performance conditions to be met over the course of three fiscal years following the stock options grant date (see below)).
- Holding requirement: yes, for the members of the Executive Committee since fiscal year 2007/08 (see below).

For each plan, the options' subscription price, determined by the Board when the Board of Directors grants the options, has no discount. It corresponds to the average price of the shares during the twenty trading days preceding the day when the Board of Directors grants the options.

The life of the options plans was ten years and has been reduced to eight years as from the LTI plan No. 12 granted in 2009. The options are generally only exercisable at the expiry of a vesting period of three years as from the grant date. In France, for grants made prior to 28 September 2012, beneficiaries who are French residents must also keep the shares subscribed up until the expiry of a four-year period following the grant date of the plan.

Since the 2006/07 fiscal year, all the options granted are conditional and submitted to the achievement of demanding and pre-determined internal performance conditions set forth in the table below.

The performance condition retained since 2006 is the future operating margin level of the Group, which is the same criterion used for performance shares and the objectives of the Group, completed since 2012 by the requirement of the absence of negative free cash-flow. The performance conditions are determined in accordance with the three-year forecasts of the Group at the time of allocation.

The exercise of options is also subject to the beneficiary's presence within the Group, save in exceptional cases.

# Main characteristics of the performance shares

- Frequency: annual allocation at the end of September of each year. In 2010 and 2012 the plans have been exceptionally completed in December.
- Performance requirement: yes, the final allocation of all shares is contingent upon the satisfaction of Group performance requirements over a period of three fiscal years following the grant date.
- Final allocation: once in full at expiration of a four-year period for all beneficiaries (for grants made up to the 2012/13 fiscal year, this period was approximately three years long for French residents and four years long for non-French residents).
- Holding requirement: none where the shares are granted at expiration of a four-year term, two years in all other cases.
- Specific holding requirement for members of the Executive Committee: yes since fiscal year 2007/08 (see below).

Generally speaking, the shares are allocated following a vesting period which, for French residents, runs for approximately three years following the date upon which the Board of Directors allocated the rights (followed by a two-year retention period), or four years for beneficiaries who are not French residents, subject to satisfying performance conditions set internally by the Company. With respect to LTI Plan No. 16, this period is four years long for all beneficiaries. These are new shares to be issued at the moment of their final allocation by deduction from the reserves.

The definitive allocation of the performance shares to beneficiaries within the LTI plans granted since 2007, is subject to the same conditions associated with the Group's performance at the end of or over a three-fiscal year period as the exercise of the conditional stock options. The definitive allocation is also subject to conditions associated with the executive's presence within the Group, save in exceptional cases as provided for in the plan.

# Requirement to hold the shares applicable to members of the Executive Committee – Rules of conduct

For each plan since the 2007 plan (LTI No. 10), the Board of Directors has set the custody requirements applicable to beneficiaries who are members of the Executive Committee.

Therefore, for the entire period of time during which they perform their duties, such beneficiaries must hold, in registered form, a number of shares resulting from the exercise of options and the free allocation granted within these plans and corresponding to 25% of the theoretical net gain (after taxes and social security withholdings) calculated on each date of exercise of options and on the effective date of final allocation of the performance shares.

At its meeting dated 1 October 2013, the Board of Directors made the holding requirements applicable to the Chairman and Chief Executive Officer more stringent (see page 221).

Moreover, rules of conduct applicable within the Group where inside information is held, prevent any sale of shares during periods preceding the approval of the Group's results and more generally when inside information is held. Any request to exercise stock options is subject to prior authorisation of the Human Resources Department in order to monitor compliance with the blackout trading periods by beneficiaries registered on the Group's insiders lists (see also page 210). In addition to this lock-up requirement applicable only to insiders, specific legal obligations are also applicable to all recipients of performance shares, irrespective of whether or not they hold the status of insider. Such obligations preclude them from selling any performance shares during certain periods determined by law.

# Consequences of the Transaction with General Electric regarding the treatment of stock options and performance shares plans

The completion of the transaction contemplated with General Electric has the following consequences on the LTI Plans:

- in accordance with the terms of the agreement (the "Contract of Sale") entered into with General Electric for the sale of Alstom's Energy businesses (Power (Electricity generation) and Grid), as well as central and shared services of Alstom (the "Transaction"), beneficiaries of LTI Plans who leave the Alstom Group as a result of the sale of Alstom's Energy businesses to General Electric shall retain the benefit of their options and their rights to be allocated performance shares, provided that they are employees of the Alstom Group as of the date of completion of the Transaction. The lifting of the condition of presence following completion of the Transaction has been approved by the Board of Directors;
- with respect to the performance conditions under LTI Plans No. 15 and No. 16 relating to a reference period that had not ended on 1 April 2014, or for fiscal years 2014/15 and 2015/16, these performance conditions shall be deemed to have been met by the fact of, (and subject to) the completion of the Transaction. The Board of Directors has (i) stated that the sale price of Alstom's Energy businesses amounting to €12.35 billion highlights assumptions of results for the Energy businesses which imply that demanding performance conditions set for the entire Alstom Group are met, and (ii) reiterated that the completion of the Transaction now constitutes the Group's strategic priority.

In accordance with the decision taken by the Board of Directors in the light of the report of the Nominations and Remuneration Committee, such modifications to LTI Plans No. 15 and No. 16 were effective subject to the approval of the Transaction at the General Shareholders' Meeting of the Company, which took place on 19 December 2014.

# Summary of the main characteristics of the stock options plans granted outstanding at the end of fiscal year 2014/15

The total number of options that could be exercised according to the outstanding plans corresponds to 2.43% of the share capital as of 31 March 2015 (subject to achievement of the performance conditions linked to fiscal years 2014/15 and 2015/16 – please refer to the consequences of the transaction with General Electric on LTI Plans 15 and 16 above and Note 23 to the consolidated financial statements for the 2014/15 fiscal year).

5

The main characteristics of all stocks option plans implemented by the Company and outstanding as of 31 March 2015 are summarised below. No other company of the Group has implemented stocks option plans giving right to the Company's shares.

	Plan No. 8	Plan No. 9 (conditional options)	Plan No. 10 included in plan LTI No. 10 (conditional options)	Plan No. 12 included in plan LTI No. 12 (conditional options)	Plan No. 13 included in plan LTI No. 13 (conditional options)	Plan No. 14 included in plan LTI No. 14 (conditional options)	Plan No. 15 included in plan LTI No. 15 (conditional options)	Plan No. 16 included in plan LTI No. 16 (conditional options)
Date of Shareholders' Meeting	9 July 2004	9 July 2004	26 June 2007	26 June 2007	22 June 2010	22 June 2010	22 June 2010	2 July 2013
Date of Board meeting	27 Sept. 2005	28 Sept. 2006	25 Sept. 2007	21 Sept. 2009	13 Dec. 2010	4 Oct. 2011	6 Nov. 2012	1 Oct. 2013
Initial exercise price (1)	€35.75	€74.66	€135	€49.98	€33.14	€26.39	€27.70	€26.94
Adjusted exercise price (2)	€17.88	€37.33	€67.50	-	-	-	_	-
Beginning of stock options exercise period	27 Sept. 2008	28 Sept. 2009	25 Sept. 2010	21 Sept. 2012	13 Dec. 2013	4 Oct. 2014	10 Dec. 2015	3 Oct. 2016
Expiry date	26 Sept. 2015	27 Sept. 2016	24 Sept. 2017	20 Sept. 2017	12 Dec. 2018	3 Oct. 2019	9 Dec. 2020	30 Sept. 2021
Number of beneficiaries	1,030	1,053	1,196	436	528	514	538	292
Total number of options (adjusted if any) <sup>(2)</sup>	2,803,000	3,367,500	1,697,200	871,350 <sup>(4)</sup>	1,235,120 <sup>(5)</sup>	1,369,180 <sup>(6)</sup>	1,312,690 (7)	671,700
Total number of exercised options	2,087,456	526,967	1,000	-	-	9,429	-	-
Total number of cancelled options <sup>(2)</sup>	263,800	438,750	265,500	561,150	387,970	539,645	715,985	16,300
Number of remaining options to be exercised as of 31 March 2015 <sup>(2)</sup>	451,744	2,041,783	1,430,700	310,200	847,150	820,106	596,705	655,400
Percentage of capital as of 31 March 2015 that may be created	0.146%	0.775%	0.462%	0.100%	0.273%	0.265%	0.193%	0.212%
Number of shares that may be subscribed as of 31 March 2015 by members of the Executive Committee <sup>(2)</sup> <sup>(3)</sup>	-	335,000	178,600	53,000	65,992	247,338	159,170	248,500
of which number of shares that may be subscribed by Mr Patrick Kron as of 31 March 2015	-	240,000	115,000	32,000	-	70,000	50,000	90,000

(1) Undiscounted price corresponding to the average price of the share during the twenty French stock market trading days preceding the Board of Directors' meeting that implemented the plan.

(2) Stock option plans 8, 9, and 10 were adjusted in order to take into account the two for one split in the par value of the share from €14 to €7 carried out on 7 July 2008. (3) Pertains to the members of the Executive Committee as of 31 March 2015 and not to those who were members of such Committee at the time of the grant.

(4) 60% of the stock options initially granted under LTI Plan 12 were cancelled based on the application of the performance condition associated with the results of the 2011/12 fiscal year (please refer to Note 22 to the consolidated financial statements for the 2013/14 fiscal year). (5) 20% of the stock options initially granted under LTI Plan 13 were cancelled based on the application of the performance conditions associated with the results

of the 2010/11, 2011/12, and 2012/13 fiscal years.

(6) 30% of the stock options initially granted under LTI Plan 14 were cancelled based on the application of the performance condition associated with the results of the 2011/12, 2012/13, and 2013/14 fiscal years (please refer to Note 23 to the consolidated financial statements for the 2014/15 fiscal year).

(7) 50% of the stock options initially granted under LTI Plan 15 were cancelled based on the application of the performance condition associated with the results of the 2012/13 and 2013/14 fiscal years (please refer to Note 23 to the consolidated financial statements for the 2014/15 fiscal year).

# TERMS OF EXERCISE/PERFORMANCE CONDITIONS (8) (9)

(c	lan No. 9 conditional ptions)	Plan No. 10 included in plan LTI No. 10 (conditional options)	Plan No. 12 included in plan LTI No. 12 (conditional options)	Plan No. 13 included in plan LTI No. 13 (conditional options)	Plan No. 14 included in plan LTI No. 14 (conditional options)	Plan No. 15 included in plan LTI No. 15 (conditional options)	Plan No. 16 included in plan LTI No. 16 (conditional options)
options can be exercised from 27 September 2008. • • • • •	100% of options can be exercised from 28 September 2009 if the 2007/08 Group operating margin (the "2007/08 Margin") is equal or above 7.5%. 80% of options can be exercised if the 2007/08 Margin is between 7% (included) and 7.5% (excluded). 40% of options can be exercised if the 2007/08 Margin is below 7%. erformance ondition fulfilled: 00% of the otions exercisable nce 8 Sept. 2009.	<ul> <li>100% of options can be exercised from 25 September 2010 if the 2009/10 Group operating margin (the "2009/10 Margin") is equal or above 8.5%.</li> <li>80% of options can be exercised if the 2009/10 Margin is between 8% (included) and 8.5% (excluded).</li> <li>40% of options can be exercised if the 2009/10 Margin is between 7.5% (included) and 8% (excluded).</li> <li>No option can be exercised if the 2009/10 Margin is between 7.5%</li> <li>(included) and 8% (excluded).</li> <li>No option can be exercised if the 2009/10 Margin is below 7.5%.</li> <li>Performance condition fulfilled: 100% of the options exercisable since 25 Sept. 2010.</li> </ul>	<ul> <li>100% of options can be exercised from 21 September 2012 if the 2011/12 Group operating margin (the "2011/12 Margin") is equal or above 8.7%.</li> <li>80% of options can be exercised if the 2011/12 Margin is between 8.2% (included) and 8.7% (excluded).</li> <li>60% of options can be exercised if the 2011/12 Margin is between 7.2% (included) and 8.2% (excluded).</li> <li>40% of options can be exercised if the 2011/12 Margin is between 7.2% (included) and 7.2% (excluded).</li> <li>40% of options can be exercised if the 2011/12 Margin is between 6.5% (included).</li> <li>No option can be exercised if the 2011/12 Margin is between 6.5%</li> <li>Fulfilment of performance conditions: 40% of the options initially granted are exercisable since 21 September 2012.</li> </ul>	<ul> <li>The percentage of options which can be exercised from 13 December 2013 will vary according to predetermined levels of the Group's operating margin for the 2010/11, 2011/12 and 2012/13 fiscal years (the "Margins").</li> <li>100% of options can be exercised if the Margins are equal or above 7.5%.</li> <li>No option can be exercised if the Margins are below 6.5%.</li> <li>Fulfilment of performance conditions: 80% of the options initially granted are exercisable since 13 December 2013</li> </ul>	<ul> <li>options can be exercised if the Margins are equal or above 7.5%.</li> <li>No option can be exercised if the Margins are below 6.5%.</li> <li>For more details, refer to Note 23 to the consolidated financial</li> <li>statements for the 2014/15 fiscal year.</li> <li>Fulfilment of performance conditions: 70% of the options</li> </ul>	<ul> <li>The percentage of options which can be exercised from 10 December 2015 will vary according to predetermined Group's operating margin levels for the 2012/13, 2013/14 and 2014/15 fiscal years (the "Margins") and requires a free cash flow ("FCF") above or equal to 0 for each fiscal year.</li> <li>100% of options can be exercised if the Margins are equal or above predetermined levels and the FCF is above or equal to 0 for each fiscal year.</li> <li>No option can be exercised if the Margins are equal or above predetermined levels and the FCF is above or equal to 0 for each fiscal year.</li> <li>No option can be exercised if the Margins are below 7% or the FCFs are negative.</li> <li>The performance conditions relative to the 2014/15 fiscal year will be deemed fulfilled as a result (and under the condition) of the completion of the transaction with General Electric.</li> <li>For more details, refer to Note 23 to the consolidated financial statements for the 2014/15 fiscal year.</li> <li>Status of achievement: As of today 30% of the initially allocated options are vested and 50% are cancelled based on the performance condition linked to the results of fiscal years 2012/13 and 2013/14. The remaining options, or 20% of the initial allocation, will vest as a result (and subject to the condition) of the completion of the transaction with General Electric.</li> </ul>	<ul> <li>can be exercised if the Margins are equal or above predetermined levels and the FCF is above or equal to 0 for each fiscal year.</li> <li>No option can be exercised if the Margins are below 7.2% for Fiscal Year 2014/15 or 7.4% for Fiscal Year 2015/16 or the FCFs are negative.</li> <li>The performance conditions relative to the 2014/15 and 2015/16 fiscal years will be deemed fulfilled as a result (and subject to the</li> </ul>

(8) The exercise is also subject to the satisfaction of a condition of continued employment within the Group, unless exceptions provided under the plan.
(9) The thresholds of the operating margin for fiscal year 2011/12 referred to in LTI No. 12 have been adjusted by the Board of Directors to take into account the temporary dilutive impact of the integration of Grid (see Note 21 to the financial statements for the 2010/11 fiscal year).

LTI plan No. 7 expired on 16 September 2014. Only 40% of the stock options offered under LTI plan No. 12, 80% of the stock options offered under LTI plan No. 13, and 70% of the stock options offered under LTI plan No. 14 are exercisable upon application of the performance conditions of these plans.

Upon application of the performance conditions associated with the results of the 2012/13 and 2013/14 fiscal years, 50% of the stock options offered under LTI plan No. 15 were cancelled and 30% vested. The remaining balance under LTI plan No. 15, or 20% of the initial allocation under LTI plan No. 15, and 100% of the allocation awarded under LTI plan No. 16 can vest as a result (and under the condition) of the completion of the transaction with General Electric (please refer to Note 23 to the consolidated financial statements for fiscal year 2014/15).

# Conditional stock options granted to Alstom's Executive and Non-Executive Directors (mandataires sociaux) during fiscal year 2014/15 and options exercised by them

Over the course of the 2014/15 fiscal year, the Company did not grant any stock options to Mr Patrick Kron, the Chairman and Chief Executive Officer and only Executive Director of Alstom. He did not exercise any stock options over the course of the 2014/15 fiscal year.

The Company did not grant any stock options to any other Non-Executive Directors during the 2014/15 fiscal year.

# Conditional stock options granted during fiscal year 2014/15 to the ten employees who are not Alstom's Executive or Non-Executive Directors and who received the largest number of options

No stock options were granted to employees who are neither Executive nor Non-Executive Directors during the 2014/15 fiscal year.

# Stock options exercised during fiscal year 2014/15 by the ten employees who are not Alstom's Executive or Non-Executive Directors and who exercised the largest number of options

	Number of shares subscribed <sup>(*)</sup>	Average share price $^{(*)}$ (in $\epsilon$ )
Total number of options exercised during the fiscal year by the ten first employees who are not	60,800	€10.58
Executive or Non-Executive Directors and who exercised the largest number of options		

(\*) Relates to exercise of options of plan No. 7 and No. 8. Figures have been adjusted to consider the two-for-one stock split as of 7 July 2008.

# Summary of the main characteristics of the free performance share allocation plans outstanding as of the end of fiscal year 2014/15

The total number of performance shares that could be created in connection with the free allocation of performance shares that have not yet been fully granted represents 0.50% of the share capital as of 31 March 2015 (subject to achievement of the performance conditions linked to fiscal years 2014/15 and 2015/16 – please refer to the consequences of the transaction with General Electric on LTI plans No. 15 and 16 on page 241 and Note 23 to the consolidated financial statements for fiscal year 2014/15).

	2011 plan (LTI No. 14) (performance shares)	2012 plan (LTI No. 15) (performance shares)	2013 plan (LTI No. 16) (performance shares)
Date of Shareholders' Meeting	22 June 2010	22 June 2010	2 July 2013
Date of Board meeting	4 October 2011	6 November 2012	1 October 2013
Initial number of beneficiaries	1,832 beneficiaries	1,763 beneficiaries	1,814 beneficiaries
Initial number of rights entitling their holders to an allocation of shares	804,040 shares <sup>(4)</sup>	781,540 shares <sup>(5)</sup>	1,000,700 shares
Definitively granted shares	229,950 shares	414 shares	-
Number of remaining rights as of 31 March 2015 entitling their holders to an allocation of shares	255,731 shares	356,810 shares	947,600 shares
Final delivery of the shares (subject to performance conditions)	<ul> <li>For beneficiaries of French companies: 15 May 2014.</li> <li>For beneficiaries of companies outside France: 5 October 2015.</li> </ul>	<ul> <li>For beneficiaries of French companies: 30% of the initial allocation on the fifth business day following the day of publication of the consolidated accounts for fiscal year 2014/15 (e.g. on 15 May 2015), and the balance, as the case may be, on the fifth business day following the closing <i>of</i> the transaction with General Electric.</li> <li>For beneficiaries of companies outside France: 12 December 2016.</li> </ul>	2 October 2017
Percentage of capital that may be created (calculated on the capital as of 31 March 2015)	0.083%	0.115%	0.306%
Number of shares as of 31 March 2015 that may be delivered to members of the Executive Committee <sup>(1)</sup>	-	19,550 shares	98,500 shares

	2011 plan (LTI No. 14) (performance shares)	2012 plan (LTI No. 15) (performance shares)	2013 plan (LTI No. 16) (performance shares)
Performance conditions <sup>(2)</sup>	<ul> <li>The percentage of shares to be delivered will vary according to the levels of the Group's operating margin for the 2011/12, 2012/13 and 2013/14 fiscal years (the "Margins").</li> <li>100% of the shares can be delivered if the Margins are equal to or higher than 7.5%.</li> <li>No share can be delivered if the Margins are lower than 6.5%. For more details, refer to Note 23 to the consolidated financial statements for fiscal year 2014/15. Fulfilment of the conditions: 70% of the shares initially granted have been or will be delivered based on the achievement of the performance conditions.</li> </ul>	<ul> <li>The percentage of shares to be delivered will vary according to the levels of the Group's operating margin for the 2012/13, 2013/14 and 2014/15 fiscal years (the "Margins") while requiring an amount of Free Cash Flow ("FCF") higher than or equal to zero for each fiscal year.</li> <li>100% of the shares can be delivered if the Margins are equal to or higher than predetermined levels and the FCF for each fiscal year is equal to or higher than 0.</li> <li>No share can be delivered if the Margins are lower than 7% or the FCFs are negative.</li> <li>The performance conditions relative to the 2014/15 fiscal year will be deemed fulfilled as a result (and under the condition) of the completion of the transaction with General Electric.</li> <li>For more details, refer to Note 23 to the consolidated financial statements for fiscal year 2014/15.</li> <li>Status of achievement: As of today, delivery of 30% of the shares is vested and 50% of the award is cancelled based on the performance condition linked to the results of fiscal years 2012/13 and 2013/14. The balance (20%) will be delivered as a result (and under the condition) of the completion of the transaction with General Electric.</li> </ul>	<ul> <li>The percentage of shares to be delivered will vary according to the levels of the Alstom Group's operating margin for the 2014/15 and 2015/16 fiscal years (the "Margins") while requiring an amount of Free Casl Flow ("FCF") higher than or equal to zero for each fiscal year.</li> <li>100% of the shares can be delivered if the Margins are equal to or higher than predetermined levels and the FCF for each fiscal year is equal to or higher than 0.</li> <li>No share can be delivered if the Margins are lower than 7.2% for 2014/15 or 7.4% for 2015/16 or the FCFs are negative.</li> <li>The performance conditions relative to the 2014/15 and 2015/16 fiscal years will be deemed fulfilled as a result (and under the condition) of the completion of the transaction with General Electric.</li> </ul>
Shares retention period	Two years, except for shares to be delivered on 5 October 2015 barring any exception set forth by the plan <sup>(3)</sup> . The shares retention period applies only to beneficiaries of French companies.	Two years, except for shares to be delivered on 12 December 2016 barring any exception set forth by the plan <sup>(3)</sup> . The shares retention period applies only to beneficiaries of French companies.	None <sup>(3)</sup>

(1) Refers to the Executive Committee as of 31 March 2015. The numbers of rights to which Mr Patrick Kron is entitled under LTI plan Nos. 15 and 16 are presented

(1) Refers to the Executive Committee as of 31 March 2015. The numbers of rights to which Mr Patrick Kron is entitled under LII plan Nos. 15 and 16 are presented in the section Compensation of Executive and Non-Executive Directors of the Chairman's report (see page 226).
 (2) Final allocations are also contingent upon attendance requirements within the Group unless an exception is made within the plan.
 (3) A specific holding requirement applies to the beneficiaries who are members of the Executive Committee (see page 221 for the Chairman and Chief Executive Officer and see page 241 for the other members of the Executive Committee).
 (4) 30% of the rights initially granted under LTI plan No. 14 were cancelled upon application of the performance condition linked to the results of the 2011/12, 2012/13, and 2013/14 fiscal years (see Note 23 to the consolidated financial statements for fiscal year 2014/15).
 (5) 50% of the rights initially granted under LTI plan No. 15 were cancelled upon application of the performance condition linked to the results of the 2012/13 and 2013/14 fiscal years (see Note 23 to the consolidated financial statements for fiscal year 2014/15).

Under LTI plan No. 13, only 80% of the initial allocation was granted to beneficiaries in companies outside of France over the course of the 2014/15 fiscal year. Under LTI plan No. 14, only 70% of the rights to free shares definitively vested upon application of the performance condition applicable under such plans.

Upon application of the performance conditions associated with the results of the 2012/13 and 2013/14 fiscal years, 50% of the rights to the free allocation of shares under LTI plan No. 15 were cancelled and 30% are vested. The balance, or 20% of the rights to the free allocation of shares under LTI plan No. 15, and 100% of the rights under LTI plan No. 16 can vest as a result (and under the condition) of the completion of the transaction with General Electric.

# Free allocation of shares to Alstom's Executive and Non-Executive Directors *(mandataires sociaux)* during fiscal year 2014/15

Over the course of the 2014/15 fiscal year, no right to the allocation of performance shares was granted to Mr Patrick Kron, the Chairman and Chief Executive Officer and only Executive Director of Alstom as of 31 March 2015.

The total number of performance shares allocated to him definitively and free of charge over the course of the fiscal year under LTI plan No. 14 following the expiration of the vesting period is indicated in the section of the Chairman's report related to the compensation of Executive and Non-Executive Directors (see page 226).

No performance shares were allocated to any other Non-Executive Directors of the Company during the 2014/15 fiscal year or under any previously implemented plans.

# Free shares allocated during fiscal year 2014/15 to the ten employees who are not Alstom's Executive or Non-Executive Directors and who received the largest number of free shares

No rights to the allocation of performance shares were granted to employees who are neither Executive nor Non-Executive Directors during the 2014/15 fiscal year.

Moreover, the total number of performance shares granted definitively and free of charge over the course of the fiscal year under LTI plan No. 14, following the expiration of the vesting period, to the ten employees (who are neither Executive nor Non-Executive Directors) who were definitively granted the highest number of shares is equal to 25,928.

# FREE SHARE PLAN FOR SUBSCRIBERS TO "ALSTOM SHARING 2009" OFFER LOCATED OUTSIDE OF FRANCE

Within the employee share purchase scheme called "Alstom Sharing 2009" reserved for Group employees and former employees participating in the Group's savings plan in 22 countries respectively including France, implemented during the 2008/09 fiscal year, the Board of Directors decided that the employees outside France subscribing to

the "structured" formula will receive, instead of the employer company match offered to the subscribers to this formula in France, shares allocated for free by the Company. 113,672 free shares were created and delivered in one instalment on 1 July 2014 following the vesting period that expired on 30 June 2014.

# EMPLOYEE PROFIT-SHARING, SPECIFIC PROFIT-SHARING AND EMPLOYEE SAVINGS PLAN

# **Profit sharing**

All the French subsidiaries of the Group to which the French law of 7 November 1990 applies have entered into employee profit sharing agreements. An exceptional profit-sharing scheme (accord de participation dérogatoire) benefiting at least 90% of the employees of the French companies of the Group took effect on 30 September 2011. The amounts paid in respect of the French statutory employee profit sharing agreements over the last three years are as follows:

Fiscal year ended 31 March (in € million)	2012	2013	2014
Statutory employee profit sharing agreements	18.9	17.2	21.3

# Specific profit sharing

As of today, more than 98% of employees in the Group's French subsidiaries benefit from a specific profit sharing plan (accord d'intéressement). The amounts paid in respect of fiscal year 2014/15 are not yet known to date, because they depend on a series of criteria defined in profit sharing plans applicable for each subsidiary, the final result of which are known within six months as from the end of fiscal year, *i.e.* 30 September of each year. The amounts paid in respect of specific profit sharing plans for the past three fiscal years are as follows:

Fiscal year ended 31 March (in € million)	2012	2013	2014
Specific employee profit sharing plans	19.7	36.4	38.3

# Employee savings plan and retirement savings plan

Alstom's French employees can invest their savings resulting from profit-sharing, specific profit-sharing, or voluntary savings in the Group Savings Plan not invested in the Company securities or in a collective savings and retirement plan ("PERCO"). This latter plan receives an employer matching contribution from the Company in the maximum amount of €500 for €1,500 contributed over the year. In 2014, the French employees contributed €26.1 million in the Group Savings Plan and €9.6 million in the PERCO savings plan. These contributions to the PERCO triggered an employer matching contribution of €2.3 million paid by Alstom.

# Employee shareholdings within the Group savings plan

Within the Group Savings Plan, employee savings can also be invested in the Company securities. Since its initial public offering and first listing, the Company implemented five share capital increases reserved for the employees participating in the Group Savings Plan. No capital increase was carried out in the context of the Group's savings plan over the course of the 2014/15 fiscal year. The most recent capital increase was carried out over the course of the 2008/09 fiscal year in the context of the "Alstom Sharing 2009" shareholding plan reserved for current employees (and former employees) of the Group with at least three months seniority, and was offered in 22 countries including France, *via* a "Two for One 2009" offering and a "classic" offering. Approximately 28% of the Group's eligible permanent staff as of that date (or approximately 18,400 employees) subscribed to this capital increase. Over the course of the 2014/15 fiscal year, this plan gave rise to the free allocation of shares referred to in the above paragraph entitled "Free Share Plan for subscribers to "Alstom Sharing 2009" offer located outside of France".

As of 31 March 2015, the Group's employees and former employees hold 1.05% of the Company's share capital, either directly or through a fund ("FCPE") (see page 328).

# SUMMARY OF THE OPERATIONS OF EXECUTIVE AND NON-EXECUTIVE DIRECTORS OR PEOPLE MENTIONED IN ARTICLE L. 621-18-2 OF THE FRENCH MONETARY AND FINANCIAL CODE ON THE SECURITIES OF THE COMPANY PERFORMED DURING FISCAL YEAR 2014/15

The following transactions were registered with the AMF:

Notifying person	Financial	Type of	Number of	Value of
	instrument	transaction	transactions	transactions
Amparo Moraleda	Shares	Acquisition	1	€11,370

# **RELATED-PARTY** AGREEMENTS AND COMMITMENTS

See the Statutory Auditors' special report to the Shareholders' Meeting convened on 30 June 2015 (please refer to page 169).

# **STATUTORY** AUDITORS

# STATUTORY AUDITORS

## PricewaterhouseCoopers Audit

represented by Mr Olivier Lotz 63, rue de Villiers 92200 Neuilly-sur-Seine

## Mazars

represented by Mr Thierry Colin 61, rue Henri Regnault 92400 Courbevoie

The Statutory Auditors were appointed by the Ordinary General Meeting held on 23 June 2009 for six fiscal years expiring when the Ordinary General Meeting will be called to review the accounts for fiscal year 2014/15.

PricewaterhouseCoopers Audit and Mazars belong to the "Compagnie régionale des Commissaires aux comptes de Versailles".

# **DEPUTY STATUTORY AUDITORS**

## **Mr Yves Nicolas**

Deputy Statutory Auditor of PricewaterhouseCoopers Audit 63, rue de Villiers 92200 Neuilly-sur-Seine

## Mr Patrick de Cambourg Deputy Statutory Auditor of Mazars 61, rue Henri Regnault 92400 Courbevoie

The Deputy Statutory Auditors were appointed by the Ordinary General Meeting held on 23 June 2009 for six fiscal years expiring when the Ordinary General Meeting will be called to review the accounts for fiscal year 2014/15.

# STATUTORY AUDITORS' FEES FOR FISCAL YEAR 2014/15

The Statutory Auditors' fees for fiscal year 2014/15 are included under Note 32 to the consolidated financial statements for fiscal year 2014/15.

# **NEW MANDATES**

The mandates of the Statutory Auditors expire at the end of the General Shareholders' Meeting convened on 30 June 2015 and set to approve the financial statements of the 2014/15 fiscal year.

The Audit Committee considered that it was not necessary to carry out a request for proposals and recommended to the Board of Directors that it renew the mandates of the Statutory Auditors. In accordance with the law, the specific partners responsible for carrying out the duties of permanent Statutory Auditor will be replaced.

Based on the Board of Director's proposal, which is in turn based on the Audit Committee's recommendation, the following appointments will be proposed at the General Shareholders' Meeting convened on 30 June 2015 for a term of six fiscal years expiring at the end of the Ordinary Shareholders' Meeting called to approve the financial statements of the 2020/21 fiscal year:

# **Statutory Auditors**

## PricewaterhouseCoopers Audit

Represented by Mr Édouard Demarcq 63, rue de Villiers 92200 Neuilly-sur-Seine, France

### Mazars

Represented by Mr Cédric Haaser 61, rue Henri-Regnault 92400 Courbevoie, France

# **Deputy Statutory Auditors**

## Mr Jean-Christophe Georghiou

Deputy Statutory Auditor for PricewaterhouseCoopers Audit 63, rue de Villiers 92200 Neuilly-sur-Seine, France

### Mr Jean-Maurice El Nouchi

Deputy Statutory Auditor for Mazars 61, rue Henri-Regnault 92400 Courbevoie, France

# EXTERNAL AUDIT CHARTER

In March 2010, Alstom and its new Statutory Auditors formalised, following the Audit Committee's approval, the new Audit Charter applicable until 31 March 2015 when the current Statutory Auditors' engagement comes to an end.

This charter defines the Group's external audit process under the various applicable laws and rules. By formalising it, the parties officially commit themselves to respecting the said charter and to aiming for more transparency and efficiency.

The main rules defined apply to the following topics:

- principles on fee and assignment split between both auditing firms;
- work process between the two audit firms and relationship with Alstom, notably with the Internal Audit function;

- relationship between the Statutory Auditors and the Audit Committee;
- defining the allocation principles of assignments accessory to the audit mandate;
- reminder of pre-approval procedure of these assignments and of pre-approved assignments;
- reminder of prohibited assignments.

This charter will be updated after it has been approved by the Audit Committee, following the reappointments of the Statutory Auditors to be proposed at the General Shareholders' Meeting dated 30 June 2015.

# 6

# SUSTAINABLE DEVELOPMENT: ALSTOM'S SOCIAL RESPONSIBILITY AND INNOVATION

ALSTOM'S CONTRIBUTION TO SUSTAINABLE DEVELOPMENT A proactive policy of Corporate Social Responsibility Sustainable development in Alstom's solutions Facing climate change Development in emerging markets	<b>252</b> 252 254 266 268
INNOVATION Governance Launched initiatives	<b>268</b> 269 269
ENVIRONMENTAL PERFORMANCE Certification of units Energy consumption Greenhouse gas (GHG) emissions Water consumption Airborne emissions Raw materials Noise pollution Ground footprint Waste management Management of controversial substances Biodiversity Employee awareness and recognition for best practices	270 271 272 275 276 277 277 277 277 277 277 278 279
SOCIAL PERFORMANCE Group Human Resources policy A strong focus on work-related health and safety Group workforce at 31 March 2015 Adapting the workforce to the markets and activities Reinforcing the Company culture Managing careers and developing competencies Equal opportunity Employee relations Length and organisation of working time	280 280 283 284 285 288 292 295 295

RELATIONSHIPS WITH EXTERNAL STAKEHOLDERS Relationships with customers	<b>296</b> 296
Relationships with governments, international organisations and think tanks Relationships with suppliers and contractors Relationships with local communities The Alstom Corporate Foundation	298 300 302 304
METHODOLOGY	306
SYNTHESIS OF INDICATORS/ KEY FIGURES 2014/15	307
REPORT BY ONE OF THE STATUTORY AUDITORS, APPOINTED AS AN INDEPENDENT THIRD PARTY, ON THE CONSOLIDATED ENVIRONMENTAL, LABOUR AND SOCIAL INFORMATION PRESENTED	
IN THE MANAGEMENT REPORT	310
TABLE OF COMPULSORY CSR INFORMATION Search	313

The Content of the Annual Financial Report is identified in the summary table with the help of the pictogram

"Meeting today's needs without compromising the ability of future generations to meet their own needs" <sup>(1)</sup>

Tomorrow, about 9 billion people will call the planet home, mostly living in cities. They will need clean and affordable energy and efficient transportation. Current transport and energy infrastructures will need to change to avoid long-term impacts on the environment, health and climate change. All parties involved in economic development are aware of this fact.

Operating at the heart of these issues, Alstom contributes to Sustainable Development through a socially responsible model, first by deploying the means to create the sustainable power generation, transmission and transport technologies of tomorrow, secondly, by integrating environmental and social concerns in all of its business operations and in its interaction with its stakeholders.

# ALSTOM'S CONTRIBUTION TO SUSTAINABLE DEVELOPMENT

# A PROACTIVE POLICY OF CORPORATE SOCIAL RESPONSIBILITY

# Global challenges can become strategic opportunities

All reports from the International Panel on Climate Change (IPCC) are demonstrating how human activity is affecting climate. Their conclusions are now generally accepted and this increases the pressure on all deciders to deliver with no delay a new global agreement from all nations on reduction in carbon emissions.

The Conferences of the Parties <sup>(2)</sup> COP 19 in Warsaw (Poland) and COP 20 in Lima (Peru) have paved the way towards a new global agreement to be concluded at COP 21 in December 2015 in Paris (France). This agreement aims to get from every participant's commitments on the reduction in greenhouse gas (GHG) emissions and to participate in building a green fund mechanism to help affected countries in mitigating the consequences of global warming. This will drive in the same time regulation from many countries and infrastructure investments.

It is clear that the world is facing growing environmental and social challenges:

- the world's population is expected to reach over 9 billion people in 2050. As a consequence, global demand for energy and infrastructure will grow. By 2035, the global energy demand is anticipated to rise by more than one-third, while 60% of the infrastructure which will supply the world's electricity are yet to be built <sup>(3)</sup>;
- over 70% of the world population will live in urban areas by 2050. Driven by economic growth, mobility will increase; both passenger travel distance and commuting time per capita are expected to double <sup>(4)</sup>;

 with demographic and economic growth pushing up GHG emissions and the pressure on natural resources for decades, the climate is substantially changing. It is a fact the only questions remaining are how much and which consequences.

The interaction between energy, environment and development concerns urge each actor to adopt a holistic approach. To make corporate action a change lever, it is essential that Corporate Social Responsibility (CSR) be addressed on a strategic level for a company like Alstom involved in energy and railway transport solutions.

Alstom considers that catching the early warning signs announcing megatrends is a key competitive advantage, driving profitable, longterm growth. In that way, pursuing a CSR policy is therefore critical to anticipate and proactively manage the risks and opportunities they entail.

This cross-cutting approach enables the Group to:

- avoid defensive costs for instance, linked with a non-compliance with international or local legislations and standards, or with expectations from customers, investors and civil society;
- strengthen its reputation and mobilise its internal human resources;
- generate product and process efficiency gains able to anticipate needs of the society;
- identify and assess future and emerging markets.

<sup>(1)</sup> World Commission on Environment and Development, Bruntland Report 1987.

<sup>(2)</sup> Conferences of the Parties (COP) organised by the United Nations Framework Convention on Climate Change.

<sup>(3)</sup> World Energy Outlook 2012.

<sup>(4)</sup> UN World Urbanization Prospects, World Business Council for Sustainable Development.

It involves driving progress by staying one step ahead to better grasp all the Group's sustainability concerns. This position gives Alstom the means to define and implement an integrated CSR policy, which was endorsed by the top management and widely communicated inside the Company in December 2013. This policy, described hereafter, is available on <u>www.alstom.com</u>.

# An integrated Corporate Social Responsibility (CSR) policy

Alstom's CSR policy is based around three main axes, guided by quantified and assessed objectives. These objectives are translated into action plans, which create a virtuous circle of progress in economic, social and environmental fields.

Alstom thus strives to:

- with its technologies and solutions, help customers effectively limit their environmental impact:
  - support the expansion of renewable energy production,
  - improve resource and energy efficiency in all of its new and existing products,
  - apply sustainable development and eco-design principles;
- with its partners and stakeholders, work together for mutual benefit:
  - assess existing and future customers' needs and adapt its offering accordingly,
  - develop a sustainable supply chain,
  - do more to identify environmental and social impacts of projects,
  - involve itself in the life of local communities;
- with its way of operation, be a reference to:
  - enforce the highest ethical standards,
  - offer its employees the best safety and working conditions,
  - reduce the environmental footprint of its operations.

The action plans related to this policy are outlined both in the sub-sections related to "Sustainable Development in Alstom's solutions" and in the sections related to "Environmental performance", "Social performance" and "Relationships with external stakeholders".

The Group commits to implement this policy and ensure compliance with its internal rules across the full range of its operations.

# A dedicated organisation at all levels of the Group

A central team, under the responsibility of the Group Human Resources organisation, defines and monitors the implementation of this CSR policy. It is supported in each Sector by a dedicated team in charge of implementing the Group's policies and setting up programmes related to the Sectors' activity. The aim is to spread the Group's CSR vision throughout the organisation, so that all employees know it, understand it, commit to it and actively take part in it.

Within the Board of Directors, the Ethics, Compliance and Sustainability (ECS) Committee has been closely following the Group's CSR policy and actions since 2010. This Committee, composed of three independent Directors, meets three to four times a year to review and assess the Company's strategy, policies and procedures on topics related to corporate responsibility and sustainable development (see Corporate governance – Chairman's report – Board Committees).

Local implementation of the CSR policy is supported by the Alstom International Network, with 56 Country Presidents covering 179 countries. The role of the Country Presidents is to represent the Group locally and to develop relations with local institutions, organisations and communities. In all the Group's main countries of operation, the Country President is assisted by a CSR specialist in connection with the central team and working with Sectors for specific projects. This local support organisation guarantees a good understanding of the local communities' needs.

# Evaluation of the CSR policy versus stakeholders' expectations

CSR actions by the Group are increasingly expected by:

- its employees;
- its customers (increased use of CSR criteria in tenders);
- public authorities (emergence of new CSR regulations);
- its shareholders and potential investors.

Each of those categories of stakeholders is thoroughly followed through regular engagement surveys by employees and external customer surveys.

Alstom is participating in a large number of industry associations in Europe and large countries (*AFEP, MEDEF, C3D*, Econsense, *BITC, CEMEFI*, etc.) which is a way to get insight from public authorities' expectations and to understand in advance the evolution of regulations. The materiality matrix presented last year has kept unchanged during FY 2014-15<sup>(1)</sup> and shall be updated in the future in consistency with the evolution of stakeholders' expectations and Alstom's future strategy.

# Evaluation of the Group's CSR performance by independent third parties

Alstom's Corporate Social Responsibility performance is regularly measured by various rating agencies with different methods and criteria, such as, in 2014, RobecoSAM for the Dow Jones Sustainability Indices (DJSI), and CDP (formerly known as 'Carbon Disclosure Project'). These assessments help identify and analyse the areas of improvement. As a result:

 Alstom was selected in September 2014 for the fourth time in a row as an index component of the DJSI – World & Europe –, after its assessment by RobecoSAM. This rating agency attributed the rating of 76/100 to the sustainability performance, with a particular good rating on the economic dimension. This year, Alstom distinctly

(1) Available in Alstom's Registration Document 2013/14 - Chapter 6 and on www.alstom.com.

improved in antitrust policy, code of conduct/compliance/corruption & bribery, risk & crisis management and environmental policy and reporting. The Group also achieved the best score of its industry category on customer relationship management and labour practices indicators/human rights;

 since 2010, Alstom has been assessed by CDP for its transparent approach in disclosing climate change information; in October 2014, the Group received a score of 94/B (disclosure/performance). For the third consecutive year, Alstom is ranked as part of the Carbon Disclosure Leadership Index for French companies.

# SUSTAINABLE DEVELOPMENT IN ALSTOM'S SOLUTIONS

# **Eco-innovation**

The "Eco-innovation" programme is Alstom's product stewardship initiative launched in June 2014 to highlight the performances of Alstom innovative solutions with respect to environmental issues together with economic competitiveness.

The objective is to showcase Alstom's strategy with customers' and stakeholders' key sustainability requirements and concerns. It also aims to present Alstom's commitment for a responsible management approach that balances the economic, social and environmental values of its existing and new innovative solutions.

This programme is based on a solid and transparent methodology elaborated in each Sector and coordinated at Group level which resulted in two main deliverables:

- a portfolio of sustainable and innovative technologies, and
- a tool to evaluate the sustainability benefits of solutions having systemic impact.

#### Methodology

This programme, consolidated at Group level, is derived in each Sector according their market specificities. A selection process governance frame has been set up, defining the indicators related to products for each Sector and the common principles of selection, which results in a global offering at Group level.

The qualifying process is as follows: each Sector already aims at improving environmental performance of its industrial offer through their eco-design and Life-Cycle Assessment solutions ("Clean Power, Clear Solution" for Alstom Power, "Clean Grid" for Alstom Grid and "Designing Fluidity" for Alstom Transport). Each Sector selects its "bestin-class" products, systems and services based on its relevant indicators and qualifying criteria considering market specificities and as long as it respects common principles of selection (performance through the different life-cycle critical stages, sustainable indicators, no "pollution transfer", benchmark with market standard if possible, etc.).

The performance evaluation of each product, system and service selected from this process results in a quantification of the global sustainable benefits. A dynamic review of the selected products is set up to take into account the market and technology evolutions. This efficient methodology at Group level involving innovation leads to continuous improvement of Alstom products' environmental footprint and favours potential opportunities for transversal R&D programmes and synergies between Sectors.

#### Sustainable and innovative portfolio

A first list of innovative products, systems and services featuring advanced sustainable performances has been established through this methodology.

Six examples of disruptive innovations having significant impact in terms of potential reduction of carbon emissions and cost savings have been released:  $CO_2$  capture, utilisation or storage, 660 MW USC CFB<sup>(1)</sup> Boiler, g<sup>3</sup> (Green Gas for Grid) replacing SF<sub>6</sub> in high-voltage applications, Community Energy Management System, HALIADE<sup>TM</sup> 150-6 MW offshore wind turbine, Pump Storage Plant (PSP) based on variable speed technology. Product sheets highlighting the sustainable innovative performances of these six technologies are available on the <u>Alstom</u> innovation website.

Among the Sectors' products, systems and services, more technologies have been identified as future candidates to be introduced in the eco-innovation portfolio.

## Sustainability benefits tool

A tool has been developed to estimate the potential economic and environmental benefits of Alstom solutions for the whole electricity value chain. A simplified methodology is used to simulate the set-up of different functions and their impact on the system.

This systemic simulation has been carried out on two use cases, a smart grid project in France and another one in the USA (with the regional transmission operator PJM). This tool has been developed to be sufficiently didactic to be used by the commercial teams and will contribute to differentiate Alstom from competitors.

#### Global sustainable indicators

These deliverables allow Alstom to estimate the potential sustainable advantages (first GHG emission reduction, and also energy savings, cost savings, etc.) for each product and solution. The potential is described by an indicator of  $CO_2$  emission avoidance per year by 2020. It will recognise Alstom as a technology leader with excellent sustainable performances.

(1) USC CFB: Ultrasupercritical circulating fluidised bed.

Alstom's commitment to invest in sustainable and innovative solutions will be cost-effective while also reducing the environmental impact for customers.

# **Solutions from Alstom Transport**

#### Challenges in the rail industry

Worldwide demand for mobility is growing steadily in connection with demographic changes, urbanisation and economic development. The worldwide population is expected to reach 9 billion inhabitants before 2050, of which nearly 70% will live in urban areas <sup>(1)</sup>. In non-OECD countries, the demand for all modes of passenger transport combined could thus triple by comparison with 2010 <sup>(2)</sup>.

In parallel, public authorities everywhere are concerned about the environmental impacts of transport: traffic jams, air pollution, noise, climate change and depletion of energy resources. Indeed, transport today represents 28% of final energy consumption worldwide and 23% of CO<sub>2</sub> emissions from fuel combustion. Between 1990 and 2011, energy consumption and CO<sub>2</sub> emissions from transport have increased by more than 50% following, in particular, the development of road transport <sup>(a)</sup>.

The benefits of rail transport in terms of air pollution, use of space, safety, energy efficiency and  $CO_2$  emissions make it a true sustainable alternative <sup>(4)</sup> and a key player for the development of global sustainable transport systems.

Alstom designs and delivers comprehensive, efficient and sustainable railway systems for the benefit of all its stakeholders: rail operators, public authorities and passengers. By continuously improving the environmental performance of its solutions, Alstom also strives to reduce their lifecycle cost and reinforce their attractiveness.

## Solutions for sustainable mobility

Smart transport systems should be fluid, efficient, eco-friendly, safe, connected and accessible. Alstom develops rail transport solutions which meet the social and environmental challenges of mobility.

#### Efficiency at the heart of the city

Throughout the world, tramway networks are an attractive solution for cities seeking a new mode of sustainable transport. They offer high capacity with long-term reliability and the potential for significant growth in order to accommodate future developments.

In the past 15 years, over 1,900 trams of the CITADIS<sup>TM</sup> product range have been sold throughout the world. With more than 6 billion passengers carried, it is estimated that the CITADIS<sup>TM</sup> range has allowed more than 5 million tonnes of CO<sub>2</sub> emissions to be avoided up until now. All the tramsets provide a maximum level of comfort and fluidity, and guarantee easy access. With their customised livery and interior layouts, ground level power supply and vegetal cover on the tracks, these tramways are fully integrated into their surroundings.

Taking into account new customer demands and analysis of the passenger experience, Alstom has developed the CITADIS<sup>™</sup> X05: improving passenger flow and accessibility, optimising the tram weight and improving the traction system efficiency with the use of permanent magnet motors as well as energy management to lower energy consumption and reduce lifecycle costs.

Alstom is the only manufacturer with a complete range of catenary-less power-supply solutions for tramways that can meet the needs of all its customers. Features include a ground power-supply system (*APS*), the only service-proven technology eliminating the need for an overhead wire over an unlimited distance; as well as on-board batteries or super-capacitors for autonomous operation over short distances. For example, in Rio de Janeiro (Brazil) for the Porto Maravilha project, the chosen solution combines *APS* and on-board super-capacitors to cover areas without an electricity supply.

Metros provide efficient solutions for high-capacity urban transport, with minimum space use and low environmental impact. Thanks to minimum local air emissions, metro networks actively contribute to improving air quality in city centres. Through turnkey projects involving its METROPOLIS<sup>™</sup> range of trains and URBALIS<sup>™</sup> signalling solutions, Alstom offers transport systems for reliable, seamless mobility and optimised ownership costs.

The METROPOLIS<sup>™</sup> range of products was designed to propose a large choice of configurations and options, to provide solutions for all transport capacity needs, enhance passenger experience and security, and optimise energy consumption.

URBALIS<sup>™</sup> signalling solutions provide automatic control of train movement and safer traffic management. They also enable transport operators to increase network capacity by operating more trains on the same infrastructure, which optimises environmental impacts. URBALIS<sup>™</sup> Fluence, the most recent development in the range, has even more integrated on-board intelligence, leading to a 20% reduction in equipment and up to 30% overall energy savings thanks to optimised operations. URBALIS<sup>™</sup> Fluence is currently being implemented in the project to renew the French city of Lille's driverless Line 1 metro.

Alstom will supply the latest-generation of rubber-tyred metros to equip the Paris network – MP 14. This has been designed to improve passenger experience, maximise operational efficiency and reduce environmental footprint. It offers an unprecedented level of comfort thanks to new ergonomic seating, LED lighting, on-board information, and on-board video cameras for increased security. It combines low energy consumption and ease of maintenance to optimise the efficiency over the lifecycle. Its 100% electric braking system recovers energy and reinjects it into the network in the form of electricity, thus avoiding the emission of fine particles from brake pads. This system contributes to the reduction of air pollution as well as the metro's energy consumption by up to 20%.

<sup>(1)</sup> Source: UNFPA, United Nations Population Fund.

<sup>(2)</sup> Source: "Transport outlook – Seamless Transport for Greener Growth" – International Transport Forum – 2012.

<sup>(3)</sup> Source: IEA, 2013.

<sup>(4)</sup> Source: "High Speed Rail - Fast Track to Sustainable Mobility" - UIC.

Alstom has also developed AXONIS<sup>™</sup>, a new light metro system which is economical, quick to build and fits smoothly into the cityscape. This system is particularly designed for cities with high population density and rapid expansion. It is a unique fully integrated metro solution that combines Alstom's most efficient metro sub-systems standardised and optimised together: the METROPOLIS<sup>™</sup> range of rolling stock, URBALIS<sup>™</sup> signalling, HESOP<sup>™</sup> energy recovery system as well as infrastructure built on viaduct sections made from precast modules for swift construction and sections at street level or possibly in tunnels.

Additionally, the APPITRACK<sup>™</sup> automated track laying technology makes it possible to install tracks four times faster than with traditional methods, and ensures efficient installation while reducing works-related disturbances.

Aware that energy can represent up to 20% of their total operating costs, operators are paying increasing attention to the energy efficiency of the systems they purchase. HESOP<sup>™</sup>, the advanced reversible power-supply substation developed by Alstom for urban and suburban rail networks, allows significant savings on operation to be achieved. Indeed it enables almost all electrical energy recoverable from trains equipped with regenerative braking systems to be fed back into the grid. HESOP<sup>™</sup> optimises infrastructure as it includes the possibility to reduce the total number of substations needed for a line by up to 20%. HESOP<sup>™</sup> also allows reducing heat release from underground operations and associated needs for ventilation systems. To date, more than 100 HESOP<sup>™</sup> converters have been delivered or ordered, such as for the Paris T1 Tramway (France, 1 in revenue service since July 2011), London Underground (UK), Milan-Desio-Seregno Tramway (Italy), Riyadh Metro (Saudi Arabia) and Sydney Tramway (Australia).

#### Suburban and regional transport for day-to-day travel

For the long daily journeys within expanding suburban areas, Alstom offers comfortable and reliable high-capacity public transport solutions. Its suburban trains (X'TRAPOLIS<sup>™</sup>) and tram-trains (CITADIS<sup>™</sup> Dualis and CITADIS Spirit<sup>™</sup>), in service on urban networks and main lines, form an essential link in the intermodal system.

Regional trains also provide daily commuting services between new urban areas. They connect territories and contribute to their economic growth. The needs they fulfil are as diverse as the areas they serve: high capacity and service frequency, high-speed travel for longer distances, modularity, extreme weather conditions, etc. With its CORADIA<sup>™</sup> range, Alstom offers a variety of technical configurations to meet all these needs.

The Regiolis version of the CORADIA<sup>™</sup> Polyvalent platform has a high-performance environmental profile: good energy efficiency *via* an adjustable ventilation system to optimise air flows outside peak hours, optimised sleep modes, a specific approach to favour the use of clean, recyclable materials and good performance in terms of external noise emissions.

The new CORADIA<sup>™</sup> Lint, for the Cologne diesel network in Germany, launched in 2014, is fitted with diesel engines that have catalytic converters to treat exhaust gases in order to comply with stage IIIB European regulations for non-road diesel engines. Its architecture allows one engine to be switched off when full power is not needed, thus achieving up to 10% fuel savings. The same train is also operating on the *Dieselnetz Südwest* network in Germany. In 2014, Alstom also signed Letters of Intent with German *Länder* of Lower Saxony, North Rhine-Westphalia, Baden-Württemberg, and the Public Transportation Authorities of Hesse, for the use of a new generation of emission-free trains equipped with fuel cell drives. The new train will be based on the CORADIA<sup>™</sup> regional train. It will be completely emission-free and its noise level will be drastically reduced, compared with the diesel version. Furthermore, through the use of energy storage, as well as an intelligent energy management system, the new train will consume less energy, compared with a conventional diesel multiple unit. Two prototypes will be tested in 2018.

#### High-speed rail linking regions

Contributing to making rail competitive compared with air and road transport is one of Alstom's strategic priorities as it strives to provide the most attractive and efficient solutions.

Alstom has sold more than 720 very high-speed trains (300 km/h) and more than 500 high speed trains (220-250 km/h), which gives it unrivalled experience in this market. The three products in its current range draw on the best of this expertise:

- The EURODUPLEX<sup>™</sup> is the only double-decker very high-speed train in the world. Using 6% less energy than its main competitors, it can carry between 20 and 40% more passengers in high comfort. So on top of its outstanding energy efficiency, it allows operators to offer lower ticket prices and attract more passengers from less sustainable transport modes.
- The AGV<sup>™</sup> combines articulated architecture with distributed power. Its global energy consumption is around 20% lower than that of competitors' trains thanks to its articulated design, low weight, reduced aerodynamic drag and high efficiency traction. Environmental efficiency was fully integrated into the train's design, from the low noise emission to the minimised use of friction disks, even on emergency braking, which reduces particle emissions.
- The PENDOLINO<sup>™</sup> is a versatile train that allows higher speeds in all the configurations that can be found between the regional railways and the very high-speed systems. When passenger traffic or other reasons do not justify the construction of a very high-speed line, this train offers the best way to cut travel times while optimising use of existing infrastructure. The tilting system prevents the speed reduction and acceleration of conventional trains in curves, so as well as reducing travel time, less braking and accelerating is needed – resulting in better energy efficiency and less friction particle emissions.

In this market segment, attracting passengers is key. Alstom focuses its efforts in providing a remarkable level of comfort, with flexible interiors that can be adapted to each operator's needs: spacious interior compartments and wide aisles, large window surfaces, lower levels of interior noise and multimedia amenities. Alstom's expertise in ergonomics, dynamics, acoustics or aerodynamics, combined with its in-house Design & Styling division, contribute to create the best passenger experience for the millions of passengers who use Alstom high-speed trains.

#### A hybrid locomotive to reduce air emissions

Alstom has designed the H3 hybrid shunting locomotive, combining the use of a diesel generator, electric traction and batteries. This technology reduces fuel consumption by up to 50% compared to conventional solutions and facilitates indoor operations by limiting emissions and reducing noise. Contracts with Volkswagen and Deutsche Bahn Regio Bayern in Germany are currently ongoing for the delivery of three and five hybrid locomotives, respectively. The first locomotive was shown at Innotrans 2014 in Berlin and an additional contract was received in 2014 from Audi for two units.

#### Designing sustainable railway systems

For its products and services, Alstom consistently promotes a lifecycle approach maximising environmental and economic benefits over time.

#### Eco-design for products and services

The priorities set in Alstom's eco-design policy focus on:

- energy efficiency of rail transport systems;
- reduction of noise and vibrations;
- use of clean, recyclable, and natural materials;
- reduction of air emissions;
- end-of-life management of products, particularly in maintenance activities.

This policy is deployed in design processes which ensure compliance throughout project execution, supported by a network of more than 60 experts (eco-designers, acoustics experts, materials experts, energy engineers, etc.).

2014 saw the first implementation of environmental performance dashboards to record baseline performance of solutions and track progress versus targets. These dashboards are progressively deployed for urban trains and will be extended in the future to main lines and infrastructure products.

Lifecycle assessments are conducted to support technical choices in many projects, such as new metros or tram-trains and the Regiolis version of the CORADIA<sup>™</sup> Polyvalent platform designed for French regions. Environmental Product Declarations provide customers with an in-depth picture of environmental impacts throughout the lifecycle. Alstom is currently preparing the Environmental Product Declaration for a metro solution for Montreal in Canada.

In 2014, extensive efforts were made to rationalise and optimise practices in terms of lifecycle assessments across the platforms, which will help deploy lifecycle assessments in a more efficient and systematic way in the future. A common method to deploy environmental analysis for products and identify significant aspects was also issued.

As for signalling equipment, the IMPN safety box, which allows safe stops of traction in case of anomalies (such as a wrong direction), is the first to have benefited from a full eco-design process. Its environmental performance has been improved globally by 30% and it uses 56% less natural resources over the lifecycle. It is also 30% lighter than previous generations. The environmental performance of this equipment was published in accordance with ISO 14025.

#### Improving energy efficiency

Alstom makes constant efforts to reduce the energy consumption of its trains and systems. The trains designed today consume up to 20% less than previous generations thanks to:

- weight reduction through composite materials and re-design of parts;
- reduced aerodynamic drag;
- more efficient traction systems, either electric or diesel (permanent magnet motors, optimised power packs control system, new traction chains, efficient traction auxiliaries);
- energy-efficient comfort auxiliaries (lighting, heating and air conditioning);
- enhanced electrical braking including electrical braking until standstill;
- efficient energy storage solutions;
- optimised sleep modes.

To reduce the energy consumption of existing systems, Alstom has developed a complete range of services for energy efficiency which includes energy mapping, optimisation solutions, implementation of eco-driving tools, as well as energy storage. The energy mapping offering allows the main usages of energy to be monitored in order to identify gaps and propose enhancements. Implementation of a driver advisory system (DAS) addresses head-on the reduction of energy consumption and maintenance costs while improving punctuality and safety. The retrofit services target energy performance in main energy-consuming components like traction, heating and ventilation or to recover energy from braking.

In 2014, Alstom was awarded a contract by *STC (Sistema de Transporte Colectivo)* which manages public transport in Mexico to renovate 85 subway trains. Previous metro modernisation services contract in Mexico (MP82) has demonstrated up to 35% reduction in energy consumption.

In order to address the energy efficiency of global railway systems, Alstom is also working in partnership with major organisations to introduce smartgrid elements in railway systems through projects such as:

- IN2RAIL, targeting smart metering of rail systems;
- Osiris, to develop energy hub solutions for urban transport (with RATP);
- Merlin, to develop energy efficient traffic management and a new generation of substations for high-speed lines (with SNCF).

#### **Noise reduction**

Noise is a key concern, crucial to the acceptance of railway projects and fundamental for passenger comfort. Simulation tools have been developed by Alstom for railway systems to define optimised solutions by integrating the most recent innovations such as:

- redesigned HVAC (resonators, micro-perforated ducts) for reduced interior noise;
- redesigned traction motor rotors (regional trains, metros);
- reduced electro-magnetic noise during acceleration phases;
- optimised doors;
- optimised ventilation: natural or switched off during stops;
- development of quiet power packs;
- high attenuation sleepers to mitigate vibrations from the tracks, which deliver an equivalent performance to floating slab track systems at a lower cost.

On average, new trains are now 3-5 dB more silent than previous generations.

#### Use of clean, recyclable materials

Alstom is proactive in its design choices to favour recyclable materials. A consequence of the latest eco-design developments is that, on average, trains are now 92% recyclable and 97% recoverable (including energy recovery).

Actions are taken to reduce the quantity of consumables needed in the maintenance process and to extend the lifetime of parts. For example, on new bogies proposed for the CITADIS<sup>™</sup> X05, the wheel lifetime has been extended by up to 30% versus the previous generation.

The design process also makes it possible to reduce risks and prepare for the end of the product lifecycle by:

- favouring water-soluble paints and biodegradable oils for most rolling stock;
- favouring riveting and bolting when assembling parts to facilitate recycling;
- providing customers with safety information and decommissioning instructions for materials;
- tracking and substituting hazardous substances falling under the European Regulation for Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH <sup>(1)</sup>).

Over the past four years, the approach towards substances, managed in collaboration with the whole supply chain, has allowed the detection and resolution of many cases of use of substances listed in Annex XIV or candidates under REACH regulation. For more detailed information, please refer to Section Environmental Performance/Management of controversial substances.

#### Product safety fully integrated in design

Product safety is also a real concern for the railway industry and a major driver for Alstom's business. The performance of Alstom products in this field is well recognised.

Alstom Transport's Quality and Safety policy was updated in April 2014. For the implementation of this policy, a railway safety procedure is in place and defines three needs as follows:

- ensure that safety is implemented & demonstrated in the systems/ products delivered to customers;
- maintain safety during the operation and maintenance phase with adequate safety management of maintenance activities when performed by Alstom;
- report and manage any potential safety issues occurring in revenue service.

Railway safety processes defined at Alstom level are complemented by railway safety deployment instructions for signalling activities, trains platforms, services, infrastructure platforms and systems.

In addition, Alstom Transport's Management and Quality Manuals define clear responsibilities in terms of product liability and safety authorisation. These processes and governance apply to all Sector's regions and sites.

To reinforce the railway safety culture within Alstom Transport, a campaign of training at different levels is deployed, targeting all employees through different sessions.

#### Putting the passenger at the heart of innovation

Alstom believes that passenger comfort is the key element in changing behaviours in favour of sustainable mobility. That is why it puts the passenger at the heart of its innovation policy. Alstom's engineers design products which anticipate the needs of users tomorrow. They particularly take into account the increase in average height of passengers and the ageing of the population.

The new Alstom products offer large windows and wide aisles and guaranteed accessibility for all. Alstom is committed to facilitating access and on-board movement, to adapting ergonomics, notably *via* touch-sensitive and visual push-buttons, and to improving passenger information systems through real-time maps as well as visual and auditory signals.

CITADIS<sup>™</sup> X05 for Sydney will offer high-end comfort, including doubledoors for improved access and passenger flows, large balcony style windows, multi-purpose areas and ambient LED lighting. It also offers the highest levels of customer safety including constant CCTV (closed circuit television) monitoring, emergency intercoms and the latest way-finding aids for real time passenger information.

<sup>(1)</sup> European Regulation No. 1907/2006 of the European Parliament and Council, dated 18 December 2006, for Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH).

Operating since April 2014 on the French network, the Regiolis version of the CORADIA<sup>TM</sup> Polyvalent platform is the first train to meet the new European standard on accessibility for people with reduced mobility (*STI PMR*). The version for Lorraine Region has even been equipped with a specific system to help visually impaired passengers better identify doors.

The new PENDOLINO<sup>™</sup> for the Polish operator, PKP Intercity, offers also specific adaptations, such as information in Braille to identify seats, while the new MP14 metro for the Paris network, will be equipped with inductive loops for the hard of hearing.

These innovations, combined with the elimination of controversial substances (see dedicated paragraph in the Environmental section), are in favour of the safety and comfort of passengers, which are the end-users of Alstom products.

As for other businesses of the Group, relationships with other stakeholders (such as customers, suppliers, external bodies) and local communities are part of Alstom Transport's sustainable development activities. For more information, please refer to information provided in the section "Relationships with external stakeholders".

# Solutions from the energy businesses (discontinued operations)

#### **Alstom Power**

#### Challenges in the power generation industry

World population is projected to grow by 0.9% per year on average, from an estimated 7.1 billion in 2013 to 9 billion in 2050 <sup>(1)</sup>.

As a consequence:

- demand for electricity, as a key enabler for economic and societal developments is increasing along a similar trend;
- intermittent renewable energy will account for almost one-third of total electricity output;
- non renewable energy sources will continue to contribute to climate change by combustion process releasing CO<sub>2</sub> and other pollutants to air and to water;
- high inequalities in the world are leading to heterogeneous electricity distribution. It is estimated that today, 1.2 billion people do not yet have access to electricity <sup>(2)</sup>.

For social and economic development to be sustainable, delivery of power services needs to be secure and have low environmental impacts. It requires reliable and affordable access to power.

Alstom is committed to being a socially responsible organisation; Alstom Thermal Power and Alstom Renewable Power are both applying this commitment to integrate sustainable development in the energy markets and countries they serve.

#### Alstom Power's approach to sustainable solutions

Alstom Power's Product Stewardship strategy

The Alstom Power has continued to deploy their "Clean Power, Clear Solutions" product stewardship strategy, introduced in 2013. The ultimate objective of this strategy is to maximise customer value while contributing to enabling a sustainable growth path in power generation sector with Alstom's products and solutions by:

- reducing cost of electricity generation, to ensure assets' competitiveness;
- lowering environmental footprint, to lower the life-cycle impact while making these assets increasingly eco-friendly;
- increasing flexibility and reliability, to ensure assets can respectively:
  - adapt to fluctuating electricity and fuel markets conditions,
  - generate the required electrical load through maximised availability, reliability, and maintainability.

Progress on developing and introducing new sustainable solutions

Since 2013, this strategy has been translated into a comprehensive product stewardship programme aiming at transforming all aspects of product development and management processes to offer a concrete portfolio of products with a measurable contribution to address the sustainability challenges and concerns of the industry. This year, Alstom managed to:

- Introduce the first set of procedures to adapt the business process management practices of both Alstom Thermal Power and Alstom Renewable Power to this strategy. This approach has been made clearly visible in all product promotion campaigns and communication tools both internally and externally. Further process management guidelines and tools are being currently developed to make a proactive and systematic management of the life-cycle impact of Alstom's solutions as integral part of future product development and management.
- Further increase the number of core products and solutions that have been assessed with the Life-Cycle Assessment (LCA) approach. Meanwhile, around 80% of core products in Hydro Business and two major product platforms in Wind Business (Onshore: ECO 100; Offshore: HALIADE™ 150) have been assessed with a full LCA. Further studies on existing and new solutions are being currently undertaken in Alstom Renewable Power. In Alstom Thermal Power, recent upgrades of the GT24/26 platform have been also assessed this year and a new approach for integrating the life-cycle environmental impact analysis into the design tools of new turbines (with turbine blades as a pilot) has been successfully developed and implemented.

Alongside with these efforts aiming at improving the transparency regarding used materials, managing and anticipating the associated risks and continuously improving the impacts of Alstom's future solutions, recent product introductions reflect already Alstom's past and continuous commitment to enabling sustainable development.

(1) Source: UNFPA, United Nations Population Fund.

(2) Source: "Achieving Universal Energy Access" - United Nations Foundation (unfoundation.org).

This year, Alstom Thermal Power achieved the synchronisation of the 1,000 MW Manjung coal-fired power plant in Perak to the Malaysian grid. The Manjung plant is the first coal-fired power plant in South East Asia built with Alstom Ultra Super Critical technology. With an improvement of 5 points in efficiency, it will reduce the cost of the electricity provided to nearly 2 million households in Malaysia, It will also cut the CO<sub>2</sub> emissions level of each MW produced by 12% and remove 90% of the SO, emissions with a state-of-the-art Seawater Flue Gas Desulphurisation system. Finally the plant is also equipped with Alstom's TSF 2000<sup>®</sup> firing system capable of burning a wide range of coal, either Bituminous and sub-bituminous, thereby ensuring fuel supply flexibility and reliability. This new power plant is aligned with the country's energy diversification policy to create a more balanced portfolio of power generation sources that includes gas, coal and renewables, and demonstrates the ability of Alstom to market its advanced solutions in a very competitive market.

On the Alstom Renewable Power side, Alstom has recently broadened its Concentrated Solar Power (CSP) offering by developing a storage solution that will allow converting solar energy into electricity 24 hours a day. This innovation uses the intermediary of molten salts, which absorb heat from the sun rays collected in the solar receiver. The heat can be stored for several hours and used at a later point to produce the steam required to activate a steam turbine and produce electricity.

In December 2014, Alstom's 1 MW tidal stream turbine, installed and connected at the European Marine Energy Centre, has produced 1 GWh for the grid. On the strength of this success, Alstom has improved its tidal stream turbine design by introducing the Oceade™ 18-1.4 MW, which has been chosen along with GDF Suez by the French Government for the pilot farm at Raz Blanchard. The installation of four of these even more efficient, cost-effective and easy to maintain tidal stream turbines, as well as of the Alstom electrical subsea hub <sup>(1)</sup>, represents a decisive step towards setting up commercial operations in tidal energy.

The Hydro business has had a number of important successes this year including completing the R&D and model testing of Alstom's largest diameter Kaplan runner ever for São Manoel (Brazil) and achieving the highest power ever for a Hooped Pelton Turbine for Grand'Maison (France). Alstom has delivered all five units of China's and Alstom's largest diameter bulb turbines for the Xiajiang project.

For wind On-Shore, the ECO 100 platform approach is to cover all wind conditions and reduce cost of energy by offering one product with three rotors diameters (100/110/122): the POWEROF3<sup>m</sup>. The 3 MW version is available for the three rotors diameters. The new 3 MW version of the ECO 122 produces 4-6% more energy than the previous ECO 122 version.

Alstom stands as a major player in offshore wind power with its HALIADE<sup>™</sup>150-6 MW, one of the world's largest offshore wind turbines. This new generation of 6 MW wind turbines incorporates ALSTOM PURE TORQUE<sup>®</sup>, a proven technology that guarantees the drive train reliability. Each HALIADE<sup>™</sup> 150-6 MW unit produces enough electricity to supply about 5,000 households. Featuring innovation and technology, this direct drive offshore wind turbine is adapted to all types of offshore conditions and ensures power at competitive prices.

Further key initiatives have been started many years ago and have continued this year shaping Alstom's portfolio strategy on key sustainability challenges of customers. The following sections provide an update on the specific commitment and performance of Alstom Power on these challenges.

Quantifying the contribution of Alstom Power's solutions to mitigating Climate Change

As already mentioned, 2014 sees a growing acceptance among the public and private sectors that cutting greenhouse gas emissions is compatible with economic growth, as witnessed during the United Nations New York Climate Summit. In 2015, the world is looking toward an agreement at the Convention of Parties (COP) in Paris (in December 2015) that includes emission reduction contribution from all countries. The first round of targets will set the course for the important decade from 2020 to 2030 as the next 15 years of investment will determine the future of the world's climate system <sup>(2)</sup>.

As a global provider of power generation technologies, Alstom strongly supports the implementation of effective  $CO_2$  emission reduction paths. Since 2010, Alstom Power has continuously assessed the contribution of their portfolio to enabling  $CO_2$  emission reduction for its customers <sup>(3)</sup>. Based on the international standard "GHG Protocol", the Alstom assessment approach offers a unique worldwide database on Operating and Build Margin emission factors reflecting the yearly evolution of  $CO_2$  emissions under a business-as-usual scenario at country level since 2002. The latest assessment (in 2014) covers relevant projects commissioned in 2013 and provides an overview of the achievements of the most recent 10 years (2004 to 2013).

As for previous years, the results have been verified by PricewaterhouseCoopers Audit in accordance with the ISO 14064-3 standard. The corresponding "Reasonable Assessment Report" on 2013 projects, issued in March 2015, is available from Alstom Power.

<sup>(1)</sup> The electrical subsea hub is developed by Alstom in cooperation with GDF SUEZ as part of the PRISMER project, which won an earlier CEI organised by Ademe on Marine Energy technological bricks.

<sup>(2)</sup> Source: International Energy Agency, World Energy Outlook 2014 (IEA, WEO 2014) & The New Climate Economy Report of the Global Commission on the Economy and Climate (2014).

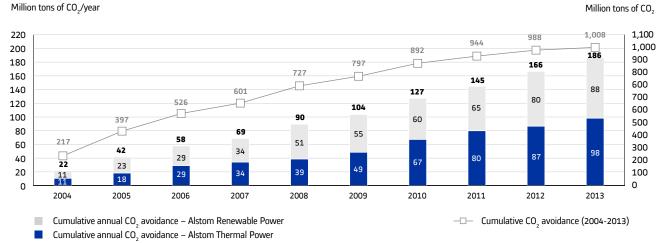
<sup>(3)</sup> For more details on the Alstom Power's CO<sub>2</sub> emission reduction quantification approach, please refer to the Alstom registration documents 2012/13 & 2013/14 and to <u>www.alstom.com</u>.

### SUSTAINABLE DEVELOPMENT: ALSTOM'S SOCIAL RESPONSIBILITY AND INNOVATION ALSTOM'S CONTRIBUTION TO SUSTAINABLE DEVELOPMENT

For more than 1,500 new build and service projects completed, power plant owners were able to reduce a cumulative figure of 1.0 gigaton of  $CO_2$  emissions over 2004-2013. Thanks to Alstom's progress on increasing the share of economically viable low and  $CO_2$ -free offerings and on improving the energy efficiency of thermal power solutions, this figure is equivalent to the Indian's power generation emissions in 2012 <sup>(1)</sup>. With each MWh of generated electricity, plant owners were

able to reduce 104 kg of CO<sub>2</sub> <sup>(2)</sup> resulting into a yearly cumulative figure of over 186 million tons of CO<sub>2</sub> when considering all projects commissioned between 2004 and 2013. The study proves that all fuels and technologies of Alstom Power's portfolio can contribute to emission reduction. Only 6% of the projects accounted for (96 projects) are non-contributing and considered as business-as-usual.

#### CUMULATIVE ANNUAL AND TOTAL CO<sub>2</sub> AVOIDANCE FOR THE GLOBAL POWER GENERATION SECTOR ACHIEVED WITH THE OPERATION OF THERMAL POWER & RENEWABLE POWER OFFERINGS COMMISSIONED BETWEEN 2004 AND 2013 (BASED ON FIRST YEAR OF OPERATION VALUES)



Source: Alstom

The accounted portfolio CO<sub>2</sub> emissions intensity <sup>(3)</sup> is estimated at 389 kg per MWh for new equipment and at 492 kg per MWh for all projects. Compared to the global average emissions of power generation in 2003 <sup>(4)</sup>, the Alstom enabled path is equivalent to a compound annual emission intensity reduction of 1.9%. This yearly reduction rate is higher than the one estimated by the IEA under the "New Policies Scenario" (1.5%) over 2013-2040 <sup>(s)</sup>. A decrease in absolute emissions levels has been achieved in three regions (China, Russia and CIS, and Latin America), hosting more than 38% of the accounted Alstom added capacity. This reduction is equivalent to an average de-carbonisation rate of respectively 51 kg of CO<sub>2</sub> per MWh of electricity generated by the corresponding projects in Russia & CIS, 29 in China and six in Latin America.

Demonstrating Alstom engagement on the water-energy nexus Globally, around 90% of today's power generation is water intensive. In many regions, water is already a risk factor for a secure power supply. As the demand for power and for water is growing, the relevance of water as a critical and strategic factor in power generation will further result from the regional and site specific impacts of climate change such as increasing air and water temperature, extreme weather, rising sea level and more recurring and longer droughts.

<sup>(1) 1.04</sup> gigatons according to IEA, WEO 2014.

<sup>(2)</sup> Estimated as electricity generation weighted average.

<sup>(3)</sup> Estimated as electricity generation weighted average.

<sup>(4)</sup> Value for end of 2002 (586 kgCO<sub>2</sub>/MWh) according to IEA, WEO 2004 adopted.

<sup>(5)</sup> This compound annual emission intensity reduction is estimated based on data provided by IEA WEO 2014 where the emission intensity of global generation drops from 583 kg/MWh in 2012 to 384 kg/MWh in 2040 under the "New Policies Scenario".

The Alstom Power's offering strategy is incorporating this challenge while pursuing a balanced and integrated approach on the trade-offs between the water dependency and use and further key aspects of environmental (*e.g.* climate change mitigation, resources efficiency...), social and economic needs (*e.g.* affordability and security of supply) of a sustainable power supply. Three main categories of economically viable and socially responsible solutions are proposed for this challenge:

- reducing water dependency and adapting to changes in water availability: with a diversified portfolio of power generation technologies reducing the need for and the impact of water withdrawal from external sources. The Alstom Power's portfolio also enables it to deal with long-term climate change impact uncertainty and seasonal changes in water availability;
- enhancing water use efficiency: with solutions to reduce the net consumption rate of high-quality water during plant operations;
- lowering the impact on water quality: with solutions to control the thermal and chemical impact of operational discharge on the quality of surrounding water resources.

While being at the forefront of technology development and integration, Alstom is actively engaged into the water-energy nexus debate at many levels. At the 2014 World Water Week in Stockholm, Sweden, Alstom collaborated with the World Bank and the Rockefeller foundation to organise a workshop titled "Valuation, Economics and Finance" focusing on the economics and financial implications of water dependency and use in the energy sector. At this event, Alstom presented the results of a global study on the impact of water economics on investment decisions in new thermal power projects. Furthermore Alstom called for the development of a "Sustainability Protocol" for thermal power plants in the style of the "Hydropower Sustainability Assessment Protocol" <sup>(1)</sup> (introduced by the International Hydro Association in 2010 <sup>(2)</sup>) as a key, project-based tool for an integrated view on the main sustainability aspects along the full cycle of a power project planning and development. Curtailing air pollution from fossil-fuel use: a measurable and remarkable impact of Alstom solutions

Damage to air quality through air pollutants impacts human health, environment and the whole economic system. Fossil-fuel based power generation, and particularly fuel combustion in boilers is a major source of air pollutants. In view of the projected continuous dominance of fossil fuels in the global energy mix through 2040 <sup>(3)</sup>, the power generation sector has a major role to play in controlling air pollution.

With over 80 years of experience, Alstom is the market leading supplier of Air Quality Control Systems (AQCS) for fossil-fuel based power generation. A new, credible and third party verifiable quantification approach on the contribution to these solutions to mitigating air pollution has been introduced in 2013. In 2014, the contribution from the operation of AQCS projects completed in 2013 for new and existing steam power plants to removing and to reducing <sup>(4)</sup> NO<sub>x</sub> and SO<sub>2</sub> emissions <sup>(5)</sup> is addressed and included into an assessment covering the last ten years (2004-2013) of start of commercial operations <sup>(6)</sup>.

As for previous years, the results have been verified by PricewaterhouseCoopers Audit. The corresponding "Reasonable Assessment Report" on 2013 projects, issued in March 2015, is available from Alstom Thermal Power.

By the end of 2013, the equipment owners of 130 accounted projects were able to remove a cumulative amount of 142,000 tons of NO<sub>x</sub> (almost equivalent to the total yearly electricity generation emissions from the United Kingdom in 2012 <sup>(7)</sup>) and 2.65 million tons of SO<sub>2</sub> per year (corresponding to 83% of the USA power generation emissions in 2013 <sup>(8)</sup>), all this thanks to the high removal efficiency rates up to 90% on NO<sub>x</sub> and 99.5% on SO<sub>2</sub>.

<sup>(1)</sup> For more information on the protocol, please refer to www.hydrosustainability.org.

<sup>(2)</sup> The Alstom Hydro business is supporting the promotion and deployment of this protocol through its commitments to the Hydro Equipment Association (HEA).

<sup>(3)</sup> According to the "New Policies Scenario" (IEA, WEO 2014), the share of fossil fuel based electricity generation is estimated at 55% for 2040. Coal would continue dominating this mix with a share of coal-based electricity generation estimated at 31%.

<sup>(4)</sup> Air pollutants avoidance is estimated through quantifying and comparing the power plant emission rate to the emission rate without operating the equipment (estimated amount of air pollution removal) and to the emission rate of the corresponding electricity grid at the start of equipment commercial operation (estimated amount of air pollution reduction).

<sup>(5)</sup> Four types of air pollutants are considered to be of notorious significance for air quality: Particulate Matter (PM), Sulphur Oxides (SOx), Nitrogen Oxides (NO<sub>x</sub>), and heavy metals represented by Mercury (Hg). At this stage, the quantification approach is focusing on NO<sub>x</sub> and SO<sub>2</sub> emissions being, according to many studies, the most significant ones in terms of total damage costs.

<sup>(6)</sup> For more details on this quantification approach, please refer to Alstom registration document 2013/14 and to www.alstom.com.

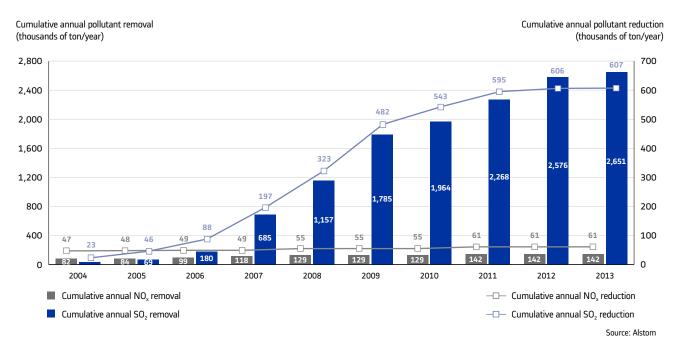
<sup>(7)</sup> Alstom analysis based on NO<sub>x</sub> emissions data from the European Pollutant Release and Transfer Register (2014).

<sup>(8)</sup> Alstom analysis based on SO<sub>2</sub> emissions data from US Environmental Protection Agency (EPA) Air Market Program Data (2015).

The impact on emission reductions is estimated for the top three regions (USA, Europe and China) in terms of the total accounted Alstom capacity over 2004-2013, covering 100% of the total installed capacity for NO<sub>x</sub> and more than 85% for SO<sub>2</sub>. Compared to the emission rates of their respective electricity grids, Alstom-equipped power plants were able to reduce 0.9 kg of NO<sub>x</sub> and 2.9 kg of SO<sub>2</sub> per MWh of generated

electricity. The resulting yearly cumulated NO<sub>x</sub> reduction is estimated at 61,000 tons, as much as the emissions of all industrial sectors in Norway in 2012 <sup>(1)</sup>. At the same time, 82 projects contributed reducing 607,000 tons of SO<sub>2</sub> yearly in 2013: around 82% of the 2012 emissions of the top three largest emitters among the power producers in the USA <sup>(2)</sup>.

CUMULATIVE ANNUAL NO<sub>x</sub>/SO<sub>2</sub> REMOVAL AND REDUCTION ACHIEVED FROM THE OPERATION OF AIR QUALITY CONTROL SYSTEM OFFERINGS COMMISSIONED BETWEEN 2004 AND 2013 (BASED ON FIRST YEAR OF OPERATION VALUES)



#### Note:

- cumulative annual removal: quantity of air pollutant removed thanks to AQCS equipment;
- cumulative annual reduction: reduction in air pollutant emission compared to the emission rate of the corresponding electricity grid.

As for other businesses of the Group, relationships with other stakeholders (such as customers, suppliers, external bodies) and local communities are part of Alstom Power's sustainable development activities. For more information, please refer to information provided in the section "Relationships with external stakeholders".

<sup>(1)</sup> Alstom analysis based on  $NO_x$  emissions data from the European Pollutant Release and Transfer Register (2014).

<sup>(2)</sup> Alstom analysis based on SO<sub>2</sub> emissions data from the study "Benchmarking Air Emissions of the 100 Largest Electric Power Producers in the United States" (2014).

#### **Alstom Grid**

#### Challenges in the grid industry

With the rapid growth in the world's population and technology penetrating every part of the globe, producing and transmitting greater quantities of electricity is today recognised as a critical challenge to be met to drive global economic development. Global demand for electricity is expected to reach 17,400 Mtoes (millions of tonnes of oil equivalent) in 2035, a 33% increase over current use rates. In order to meet this demand, global generating capacity is expected to increase by 75%, with intermittent renewable energies representing 19.5% of global electricity generation <sup>(1)</sup>. The traditional grid is already being stretched to its maximum capacity. Therefore, to successfully rise to the energytransition challenge, the current electricity transmission and distribution models need to be transformed. To manage these increasing demands for energy – and the increasing complexity that goes with them – the world needs an electric grid that integrates more automation, information and communication technologies. Alstom Grid's products and solutions are designed to meet these energy challenges:

- Energy efficiency: transporting an increasing volume of electricity in the power grid. To deliver more power to end-users, grid operators need to connect new power sources such as distributed wind turbines or solar panels, optimise existing power transmission infrastructures and manage closely the supply and demand of electricity.
- Grid reliability and stability: preventing the risk of blackouts. Today's power grids are strained due to consumption growth and are becoming more vulnerable to power shutdown, peaks and blackouts. Additionally, the growing complexity of the traditional grid networks (number of consumers, variations in the electricity consumption, intermittent energy resources connected...) means that they are becoming increasingly difficult to manage.
- Integration of intermittent renewable energies (wind and solar farms): increasing clean energy circulating in the grid and decreasing the carbon footprint. Beyond the financial challenges, the difficulty lies in multiplying the amount of clean energy sources while reducing the grid's environmental impact.
- Increasing concern in the electrical industry about the use of SF<sub>6</sub> for electrical equipment isolation due to its significant global warming properties. However, the use of SF<sub>6</sub> is essential to the high voltage grid due to its particular dielectric, breaking and insulation characteristics. Gas-insulated substations (GIS) that use SF<sub>6</sub> are more compact than air-insulated substation (AIS), and as such can be built closer to consumers, reducing network transmission losses, the major contributor to the total global warming potential of the entire system (or electrical grid).

#### Sustainable solutions and services

Alstom Grid's environmental-friendly solutions facilitate the integration of renewable energies into the grid, boosting energy efficiency and contribute to the reduction of  $CO_2$  emissions.

#### The Smart Grid

The world's power grid infrastructures are evolving to adapt to aforementioned challenges: rising energy demands, a need to integrate intermittent renewable energy sources and increasing regional grid interconnections. Furthermore, energy markets are increasingly deregulated and consumers are becoming more proactive in managing their own electricity use. Smart Grids address these challenges and market evolutions, offering improved network efficiency, capacity and stability, which in turn facilitate the development of a cleaner, more sustainable and cost-efficient energy supply.

Alstom Grid is at the forefront of this transformation with a portfolio of key Smart Grid technologies including smart control rooms, smart power electronics and digital substation solutions. These systems, installed with major operators worldwide, are capable of tracking electricity supply and demand in real-time and optimally dispatching power, reducing CO<sub>2</sub> emissions associated with unnecessary energy generation. Moreover, Smart Grids enable utilities to control the exact operating conditions of their assets in real time. By evaluating the actual physical condition as compared to the asset's design values, online monitoring and asset management solutions help companies operate their assets closer maximum capacity and optimise maintenance decisions, allowing greater flexibility and postponement of certain upgrade investments.

Countries where new urban planning and redevelopment are being done recognise that energy management is critical. Incorporating distributed renewable energy resources within existing electrical grids can only be accomplished by developing new governance schemes, accepting and implementing new technologies while raising public awareness. For Alstom Grid, this is more than just a proof-of-concept. Alstom Grid is very active in global and local smart grid and smart city green demonstration projects under implementation worldwide. The latest achievements include:

- e-Storage (France): the project aims at developing cost-effective solutions for the widespread deployment of flexible, reliable, GWh-scale energy storage across the European Union and to enhance grid management systems to allow the integration of a large share of renewable energies. Alstom Grid and EDF test the integration of hydro pump energy storage into the management of the power grid at two levels: through a Smart Dispatch solution for the electricity flows, and through a Market Management System for commercial transactions;
- réflexE (France): Alstom Grid and its partner Veolia built a Virtual Power Plant (distributed renewable energy generation and demand side management) combined with solutions in aggregation and decision-making software for distributed energy resource management that also include energy storage;
- eco2Charge (France): This project aims to boost the development of electric vehicles (EV) by accelerating the deployment of EV charging infrastructures in buildings, campuses and eco-districts. The project is implemented with the support of the "Vehicle of the Future" programme.

(1) Source: International Energy Agency 2014.

#### The Supergrid

Another sustainable grid solution is the development of the Supergrid, a high-efficiency power grid which interconnects national energy networks across regions and continents. These energy-efficient highways can transmit bulk power over long distances and integrate large amounts of renewable energy sources. This is an important transformation as long-distance connections are the best way to connect remote energy production sites to dense urban centres; it is also the best way to integrate offshore wind farms far from the coast.

The interconnections between national grids allow utilities to export energy to neighbouring markets, reduce the costs of energy production and transmission, and improve grid stability.

Supergrid solutions offer various environmental benefits:

- integration of distant large-scale renewable energy sources (hydro, wind or solar) via High Voltage Direct Current (HVDC) which transmits electricity with only 3% energy loss compared to 6% for the traditional Alternative Current (AC);
- power generation installed capacity reduction due to shared reserves between interconnected regions.

In 2014, Alstom was awarded the Labrador Island Transmission Link project in Canada, which will create a robust transmission highway of clean, renewable energy, meeting the demand of homes and businesses across Newfoundland and Labrador. Alstom Grid will use high voltage direct current (HVDC) to transmit energy across 1,100 km from Muskrat Falls, an 824-megawatt renewable hydroelectric generating facility in Labrador, to Soldiers Pond, Newfoundland.

#### Integration of wind and solar energy

Integrating increasing renewable energy sources into the grid is a priority for many countries, including the European Union and China. Alstom Grid has become one of many utilities' preferred partners in this field, with solutions for renewable energy integration including smart control room expertise and Direct Current (DC) connections.

Alstom provides intelligent software solutions, *i.e.* network management systems to manage intermittent electricity flows, transmission and distribution levels. The Renewable Desk (for transmission networks) and the Distributed Energy Resources Management System (DERMS), for instance, monitor in real-time and integrate both wind and solar- energy sources with the base load – that is, the amount of power needed to meet minimum customer demands. These intelligent systems pave the way for renewable fleet management network protection and control. Smart online stability solutions help to avoid perturbations while integrating the renewable power flow into the grid.

Alstom also offers a range of power transmission solutions for wind farms compliant with feasibility studies, power connection design and power compensation solutions. Floating offshore electrical substations are provided to bring the grid closer to offshore wind turbines. Alstom's first offshore substations were installed in the UK, and subsequently in the North and Baltic Seas off the German and Danish coasts. For the efficient transmission of offshore wind energy to the onshore grid, Alstom Grid has developed HVDC MaxSine<sup>TM</sup> – a Voltage Source Converter (VSC) ideal for offshore wind integration due to its small footprint and ability to carry power efficiently across distances greater than 50 km. Alstom will use this technology for the Dolwin3 project in the north of Germany to connect 900 MW offshore windfarms located 80 km from the on-shore sub-station.

#### **Green Services**

Alstom offers innovative and high quality service to optimise electrical infrastructure, heighten equipment return-on-investment and prolong asset service life.

Service solutions provide lifetime support on selected power equipment or on entire networks, from inspections and tests to minor or major maintenance and repair work, in order to increase infrastructure reliability. Renovation, modernisation and extension services improve performance and resolve obsolescence issues. Equipment that is maintained throughout its lifecycle, replaced or updated as needed is able to keep pace with environmental standards and operates efficiently with less waste. Alstom offers a wide range of consulting solutions to proactively ensure better, more energy-efficient performance.

Alstom also offers green services to help customers reduce their environmental footprint throughout their equipment ownership, including  $SF_6$  management (handling training and certification, top-up, quality check, recycling, leak detection and repair, and mobile decontamination workshop), and equipment decommissioning, refurbishing and recycling. Cost-efficient, these services, offered through Alstom's experts and experienced field technicians, help customers comply with environmental regulations, reduce  $SF_6$  emissions, pollution and industrial waste, and improve their safety conditions.

#### Sustainable products and production methods

#### SF<sub>6</sub>-free alternative for high voltage applications

Alstom is the first in the world to launch a clean alternative to SF<sub>6</sub>, a gas commonly used in high-voltage equipment. The revolutionary SF<sub>6</sub>-free solution, g<sup>3</sup> – green gas for grid – was jointly developed with  $3M^{\text{TM}}$ , a leader in environmentally sustainable solutions. g<sup>3</sup> has 98 percent less impact on global warming than SF<sub>6</sub>. With performances comparable to SF<sub>6</sub>, it is a suitable technology for the development of tomorrow's new generation of clean high- and ultra-high voltage gas and air insulated equipment.

Environmental-friendly product design and life cycle assessment Eco-design takes into account sustainability to minimise environmental impact at every stage of a product's lifecycle. Alstom Grid's eco-design process relies on the IEC 62430 standard, specifying the norms and procedures used to integrate environmental factors into product conception, development and materials. Alstom Grid provides eco-design training for all its product designers. Eco-design uses the life-cycle assessment (LCA) approach to evaluate the environmental impacts of a product at every stage of its life cycle: raw materials, manufacturing (the reduction of natural resources in the components), product operations (lower  $CO_2$  emissions, limits on environmental risks, greater energy efficiency, etc.) and end of life (product recycling capabilities). The LCA allows Alstom Grid R&D to precisely identify the processes and phases with the greatest environmental impact, and highlight priority areas for design improvement. Using the LCA methodology, Alstom Grid has improved the environmental impact of an increasing number of its products resulting in the creation of product environmental profiles.

As an example, the S3C 245 kV disconnector (manufactured at the Company's Centre of Excellence in Noventa di Piave, Italy) was redesigned with special focus given to material weight reduction. The LCA was carried out by the DSC unit, in collaboration with the Technology Research Centre in Villeurbanne, France – respecting the same criteria as those for earlier models – to demonstrate the environmental benefits of the new generation. Each phase of the product's lifecycle was modelled

# FACING CLIMATE CHANGE

Climate change is one of the world's biggest risks of this century. Alstom wants to contribute to mitigate this risk from a business perspective and is, therefore, following the United Nations Framework Convention on Climate Change (UNFCCC) negotiation process closely through member organisation such as International Emission Trading Association (IETA) and Union of European Railway Industries (UNIFE). Alstom considers this its duty for society, employees as well as customers. By advising governments on technology innovation and policy recommendation, the Group takes serious steps in supporting a low-carbon future. Alstom supports its customers to mitigate the risk of new climate policies through its product innovations. Alstom will also participate in the UNFCCC's 21st Conference of the Parties (COP) in December 2015 in Paris (France) to discuss and profile its low-carbon technology. The transport and energy businesses will join a number of respective business organisations to deliver Alstom's climate change related messages as well as to support governments from a business perspective.

## **Risks**

For several years, a yearly risk assessment review has been performed, as part of the annual budget and three-year plan process, which objective is to identify, analyse and anticipate the significant risks of the Group.

In order to address the climate change challenge, Alstom implemented in fiscal year 2013/14 a "Climate change risk" indicator. Climate change risk is being assessed to evaluate the exposure of Alstom's manufacturing activities, sites and buildings to extreme weather conditions such as tropical cyclone, extra-tropical cyclone, hail storm, storm surge, flash flood and tsunami. The evaluation method took into consideration facilities with over €50 million of property damage and from manufacturing (including material extraction) to transportation, use and end-of-life. Using SimaPro software and the EcoInvent database, and employing the ReCiPe method of calculation. A total of 18 environmental indicators were studied. When focused on materials phase impacts, LCA clearly demonstrates the environmental benefits of the new design. An average decrease of 21% on all environmental impacts was recorded, mainly thanks to a reduction of copper, steel and aluminium. Specifically, the LCA reveals a 35% decrease on the metal depletion indicator. Moreover, with a 3% reduction in Joule losses over the whole use phase, the new generation S3C allows utilities to cut the total environmental impact of the disconnectors by 6%, when calculated on its full life cycle.

As for other businesses of the Group, relationships with other stakeholders (such as customers, suppliers, external bodies) and local communities are part of Alstom Grid's sustainable development activities. For more information, please refer to information provided in the section "Relationships with external stakeholders".

business interruption insurance values in relation with geographical risk indexes and combined to probability ratio provided by insurance companies, in order to identify exposed facilities of the Group.

Following this risk evaluation, Alstom can take immediate action wherever necessary. The main example is the management of Alstom's industrial locations. For the selection of new sites or for major structural investments in existing sites, the Group has integrated the site's "preparedness" and "exposure" to climate change effects as one of its ranking criteria.

# **Opportunities**

Alstom is well prepared to benefit from new opportunities arising from changing conditions, and will be well positioned to gain a competitive advantage.

First, the increasingly visible climate change perspective will drive actions from governments and regulation bodies to limit the magnitude of this climate change by reducing greenhouse gas emissions. It is expected from Paris agreement to incorporate the emission reduction commitments being made at sub-national level. The countries' Intended Nationally Determined Contributions (INDCs) need to reflect the respective countries' efforts to reduce emissions. Furthermore, it is expected that finance would be a central part of the agreement. These outcomes recognising environmental and economic importance should increase the demand for all products and services that Alstom has been working on for many years, with a strategy to make these as environmental-friendly as possible. Here are a number of significant examples on how Alstom addresses these business opportunities.

## **Alstom Transport**

Alstom supports Low Carbon Rail Transport Challenge that was presented in September 2014 by the International Railway Association *(UIC)*, representing 240 members on six continents. This initiative responds to the United Nations Secretary General's call to bring bold pledges to the Climate Summit.

The targets are to:

- reduce final energy consumption from train operations by 50% by 2030 and 60% by 2050, relative to a 1990 baseline;
- reduce average CO<sub>2</sub> emissions from train operations by 50% by 2030 and 75% by 2050, relative to a 1990 baseline;
- achieve a 50% increase of rail share of passenger transport (passenger/ km) by 2030 and a 100% increase by 2050, relative to a 2010 baseline;
- reach a rail share of freight land transport (ton/km) equal with road by 2030 and 50% greater than road by 2050 <sup>(1)</sup>.

The Dubai Tramway (United Arab Emirates), inaugurated last year, includes many Alstom's technological breakthroughs. It is the first tram in the world able to run in temperatures of up to 50°C and to withstand harsh climate conditions such as humidity and sandy atmosphere.

Alstom will contribute to the objectives not only by developing and delivering railway solutions which are ever more energy-efficient and attractive (such as high performance electrical, diesel and hybrid trains, smart railway systems and modernisation services), but also by building facilities which improve their own environmental practices. For example, Alstom has inaugurated a new production line for CITADIS<sup>™</sup> trams at its Taubaté plant, State of São Paulo (Brazil). This new production facility – in which Alstom has invested about €15 million – will serve the Brazilian market and, in a near future, the Latin America region where a number of new tramway projects are emerging. The factory adopts state-of-the-art environmental practices with, for example, the use of rain water to test the leakage of the train.

#### Energy businesses (discontinued operations)

Alstom Renewable Power will significantly grow through higher demand for renewable energy, but the other energy sectors also have new solutions under development to address specific environmental concerns. This strategy has already been addressed exhaustively in the above sub-sections "Sustainable Development in Alstom solutions", as well as in Chapter 1 – Description of Activities -, but this presentation can be completed by a few examples:

First in Alstom Thermal Power, Alstom strives to:

- Continuously improve generation efficiency of thermal power solutions (reducing emissions per unit of electricity generation);
- Continuously improve the flexibility of traditional generation assets being essential to ensure an effective integration of renewable technologies to the grid. Alstom offers a broad range of both generation and control technologies for both new and existing plants to ensure that efficiency and flexibility is maximised;
- Carry out an intensive effort for developing and/or acquiring the best available Carbon Capture and Storage/Utilisation (CCS/U) technologies that will provide optimum efficiency as well as environmental and commercial benefits to power plant operators worldwide, now and in the future. Acknowledging that fossil fuels will continue to account for about 55% of the global power generation mix in 2040, Alstom is taking a leading role in this regard. Several Alstom demonstrators are successfully operating, and the Group has the technology and know-how to deploy these on a commercial scale, as soon as demand (driven by regulations or higher CO<sub>2</sub> prices) increases. For example, located on land adjacent to the existing Drax Power Station, near Selby in North Yorkshire (UK), the 426 MW new build power plant will burn coal with the potential to co-fire sustainable biomass and meet the equivalent power needs of over 630,000 homes. Fully equipped with CCS technology from the outset, 90% of all the CO<sub>2</sub> produced by the plant will be captured and transported by pipeline for permanent off-shore storage deep beneath the North Sea seabed.

In Alstom Grid, Alstom is the first in the world to launch a clean alternative to  $SF_6$ , a gas commonly used in high-voltage equipment. The revolutionary  $SF_6$ -free solution,  $g^3$  (Green Gas for Grid) – was jointly developed with  $3M^{TM}$ , a leader in environmentally sustainable solutions. For more information, please refer to the previous section related to sustainable development in Alstom solutions.

# **DEVELOPMENT IN EMERGING MARKETS**

Alstom's development in emerging markets is a main driver for its growth. As a global player, the Group has a major presence in all leading growth economies. This does not mean only commercial presence, but also significant R&D, engineering, manufacturing, project execution, as well as service resources. The share of emerging markets in Alstom's headcount, CAPEX and orders has increased in recent years, and will remain at a high level in the foreseeable future. Here are a few examples of what Alstom has achieved.

# **Alstom Transport**

Pushed by the increase of population and urbanisation, the market in emerging countries is growing. Major cities are rapidly expanding and this creates strong needs for efficient transport solutions.

In the last years, the Group accelerated its international footprint development notably in emerging countries by opening an engineering centre in Bangalore (India) in 2001 and a production site in Chennai (India). Alstom has also developed strategic partnerships with key actors for instance in:

- Russia: the local company Transmashholding (TMH);
- South Africa: several local companies within the joint-venture Gibela;
- Algeria: with the creation in 2011 of a joint-venture, Cital, for maintenance and assembly of trams.

In addition, Alstom plans to develop the presence of its commercial and industrial sites while adapting them to each of the regions.

Alstom Transport's organisation was reviewed in 2014. In order to guarantee close proximity to its customers, Alstom Transport is now divided into seven regions which cover the full value chain, from bid preparation, project execution, warranty implementation for trains, infra- and services activities in their regions. This new organisation brings large empowerment of the Regions, such as Asia/Pacific, Latin America and Middle East/Africa. By reinforcing its local base, Alstom Transport's strategy will benefit from the growth potential in these local markets and take advantage of more competitive pricing. The establishment of new engineering centres outside Europe and the installation of new production sites will enable also the Company to significantly reduce both its engineering costs and its production costs while maintaining its level of excellence.

As already mentioned, Alstom inaugurated on 3 March 2015 a new manufacturing line to produce CITADIS<sup>™</sup> trams in Taubaté, State of São Paul (Brazil). This new production facility will serve the Brazilian and Latin American markets, where a growing number of tramway projects are emerging. When fully operational, the site will employ around 150 people. 100% of employees hired and trained come from the Taubaté area.

# Energy businesses (discontinued operations)

To stress the importance of Asia as the main global cluster of emerging economies, Alstom continues to strengthen its footprint in Asia, for instance in:

- India: a manufacturing site for steam turbines and generators in partnership with Bharat Forge is being built;
- Vietnam: Alstom and EVN are working on a joint workshop to provide a gas turbine reconditioning services locally to EVN customers and for export.

As far as Latin America is concerned, Alstom and the infrastructure group Andrade Gutierrez inaugurated in 2015 a new factory for the production of steel towers for wind turbines in Jacobina, State of Bahia (Brazil). The Torres Eólicas do Nordeste (TEN) unit is an industrial joint venture between the two companies. Jacobina unit is Alstom's third Wind unit in Latin America. The first one was opened in 2011, in Camaçari (Bahia) to manufacture nacelles, and the second one was opened in 2013, in Canoas (Rio Grande do Sul) to manufacture towers for Brazil's south market and neighbouring countries, such as Argentina, Chile and Uruguay. Alstom has also contributed for the development of the supply chain for nacelles, towers, hubs and blades, positioning itself as a major player in the country.

# **INNOVATION**

Innovation strategy has been put as a priority by Alstom to reinforce its competitiveness and anticipate the future market trends.

To implement this strategy, a new department was created in 2012 at Alstom corporate to support Sectors, achieve Research and Development (R&D) synergies and make the Group more reactive with respect to market and customers' expectations. The mission of the Innovation and future technologies department is threefold:

- coordinate and establish synergies across Sectors in the upstream part of the R&D and the innovation activities;
- stimulate open innovation with universities, research organisation, leading-edge industrial clusters and start-ups;
- identify early signals and strategic topics.

One of the most important challenges, *i.e.* achieving better coordination and synergies across the Group, is related to a comprehensive governance of innovation.

# GOVERNANCE

The innovation governance at Group level relies on three pillars:

# Top down "in-house" governance

The top-down "in-house" governance of innovation is conducted through an **Innovation steering committee** chaired by the Chief Innovation Officer, reporting directly to the Chairman and CEO, and gathering all the R&D and innovation top managers every three months. This steering committee addresses the on-going R&D programmes, enhances the sharing of best practices and information on potential partnerships with universities, research organisations and start-ups or small and medium enterprises (SMEs). It also screens the future opportunities for R&D cooperations both at national, European (Horizon 2020 framework) or international levels.

Among the most remarkable results achieved during the last fiscal year, a few significant examples can be highlighted:

- strategic discussions on a future roadmap with EDF R&D and the energy businesses of Alstom;
- identification of digital as key enabler for future energy and transport industries to anticipate the industrial 4.0 wave;
- identification of Systems of Systems paradigm as a new way to design, build and maintain infrastructures;
- establishment of joint laboratories with universities and research organisations.

# **External perspective**

In Alstom's vision to stimulate open innovation, the Group hosts each year an **International Science and Technology Committee** (ISTC) composed of independent international experts originating from different horizons and chaired by Prof. Jean Jouzel, former Nobel Peace prize-winner. This Committee challenges and advises Alstom's innovation strategy and delivers relevant guidance recommendations to orientate the Group's future innovation programmes. This year, the ISTC validated the vision to focus the innovation strategy on Digital and Systems of Systems considering that this will constitute two major and essential enablers for future Energy and Transport businesses.

## Bottom-up governance

The last pillar of the innovation governance system deals with a "bottom-up" approach. This is achieved through an **advanced** cloudbased **collaborative platform** dedicated to the scientific and innovation communities which allows the participants to discuss ideas and projects, and to exchange knowledge, experience and content. The exchanges in these communities are leveraged by an advanced "add-on" tool, using "big data" capabilities that pushes additional contents referring to the subjects addressed by the members.

# LAUNCHED INITIATIVES

# Science and technology reshaping

The *science* and *technology reshaping* is supported by strategic partnerships with universities and research organisations. Following the recommendations from the Innovation Steering Committee, the ISTC or from Alstom's scientific communities, it has been decided to reinforce innovation and R&D toward the *digital industry* and the *systems* of *systems*.

This has been achieved through the creation of Joint Innovation Laboratories (JIL) with *Institut national de recherche en informatique et automatique* (INRIA) in France, with CityU University in Hong-Kong, China, and with Nanyang technological university (NTU) in Singapore. It has to be emphasised that all these JILs are strongly supported by business lines with the objective to upgrade Alstom's product portfolio and use open innovation has an enabler to nurture and to prequalify business developments.

# Alstom Venture programme

"Alstom Venture" programme is related to Alstom's strategy to support innovation eco-systems both in France and abroad, to prepare future partnership networks and be in an ideal position to detect future breakthrough technologies and talents. This programme is structured on three pillars:

- A venture capital fund, Aster Capital, targets breakthrough innovations, just a few years before their widespread adoption, in energy, resources and connectivity domains. Investments in 35 companies were made out of which three were completed this year.
- An incubator/accelerator programme, Horizon GreenTech venture, formed in 2011 in Israel, a country with high innovation potential, helping seed-stage ventures to overcome major challenges by providing initial funding, technological expertise and industrial guidance. Their current portfolio has ten startup companies in domains such as energy storage, renewable energy, new information and communication technologies (ICTs). This year has seen the first contract signed between one start-up of the incubator with a business line of Alstom showing the leverage brought by open innovation in the Alstom product offering.
- A Technology Business incubator created this year with the Jain University in the Karnataka region in India.

## A Group innovation contest

A Group innovation contest *"I Nove You"* strengthens cross-company collaborative work, creating synergies and nurturing cross-cutting innovation. Over the past years, a number of award-winning projects in this competition have played a significant role in Alstom's success on the market, demonstrating that innovation does bring competitive advantage.

In 2014, the seventh edition of Alstom Innovation Awards was a resounding success with a record number of 717 innovations submitted involving more than 2,200 participants, and representing a 40% improvement over the 2013 edition. Diversity was a hallmark of the awards from cultural, geographic, gender, generational and technological standpoint. Innovations came from 26 countries and from a large range of functions (R&D, Engineering, Human Resources, EHS, Project Management, etc.) which led to a high level of cross-functional initiatives encompassing different business lines and cultures. A category "Open innovation" has been newly included this year to encourage innovations born from exchange and sharing, both within and outside the Company by cultivating ties with academic institutions and other firms. The g<sup>3</sup> product rewarded in this category, a clean alternative to SF<sub>6</sub> for high voltage applications, demonstrates Alstom's continued consideration for climate change and is also a breakthrough in terms of open innovation through a strategic partnership with 3M<sup>TM</sup>.

Many innovations are also anticipating the development of new technologies and services linked to digitization in energy and transport sectors like the e-passenger experience, the predictive maintenance of grid equipment or the eStorage project to improve management of renewable energies.

Finally, despite a difficult economic context, total R&D efforts across the Group amounted to  $\epsilon$ 674 million in 2014/15 (compared to  $\epsilon$ 733 million in 2013/14), nearly 3.5% of sales (out of which  $\epsilon$ 112 million for Alstom Transport, representing nearly 1.8% of Alstom Transport sales).

# **ENVIRONMENTAL** PERFORMANCE

The report presents the results of the Group on the environmental footprint of permanent facilities.

Five environmental indicators are monitored, for which the Group has set objectives to reduce its environmental impact; other indicators and actions taken in favour of the environment are also presented, including compliance with new regulations or directives.

In this section, environmental results are presented by calendar year and certification results by fiscal year.

In 2014, the Group was in line or ahead of its environmental objectives for the five indicators described hereunder:

- Energy consumption divided by sales (intensity) and greenhouse gas emissions intensity (GHG): these indicators demonstrate Alstom's engagement in energy efficiency and GHG emissions, including for its own operations. For these two indicators, Alstom in 2014 has already hit the 2015 target set in 2008. The major improvement compared to 2014 is attributable to three factors: energy-saving initiatives across the Group (We Share the Power, for example), the adjustment of the industrial footprint (sale of Alstom Power Energy Recovery business, for instance) and a gas consumption favoured by milder winter in Europe in 2014.
- Water consumption: this indicator is monitored because of the increasing prevalence of water scarcity specifically in water-stressed areas but more generally in emerging countries where Alstom is developing its business. The reduction objective set in 2008 (-20%) was reached and exceeded in 2013 and the annual reduction since then amounts to 6%.
- Non-methane Volatile Organic Compounds (VOC) emissions: this indicator measures the only air pollutant emitted by Alstom operations in a significant quantity. The annual reduction target set three years ago has been substantially exceeded since then.
- Percentage of recovered waste: The objective was set at 80% in 2015 together with a net reduction of the quantity of waste sent to waste disposal in order to improve Alstom operations, reduce associated costs mainly in countries where waste recovery is not developed. This objective of 80% has already been reached, thanks to the reduction in waste sent for disposal year after year.

This section has been reviewed by PricewaterhouseCoopers as an independent third party in regard to Article 225 of the French Grenelle law. A sample of 35 sites in 14 countries has been examined. The review report is available at the end of this chapter.

# **CERTIFICATION OF UNITS**

**Objective:** All manufacturing sites over 200 employees certified ISO 14001.

**Results:** At the end of fiscal year 2014/15, 100% of the manufacturing sites with over 200 employees are certified ISO 14001. This programme supports the reduction in environmental impacts from the Group's operations.

The requirements for ISO 14001 and OHSAS 18001 (Safety) certifications are integrated in the Alstom EHS Roadmap and contribute to the improvement process of Environment, Health and Safety on sites.

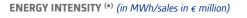
Alstom Transport has extended the requirement of ISO 14001 certification to six industrial sites (HC<200) considering their growth potential, four of which have already been certified.

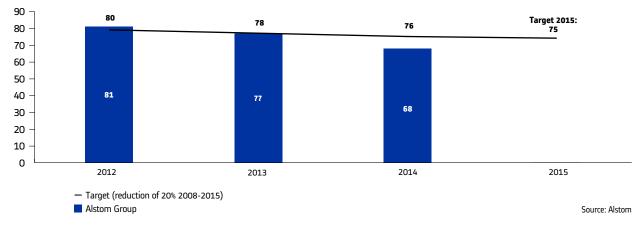
# **ENERGY CONSUMPTION**

**Objective:** Reduce energy intensity by 20% in permanent facilities by 2015 (reference year 2008).

Energy intensity is measured in terms of the amount of energy used in relation to total sales of Alstom Group. The indicators are calculated with regards to sales of the fiscal year.

**Result:** At the end of 2014, a reduction in energy intensity (68) by 28% was achieved compared to the 2008 base year (94). The result is already beyond the objective of 75 in energy intensity set for 2015.





(\*) Excluding the energy used by the Birr (Switzerland) Research & Development (R&D) test activity (gas and diesel oil as fuel).

# Details of energy consumption

**ENERGY CONSUMPTION IN PERMANENT FACILITIES** 

	Transp	port	Alstom Gr	15 <sup>(1)</sup>	
(in GWh)	2013	2014	2012	2013	2014
Natural gas <sup>(*)</sup>	275	222	685	621	481
Butane, propane and other gases	9	7	44	43	34
Heavy fuel and diesel oil (*)	6	10	66	51	38
Steam/heat	41	30	134	134	109
Electricity	186	181	706	703	662
Coal & other fuels	0	0	8	4	1
TOTAL ENERGY CONSUMPTION	517	449	1,642	1,555	1,325

Source: Alstom.

(\*) Excluding the energy used by the Birr (Switzerland) Research & Development test activity (gas and diesel oil as fuel).

(1) Alstom Group at 31 March 2015 includes Transport and discontinued operations (Grid, Thermal Power, Renewable Power, Corporate & Others).

The Group total energy consumption decreased by 15% (-13% for Transport) between 2013 and 2014.

Natural gas consumption decreased by 23%, electricity usage remained stable and the use of heavy fuel has been reduced. The ongoing application of energy saving programmes contributed to these results.

The Birr (Switzerland) Research & Development activity tests gas turbine prototypes in real operating conditions using natural gas and diesel fuel oil. Electricity is produced and sent into the Swiss distribution network with no significant impact on the country's electricity  $CO_2$  emission factor.

Since this activity is intermittent, it varies significantly from one year to another; it cannot be integrated into the global objective of the Group and is therefore counted separately. No major test activities were performed this year, which leads to a natural gas consumption of 8 GWh in 2014.

Find out more about best practices and programmes which contribute to reach the Group's targets: <u>www.alstom.com</u>.

# **GREENHOUSE GAS (GHG) EMISSIONS**

## GHG emissions related to operations

**Objective:** Reduce GHG emission intensity by 20% in permanent facilities by 2015 (reference year 2008)  $^{(1)}$ .

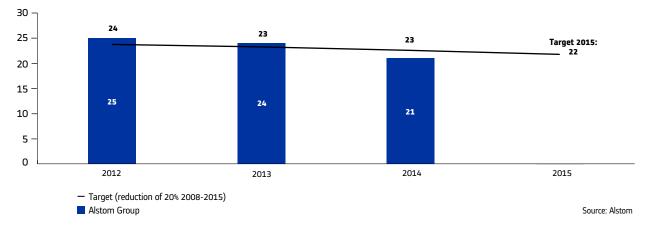
GHG emission intensity is measured in terms of tons of  $CO_2$  equivalent produced in relation to Alstom total sales at the end of the fiscal year.

The Group measures separately the GHG attributable to energy usage, fugitive emissions of perfluorocarbons gases (PFC) and hydrofluorocarbons (HFC) (kilotons  $CO_2$  eq.) and the GHG from fugitive emissions of SF<sub>6</sub> (SF<sub>6</sub> gas is specific to Alstom Grid). As such, the comparison with the 2008 objective is limited to GHG emissions from energy consumption (kilotons  $CO_2$  eq.) in permanent facilities.

**Result:** At the end of 2014, the GHG emission intensity attributable to energy consumption decreased by 22% (21) compared to the reference year, 2008 (27).

<sup>(1)</sup> Excluding the CO<sub>2</sub> emissions due to Alstom Grid's SF<sub>6</sub> fugitive emissions and the CO<sub>2</sub> emissions related to the energy used by the Birr R&D test activity (emissions due to gas and diesel oil usage) – updated compared to previous years' registration documents.

#### GREENHOUSE GAS EMISSIONS INTENSITY (\*) (in tons CO, equivalent/sales in € million)



(\*) Excluding the CO<sub>2</sub> emissions due to Alstom Grid's SF<sub>6</sub> fugitive emissions and the CO<sub>2</sub> emissions related to the energy used by the Birr R&D test activity (emissions due to gas and diesel oil usage).

#### GHG emissions details

**GHG EMISSIONS FROM ENERGY USAGE IN PERMANENT FACILITIES** (\*)

	Tran	Transport		Alstom Group at 31/03/2015 <sup>(1)</sup>	
(in kilotons CO <sub>2</sub> eq.)	2013	2014	2012	2013	2014
Direct CO <sub>2</sub> emissions from natural gas, butane, propane,					
coal and oil consumption	65	54	181	162	125
Indirect CO <sub>2</sub> emissions from steam, heat and electricity consumption	65	60	326	324	277
Total CO <sub>2</sub> emissions from energy consumption	130	114	508	486	402
Other Direct CO <sub>2</sub> fugitive emissions from PFC and HFC	2	1	2	1	1
TOTAL CO <sub>2</sub> EMISSIONS FROM ENERGY CONSUMPTION					
AND OTHER DIRECT EMISSIONS EXCEPT $SF_{\epsilon}$	131	115	510	488	403

Source: Alstom.

(\*) Excluding the CO<sub>2</sub> emissions due to Alstom Grid's SF<sub>6</sub> fugitive emissions and the CO<sub>2</sub> emissions related to the energy used by the Birr R&D test activity (emissions due to gas and diesel oil usage).

(1) Alstom Group at 31 March 2015 includes Transport and discontinued operations (Grid, Thermal Power, Renewable Power, Corporate and Others).

Alstom Group's direct and indirect CO, emissions from energy consumption decreased by 17% (12% for Alstom Transport) between 2013 and 2014.

# GHG emissions related to the use of SF<sub>6</sub>

**Objective:** Reduce SF<sub>6</sub> intensity by 8% between 2012 and 2015.

 $SF_6$  represents a large proportion of Alstom Grid GHG emissions, 61% of the total emissions of greenhouse gases (direct and indirect) and approximately 85% of the total direct emissions in CO<sub>2</sub> equivalent.

No other Alstom activity uses  $SF_{6r}$  and this gas is essential to Alstom Grid's business and its customers, due to its particular dielectric properties. It is used in high- and medium-voltage switchgears and in all components of Gas Insulated Substations (GIS) for its insulation characteristics. However, it presents a global warming potential: nearly 24,000 times more than  $CO_2$ . Therefore its importance as a greenhouse gas is critical and the emission of  $SF_6$  into the atmosphere must be prevented as much as possible.

In 2014, Alstom Grid handled approximately 726 tons of  $SF_6$ , out of which 5.4 tons were released into the atmosphere on Alstom Grid's permanent sites during testing and filling operations. This represents a leakage rate of 0.7%.

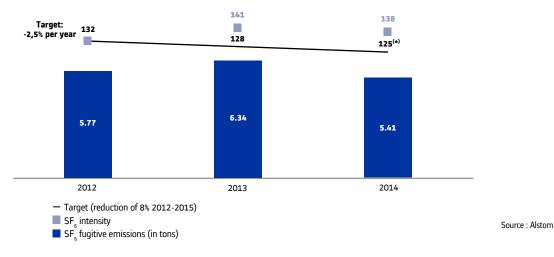
Alstom Grid commits to reduce those emissions by reducing the  $SF_6$  mass in sub-stations thanks to its eco-design approach, as well as by the implementation of best-handling practices on Alstom Grid sites to reduce leakages. The day-to-day implementation of best-handling practices by all those involved in the gas life cycle is, nevertheless, the most important factor in a continuous, environmental-friendly improvement process.

Since 2012, this indicator has been monitored each year with an objective that is in line with the Group's greenhouse gas initial objective of -8% between 2012 and 2015 (*i.e.* an average of -2.5% per year).

Adhering to the European fluorinated greenhouse gas certification regulation, Alstom Grid has deployed a worldwide training programme on SF<sub>6</sub> management and emission impact prevention. To date, close to 1,000 employees have joined the programme. This ensures that Alstom Grid employees are well aware of this gas' environmental impacts, safety risks, and the proper handling techniques to reduce emissions.

Alstom Grid is the first in the world to launch a clean alternative to  $SF_{\epsilon}$ , applicable to high-voltage equipment. The revolutionary  $SF_{\epsilon}$ -free solution,  $g^3$  – Green Gas for Grid – was jointly developed with  $3M^{TM}$ , a leader in environmentally sustainable solutions.  $g^3$  has 98 percent less impact on global warming than  $SF_{\epsilon}$ . With performances comparable to  $SF_{\epsilon}$ , it is a suitable technology for the development of tomorrow's new generation of clean high- and ultra-high voltage gas and air insulated equipment.

#### **INTENSITY OF GREENHOUSE GAS EMISSIONS FROM SF**<sub>6</sub> (in tons $CO_2$ equivalent/SF<sub>6</sub> equipment sales in $\epsilon$ million)



(\*) The 2015 target was decided based on 2012 figures, but in 2013 inaccuracies in the 2012 data were discovered at certain sites, giving rise to the assumption that the 2012 figure was underestimated.

# CO<sub>2</sub> emissions related to business travels

#### **CO, EMISSIONS FROM BUSINESS TRAVELS**

	Tran	Transport		Alstom Group at 31/03/2015 <sup>(1)</sup>		
(in kilotons CO <sub>2</sub> eq.)	2013	2014	2012	2013	2014	
CO <sub>2</sub> emissions from air travels <sup>(*)</sup>	23	18	131	115	100	
$CO_2$ emissions from train travels (*)	1	1	-	2	2	
CO <sub>2</sub> emissions from company cars using gasoline	1	1	8	6	9	
CO <sub>2</sub> emissions from company cars using diesel oil	6	5	16	16	20	

Source: Alstom.

(\*) Source: Carlson Wagonlit Travel (CWT) – CO<sub>2</sub> calculations are based on the 2011 (July) guidelines produced by DEFRA/DECC's GHG Conversion Factors – The calculation takes only into account air travel that has been tracked by CWT.

(1) Alstom Group at 31 March 2015 includes Transport and discontinued operations (Grid, Thermal Power, Renewable Power, Corporate & Others).

In 2014 Alstom maintained strict control on air travel encouraging the use of train as much as possible as well as virtual meetings (see "Social performance / Alstom Collaborative Way"). This has contributed to reduce CO<sub>2</sub> emissions related to air travel by 13% and total CO<sub>2</sub> arising from business travel by 6%.

# Use of renewable energies

The Group has signed contracts for usage of electricity from renewable sources where economically feasible: Alstom is fully supplied with green electricity in the UK (40 GWh from renewable sources: 74% coming from wind, 14% from biomass, 7% from hydro and 5% from other sources) as well as in Belgium. These contracts have been in force since 2013.

In 2014 and 2015 French electricity contracts negotiated for large sites (around 50% of the needs) use 30% renewable energy sources.

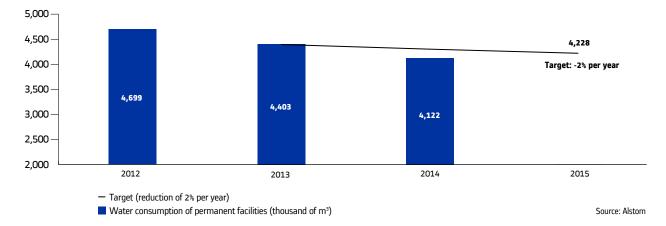
In Germany, the Kassel site uses renewable energy sources and has had a 100% Green Power hydro energy contract since 2008.

# WATER CONSUMPTION

# Water consumption in the whole Group (all permanent sites)

**Objective:** Water consumption reduction by 2% per year.

#### WATER CONSUMPTION OF PERMANENT FACILITIES (in thousands of cubic metres)



In 2014, the overall water consumption decreased by 6% (11% for Alstom Transport). Around 37% of water usage is impacted by a small number of large volume users, which use water for R&D activities in open-circuit cooling systems or for test purposes, with no significant impact on the water quality, temperature or on the natural environment (see detailed figures below).

Find out more about best practices and programmes which contribute to reach the Group's targets: <u>www.alstom.com</u>.

#### Permanent sites located in water-stressed areas

Special attention is given to sites located in extremely high, high and medium-high water-stressed areas <sup>(1)</sup>. This category represents 80 locations (>200 employees) with a global water consumption of 848 thousand cubic metres, 20% of the overall water consumption of the Group's permanent sites.

### Details of water consumption

WATER CONSUMPTION IN PERMANENT FACILITIES

	Transp	Transport		Alstom Group at 31/03/2015 <sup>(1)</sup>			
(in thousands of cubic metres)	2013	2014	2012	2013	2014		
Public network	790	694	2,224	2,244	1,898		
Ground water	273	248	2,058	1,765	1,725		
Surface water	0	0	387	394	499		
TOTAL WATER CONSUMPTION	1,063	942	4,699	4,403	4,122		

Source: Alstom.

(1) Alstom Group at 31 March 2015 includes Transport and discontinued operations (Grid, Thermal Power, Renewable Power, Corporate and Others).

WATER CONSUMPTION USED FOR TESTS OR IN OPEN-CIRCUIT COOLING SYSTEMS INCLUDED IN TOTAL WATER CONSUMPTION

(in thousands of cubic metres)	2012	2013	2014
Water used for tests or in open-circuit cooling systems	1,785	1,527	1,543

Source: Alstom.

(1) Mapping as per the WRI Aqueduct<sup>m</sup> project reference map.

# Waterborne discharges

WATERBORNE DISCHARGES IN PERMANENT FACILITIES

(in tons)	2012	2013	2014
Chemical Oxygen Demand	98	72	93
Suspended matters	55	41	32
Hydrocarbons	1	1	1
Metals	3	0.5	0.2

Source: Alstom.

The impact on the water discharged by the Group's production facilities is globally considered as limited, relatively to the size of Alstom operations.

# **AIRBORNE EMISSIONS**

# Non-methane Volatile Organic Compounds (VOC) emissions

**Objective:** Reduce non-methane VOC emissions by 2% each year until 2015.

In 2014, the Group improved both VOC emissions data accuracy and measure. In Alstom Thermal Power, VOCs' capture systems newly installed on a major site led to a significant emission reduction as well as some changes in painting processes from Alstom Grid and multiple local initiatives across the Group.

As a result, VOC emissions have significantly decreased compared to 2013 (by 11% for the Group and by 15% for Alstom Transport).

## Detail of non-methane VOC emissions

**VOC EMISSIONS IN PERMANENT FACILITIES** 

	Т	ransport	Als	tom Group at 31/03/20	015 <sup>(1)</sup>
(in metric tons)	2013	2014	2012	2013	2014
VOC emissions	143	121	1,227	804	716

Source: Alstom.

(1) Alstom Group at 31 March 2015 includes Transport and discontinued operations (Grid, Thermal Power, Renewable Power, Corporate and Others).

Find out more about VOC detailed results, best practices and the programmes which contribute to reach the Group's targets: www.alstom.com.

# SO<sub>2</sub> and NO<sub>x</sub> emissions

SO<sub>2</sub> AND NO<sub>x</sub> EMISSIONS IN PERMANENT FACILITIES EXCLUDING THE BIRR R&D TEST ACTIVITY (explanations are provided in the Energy intensity part)

(in metric tons)	2012	2013	2014
SO <sub>2</sub>	20	15	12
NO <sub>x</sub>	114	117	93
Source: Alstom.			

# **RAW MATERIALS**

Alstom, as an engineering company, does not use a significant amount of raw materials as such; it generally uses already transformed material or components. Nevertheless, through its sustainable development policy, Alstom encourages its suppliers to work on raw material reduction whenever possible.

# **NOISE POLLUTION**

Part of Alstom's continuous improvement process, the EHS referential "EHS Roadmap" covers "noise management" as a specific chapter of the Environmental management chapter. Noise analysis is also covered by Alstom EHS risk assessments and impact analysis processes.

# **GROUND FOOTPRINT**

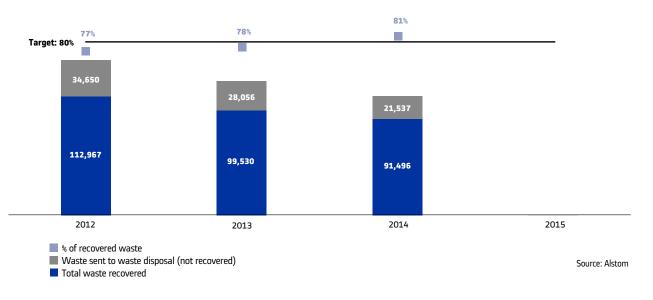
The Ground footprint is not relevant or extensive in Alstom's industrial activity sector; therefore no detailed ground footprint analysis needs to be carried out at Alstom's operation sites.

# WASTE MANAGEMENT

# Waste production, recovery and disposal

**Objective:** recovery of 80% of the total waste by 2015.

PERCENTAGE OF RECOVERED WASTE & QUANTITY OF WASTE NOT RECOVERED VERSUS TOTAL WASTE (in metric tons)



Waste recovery rate increased this year amounting to 81%, above the objective set by the Group for 2015.

#### WASTE PRODUCTION IN PERMANENT FACILITIES

	Trans	sport	Alstom Group at 31/03/2015 <sup>(1)</sup>			
(in metric tons)	2013	2013 2014		2013	2014	
Hazardous waste	2,943	2,669	19,809	11,062	9,739	
Non-hazardous waste	26,110	29,032	127,808	116,524	103,295	
TOTAL WASTE PRODUCTION	29,052	31,701	147,617	127,586	113,033	
Waste sent to waste disposal (not recovered)	4,850	5,151	34,650	28,056	21,537	
PERCENTAGE OF RECOVERED WASTE	83%	<b>84</b> %	77%	78%	81%	

Source: Alstom.

(1) Alstom Group at 31 March 2015 includes Transport and discontinued operations (Grid, Thermal Power, Renewable Power, Corporate and Others).

# MANAGEMENT OF CONTROVERSIAL SUBSTANCES

## Elimination of asbestos

Utilisation of any asbestos or asbestos containing material has been prohibited in Alstom's products since 2006.

It has been Alstom's policy for many years to ban the presence of asbestos in all its operational units and to have asbestos-free materials in its buildings (leased or owned) and equipment used by the Group worldwide, including in countries where asbestos is not prohibited. The Group applies instructions to frame the monitoring process and workers' protection; these instructions have been updated and improved regularly.

Within this framework, Alstom keeps the ambition to eradicate asbestos in its buildings as much as reasonably and economically practicable.

With the development of Service activities, it appeared necessary to better define the conditions under which Alstom employees and contractors worldwide could work on customers' equipment when there is a risk of ACM (Asbestos containing material). An Alstom corporate directive was published in October 2014 and has been in force since then.

## **REACH regulation management**

As a complex product and service supplier working in an international environment, Alstom is impacted by the REACH <sup>(1)</sup> regulation in its conception activities and project implementations carried out within and from Europe.

There are two main prospective impacts:

- the obligation to inform the customers about Substances of Very High Concern (SVHC);
- the risk of a lack of supply for hazardous substances; suppliers could stop providing them.

It is generally understood that:

- Alstom does not need to register any substance because it does not import or manufacture any chemical substance in quantities above 1 ton/year per European entity;
- Alstom does not need to notify the European Chemical Agency (ECHA) or communicate to its customers the presence in its products of any SVHC listed on the ECHA "candidate list", because the Group does not supply products containing more than 0.1% of these identified substances;
- Alstom implements the recommended measures to prevent human and environmental risks related to the use of chemicals.

In order to guarantee compliance with these guidelines, Alstom uses an approach that requires dealing with exclusive representatives in order to import chemicals into the European Economic Area, instructions to suppliers concerning substances and articles listed in the REACH regulation, information gathering from suppliers about the possible presence of hazardous substances in the products, identification of hazardous articles by internal experts, implementation of substitution programmes when necessary and the update of the internal process of chemical hazard management.

For three years, Alstom Transport's proactive approach to substances has enabled it to detect and resolve numerous cases of the use of Substances of Very High Concern according to the REACH regulation. More than 22,400 cases of components or parts that contain candidate substances have been detected since 2012. These components are monitored in order to progressively substitute these substances, also called "Substances of Very High Concern" by more environmentally friendly substances. Currently, 42% of detected cases have already been substituted. With respect to substances subject to authorisation, published in Annex XIV of the REACH regulation, around 1,300 cases have been detected and are currently being addressed with suppliers. Thus 82% of Annex XIV cases are now secured and 100% will be secured before the legal deadlines.

<sup>(1)</sup> European Regulation No. 1907/2006 of the European Parliament and Council, dated 18 December 2006, for Registration, Evaluation, Authorization and Registration of Chemicals (REACH).

# Nanotechnologies

Alstom does not at present add engineered nanomaterials to its products. However, on-going Research & Development in components of electrical insulators (for power electronics, switchgears, bushings, etc.) or studies

# BIODIVERSITY

A biodiversity assessment conducted in March 2013 to evaluate Alstom's 70 major manufacturing sites (>200 employees) impact, highlighted that 63 of them are located at more than one kilometre from legally protected areas <sup>(1)</sup> and/or priority sites for biodiversity <sup>(2)</sup>. Consequently, 90% of Alstom major sites do not operate in or adjacently to legally protected areas <sup>(1)</sup> or priority sites for biodiversity <sup>(2)</sup>. Alstom currently does not own any site within the sub-categories of legally protected areas *e.g.* IUCN I, II, III and VI and also those of priority sites for biodiversity *e.g.* Important Bird Area and Alliance Zero Extinction sites.

for use in paintings or coatings (hydrophobic or heal coating properties), involve some very small quantities of nanotechnologies, a few hundred grams that are included in laboratory samples of small polymer components. The research projects are conducted at the Supergrid Institute Research centre in Villeurbanne (France).

Alstom sites in Brazil, Mexico, Indonesia, Spain, Portugal and Turkey are located within vast Biodiversity hotspots (Regions of Conservation Importance <sup>(3)</sup>); but they cover minimal areas compared to the size of biodiversity hotspots.

The biodiversity Graph is available on www.alstom.com.

Source for definitions of IUCN I-VI, Natura 2000, Biodiversity hotspots etc.: <u>www.biodiversitya-z.org</u>.

# **EMPLOYEE AWARENESS AND RECOGNITION FOR BEST PRACTICES**

Alstom strives to improve employee awareness and recognition regarding environmental concerns. A few examples:

- Alstom Transport in the Netherlands was awarded the highest level (level 5) on the CO<sub>2</sub> performance ladder, initiated by ProRail. In order to keep this high standard, actions had to be taken during the entire year culminating in a successful audit by an external party, Lloyds. A Green Team of volunteers has been established, responsible for taking and coordinating all actions, such as seminars focusing on CO<sub>2</sub> reduction, introduction and further development of green (product) innovations (HESOP and Hybrid locomotives), motivating suppliers and customers to contribute to the CO<sub>2</sub> reduction program, publishing best practices, and, last but not least, reducing the energy and water consumption of the different Alstom sites in the Netherlands. The main result of all actions described is above the re-establishment of the highest CO<sub>2</sub> performance level, a 15% reduction of CO<sub>2</sub> emission in comparison to 2009 and achieving an A-label (highest energy efficiency standard) for the headquarters building in Rijswijk.
- The Stafford site in the UK celebrated after scooping two accolades for green initiatives at the 2014 Stafford Borough Council Green Awards for projects that clearly benefited the environment and that also saved money. The team demonstrated green credentials through a range of projects, including: the installation of four electric car charging points, new heating systems, energy efficient lighting and roof replacements. Events were held for employees to find out more and connect with others to share their journey to and from work. Supporting the local wildlife trust at Allimore Green, 19 volunteers gave up their day to exchange their time and effort to help maintain one of Staffordshire's most diverse wetlands, working on various tasks.
- Alstom Mannheim, in Germany, was awarded the City of Mannheim Environmental Award 2014. The jury recognised the integrated environmental strategy of Alstom, the energy efficiency and resource conservation initiatives, as well as the special commitment at corporate locations.

Other examples of actions to offset the environmental impact of operations can be found in former Registration documents and on <u>www.alstom.com</u>.

<sup>(1)</sup> Legally protected areas (PA): IUCN I-VI, World heritage sites, Natura 2000, Ramsar, OSPAR, Barcelona convention, ASEAN heritage sites.

<sup>(2)</sup> Priority sites for Biodiversity (KBA): Important Bird Area (IBA) and AZE.

<sup>(3) &</sup>quot;Régions d'importance pour la conservation" (CI): Endemic bird areas, High biodiversity wilderness areas and Biodiversity hotspots.

# **GROUP HUMAN RESOURCES POLICY**

The announcement on 24 April 2014 that the Energy activities of the Group may be sold to GE created a destabilising environment. In this uncertain context, the Group carried on the implementation and evolution of its Human Resources (HR) policy as a key success factor, irrespective of who the future owner may be.

The Group HR vision remains identical as it focuses on developing, engaging and rewarding employees. Tools and resources are deployed so that, over the medium term, all employees should recognise Alstom:

- as the place where people can have a direct impact on the success of the business;
- for its diversity, its dedication to innovation, learning and an engaged workforce;
- as a company developing and promoting experts and leaders from the Group and all over the world;
- for its lean organisation facilitating the life of employees and the business;
- for its reward of performance and regular feedback.

The HR strategy is based on staffing, knowledge, talent and engagement. It fully supports the main ongoing programmes which are designed to:

- offer the best working conditions;
- adapt the workforce to the Group's activities and markets;
- reinforce Company culture;

- develop competencies and manage careers;
- promote equal opportunities.

During the fiscal year, Alstom maintained its safety focus through the further deployment of its Zero Deviation Plan for high-risk activities. It also continued to:

- adapt its organisation to better match the market and technology evolutions;
- increase operational efficiency: sharing experience and cross-Sector fertilisation; and
- promote internal mobility.

Due to the foreseen changes in the Group's structure the further deployment of 'One Alstom HR' organisation has been slowed down. Nevertheless efforts to deploy a leaner HR organisation to professionalise the HR teams have been maintained.

The network of 1,248 HR Managers is mobilised to support employees in their daily activities. The intranet HR section describes the mandatory HR processes and rules. Its activity is supported by a single Human Resources Information System (HRIS) that encompasses all key processes and is deployed worldwide.

In this section, the results from the HRIS covering the whole Group are presented by fiscal year; the results from the social survey conducted in 29 countries representing 94% of the total headcount are presented by calendar year.

# A STRONG FOCUS ON WORK-RELATED HEALTH AND SAFETY

# Occupational accident prevention

Alstom's utmost priority is the prevention of occupational accidents and diseases. A successful safety performance cannot be considered as fully achieved if the physical integrity or health of Alstom employees and its contractors' has been affected during the course of activities.

This section has been reviewed by PricewaterhouseCoopers as an independent third party in regard to Article 225 of the French Grenelle law. A sample of 35 sites in 14 countries has been examined. The review report is available at the end of this chapter.

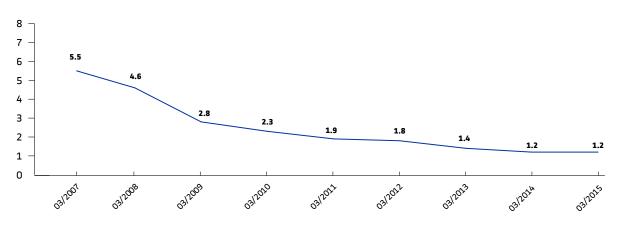
## Alstom's work safety goals and current situation Safety Objectives:

- No fatalities (both for employees and contractors).
- Occupational injury frequency rate (IFR1): Alstom Group targets level 1.0 for the next fiscal year.

Result: Injury Frequency Rate 1 (IFR1): 1.2 at March 2015.

#### **INJURY FREQUENCY RATE 1 (IFR1)**

(Number of accidents with sick leave per million hours worked, alstom employees up to 2009, employees & contractors as from 2010)



Source: Alstom

Alstom monitors the safety performance of its contractors with the same ambition as for its own employees. The IFR1 for contractors' employees is very close to that for Alstom employees. However, when it comes to severe accidents, the number of victims is higher among contractors. Thanks to the global reduction in the number of accidents, the Injury Frequency Rate has been reduced by 74% since 2008. The number of severe accidents, although remaining high, has decreased by 22% compared to 2013/14 at Alstom Group. Nevertheless, work safety remains an absolute priority across the Group.

#### **KEY FIGURES ON OCCUPATIONAL ACCIDENT PREVENTION**

	Transport		Alstom Group at 31/03/2015 <sup>(1)</sup>		
	2013/14	2014/15	2012/13	2013/14	2014/15
Number of employees trained in EHS classroom trainings <sup>(2)</sup>	-	-	3,411 <sup>(3)</sup>	3,250 <sup>(3)</sup>	7,430
Number of employees trained in EHS through e-learning <i>trainings</i> <sup>(2)</sup>				25 100	10.020
	-	-	-	35,196	10,829
Number of fatal accidents of employees (Alstom employees)	0	0	1	0	0
Number of fatal accidents linked					
with Alstom activities (contractors)	0	0	4	5	1
Number of occupational safety severe accidents reported (*)					
(incl. fatal accidents)	10	10	29	37	29
Occupational Injury Frequency Rate of lost-time accidents					
(employees and contractors)	2.1	2.0	1.4	1.2	1.2

(\*) Occupational safety severe accident definition: On Alstom sites or other companies' sites related to Alstom activities, whichever company (Alstom or other) employs the victim are included in this category, Fatal accidents and any accident resulting in permanent consequences (either in permanent disfigurement, or permanent disability such as amputation of any digit or part of a digit) whatever the length of the medical leave, as well as any accident causing fracture requiring surgery, whatever the length of the medical leave.

(1) Alstom Group at 31 March 2015 includes Transport and discontinued operations (Grid, Thermal Power, Renewable Power, Corporate & Others).

(2) Source: Alstom University

(3) Data adjusted vs. last year's Registration Document.

Source: Alstom.

Occupational safety is managed through the Environment, Health and Safety (EHS) organisation. A network of approximately 880 managers and professionals (including about 200 in Alstom Transport) in total is organised in each Sector and coordinated at Group level. This network is also in charge of managing environmental risks and preventing accidental pollution from Alstom operations.

A cross-sector EHS Competency Development Programme has been created with the primary objective to support the efficiency of EHS professionals and to give them the opportunity to develop their career in the function. There are four fundamental objectives of the programme:

- reinforce performance standards that achieve Performance Excellence;
- identify learning and development needs both collectively and individually;
- recognise individual strengths and identify development areas for further career development;
- propose next career steps for EHS professionals.

The EHS Competency Development programme is based on a Competency Assessment Tool. This tool allows EHS employees to assess themselves against EHS Know-How requirements of their specific positions, to identify their personal development areas, as well as their related trainings and development actions. All these elements are discussed with the line manager during the performance review with a global consolidation at Sector and Group level. The EHS Competency Development programme aims to develop core professionals with respect to EHS knowledge and behaviours.

The functional management system for EHS is based on a reference guide (EHS reference standard) called "EHS Roadmap", in line with ISO 14001 and OHSAS 18001 requirements. Implementation is verified through self-assessment and audits.

#### "Alstom Zero Deviation Plan" (AZDP)

This plan launched in June 2012 in order to reduce the number of fatalities and severe accidents from Alstom activities <sup>(1)</sup> had a strong effect on the reduction in the number of fatalities. Since May 2012 no fatal accident has affected an Alstom employee and severe accident numbers have declined significantly.

As a consequence, AZDP remains the keystone of Alstom's global actions to reach "zero severe accidents".

At the end of 2013, Alstom Safety Directives were extended to cover two additional high-risk activities with 50 critical requirements, the application of which is supported by a "Zero Tolerance to Deviation" policy. In fiscal year 2014/15, Alstom organised another wave of 173 audits to support AZDP. Those audits, were conducted by over 230 EHS professionals, trained in fiscal year 2013/14, over three-day sessions.

#### **Occupational diseases**

Due to the absence of an international definition of occupational diseases, it is difficult to aggregate the data in this domain. Therefore the following figures give an estimate of the number of occupational diseases registered and reported for France only.

In 2014/15, 53 occupational diseases were registered in France.

#### Safety awareness programmes and awards

Alstom strives for zero accidents. Here are some examples of Alstom's Health and Safety performance in fiscal year 2014/15:

- After three years of continual EHS investment, the team at Nantes workshop in France received an exceptional result in their 2015 AZDP audit. Their score rose from 81% to 95% in just one year. The workshop has become a safer and more pleasant place to work thanks to various EHS initiatives and investments. These include raised floors for highlevel work and pneumatic tools to replace manual jobs. And best of all, the workshop's productivity has increased thanks to these clever improvements, because they allow work to be completed more quickly and easily, as well as more safely.
- The Medupi project in South Africa celebrated 3 million Lost-Time Incident-free hours thanks to a strong "prevention mindset" and teamwork, from contractors to senior management, everyone on site plays a role in preventing accidents. Key to remaining LTI-free for so long are the prevention activities in place such as: 2.5-hour induction process for everyone working on site, Alstom's 10 Life Saving Rules widely publicised on-site, Management involvement in coaching during their walkabouts, no work being permitted on site without authorisation by Alstom and systematic risk assessment before every task.
- Three depots, 441 employees, 3,650 days and zero accident: this is the performance of Alstom Transport Service teams in Romania at the depots of Ciurel, Pantelimon and Berceni. They are dedicated to the Metrorex contract for a 15-year period and provide preventive and corrective maintenance for the metro in Bucharest. Over the last ten years, they have not had a single lost-time accident. This achievement is the result of a very efficient organisation in workshops combined with the daily involvement of employees with regard to respecting EHS regulations.

## Assessment of collective agreements on Health & Safety

Occupational safety indicators are included in most profit-sharing agreements as one of the calculation criteria. On-site health and safety committees resulting from regulation or local agreements exist in most industrial locations.

All operational managers whose action impacts EHS have one of their objectives related to EHS results or actions.

(1) For more information on this programme, please refer to Registration Document 2012/13 (p.249-250) and on www.alstom.com.

# Life insurance

Objective: All employees receive at least one year salary in case of accidental death.

Results: The evolution of employee coverage is quite satisfactory.

	2012/13	2013/14	2014/15
Ratio of employees covered by a life insurance in case of accidental death	99.5%	97.3%	98.0%
Ratio of employees covered by a life insurance giving one year salary	91.0%	93.7%	87.2%

Source: Alstom social survey conducted in 29 countries representing 94% of the Group's total headcount.

In countries such as Poland, employer contributions to insurance policies are considered as a taxable benefit, leading some employees to decline this offer.

# **GROUP WORKFORCE AT 31 MARCH 2015**

The figures in the following tables include permanent and fixed-term contracts.

Note: Alstom HRIS stands for Alstom Human Resources Information Systems, a worldwide database supporting Human Resources management.

# **Breakdown by Region**

	At 31 March 2014									At 3	1 March 2	015							
-	Africa/				Central			Africa/				Central							
	Middle	Asia/		North	& South			Middle	Asia/		North	& South							
	East	Pacific	Europe	America	America	Total	%	East	Pacific	Europe	America	America	Total	%					
Transport	1,119	1,908	21,526	1,316	2,472	28,341	29,9%	1,191	2,238	20,275	1,163	2,676	27,543	30,8%					
Discontinued																			
operations	2,153	16,925	34,019	8,323	4,958	66,378	70,1%	2,197	15, 828	32,434	6,562	4,895	61,916	69,2%					
Thermal Power	1,007	8,694	20,786	5,845	631	36,963	39,0%	992	7,876	19,308	4,046	516	32,738	36,6%					
Renewable Power	10	2,774	3,284	784	2,357	9,209	9,7%	23	2,610	3,349	831	2,424	9,237	10,3%					
Grid	1,079	5,036	7,968	1,516	1,560	17,159	18,1%	1,129	4,929	7,842	1,515	1,556	16,971	19,0%					
Corporate & others	57	421	1,981	178	410	3,047	3,2%	53	413	1,935	170	399	2,970	3,3%					
TOTAL	3,272	18,833	55,545	9,639	7,430	94,719	100%	3,388	18,066	52,709	7,725	7,571	89,459	100%					
% of total workforce	3.5%	19.9%	58.7%	10.2%	7.8%	100%		3.8%	20.2%	58.9%	8.6%	8.5%	100%						
Out of which long-term absentees (LTA)	4	101	1,375	83	154	1,717		15	100	1,254	83	158	1,610						

Source: Alstom HRIS.

# Breakdown by Category (incl. LTA)

		At 31 Marc	h 2014		At 31 March 2015				
	Manag profess	•	e	Other employees		ers & ionals	Oth emplo		
		% of total		% of total		% of total		% of total	
	Total	employees	Total	employees	Total	employees	Total	employees	
Transport	12,519	44.2%	15,822	55.8%	12,569	45.6%	14,974	54.4%	
TOTAL (*)	48,225	50.9%	46,494	49.1%	47,405	53.0%	42,054	47.0%	

(\*) Alstom Group at 31 March 2015 includes Transport and discontinued operations (Grid, Thermal Power, Renewable Power, Corporate and Others). Source: Alstom HRIS.

# Breakdown by Gender (incl. LTA)

		At 31 Mai	rch 2014			At 31 March 2015					
	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1en	Wo	Women		1en	Women				
	Total	% of total employees	Total	% of total employees	Total	% of total employees	Total	% of total employees			
Transport	24,011	84.7%	4,330	15.3%	23,299	84.6%	4,244	15.4%			
TOTAL (*)	79,294	83.7%	15,425	16.3%	74,381	83.1%	15,078	16.9%			

(\*) Alstom Group at 31 March 2015 includes Transport and discontinued operations (Grid, Thermal Power, Renewable Power, Corporate and Others). Source: Alstom HRIS.

# Breakdown by Type of contract (incl. LTA)

		At 31 Mai	rch 2014			At 31 M	arch 2015	
	Permanent contracts	Fixed-Term contracts	Temporary workers	Interns	Permanent contracts	Fixed-term contracts	Temporary workers	Interns
Transport	26,142	2,199	2,906	609	25,848	1,695	2,176	564
TOTAL (*)	86,125	8,594	8,020	2,208	83,736	5,723	7,535	2,108

(\*) Alstom Group at 31 March 2015 includes Transport and discontinued operations (Grid, Thermal Power, Renewable Power, Corporate and Others). Source: Alstom HRIS.

# Workforce changes during fiscal year (incl. LTA)

			At 31 Marc	h 2014			At 31 March 2015					
	Hiring on permanent contracts	Hiring on fixed-term contracts	Resigna- tions	Redun- dancies	Dismissals (1)	Other depar- tures <sup>(2)</sup>	Hiring on permanent contracts	Hiring on fixed-term contracts	Resigna- tions	Redun- dancies	Dismissals (1)	Other depar- tures <sup>(2)</sup>
Transport	2,737	1,203	615	71	136	851	2,442	969	776	359	449	1,064
TOTAL (*)	8,275	7,189	3,212	693	731	3,238	7,022	6,101	3,386	1,074	1,419	2,954

(\*) Alstom Group at 31 March 2015 includes Transport and discontinued operations (Grid, Thermal Power, Renewable Power, Corporate and Others).

(1) Calculated on permanent headcount only.

(2) Including retirements, not including disposals and acquisitions.

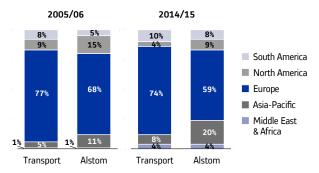
Source: Alstom HRIS.

# ADAPTING THE WORKFORCE TO THE MARKETS AND ACTIVITIES

At 31 March 2015, Alstom employed 89,459 people.

The priority is to have the competencies needed for the Group's development and to facilitate the integration of newcomers.

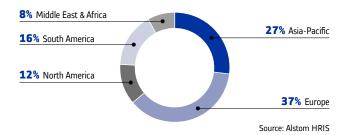
The chart below shows the workforce breakdown evolution by region over the past nine years, which demonstrates the development in emerging countries where the markets grow faster. WORKFORCE BREAKDOWN BY REGION (TOTAL WORKFORCE)



Source: Alstom HRIS

Alstom recruited over 7,000 permanent employees over fiscal year 2014/15. It does not face any difficulty in recruiting, due to its reputation and its active relationship and partnership with schools and universities.

RECRUITMENT BY REGION IN 2014/15 (PERMANENT CONTRACTS)



# Developing active relationships with universities

Alstom recruited over 7,000 permanent employees over the fiscal year. In order to find the right competencies, relationships with schools and universities are actively managed in more than 35 countries, with a three-fold objective of:

- making Alstom well-known and identifying future employees;
- establishing partnerships, including in research and development;
- participating in the national effort for education and training in the countries where the Group operates.

Alstom has a long-lasting practice of partnerships with universities in countries where it is present. See examples on <u>www.alstom.com</u>.

In addition, Alstom is promoting apprenticeships and welcoming an increasing number of apprentices. Mentors are very involved in the follow-up of the apprentices. In France, sites such as La Courneuve (Alstom Thermal Power) and Reichshoffen (Alstom Transport) have already launched initiatives over a number of years to improve the recruitment and training of young people on work-study programmes. In Reichshoffen, the Group hosts an apprentice training centre (CFA) with 44 apprentices as of 31 March 2015. As a whole, more than 850 apprentices were hired worldwide during the fiscal year.

## Integrating new employees

Recruitment is followed by numerous actions to facilitate the integration of new employees into their teams.

At Group level, Alstom conducts an induction programme called Alstom Connection, which gathers recently hired managers (between 12 to 18 months of seniority) to learn about the Group's activities and values, meet with senior management, visit Alstom sites and build a first network. During the fiscal year, no sessions were held, as the emphasis was put on individual induction into the teams and activities. Specific events are organised in order to facilitate the employee's integration, such as HR In Motion, a venue for new HR professionals.

In Alstom Grid, the Newcomer's Discovery Kitchen was launched in January 2013 and since then, over 970 new employees have had access to the online induction session, in addition to the welcome day.

# **REINFORCING THE COMPANY CULTURE**

To maintain a high level of employee engagement, Alstom relies on the respect of Business Ethics and Human Rights, as well as on a common culture based on Alstom's values and common tools implemented across the whole Group.

# **Respecting business ethics**

Alstom's culture and reputation for integrity are essential for the Group. Such a reputation can only be built through a permanent benchmark to meet the best international standards and through the continuous strengthening of its ethical rules and procedures, as well as through the adhesion of all employees, who must know and rigorously apply the principles of Alstom's Code of Ethics.

The mission of the Ethics & Compliance (E&C) Department is to propose the content of the Alstom Integrity Programme and to foster its implementation throughout the Group worldwide. The Group culture embraces all ethical best standards based on the Alstom values: Trust, Team, Action. This culture must permeate the whole organisation, the tone from the top being relayed by each level of the management up to each and every employee. The Alstom Integrity Programme comprises:

 The Code of Ethics, which applies to every employee within the Group. Published in 2001, it was reviewed for the third time in October 2014. It includes a set of practical tools for employees. It is available in 23 languages: English, French, Arabic, Brazilian-Portuguese, Chinese, Croatian, Czech, Dutch, Finnish, German, Greek, Hindi/English, Hungarian, Indonesian, Italian, Japanese, Polish, Portuguese, Romanian, Russian, Spanish, Turkish and Vietnamese.

The Code of Ethics prescribes essential rules of conduct with regards to the relationships with business partners, the role of Alstom in its environment, the promotion of a team spirit and the commitment to protect the Group's assets.

In addition, the Code of Ethics details the Alert Procedure which allows any employee or any person or third party in relationship with Alstom to report violations of prevention of corruption, competition and securities and accounting laws and regulations. It was enhanced in July 2013 to add two additional means of reporting: a secure website (<u>www.alstom.ethicspoint.com</u>) and a toll-free hotline, both reachable 24 hours a day, 7 days a week, 365 days a year.

- **E&C Group Instructions** which provide detailed guidance to employees on rules and procedures to strictly apply in the areas of gifts and hospitality, political contributions, charitable contributions, sponsorship, sales partners, consulting companies, conflicts of interest, and prevention of corruption with suppliers and contractors and in joint venture and consortium. In 2014 a Group Instruction on facilitation payments was released. It reminds that Alstom prohibits facilitation payments and provides the steps for minimising the risk of being requested to pay a facilitation payment or resisting any request for a facilitation payment.
- Training sessions and e-learning programmes are essential to explain the Group's Ethics & Compliance policy. During fiscal year 2014/15, around 7,600 persons (*i.e.* a cumulative total of approximately 17,500 people since 2009) participated in a compliance session.

The e-Ethics module related to the Code of Ethics was launched in March 2010 and updated in February 2015. It targets Managers & Professionals for whom it is compulsory. They must retake and complete it every two years. It has been completed by more than 70,400 employees since its launch out of which over 16,200 from Alstom Transport.

- A community of approximately 300 E&C Ambassadors, all volunteers who come mainly from the Legal, Finance and HR functions or are Alstom Country Presidents. Their main role is to promote the culture of integrity throughout the Group through E&C Awareness sessions and to be a contact point for questions about ethics and compliance. The E&C Ambassadors have a direct contact with the E&C department which provides them with the appropriate support and tools to achieve their mission. For example, the E&C Ambassadors receive a monthly E&C Newsletter providing them with press articles and ethical real case studies.
- A variety of internal communication methods in order to ensure that all employees are well informed about E&C in Alstom:
  - a visible and regularly updated section on Altair, Alstom's intranet, called "Ethics & Compliance", containing not only E&C Group Instructions, but also information on the prevention of corruption, a monthly newsletter, as well as E&C case studies, advice to employees on how to behave in the event of an ethical dilemma,
  - regular news in Alstom's weekly newsletter (Newsflash) and pieces of news in local internal newsletters (at country or site level),
  - an educational video addressing the issue of corruption prevention, available in both English and French on the intranet site as well as on <u>www.alstom.com</u>,
  - posters displayed in all locations.

On 12 September 2011, the Alstom Integrity Programme was awarded a certificate from ETHIC Intelligence. In May 2014 the Alstom Integrity Programme has been certified again following an audit of the procedures in various countries and on the recommendations of international and recognised anti-bribery experts. Alstom is committed to promote ethics and compliance principles in business worldwide. The Senior Vice President Ethics & Compliance is a member of the United Nations Global Compact Working Group on the Tenth Principle, of the ECOA (Ethics and Compliance Officers association in the USA), of the IBE (Institute of Business Ethics in the UK) and of the ICC France (International Chamber of Commerce).

On a local level:

- Alstom sponsors the Ethos Institute in Brazil and the Centre for Business Ethics and Corporate Governance in Russia;
- since July 2012, Alstom has been taking part in the Principle based initiative for Argentina's Electrical Energy Transportation Industry committed to the prevention of corruption together with other industry players;
- on 26 July 2012, Alstom signed the Corporate Integrity Pledge in Malaysia, witnessed by the Chief Commissioner of the Malaysian Anti-Corruption Commission (MACC);
- after having sponsored the Chair of Excellence of "Law and Business Ethics" of the University of Cergy-Pontoise, France, over the 2010-2013 period, Alstom has maintained its relationship with the Master of Law and Business Ethics through the establishment of positions for apprentices and seminar presentations.

# **Respect of Human Rights**

The respect of Human Rights is one of Alstom's fundamental commitments. Among others, Alstom is particularly respectful of the laws governing human rights and labour, health and safety standards, protection of the environment, corruption and bribery, fair competition, taxation and the accurate communication of financial information. Alstom complies with the guiding principles of the Organisation for economic cooperation and development (OECD), the United Nations Universal Declaration of Human Rights and those of the International Chamber of Commerce (ICC). The charter that Alstom's suppliers and contractors are requested to adhere to, stipulates that they must be compliant with the same principles and national or local regulations which are applicable to their activities in the country(ies).

Alstom is a member of the Global Compact, promoting the respect of human rights within its sphere of influence. Alstom encourages its managers to be involved in their local Global Compact network. In November 2014, the Alstom Chairman and CEO renewed his commitment to the Global Compact.

In the day-to-day management of its activities, Alstom strives to strictly comply with its commitments in its sphere of influence:

- Regarding Human Resources, Alstom applies a policy based on respect for individuals, their dignity, rights and individual liberties, and promotes their involvement in Company life. The Group promotes all forms of dialogue with both individual employees and their representatives.
- Alstom conducts an annual survey to ensure the absence of any incident regarding child labour, forced labour, freedom of association or any kind of discrimination. This year, no incident was reported.

- An internal directive on Individual Data Protection states that the Human Resources management is based upon performance and competence using well-known shared processes: these processes should be based on objective data, not on personal factors such as gender, age, religion, ethnic origin, political and philosophical opinions, trade union membership, health, and sexual orientation. All recorded information shall reflect these principles. All employees have the right to request access to their own data and to obtain the rectification of such data when justified.
- The respect of human rights is one of the criteria examined by the monthly Corporate Risk Committee when assessing the projects: any breach to it may have significant consequences on the feasibility of the project, its financing or implementation, and on the Group's reputation.

### Involving employees in the Company

The development of a common culture is important to hold the Group's employees together, which is done through:

 a set of Group's common values and ethical principles (detailed above): Alstom's three core values – Trust, Team, Action – contribute to the sense of belonging. They are explained via awareness-raising actions and training at local level, supported by an e-learning programme. Since October 2011, 8,680 employees have been involved in this e-learning programme of which 2,747 in the fiscal year. As part of the performance review process, the manager, after in-depth discussion with the employee, evaluates how values are put into practice.

Should improvement be identified during the performance review discussion, a specific development plan will be built and its implementation will be monitored with the support of the HR team;

 an action plan to encourage their involvement in the life of the Company – some major actions are detailed below – measured through specific indicators.

#### Specific actions

Employee's involvement and motivation are also critical for Alstom. The Group's strength is based on the dynamism and creativity of its employees and several actions have been taken to encourage them.

#### Well-being policy

In several countries, specific programmes are in place to improve employees' health and well-being at work. A few examples can be found on <u>www.alstom.com</u>.

#### **Remuneration schemes**

#### Remuneration evolution

Due to the Group's diversity, activities in numerous countries, influence of local inflation and economic situation, no comprehensive indicator has yet been developed. Alstom's policy is to review the employees' base salaries every year, and to have open negotiations with employee representatives where they exist.

Remuneration schemes based on performance criteria

#### Short-term incentive scheme

Alstom's annual short-term incentive scheme is based on two performance factors: financial performance (60% of the incentive target)

and individual performance (40% of the incentive target). The Target Incentive is the incentive payment that is received when 100% of the financial goals and individual objectives are met. If the financial results exceed the goals, the incentive paid out may exceed the Target Incentive.

Eligibility and incentive target rates are linked to the job grading and influenced by local market practice in each country. Nearly 33,000 employees (out of which 85% are managers) benefited from this remuneration scheme at 31 December 2014.

As safety, quality and environment care are objectives which the Company wishes to develop and reinforce as well as sustainability performance, the variable remuneration of a number of the top management teams includes related indicators. This may represent up to 20% of the variable remuneration for few employees.

#### Profit-sharing

Alstom's policy aims to recognise collective performance. Profit-sharing schemes are in place in 13 countries (namely France, Brazil, Canada, Chile, China, Croatia, Finland, Ireland, Italy, Mexico, Poland, the UK and the USA) covering about 50,000 of the Group's permanent employees, according to the Alstom social survey conducted in 29 countries covering 94% of the workforce. For fiscal year 2014/15, a total of 40,000 employees received a payment under a profit-sharing plan.

The profit-sharing schemes are often calculated on agreed criteria, including the injury frequency rate reduction or safety-related indicators such as the number of general safety inspections (Alstom Grid in France). These schemes also include business-related indicators such as the reduction of waste, and quality-related points.

#### Employee shareholding

Since its initial public offering and first listing, the Group has implemented five capital increases reserved for employees and a plan to allocate free shares to all employees (May 2006). At 31 March 2015, the current and former Group employees held 1.05% of the Alstom share capital, either directly or through mutual funds.

#### Employee retention schemes

In countries where the employment market is attractive, mid- and longterm incentives have been established for some key employees.

Due to the project with General Electric, some critical managers have been offered a retention bonus to secure the completion of the deal implementation and the preparation of the integration into the General Electric organisation. The costs of those retention schemes, subject to the deal completion, are borne by General Electric.

# Alstom Cultural Exchanges (ACE) programme for employees' children

Launched in February 2014, the Alstom Cultural Exchange Programme (ACE) is a CSR initiative implemented as part of the Group's wellbeing and diversity policies. The objective of the programme is to help employees around the world send their children abroad, hosted by a family of their colleagues, for linguistic or cultural purposes. The ACE programme is supported by an intranet platform where employees can find offers and/or post their own. A discussion forum enables the exchange to be prepared. In the first year and without being widely advertised internally, ACE enabled five exchanges.

#### Indicators to measure involvement

Regular indicators to measure motivation are the resignation rate at Group level and opinion surveys at Sector level.

Resignation rates, which also reflect the general employment situation in each geographical area in which the Company operates, are one of the criteria used to determine the level of satisfaction of the Group's employees. The rates are closely monitored at both Sector and regional levels.

#### **Resignation rate**

**RESIGNATION RATE FOR EMPLOYEES ON PERMANENT CONTRACTS IN EACH REGION** 

	Transp	port	Alsto	Alstom Group at 31/03/2015 <sup>(1)</sup>		
	2013/14	2014/15	2012/13	2013/14	2014/15	
Europe + Africa/Middle East	1.7%	2.2%	3.1%	3.0%	3.1%	
Asia/Pacific	7.0%	10.8%	5.7%	5.8%	5.9%	
Americas	4.5%	3.9%	4.3%	4.3%	5.2%	
TOTAL	2.4%	3.0%	3.8%	3.7%	4.0%	

(1) Alstom Group at 31 March 2015 includes Transport and discontinued operations (Grid, Thermal Power, Renewable Power, Corporate and Others). Source: Alstom HRIS.

The resignation rate is apparently stabilising, although the situation varies widely from country to country.

#### Absenteeism

Due to the difference in country regulations, the Group is in a process to work country by country in order to find a common definition of this indicator. Therefore, no consolidated reliable indicator can be communicated this year for the Group. For France, the absenteeism rate amounts to 5.4% this year.

#### Employee engagement surveys

As Engagement is one of the four pillars of the HR strategy and in order to foster the employees' involvement, Alstom has launched surveys which target to measure employees' opinion and assess employees' engagement on Sectors' decisions (vision, roadmap and strategy) in order to implement appropriate actions.

#### Alstom Transport

Alstom Transport conducted an Employee Opinion Survey by all its employees in November 2014 with a 64% response rate (2% higher than the 2012 survey). Improvement actions were launched to improve in Sourcing, Engineering, Information Technology and CSR.

#### Energy businesses (discontinued operations)

In February 2015, Alstom Thermal Power launched its third engagement survey (the previous one was in 2014) targeting all its employees; the response rate was up to 85% (compared to 80% the previous year). In order to enable all employees to participate, specific IT access for employees without a computer (mainly blue collars) was organised. This survey, like the previous one, will lead to action plans which will be adapted to each team.

#### **General Electric project**

In order to measure the acceptance and reaction towards the announced sale of the Energy businesses, employee surveys are conducted regularly. In March 2015 a culture survey targeting all managers was launched. All those surveys have a solid response rate; it can therefore be understood that the results obtained are fully representative of the employees' perception.

# MANAGING CAREERS AND DEVELOPING COMPETENCIES

Alstom is a high-technology company that handles large-scale, complex projects over the long-term. The quality of its teams, their skills and their commitment to the Group are crucial to its overall success.

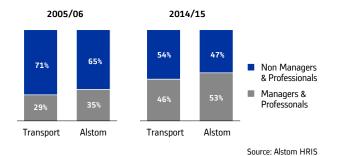
Talent management remains a priority in 2014. The Group Talent Management organisation aims to support the Group in its talent development initiatives with a specific focus on diversity and talent pool management and development while optimising the Alstom ways of working. It is based around three pillars:

- community management;
- global recruitment;
- learning solutions and Alstom University.

This global team has people based in India and France (Levallois headquarters). It works closely with the Talent Management teams in both Sectors and Countries.

# Evolution of competencies between 2006 and 2015

WORKFORCE BREAKDOWN BY CATEGORY



### Career management

#### Career development programmes

Three pillars have been identified as being the foundation of Alstom's Talent Management practices: Staffing, Knowledge, Engagement and Skills. Career management is a key target: the Group encourages each employee to manage his/her own career in collaboration with his/her line manager and HR manager, using the provided tools. This allows each employee to play a key role in his/her own performance and in his/her advancement. This policy is founded on a strong sense of commitment/engagement.

All employees are treated equally on the basis of their skills, especially with regards to employment, recruitment, talent identification, mobility, training, remuneration, health and safety, which rely on common processes and policies across the Group.

#### **Alstom Jobs Online**

To enhance internal mobility and stimulate employee applications, Alstom effectively motivates all categories of potential internal candidates. Promoting a strong employer brand in this way has helped position Alstom as a globally recognised benchmark employer, capable of both attracting the best talent and mobilising all employees around shared values (Trust, Team, Action) that are in line with the Group's strategic development.

All employees from more than 80 countries can access more than 14,500 open positions available in Alstom worldwide over the year – around 4,700 still open in March 2015 out of which around 2,200 for Alstom Transport.

#### Specific development programmes

Development programmes have been built for different communities, which address three different employee populations within the Group: Technical Experts, Functions and Managers.

Technical experts' development programmes

Each Sector manages the technical experts' development through programmes adapted to their specific needs and environment.

#### Function development programmes

The Group continues to deploy a strategy of career management for several functions: Finance, HR, EHS, Legal, and Communication, in order to develop functional expert communities. These communities are managed at Corporate level. In addition to the management of communities, "Operations" have been considered and a map of competencies with associated career paths has been designed in the Quality function for which a competency model has been issued. The operational communities are managed by the different Sectors but are deployed through a cross-Sector approach.

Managers' development programmes

As regards Management and Leadership skills:

- the AMP ("Accelerated Management Programme") entered its third year with a focus on trainees from emerging countries, which represented 60% of the participants in this programme. The objective is to focus on "Leadership": Leading self – leading others – change leadership and transitional leadership. 60 employees have been trained this year through this programme. The Group also monitors the previous participants' evolution;
- the AMS (Advanced Management Seminar) designed to prepare future top executives: no session was organised during the fiscal year as it has been decided to capitalise on former participants' development.

#### Career path management

Career path management relies on the combination of three processes articulated in the People Management Cycle (PMC) launched each year on 1 March. The PMC adapts to the business priorities and leads to improvements.

Alstom proposes that managers and employees follow an e-learning module focusing on "Performance Management", definitions of promotability and the development plan structure.

#### Annual performance interview

Objective: All employees benefit from an annual performance interview.

**Indicator:** Number of managers and professionals with an annual performance interview.

2012/13	2013/14	2014/15
42,500	43,900	44,200
Source: Alstom HRIS.		

The 2014 and 2015 numbers represent only part of the final number, as the time frame to complete the performance review process closes at the end of April.

All managers, engineers and professionals are covered by this process on a mandatory basis, which includes the setting of objectives and a development plan. To increase the efficiency of this process, the training of managers related to people development has been strengthened. The process is optional and recommended for all other employees.

As previously mentioned, the inclusion of a discussion about putting the Alstom Values into practice since 2013 is an opportunity to refresh the knowledge of managers about the performance review process.

People Reviews allow the current and future needs of the Group (based on a competency mapping) to be matched with the available competent resources, and career paths to be set with a cross-Sector vision.

The Group includes most of its managers (about 44,000 each year over the last three years) in people reviews carried out at sites, businesses, Sectors, functions and the Group as a whole.

#### Internal mobility

**Objective:** Appoint at least 60% of the Group's senior managers through internal promotion.

Indicator: Internal promotion rate of senior managers (1,540 people).

2012/13	2013/14	2014/15
80%	75%	71%
Source: Alstom HRIS.		

In most large countries where Alstom is present, regular resourcing forums are held to better identify the available competencies, business needs and to facilitate cross-Sector moves.

In addition, thanks to the deployment of e-Talent (common resourcing software), the number of vacant positions posted on the intranet website amounts to 43% in 2015. The objective is to reach 60% in 2015. The posting of vacant positions brings transparency, easier relocation and new career opportunities.

PERCENTAGE OF VACANT POSITIONS INTERNALLY POSTED

2012/13	2013/14	2014/15
33%	48%	43%
Source: Alstom HRIS.		

**Talent management** 

Objective: Shape the competencies that the Group needs, taking the employees' expectations into account.

#### Indicators:

- ratio of employees trained during the fiscal year;
- average number of training hours per employee.

	2012	2013 (*)	2014 (*)
Percentage of employees who have had training	68%	67%	70%
Average number of training hours/employee	19 h	15 h	14 h
Total number of training hours	-	1,286,445 h	1,179,341 h

(\*) Scope: social survey conducted in 29 countries representing 94% of the workforce.

#### Alstom University (AU)

Alstom University's mission is to:

- define and ensure the consistency of the global learning strategy linked to the Group's strategic objectives;
- support the identification of training needs;
- build and manage the global learning offer;
- design and deploy learning solutions in order to develop employees and serve Alstom goals.

In order to be more efficient, the objective is to have a holistic approach of learning within the Group.

**Objective:** Design and conduct common training for all Group activities.

Indicator: Number of trainees at Alstom University campuses.

20	12/13	2013/14	2014/15
1	.5,817	11,191	28,766

Source: Alstom University.

Alstom University also manages several projects in order to achieve two goals: putting in place a "lean learning" approach and developing a new learning mindset within Alstom, which means:

- defining the new learning organisation within the Group;
- building a single Alstom Learning offer structured at three levels: Group, Sector, Cluster/Country. The Alstom Learning offer was communicated in September 2014;
- deploying curriculum: in order to localise the deployment of several Alstom University programmes in the main countries;
- identifying, developing and encouraging internal trainers in order to encourage employees to share their knowledge. Being an internal trainer brings the added benefit of developing the trainers' skills and providing them with an opportunity to learn.

#### 2014 achievements

Face-to-face training

Number of sessions held at 31 March 2015 <sup>(*)</sup>	Number of people trained
1,198	22,977
594	5,789
1,792	28,766
	<b>31 March 2015 <sup>(*)</sup></b> 1,198 594

(\*) Including estimate figure for March 2015. Source: Alstom University.

Out of the 1,792 sessions, Alstom University has organised:

- 338 ethical awareness sessions that reached more than 8,875 employees;
- 192 training and certification sessions that led to an "EHS Passport" being awarded to more than 2,300 employees.

**Distance Learning training** 

- number of Distance Learning licences activated: 814;
- number of virtual sessions: 105, covering 1,258 trainees;
- number of trained participants e-learning customised by Alstom: 25,523, including the e-Ethics module (more than 10,200 trainees) for the promotion of the Alstom's Code of Ethics and values, and High Risk Activities module (more than 5,800 trainees) for the prevention of accidents.

#### Alstom Collaborative Way (ACW)

The "Alstom Collaborative Way" (ACW) initiated in 2008 played a crucial role in the development of a culture based on sharing and learning amongst employees. The implementation of collaborative tools for communities of experts has allowed the promotion, development and sharing of best practices and know-how.

#### **ALSTOM COLLABORATIVE WAY DEPLOYMENT**

	2012/13	2013/14	2014/15
Telepresence: average hours/month per site	52 h	37 h	38 h
	(33 sites)	(46 sites)	(49 sites)
Web conferences	82,000 meetings	398,013 meetings	605,347 meetings
	328,088 participants	1,207,398 participants	N/A
	72,000 accounts	93,519 accounts	86,373 accounts
			1,180,000 hours
SharePoint collaborative platform	144	241	318
	159	254	361
	322	537	778
	17,000	25,600	36,600

Source: Alstom University.

During the fiscal year, the usage of webconference has been generalised, therefore their number has increased by 52% enabling travel costs to be reduced and the decision-making process to be accelerated.

#### Knowledge management/transfer

Given the high technology product environment in which Alstom is doing business, as well as in the context of a high level of competition and an ageing workforce in some regions, Knowledge Management and Transfer is a critical activity. Since 2008, the Knowledge Transfer (KT) project targets "Improving Alstom's capability to transfer knowledge in its global network in order to build fully operational local units on time, where the market is". A common framework (KT Handbook with model, process, guidelines and tools) based on internal good practices and lessons learned had been deployed as well as a collaborative platform (connecting the community of managers, experts, specialists and key employees dealing with knowledge transfer). In Alstom Thermal Power and Alstom Renewable Power, the KT handbook and KT process are continuously disseminated and training is provided to managers across all businesses. Empowering the business with more independence this year, KT eLearning modules have been provided to reach an even bigger audience. More than 420 KT Community members are connected through the KT collaborative platform.

Currently 59 active KT projects are running in Alstom Thermal Power with specific gate reviews and quarterly reviews. Most projects are delivered in China (18) and India (22).

At Group level, gaining and sharing knowledge, developing expertise and learning from useful experiences are all cornerstones of Alstom's people strategy. To help achieve these goals, Learning Solutions and Alstom University launched the Internal Training Programme in 2014, an initiative aimed at developing internal trainers. Some 320 internal trainers located in Europe, North and South America, India, China and other parts of Asia provide a wide variety of training courses related to the main support functions: finance, purchasing, legal, quality, EHS, project management, etc. In September 2013, Alstom appointed an HR executive to lead its diversity engagement and initiatives. The roadmap as well as the targets proposed by the Diversity Steering Committee is being submitted to the Board for approval. These are the common KPIs for all countries. Country-specific diversity action plans are under preparation with a two-year roadmap taking into account the global diversity one. The plans will cover the six dimensions of diversity: nationality, gender, age/ generations, educational background, social status and ability/disability. The plans must include a three-year plan to balance salary between men and women (already in progress within the current salary review process). In order to foster the awareness and plan implementation, a community of country diversity ambassadors is being created.

It is to be noted that, before this more visible action, Alstom had already started to enhance and promote diversity in its workforce and the past years initiatives have been continued during fiscal year 2014/15.

# Promoting gender equality

It is the Group's policy to promote equal opportunities for men and women on the basis of equal employment and qualifications. This principle is included in Alstom's Code of Ethics and in the Company's HR policy but no target percentage of women has been set. The question of professional equality between women and men has been at the heart of Alstom's social and HR policy for many years. It is nevertheless noteworthy that the training path leading to the skills required for most Alstom positions primarily attract men. The proportion of women in those *curricula* is about 15% to 20%. This prevents meaningful quantitative comparison. Therefore, Alstom focuses particularly on optimising the integration of women in its activities and offering them career opportunities. In order to reinforce the diversity of its population, the Company acts at local and Group levels. In addition, through its local presence and offer of high-quality jobs and career development, the Group is a strong contributor to the development of the countries in which it is located. Despite those efforts, the expected results of Alstom's action plan have not yet fully materialised.

Having started in April 2012, discussions with the European Works Forum and the European Union representation to reach an agreement about Equal Opportunities within Europe have been continued.

**INDICATORS RELATED TO WOMEN BY CATEGORY** 

	2012/13	2013/14	2014/15
Percentage of women in the workforce	16.0%	16.3%	16.9%
Percentage of women: management	15.3%	16.2%	16.4%
Percentage of women: executives	11.6%	11.8%	12.0%
Percentage of women trained in training sessions <sup>(1)</sup>	14.5%	15.3%	15.1%

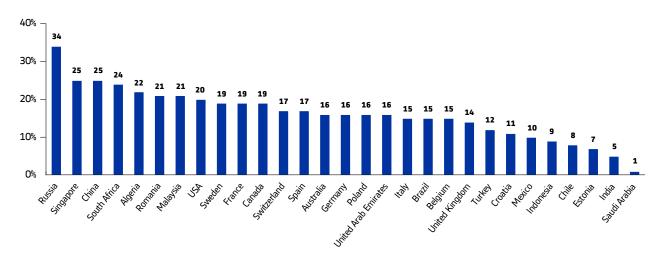
(1) Source: social survey.

Source: Source: Alstom HRIS.

The proportion of women in the headcount varies greatly between countries.

The Group has no specific targets for the percentage of women in its total workforce but it develops an active policy to favour their integration.

#### PERCENTAGE OF WOMEN PER COUNTRY (AS OF 31 DECEMBER 2014)



Source: Alstom social survey conducted in 29 countries representing 94% of the Group's total headcount.

# Supporting initiatives dedicated to promotion of women

In addition to actions launched in the previous fiscal year, this year Alstom requested all country organisations to define action plans to promote the employment of women:

- In the USA, Alstom has continued numerous partnerships and participated in many programmes and activities that demonstrate its commitment to diversity and equal employment opportunities, and more specifically for women. This year Alstom sponsored and attended the regional conference of the Society of Women Engineers (SWE) and also supported the national SWE conference. Alstom also entered into partnership with "Getting Hired" to accommodate people with disabilities and Veterans. Alstom continued to be a member of the Equal Employment Advisory Council (EEAC) and of the Industrial Liaison Group (ILG), which promotes affirmative action and equal employment opportunities by working closely with the US Government Office of Federal Contract Compliance Programs and Employment Opportunities Commission.
- In France, the partnership with "Déployons nos Elles", a non-profit organisation which promotes industrial jobs in high schools by organising exchanges with women engineers and visits of workshops has been continued. The "Elles bougent" initiative has been continued.
- The Group is involved in the "EVE" programme, a women's leadership programme that helps "increase one's performance and become an actor of change".

#### Initiatives to fight discrimination

Concrete achievements have been accomplished in order to fight discrimination and harassment. The existing action plans and programmes have been continued. For further details, please refer to previous Registration Documents.

In France, agreements have been signed with the employee representatives to foster the fight against discrimination covering more than 2,800 employees.

#### Equal opportunity policy at Group level

In line with the already launched initiatives such as the WEB programme (Women Empowerment for Business), or the "EVE" programme (for more information, see previous paragraph), Alstom has started a project to enhance diversity in its workforce. The project is implemented through action plans in each country under the leadership of the country HR Director and is coordinated at Corporate level.

A Diversity action plan was validated by the Executive Committee in March 2014 and some measures have already been implemented:

- diversity as an objective for HR;
- action plans in countries;
- short list policy: at least one woman or one non-Western European person in all short lists;
- positive discrimination for women or non-European participation in the AMP (Accelerated Management Program);
- as of the 2014/15 salary review, analysis of the salary gap between women and men for the same level of responsibilities.

Alstom has conducted a survey in 29 countries representing 94% of the total headcount, in order to assess possible salary discrepancies between men and women. The results are difficult to interpret for a number of reasons, in particular because of the very limited number of women in certain categories and of differences in positions and seniority.

With regards to disability, Alstom has started to develop a Disability policy focusing on five complementary areas: job access and maintenance in employment, raising awareness, accessibility to premises and information, and partnership with the sheltered work sector. Each entity is encouraged to integrate its initiatives into this process. Each year, Alstom organises internal training sessions to help HR team members better understand various situations relating to disability and to help prepare job interviews and the integration of people with disability. In addition, Alstom encourages the development of its parental policy by starting systems of assistance to find childcare solutions or intercompany day nurseries whenever possible (for example in La Courneuve in France).

#### Balance between personal and professional life

In several countries, measures have been taken or renewed to encourage a good balance between personal and professional life. Examples can be found on <u>www.alstom.com</u>.

# **Employment of disabled people**

It has been a continuous guideline within Alstom to develop and support the integration and employment of disabled people. This enables those employees to work in a challenging environment while following the Alstom Code of Ethics – which strictly prohibits any discrimination on the basis of health or disability – and the local regulations.

The following table shows the results of a survey conducted in 29 key countries, to measure the integration of people with disabilities in the total workforce. The data are significant only where local regulations have set minimum quotas.

#### PERCENTAGE OF EMPLOYEES WITH DISABILITIES

	Transport	t	Alstom a	at 31/03/2015 <sup>(1)</sup>	
	2013	2014	2012	2013	2014
France	4.3%	4.8%	3.9%	3.5%	4.4%
Germany	6.3%	6.6%	5.5%	5.6%	5.8%
Italy	2.5%	3.0%	2.4%	2.4%	2.8%
Spain	0.5%	0.4%	0.9%	0.6%	0.5%

Source: Alstom social survey conducted in 29 countries representing 94% of the Group's total headcount.

(1) Alstom Group at 31 March 2015 includes Transport and discontinued operations (Grid, Thermal Power, Renewable Power, Corporate & Others).

For information, this report is available on the Internet site in a version accessible to the visually impaired.

### Promoting cultural diversity

Alstom is fully aware of the strength resulting from the large number of nationalities, cultures and approaches represented in its employees. Specific action plans have been developed at local level to take advantage of this asset.

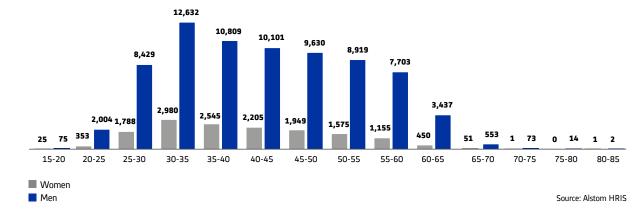
Two indicators measure diversity:

- the number of French senior executives has declined from 52% in 2006 to 45% in 2009, 40% at 31 March 2014 and stable at 40% at 31 March 2015;
- the number of expatriates decreased from 946 at 31 March 2012 to 848 at 31 March 2014. At 31 March 2015, the number amounts to 696 as a result of the Group's effort to empower local managers.

Actions and participations to bodies and organisations targeting the promotion of diversity have been continued in 2014/15. For more details, please consult <u>www.alstom.com</u>.

### Managing senior careers

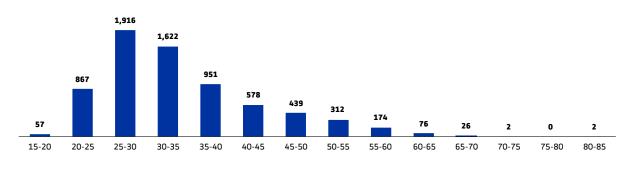
Age is obviously not a discrimination criterion. According the chart below, employees aged over 45 account for around 40% of the Group's headcount. On a more general view, the women/men breakdown vs. age is identical.



AGE PYRAMID BY GENDER (TOTAL WORKFORCE) – MARCH 2015

Besides, 1,031 people aged over 45 were hired over the fiscal year, corresponding to 15% of the new permanent recruits.

AGE PYRAMID OF NEW HIRES 2014/15 - PERMANENT CONTRACTS



Source: Alstom HRIS

# **EMPLOYEE RELATIONS**

An internal survey, conducted in 29 countries and representing 94% of the Group headcount, showed that 67% of employees (vs. 64% last year) are covered by a national or intra-company collective bargaining agreement.

# **Collective bargaining agreements**

Alstom's Management and employee representatives work closely together at all levels within the Group. The European Works Forum (EWF) met in various formats: 18 select committees, two regular plenary sessions, 14 extraordinary plenary meetings, four meetings of four working groups. The exchanges enabled the business situation and the impact on the workforce to be shared. Most meetings focused on the strategic move and transaction with General Electric. The Group decided to provide the EWF and local employee representation bodies with the support of experts beyond legal provisions to ensure a transparent and fair information process. Many agreements related to salaries, working time, medical care, restructuring and profit-sharing were signed at local level with the employee representatives during 2014.

The list of the agreements signed in 2014 is available on www.alstom.com.

### Management of restructuring impacts

Alstom strives to limit the social impact of decided restructurings. The principle driving the Group's policy is: "nobody is left to cope alone with an employment problem in the event of restructuring". Date February 2011, an agreement between Alstom and the EMF (which has become IndustriAll since that date) came to an end. This agreement was renewed in March 2015 with a scope corresponding to Alstom Transport. The agreement aims at safeguarding employment and accompanying the redeployment of employees. It also organises the social dialogue at European and local levels.

# LENGTH AND ORGANISATION OF WORKING TIME

# Organisation of working time

Work practices at the Group's industrial, commercial and administrative sites vary greatly depending on the site, type of activity, geographical location and local legislation.

In France, out of a total of 17,558 employees, 11% of the employees work on 2x8 shifts, 1.5% on 3x8 shifts and less than 1% on weekend shifts.

### Overtime

Overtime refers to hours worked beyond the legal limits set by the relevant national legislations. The concept of overtime may vary from one country to the next and in some cases is not applicable. This somewhat mitigates the relevance of this benchmark as a consolidated indicator.

In France, the average figure of overtime is 10 hours/per employee for calendar year 2014.

# RELATIONSHIPS WITH EXTERNAL STAKEHOLDERS

# **RELATIONSHIPS WITH CUSTOMERS**

For Alstom, customer satisfaction and understanding their long-term expectations is a key priority. In this respect, the Group has put in place procedures to better anticipate the needs of its customers and develop tailored solutions. These procedures must be assessed per Sector, as they correspond to different markets and product specificities. However, in all Sectors of the Group, relationships with customers are addressing the following objectives:

- understand customers' expectations and get their feedback through customer relationship management tools, regular surveys and related improvement action plans;
- build a stronger relationship with them through regular events, technical meetings with groups of customers, "customer clubs" around a product, etc.;
- make them familiar with Alstom products and solutions and help them extract the best value through technical trainings provided either at the customer premises or in dedicated Alstom training centres.

The sections below give more details of the way each Sector deploys its customer relationship policy.

### **Alstom Transport**

Alstom Transport aims at sustaining a continuous relationship with its customers through all stages of their buying cycle – from business development to after-sales. For example:

- A modern Customer Relationship Management (CRM) tool called "wall.C" – was deployed early 2013 across the Sales, Strategy and Marketing teams, encompassing over 500 employees. wall.C gives users a 360° view on all customers and thus provides the foundation for enhanced collaboration within the Company to better address customer needs. The first version of the CRM tool supported management of Accounts, Business Opportunities and Customer Satisfaction Surveys. Since March 2014, wall.C's scope has been extended to include bid management, win-loss analyses and also the Rolling Stock installed base within the service organisation and the customer web portal. The wall.C user-base has doubled within two years with more than 1,000 people connected early 2015.
- Alstom executes most of its contracts as projects in the field, installing and commissioning products and systems and integrating or maintaining them within complete transport systems. At any one time, there are some 450 of these projects in execution for contracts with a value over €15 million. To monitor the customer satisfaction on these projects, Alstom undertakes Project Surveys that are followed by project-specific action plans and feedback loops. Every three years, Alstom carries out a more qualitative high level satisfaction survey with customers at account level on a worldwide basis.
- "Customer Clubs" addressing Metro, PENDOLINO™ and Tramway systems have become part of Alstom Transport's commercial metabolism. Customer Clubs are worldwide forums for customers to

share their professional know-how and opinions with their peers and with Alstom experts. Customer Clubs for each system type are run every 12 to 24 months jointly between Alstom and one Club member. It is an opportunity for Alstom to listen to what its customers say about their business challenges and their specific needs and to present recent solutions in a customer environment. It also reinforces the customer intimacy beyond the contractual relationship. The profile of the customer participants are typically Strategy, Operations and Technical Directors. In 2014, the second meeting of the Alstom Metro Club took place in May in Panama on the occasion of the inauguration of the Panama metro: in the course of two days, 20 customer representatives from 11 metro operators in Latin America, Europe and Asia had the opportunity to share their ideas and experience on metro systems. In 2015, the Tramway Club was launched in March in Barcelona (Spain) and the second session of the Pendolino Club will take place in autumn.

- Alstom is an active participant in many exhibitions and conferences each year with the aim of fostering relationships with customers and updating them on the Company's latest innovations. Many of these events are at national or regional level, demonstrating the Company's proximity to customers. Of the global events, two stand out for particular mention:
  - Innotrans, held bi-annually in Berlin (Germany), is a strategic showcase for all stakeholders in the global rail industry,
  - UITP World Congress, held bi-annually but each time in a different location, is a multi-modal event focused on urban mobility.
- Inaugurated in July 2013, the "Knowledge Centre", located in the north of Paris (France), is a new hub equipped with modern training facilities, from which training programmes for Alstom Transport's customers' staff are delivered and developed. The centre located on an historic Alstom industrial site and shared with the other Sectors of the Group, offers training sessions to customers to help them maintain and drive Alstom products, while showing them the best way to serve passengers. It is equipped with cutting-edge technology, in particular a 3D room providing virtual reality training.
- For many years, Alstom has run a broad range of **training courses** for customers as part of equipment supply contracts. Today these are managed on a structured and integrated basis. More significantly, in nations that are investing for the first time in public transport, demand is booming for the training of train drivers, technicians and train fleet and rail infrastructure maintainers. Alstom is responding to this demand with a dedicated team which tailors and delivers rail transport training programmes to meet this need of emerging countries.

### Energy businesses (discontinued operations)

One common action covered Alstom energy activities: Alstom's *Conseil Stratégique*, a yearly CEO-level event gathering Alstom top management and the top-30 customers from all around the globe to discuss long-term *scenarii*, as well as some external stakeholders/experts giving their vision of the stakes in the energy world for the next decades. In the context of the GE/Alstom Alliance project, the 2014 event scheduled in June could not take place.

#### Alstom Power (Thermal Power and Renewable Power)

Alstom Power is dedicated to building customer relationships based on trust and mutual understanding.

The Global Power Sales organisation, based in the countries, covering both Alstom Thermal Power and Alstom Renewable Power, aims to be close to its customers, in order to better understand their needs and requirements and be in a position to answer in a timely manner. Global and Key Account Managers ensure a close and long-lasting relationship with these customers. The "One Face To the Customer" concept ensures the coordination of business activities and thus a better answer to customers' expectations and satisfaction. In addition, the following actions are carried out:

- For the past ten years, Alstom has organised regular customer satisfaction surveys to which nearly 500 people answer each time; the latest one was conducted in 2013. Results are analysed, working groups are put in place to define and implement action plans to increase the satisfaction level. Actions implemented following the 2011 survey are already showing results. Customers are provided with a feedback on their assessment. Customer satisfaction surveys are also conducted at business level during and following the completion of most projects.
- To further strengthen Alstom Power's customer satisfaction process at an operational level (customer project and plant levels), a joint initiative between Thermal Services and Steam business has been launched to harmonise Alstom's survey methodology applied across regions, products and businesses. Beyond surveys, the harmonised methodology emphasises on customer issue resolution and systemic business improvements based on the utilisation of Alstom's quality methods and customer intimacy approach. After a successful pilot, the harmonised customer satisfaction process has been deployed globally across businesses and is now a central piece of customer relationship management during projects and transactional sales with Alstom customers.
- The global "customer intimacy" programme now fully deployed aims to understand how best to work together in the future and strengthen the relationship between Alstom and its customers by building mutual trust, while ensuring a joint vision of the future to open up more business opportunities. In particular, to further demonstrate its commitment to improving the quality of its relationship with its customers, Alstom Power has launched a Customer Charter, consisting of ten commitments to which employees are adhering; over 4,000 of them have signed this charter.

- Working groups comprising customers and Group experts discuss specific products and technologies. Sharing views and experience, particularly with regards to technical expectations, is extremely useful for Alstom to improve existing products and develop new offerings.
- "Dedicated to Customer" (D2C) programme in Thermal Services focuses on listening to Alstom customers at a strategic/upper management level and adjusting the business based on their feedbacks. More than 25 customers covering 942 GW of the world thermal installed base were met in the last two years. Over 1,070 Alstom employees have been engaged to prepare and debrief these meetings and as such, have actively participated in the implementation of the "Dedicated to Customer" culture inside Alstom;
- Technical events such as the Clean Power Days, Product Roadshows and Technical Seminars are organised worldwide, to encourage technical exchanges with customers and technical associations.
- Both Alstom Thermal Power and Alstom Renewable Power propose a wide range of training courses to help customer getting familiar with their products. These trainings take place in dedicated training centres, but Alstom also offers on-site customer operation and maintenance training. For some of them, mobile power plant simulators are being used to enable operators to learn to respond to a variety of situations and to train them to operate power plants during the construction phase of a project.

#### **Alstom Grid**

The Company aims to be recognised as a reference in grid performance, developing long-term relationships with its customers based on trust and understanding.

In 2014, Alstom Grid has further reinforced its processes in order to put the customer at the centre, including:

- The set-up and integration of dedicated Transactional or Point Of Contact surveys in its customer relationship management (CRM) platform. These surveys are deployed at delivery, erection & commissioning or other key project milestones.
- The Act for Customer Trust (ACT) key performance and customer satisfaction indicators, reflecting what customers value: respecting commitment, reducing resolution lead time and minimising customer effort.

A few examples of actions underway:

- In addition to local actions, Alstom Grid carries out yearly customer quality surveys that cover various customer satisfaction questions with over 20,000 contacts worldwide. These surveys also include customers' perception of Alstom Grid's sustainable development performance. Customers' negative feedback is assessed on a one-to-one basis through a customer call-back process and is logged in ACT where necessary. It is further analysed through management meetings to define improvement plans.
- Alstom Grid strengthens customer intimacy through Key Account Management (between 150 and 180 Key Accounts which cover 80% of the business including utilities and industries). The mission of Key Account Management is to promote and develop customer intimacy, to ensure customer loyalty and increase customer satisfaction. A yearly Key Account Plan ensures in-depth account review, including

interviews with key customers to obtain feedback on cost, quality, delivery, service and relationships. The information is documented and reviewed to create clear action plans for each individual key account, used to fine-tune strategy and to develop tailored products and services. In a fast-moving international environment, Key Account Management regularly holds customer intimacy activities for each Strategic Key Account to better understand the customer's business, develop joint solutions and evaluate new technology.

• Alstom Grid also regularly holds User Groups worldwide in the fields of Network Management Solutions, Air-insulated Switchgear and Gas-insulated Substations. In 2014, the Network Management Solutions division held five User Groups that were attended by nearly 600 customers covering all regions. User Groups allow installed-base customers to exchange views with peers, interact with Alstom experts, and keep abreast of the latest trends and developments in the industry. By regularly listening to customer feedback during User Groups, Alstom gains unique insight, which helps ensure that the solutions developed evolve with the needs and challenges of its customers. Furthermore, User Groups offer Alstom an opportunity

to display its latest products and solutions, allowing its experts and sales teams to expand the customer base, develop relationships and identify business opportunities. In June 2014, the Air-insulated Switchgear division demonstrated in Frankfurt/Main (Germany) its digital substation technology and Asset Management strategies to 82 delegates from 21 countries. The Gas-insulated substations team showcased in Singapore its latest developments in terms of products and digital solutions in front of 190 delegates from 49 companies.

- Alstom Grid is an active member of CIGRE (the International Council for Large Electricity Networks), where international experts exchange knowledge, share best practices and discuss the future of the power grid.
- Alstom Grid also offers technical training through its Technical Institute network to accompany customers across the lifetime of their equipment. A comprehensive network of 21 training centres worldwide ensures technical training through a proven pedagogical approach by a community of 200 certified trainers or *via* 40 e-learning modules. During the past year, over 20,000 training days were held around the world.

# RELATIONSHIPS WITH GOVERNMENTS, INTERNATIONAL ORGANISATIONS AND THINK TANKS

### Contribution to the public debate on sustainable development policies

Alstom wants to be known for the quality of its contribution to the public debate around sustainable, environmentally sound rail transport as well as power generation and transmission, engaging government and international organisations in the development of policies.

As a company with a long history and a unique portfolio of clean power and sustainable transport technologies, Alstom has the experience and expertise to help drive low-carbon development, mitigate climate change and ensure sustainable economic growth.

The Group therefore engages in advocacy, both directly with governments, international organisations and other influencers, and through memberships in selected coalitions that share the policy vision.

The messages through which Alstom contributes to the policy debate focus on the following:

- the role of open markets and fair competition in supporting green growth, particularly through:
  - fair competition and reciprocity in public procurement,
  - removal of trade barriers for environmental-friendly goods and services,
  - consistent application of high international standards for ethics and compliance, and

- protection of intellectual property rights (IPR) as a major driver of innovation and investment in Research, Development and Deployment (RD&D);
- the need for continued investment in public and private R&D in sustainable technologies, particularly through:
  - public support and collaboration to accelerate ongoing R&D and demonstration of sustainable technologies and services,
  - public funding for the piloting and demonstration of pre-commercial technologies,
  - international financial institutions support for major infrastructure projects in developing countries,
  - financial institutions which make more use of innovative instruments to leverage private investment, notably through risksharing, and governments that support and facilitate this;
- the importance of long-term, transparent and stable policy frameworks to support investment in sustainable development, particularly through:
  - meaningful CO<sub>2</sub> prices,
  - stable and predictable market mechanisms,
  - market-based financial for non-commercial low-carbon energy technologies to support and drive their deployment. There should be equal treatment between renewables and carbon capture and storage (CCS),

- increased penetration of intermittent renewable power; there may also be a need to support storage technologies, back-up capacity, market-balancing and transmission upgrades,
- capacity mechanisms which can play an important role in ensuring adequacy of supply but should be applied only where generation, grid and storage capacity is inadequate. They should be auctionbased, technology-neutral and support market-balancing and storage as well as generation,
- balanced regulation and standard-setting to support a broad portfolio of sustainable, low carbon, high-efficiency technologies,
- promotion of sustainable, low-carbon transport options such as rail,
- effective application of the right technical standards to deploy technologies. Technical standards should ideally promote the use of best available technology (BAT),
- consistency and mutual recognition of standards and regulation between different jurisdictions (certification & homologation) to reduce costs,
- robust standards on energy efficiency and incentives to improve efficiency, especially of energy supply, play an important role in driving investment in technologies, both in energy and transport,
- regulation and standards on air quality to drive investment in environmental control systems, both in energy and transport,
- minimising the use of natural resources in energy and transport; any legislation, notably on the use of water in power plants, should take into account the technical and economic realities and incentivise deliverable efficiency improvements,
- growing interest in improving the resilience of energy and transport infrastructure, especially in response to climate change impacts.

The transition to a low-carbon economy is an essential element of ensuring a long-term sustainable operating environment for Alstom's businesses. It provides major opportunities for the deployment of the Group's technologies, and effective action on it is a central part of the Group's wider Corporate Social Responsibility. Major economies need to make ambitious CO<sub>2</sub> emission reduction commitments to drive the transition to low-carbon. A new global climate change agreement at the Paris COP 2015 Summit is central to this. A new agreement should unlock increased volumes of low-carbon finance, stimulate CO<sub>2</sub> pricing and uphold IPR protection.

# Participation in leading bodies

Convinced that the Sustainable Development goal will be reached only if all parties concerned are actively involved, Alstom participates in a number of leading bodies.

At international level

- In 2008, Alstom joined the United Nations' Global Compact organisation, designed to encourage companies to commit to a set of key values spanning human rights, labour standards, environmental protection and ethics in business practices. Alstom is actively involved in this network and promotes the ten principles that summarise its key values.
- Alstom is one of two private sector active observers on the Advisory Board of the UN Green Climate Fund (GCF).
- Alstom is a member of the Global Green Growth Forum (3GF) and on its Advisory Board.
- Alstom has been an active member of the International Emission Trading Association (IETA) for some years and is represented on its Board. The Group is also active member at the IETA's Business Partnership for Market Readiness (B-PMR) (see below).
- In 2014, Alstom became part of the World Bank's Carbon Pricing Leadership Coalition, bringing together leaders from governments, business and civil society, to help expand and improve the design and implementation of carbon-pricing policies which maintain competitiveness, create jobs, encourage innovation and deliver meaningful emission reductions.
- Alstom has signed the sustainable development charter drawn up by the International Association of Public Transport (Union internationale des transports publics, UITP).
- In 2014, Alstom confirmed its support to the International Union of Railways (UIC) Low Carbon Rail Transport Challenge, "a commitment to deliver railway solutions which are more energy efficient and attractive such as high performance electrical, diesel and hybrid trains, smart railway systems and modernisation services".
- Alstom joined the Sustainable Low Carbon Transport Partnership (SLoCaT).

#### At regional/country level

- At the European level, Alstom is part of the EU Green Growth Platform, the EU Platform for Smart Grids and Cities, and the EU Smart Energy Demand Coalition. Also, Alstom was a founder and is a leading member of the "Friends of EU ETS" coalition.
- In the USA, Alstom is a member of the US Business Council for Sustainable Energy (BCSE) and the US National Climate Coalition.
- In Germany, Alstom is a member of Econsense, the leading sustainability coalition for business in the country.
- Alstom is a founding member of the Australia-based Global Carbon Capture and Storage Institute.

# Involvement in many programmes linked to Sustainable Development

During the fiscal year, Alstom was involved in many programmes directly linked to Sustainable Development:

- Alstom continued to participate actively in the United Nations Framework Convention on Climate Change (UNFCCC) fora, sponsoring the World Climate Summit (WCS) at the 20<sup>th</sup> Conference of the Parties (COP 20) in Lima, Peru, in December 2014. Alstom will also participate in COP 21 in Paris, France, in December 2015 to show how its technologies support the transition to a low-carbon society.
- Alstom played a leading role in business support for the European Emission Trading Scheme (ETS), to support the Commission's proposal on "backloading" of allowances and a market stability reserve.
- Alstom actively engaged in the IETA's B-PMR to help industry in emerging economies to prepare for CO<sub>2</sub> emissions trading: in China, Korea, Mexico and South Africa.

- Alstom actively engaged in the promotion of policies to tackle non-CO<sub>2</sub> pollutants in Asia, through its involvement with the Centre for Clean Air Policy and its chairmanship of the Confederation of Indian Industry working group on next generation environmental standards.
- Alstom supported a number of initiatives in the rail industry. Two examples:
  - In March 2015, Alstom, together with Bombardier Transportation, Deutsche Bahn, Knorr Bremse, Nederlandse Spoorwegen and SNCF – launched Railsponsible in Utrecht, The Netherlands (see more details in next section).
  - Alstom's UK President is co-chair of Rail Supply Group, alongside Secretaries of State for Business and Transport. The group is led by the tier-one suppliers in the British rail industry, including Alstom, Siemens, Hitachi and Bombardier as well as civil contractors, consultants and other engineering firms. The group's mission is to support the development of the UK's rail supply chain – both to ensure successful delivery of domestic projects such as HS2, Crossrail and London Underground, as well as to develop a supply chain that can effectively export its expertise and products into the global rail market.

# **RELATIONSHIPS WITH SUPPLIERS AND CONTRACTORS**

Since 2007, Alstom has been committed to integrating sustainable development in its purchases, and has made every effort to reduce the environmental, social and ethical risks in its supply chain.

Suppliers' contributions represent an important part of contract execution costs (around 60%). In large global contracts, Alstom needs to use contractors for the execution of work for which it does not have the necessary skills, such as civil works. This leads to a significant number of hours of contracting: for fiscal year 2014/15, contractors worked an estimated 119 million hours at Alstom sites and on construction sites, corresponding to the equivalent of 62,130 people on the basis of a 40-hour work week and 48 weeks/year (65,000 people in 2013/14).

The effective implementation of the sustainable sourcing approach relies upon collaboration between Alstom and its suppliers and contractors, which ensures a more responsible supply chain. These commitments are formalised in the "Alstom Sustainable Sourcing Policy" signed by the Chairman and CEO of the Group and available on <u>www.alstom.com</u>.

By establishing partnerships with its suppliers and contractors, Alstom wants to ensure continuous improvement in raising its suppliers' sustainable development performance and minimising its exposure to risks. This approach is also a driver for innovation and change management in the Group.

# Risk reduction in the supply chain

# Commitment and qualification of suppliers and contractors

The "Charter for Sustainable Development for Alstom's Suppliers and Contractors", to which all Alstom suppliers have to adhere, requires their compliance with the principles set forth in the United Nations Universal Declaration of Human Rights, the International Labour Organisation's (ILO) Fundamental Conventions, the Guiding Principles of the Organisation for Economic Cooperation and Development (OECD), the Rules of Conduct of the International Chamber of Commerce (ICC) and all of the values described in Alstom's Code of Ethics.

At 31 March 2015, more than 33,700 Alstom suppliers have already expressed their commitment by signing this charter. Compliance with the charter is also integrated in Alstom's general purchasing conditions in order to ensure adherence on a general level. Furthermore, social responsibility topics are incorporated in each Sector's supplier qualification processes. The audits conducted by Alstom auditors therefore include CSR criteria.

#### **Risk mapping**

Reducing environmental, social and ethical risks in its supply chain is one of Alstom's main priorities. With a wide range of sites worldwide, Alstom favours purchases from local, generally medium-sized companies. Alstom has a highly diverse pool of suppliers. It has thus become necessary to prioritise the assessment of suppliers located within the Group's sphere of influence and potentially presenting a significant risk factor. Alstom conducts a CSR risk mapping of its suppliers on an annual basis with three criteria:

- product family;
- supplier country;
- total purchasing volume with the Group.

The level of risk for each product family and country is determined by a third party and updated annually. Risk mapping allows the Group to establish priorities for supplier assessment. The analysis methodology is described on <u>www.alstom.com</u>.

The Group has set rules and objectives on a three-year timescale. Should the GE/Alstom Alliance project – and the resulting new scope of Alstom – come into effect, a new three-year forecast plan would be defined for Alstom, aligned with objectives set during the previous period of time.

#### Assessment of suppliers

To measure their sustainable development performance, suppliers undergo an assessment based on environmental, social and ethical criteria, including their own sustainable development requirements to be passed on to secondary suppliers. The assessments are conducted by EcoVadis, a company specialising in sustainable development evaluations. They are led by a team of CSR experts, who analyse the suppliers' questionnaire responses, documentation and published information on their activities. The assessment process includes references to international standards such as the United Nations' Global Compact, ISO 26000 and the Global Reporting Initiative.

The Group has implemented various pedagogical supports targeting its suppliers and has organised conference calls, in order to help them better understand the assessment process.

At the end of fiscal year 2014/15, 1,636 suppliers had been assessed, representing more than 50% of Alstom's total production purchasing volume.

On 4 March 2015 was officially launched the Railsponsible initiative, whose Alstom is a founder member, alongside with Bombardier, Deutsche Bahn, Knorr-Bremse, Nederlandse Spoorwegen and SNCF. Railsponsible is a European rail industry initiative focused on sustainable procurement to improve sustainability throughout the entire supply chain, through sharing best practices and processes, and to use and share common tools, creating efficiencies. This partnership allows members to use the same suppliers' CSR assessment platform, settling ethical, social and environmental issues into the railway industry's sourcing strategy. There are various benefits of pooling information, both for suppliers and initiative members, as once the supplier's assessment is done upon any member's request, the result can be shared with all other members. By having access to the assessment of suppliers that are not necessarily within its risk mapping, Alstom will benefit from a wider overview of its suppliers' panel CSR performance while lightening the suppliers' burden. For more information: www.railsponsible.org.

#### **Corrective action plans**

When their assessment rating is considered unsatisfactory, suppliers must draft and implement action plans to address their identified weaknesses. Alstom's sourcing teams provide support on supplier's performance improvement efforts. Suppliers should be reassessed when they have completed their corrective action plan.

In the event that a non-compliant supplier is not willing to implement a corrective action plan or to commit to making forward progress, Alstom may consider ceasing its collaboration with that supplier.

# Integration of best practices and continuous improvement process

#### Change management with Alstom's buyers

Alstom works with a large number of suppliers worldwide; its entire process is then driven by buyers and aims to integrate sustainable development into the Group's sourcing culture. Alstom is aware that this dynamic requires strong involvement on the part of buyers, and thus, has developed a communication and training programme dedicated to sourcing and supplier-quality teams. The goal of such training is to provide a better understanding of Alstom's requirements in terms of sustainable purchasing, supplier assessment, and how to help suppliers develop corrective action plans. In order to be easily deployed in the various countries where Alstom operates, these training courses are held either online or face-to-face. Their content is reviewed and updated each year to take into account the sustainable development maturity of buyers and suppliers. At 31 March 2015, 810 members of the sourcing community have been trained (out of which 95 for Alstom Transport).

#### Development of partnerships with suppliers

Since upstream in the projects, Alstom strives to develop a relationship with its suppliers based on collaboration. By allowing a wider visibility and better forecast of the targeted markets, this approach aims to strengthen suppliers' commitment. Based on concrete projects, the human and financial investments resulting from this collaboration ensures a win-win partnership on the long-run.

This shared vision has thrived upon the partnerships developed in Alstom Transport's "Leading Partners" Programme, which gathers Alstom's key suppliers and companies who developed a specific know-how in the railway industry worth being highlighted. Thus, a preference is given to suppliers able to conjugate innovative differentiation and operational performance. Shared innovation, international development support and sustainable development are the three main pillars of this strategy.

In this regard, an example of this is the smart window notably developed with a "Leading Partner" Saint-Gobain, displaying a new "passenger's experience", and which was presented at Innotrans 2014. This innovation from Alstom Transport was also awarded the gold medal within the "Open Innovation" category (rewarding innovative products and solutions co-developed with Alstom's partners) of the Alstom 2014 Innovation Awards.

Within the "best commercial success award" category, was also distinguished by the French employers' association (*MEDEF*) a partnership between Alstom Transport and Phitech, which resulted in the development of a new visually impaired and blind customers' assistance system, helping them find and access the trains' doors.

As illustrated by these initiatives, Alstom strives to keep watching its sourcing panel, to hatch and grow new ideas and build on this profitable relationship with its suppliers.

#### Responsible product sourcing

Alstom has also initiated new projects, related notably to "environmentalfriendly sourcing", *i.e.* purchasing products or services with reduced or limited impact on the environment. Given the context of the GE/Alstom Alliance project, the volume of indirect sourcing purchase orders has significantly decreased. Although the number of initiatives launched does not reach last fiscal year's one, Alstom's positioning regarding indirect green contracts remains the same. Thus, new "green contracts" were made this, *e.g.* for document management, electronic waste, facility management, food service management, forklifts, etc. In order to help buyers integrate green criteria into their requests for quotation, guidelines for each commodity have been provided, with a detailed list of Sustainable Development criteria needing to be considered, as well as recommendation. More information is available on <u>www.alstom.com</u>.

In order to sustain this process, Alstom collaborates with its partners in a "responsible product" approach, integrating eco-design and lifecycle analysis in the product development stage. This collaborative approach enabled the Group to develop more environmental-friendly technologies. For example, Alstom jointly developed with  $3M^{\text{TM}}$ , a leader in environmentally sustainable solutions, the revolutionary  $SF_{\text{s}}$ -free solution, g<sup>3</sup> (Green Gas for Grid). For more information, please refer to the previous section related to sustainable development in Alstom solutions.

# **Key indicators**

	Transport		Alstom Group at 31/03/2		2015 (1)	
	2013/14	2014/15	2012/13	2013/14	2014/15	
Number of charters signed by suppliers (cumulative figure)	1, 880	2,450 <sup>(2)</sup>	10,900	16,900	33,750	
Number of suppliers assessed (cumulative over 4 fiscal years)	404	466	1,515	1,605	1,636	
Number of people trained in sustainable sourcing through a specific programme (cumulate figure over 4 fiscal years)	173	95	780	960	810	

(1) Alstom Group at 31 March 2015 includes Transport activity and discontinued operations (Grid, Thermal Power, Renewable Power, Corporate and Others).

(2) Excluding charters counted through Terms and Conditions signed.

# **RELATIONSHIPS WITH LOCAL COMMUNITIES**

In 2013, Alstom defined a global policy regarding community investment which is consistently implemented wherever the Group operates. Simultaneously, Alstom acts as a local player and as such, implements local action plans in line with local stakeholders' expectations and its own policy.

### A community investment policy

The Community Investment Policy, adopted in January 2013 and posted on the <u>Group's website</u>, sets three priorities:

#### Contribution to education in all countries

In line with the commitment Alstom made at Rio+20 meeting in June 2012, Alstom promotes education among young people through three pillars: supporting students, supporting education institutions and building partnerships with universities.

#### A few examples of the support to students:

 In the UK, Alstom is member of Engineering UK and WISE (Women in Science and Engineering) and has 130 employees certified STEM (Science, Technology, Engineering and Maths) ambassadors, around 40 of whom are from Alstom Transport. They participated in 30 outreach projects at national and regional levels to promote the interest of careers within the industry, targeting both female and male students. In addition, Alstom is part of the UK government's Trailblazers scheme for apprentices, a group of employers working together to design apprenticeship standards and assessment approaches to make them world class.

- In France, Alstom is member of "Elles bougent", a non-profit organisation which promotes industrial jobs to high school students by organising exchanges with female students and Alstom engineers and offering tours of workshops.
- In Sweden, Romania and Greece, Alstom encourages students to choose engineering, technology, science and maths related studies by offering scholarships, mentorships, internships and apprenticeships, in order to facilitate interactive dialogues through different events and lectures within educational institutions.
- In Mexico, Alstom provides financial support to Panther UP Robotics team, which is an academic organisation founded by the Pan-American University in Mexico City. It aims to develop sciences and technology by organising competition at regional and international levels. Alstom will support the team's participation into 2015 FIRST (For Inspiration and Recognition of Science and Technology), a competition aiming at inspiring young talent in technological innovation.

- In Tunisia, Alstom Transport is part of the FACE (Fondation Agir Contre l'Exclusion) Bizerte, an initiative to promote professional equality between women and men. Alstom will provide technical support, such as training, hosting visits and mentorship support, to beneficiaries of this initiative.
- In Israel, Alstom supports the Wisam Khamees scholarship Fund benefitting Israeli Arab and Jewish students.

It is also worth mentioning that Alstom provides help to disadvantaged students to further their study. For example:

- In Brazil, at Itajuba, since 2008, the "Projeto Pescar" initiative has aimed to help 12 young adults every year in obtaining their first job after a one-year training programme. 28 Alstom employees volunteered in this action. In Taubaté, the same kind of programme named "Escola Formare" has been implemented, targeting 20 youngsters in 2014 with 134 Alstom employees as volunteers.
- In China, in 2014, 224 employees participated in "Walking for Love", a Spring Charity Walk that aims to raise funds for the Migrant Children's School.
- In France, at Belfort, Alstom provides ten unemployed individuals with the possibility of a 400-hour internship to help them learn new skills in order to secure a future job.
- In Sweden, Alstom participates in *Teknikspranget* (Technical Leap) by hosting three students for four months to encourage them to continue their studies at a higher level.

In regards to supporting to schools, a few examples:

- In South Africa, Alstom rehabilitated two public schools welcoming 700 pupils in the neighbourhood of Kusile, Mpumalanga, where a building was rebuilt with quality materials and in Sebudosetu, where the roof was renovated.
- In India, Alstom distributed educational materials to 100 school children, who are from poor families in villages next to Alstom Transport's Sri City site; in Durgapur, Alstom supports schools through free coaching sessions for tribal students of nearby villages and provides library books and school stationeries; and in Shahabad, Alstom supports the maintenance and electricity supply of schools as well as teachers' salaries.
- In Morocco, Alstom is part of the "Initiative Foundation" along with 20 other companies. The Foundation has an annual budget of €200,000 and has been sponsoring since 2010 the extension programme of a local school, Lahraouiyine, located in a disadvantaged neighbourhood with the close involvement of school and local authorities. Not only has a covered courtyard and laboratories been built, but also 12 new classrooms have been constructed. Aside from the construction, 16 university students from the local university offer private lessons to more than 120 pupils within the school. These volunteer students in return are often given an internship opportunity at one of the 20 partner companies. Alstom welcomes its first intern from this initiative in 2015.

For more information on contribution to Education can be found at <u>www.alstom.com</u>.

When it comes to **relationships with universities**, Alstom partners with more than 100 universities, 37 of which being with Alstom Transport, for joint research programmes in 2014. As an example in France, Alstom recently participated in the creation of a new "Hydro'Like" professorship in partnership with the *Institut national polytechnique de Grenoble*.

The list of universities can be found at www.alstom.com.

#### Support the local economic development and industrial activities

As a multinational company, Alstom takes on the responsibility to coach and support small- and medium-sized enterprises (SMEs) and start-ups at local level through mentorships and financial supports. Here are a few examples:

- In Algeria, Alstom supports the *Injaz El Djazair* initiative, a non-profit organisation promoting education and in particular the development of starts-ups through a regional contest in Middle East.
- In Venezuela, Alstom is part of an initiative led by the French Chamber of Commerce and provides sponsorship to one local female chocolate maker and entrepreneur, to increase the quality of her products and promote them among Alstom employees.
- In France, Alstom develops joint projects with SMEs as part of the "Investments for the Future" programme and in the frame of the clusters it participates in. It also contributes to the Supergrid Institute in Villeurbanne, the Energy Valley activities in Belfort, the Technology Research Institutes in Saclay and in Nantes, as well as in four main competitiveness clusters: Tenerrdis in Rhône-Alpes, Pôle Nucléaire Bourgogne in Burgundy, Pôle Mer Bretagne in Brittany and EMC2 in Pays-de-Loire.

For more information, see <u>www.alstom.com</u>.

#### Social support based on the local needs

Alstom cares about the local communities where it operates and is committed to improving the lives of locals through various types of volunteering from its employees. In 2014, Alstom made a specific focus on the participation of its employees in voluntary activities. Formal and informal mechanisms have been developed at different levels to coordinate these volunteering activities.

Below are some significant examples of volunteerism:

- In Australia, Alstom employees participated in an initiative aiming to raise €25,000 to support Children's Cancer Institute Australia (CCIA). Different activities were organised by employees in 2014, such as a basketball match, barbecues, bike rides, and attendance at the Charity's annual dinner. A total of €19,800 has been collected up to March 2015.
- In Brazil, Alstom initiated the "I want to do more" programme, which encourages all employees to propose and participate, on a regular basis, in charitable activities, such as a blood drive or donation to an orphanage. A programme committee has been created on each site to suggest and implement ideas from employees. In 2014, 28 such actions were achieved.

As an example, Alstom established its own choir, Sol Maior Choir, sponsored by the Corporate Governance Committee. In 2014, 15 employees participated in the Sol Maior Choir. They meet once a week to practice and they provided two external performances as volunteers. One was during the graduation ceremony of a local school, and the other was on Father's Day in a local kidney transplant hospital.

 In Mexico, Alstom adopted an organisation with a CODIRSE (Comité Directivo de Responsabilidad Social de la Empresa) to monitor the action plan.

It has participated in Kardias Race in Mexico City since 2013 in order to raise funds to support children born with heart diseases. In 2014, 146 Alstom employees together with their families and friends joined the race to raise funds to support 9,000 such children.

- In Colombia, Alstom is part of an initiative led by a local foundation to donate and provide medical, social and psychological support for children and teenagers who go through cancer treatment. All Alstom employees have been encouraged to throw plastic bottle caps in a container at the office. Those plastic bottle caps are sold by the foundation for funds.
- In France at Belfort, Alstom is part of the International University Music Festival (*FIMU*), which organises the music festival each year during the Pentecost weekend in the old town, attracting 70,000 visitors. In the 2014/15 fiscal year, Alstom supported and provided mentorship support to 6- to 8-year-old children learning music through different musical workshops. Alstom employees volunteered to be mentors for the children.

In addition, Alstom Transport offered 400 productive hours to the NGO *APMFS* (*Association pour la Préservation du Matériel Ferroviaire Savoyard*) to renovate a 700102 locomotive.

- In Germany, Alstom has been part of the Corporate Citizen project "Brücken Bauen" for six years and has built a stable partnership with a local institution which provides support to handicapped children. In 2014, Alstom Transport (Salzgitter) participated in a summer party and organised a ride on a portable railway for 70 children with disabilities.
- In China, Colombia, Poland, Spain, Alstom employees have been motivated to donate clothes, stationaries, food and other items to disadvantaged populations, such as children from poor families, homeless people, and people affected by natural disasters.
- In the UK, Alstom has been working with BITC (Business In The Community) to reinforce its CSR action plan and nominated a "green champion" in each major site. It has set up a volunteering policy with the objective of 500 volunteering hours per year. As an example, it has developed a project to improve an area of waste land next to the Ashby office, including clearance of woodland under the supervision of the NGO Trent River Trust.

For more information on charitable contributions can be found at <u>www.alstom.com</u>.

Through these CSR activities in local communities, Alstom has been recognised as a responsible company by different organisations. For example, Alstom won the 2015 UKRIA (UK Rail Industry Awards) for CSR in recognition of the actions based on four strategic pillars: education, people, community and sustainability. And in Mexico, Alstom received the *Distintivo ESR*, Mexican badge of a socially responsible company delivered by the Mexican Centre for Philanthropy (*CEMEFI*) for the first time in April 2014 and again in 2015 for the Group, and more specifically for Alstom Transport.

# THE ALSTOM CORPORATE FOUNDATION

Around the world, Alstom and its partners lead actions with local organisations to improve the living conditions of the local communities surrounding the Group's plants and sites with close participation from the local communities. The Alstom Foundation enables the Group to strengthen these initiatives by providing finance for a variety of concrete actions in economic and social development taking into account the protection of the environment.

The Foundation's Board of Directors, which is the decision-making body, is composed of eight internal representatives and four external ones: Claude Mandil (former Director of the International Energy Agency), Cécile Vic (General Delegate of the Air France Foundation), Jacques Attali (President of PlaNet Finance); Robert Barbault (Director of the Biodiversity Department at the Museum of Natural History), who had participated actively in the Foundation's Board since its creation, passed away in December 2013 and has not been replaced since then.

Since its creation in 2007, the Alstom Corporate Foundation has financed 115 projects out of which 20 in 2014/15. All projects are presented and supported by Alstom employees and are mainly implemented in emerging countries. The Foundation has a budget of  $\epsilon 1$  million per year.

The 20 projects supported by the Foundation in 2014/15 can be classified under four areas:

### Access to energy and water

The four projects in this category are intended to facilitate access to energy and water:

- electrification with solar panels, of the Mwenga Hospital, the only hospital in an area covering 120,000 inhabitants in South Kivu, Democratic Republic of Congo;
- set-up of a hot water solar system for cooking and heating needs at Asha Bhavan Centre in India, which provides residential care for disabled children; the installation is provided by Don Bosco Self Employment Research Institute which gives trainings in vocational trades thus helping disadvantaged children get a job;
- extension of water distribution from 30 to 90 houses by upgrading the existing solar water pumping system in Panggang, Indonesia;
- electrification of 18 schools by installing solar panel and creating an electricity charging station for income generation activities in Tanzania.

# Economic and social development

In this category, the projects the Foundation supports focus more on economic support while taking into account the other aspects of sustainable development:

- a comprehensive programme to create alternative revenues through technical education for 70 children on eco-construction, in Baixo Sul, Brazil;
- development of urban agricultural activities by cultivating unused urban spaces and developing marketing strategy for the products, in Bogota, Colombia;
- sustainable waste management in Egypt;
- development marketing strategy and branding for the carpentry workshop in Uaxactum, Guatemala, which has been sponsored by the Foundation for four years;
- rehabilitation of the Peligre school and facilities in Haiti;
- creation of a home for 20 girls (orphans), who are above 7 years old, in New Delhi, India;
- reconstruction of two schools affected by Hurricanes Ingrid and Manuel in Mexico, by installing solar panels and sanitary facilities;
- promotion of cultural and academic activities in two schools in South Africa by offering architectural facilities;
- professional trainings for parents and youth with disabilities between 14 to 18 years old, to create self-employment and income-generating actions taking advantage of the local resources in Tajikistan;
- promotion of village farming by providing technical training on agriculture and nutrition in 104 targeted households in Vietnam.

### **Nature preservation**

The four projects related to nature preservation selected this year aim to increase local awareness on how to improve the environment through sustainable daily practices within the communities:

- creation of a greenhouse in one local school of Najaf, Iraq, with usage of renewable energy;
- protection of Papaloapan river watershed through reforestation, trainings of local communities with sustainable technologies, and income generation activities, in Mexico;
- natural resources sustainable and participative management in Easter Island, Chile;
- support of Mamoni Wildlife Conservation Center's strategy in eco-tourism benefiting to local communities, with hydro-electric energy plant renovation, in Panama.

### Access to mobility

- development of a bamboo-based eco-composite lumber to build boats using traditional know-how marine carpenters in Bangladesh;
- support of access to mobility of disadvantaged children at suburbs in São Paulo, Brazil, by providing them with trainings on bike mechanics and giving them repaired bikes at the end of the training.

In regards to the deal with General Electric, Alstom Foundation would be connected with the future Alstom, which would focus on transport activities, once the closing of the deal is completed. Thus, the 2015/16 project submission has been postponed until the end of September 2015, followed by the project selection by the end of December 2015.

More information about the Alstom Foundation projects can be found on the following link: <u>www.foundation.alstom.com</u>.

# **METHODOLOGY**

# Introduction

The content of this chapter dedicated to Sustainable Development and Alstom's Social Responsibility has been prepared by the CSR central team of Alstom with the collaboration of internal stakeholders: the Sectors for their respective description of sustainable solutions and customer relationship management, as well as many support functions such as Sourcing, Human Resources, Risk Control, Ethics & Compliance, Environment-Health & Safety (EHS) and the Alstom International Network (Country Presidents).

The information collection and consolidation were conducted along with a dedicated process between January and April 2015, under the supervision of an Editorial and Validation Committee led by the Group Vice President EHS & CSR, which validated the choices during three meetings over the period.

In regard to the announced acquisition of Alstom energy activities by General Electric, the information given for the Group at 31 March 2015 has been completed with specific information about the sole Alstom Transport perimeter, whenever it was relevant. In that case the title heading the information shall be "Transport". Subject to the completion of the deal, this information will allow future comparison on the new perimeter of Alstom SA.

The whole chapter has been reviewed by PricewaterhouseCoopers as an independent third party in regard to Article 225 of the French Grenelle law.

# **Reporting principles**

All the data reported (indicators) are coming from different Alstom internal reporting systems, detailed in the respective sub-sections.

These indicators refer to the "Global Reporting Initiative" (GRI). However, some indicators are not yet available on a consolidated basis or have been considered irrelevant, either with regard to the Group's diversified operations or due to difficulties in adopting standard definitions for all sites worldwide. In such cases, they are not mentioned or are limited in scope, which is then specified.

A synthesis of indicators/key figures is available in a dedicated section at the end of this chapter; it includes information as per Article L. 225-102-1 of the French Commercial Code and the decree and order – as well as per the "Decree No. 2012-557" dated 24 April 2012 related to the obligation of companies' transparency in environmental and social matters.

### Environmental performance and Health & Safety results

Data covering those topics are gathered with Alstom's reporting and consolidating system "Terenga" which is also used for financial reporting.

This ensures the coverage of Alstom's activity very close to 100% of Alstom employees for Health and Safety. Employees of companies working under Alstom's responsibility (contractors) are also covered. For the environmental performance, all permanent activities of the Group are covered. Some temporary construction sites are not covered when Alstom's activity is only a part of a larger site.

On Health and Safety, the reporting is done every month on around 770 sub-units (elementary report units) with 15 basic indicators.

On Environment, the reporting is done by quarter on around 400 sub-units with 40 basic indicators.

The definition of indicators and reporting process are described in a Group-level document (EHS Reporting Manual) managed under the responsibility of the Group Vice-President EHS and CSR.

# Social report and actions on local communities

The sources for social reporting indicators are:

- the Alstom HR information system (ALPS), based on PeopleSoft software and operating at all Alstom facilities;
- a social survey conducted in 29 countries on the figures of calendar year 2014 – Algeria, Australia, Belgium, Brazil, Canada, Chile, China, Croatia, Estonia, France, Germany, India, Indonesia, Italy, Malaysia, Mexico, Poland, Romania, Russia, Saudi Arabia, Singapore, South Africa, Spain, Sweden, Switzerland, Turkey, United Arab Emirates (UAE), United Kingdom (UK), United States of America (USA) –, representing 94% of Alstom's workforce. In some limited cases, the number of countries had to be reduced due to unreliable data provided, but the coverage remained sufficiently high.

In addition, and in order to illustrate the different sections with local initiatives, the following actions are conducted by the CSR central team:

- a "best practice" survey conducted worldwide with the support of Country Presidents;
- a collection of all news related to CSR, published internally in the Group's weekly newsletter (Newsflash) and externally through press releases.

# Limitation and difficulties

The reporting system for EHS and the HR information system are quite inclusive. However, information coming from contractors may be difficult to verify. Coming from "surveys", some information might be missing, but without having a significant impact on the results.

# SYNTHESIS OF INDICATORS/KEY FIGURES 2014/15

ENVIRONMENTAL INDICATORS Energy Energy consumption from natural gas <sup>(1)</sup> <i>(in GWh)</i>	685 44	<b>2013/14</b> 621	2014/15	reference	Page
<b>Energy</b> Energy consumption from natural gas <sup>(1)</sup> <i>(in GWh)</i>		621			
Energy consumption from natural gas <sup>(1)</sup> (in GWh)		621			
		621			
Energy concumption from butano (pronano and other cases (in CIMb)	44	021	481	ENз	272
Energy consumption from butane/propane and other gases (in GWh)		43	34	ENз	272
Energy consumption from residual "heavy" fuel oil and diesel oil (1) (in GWh)	66	51	38	ENз	272
Energy consumption from coal and other fuels (in GWh)	8	4	1	ENз	272
Energy consumption from imported steam and heat (in GWh)	134	134	109	EN4	272
Energy consumption from electricity (in GWh)	706	703	662	EN4	272
Total energy consumption (in GWh)	1,642	1,555	1,325	EN4	272
Energy intensity (in GWh/sales in € million)	81	77	68	ENз	271
Water					
Water consumption from public water supply (in thousands of m <sup>3</sup> )	2,224	2,244	1,898	EN8	275
Water consumption pumped from surface water (in thousands of m <sup>3</sup> )	387	394	499	EN8	275
Water consumption pumped from groundwater (in thousands of m <sup>3</sup> )	2,058	1,765	1,725	EN8	275
Total water consumption (in thousands of m <sup>3</sup> )	4,699	4,403	4,122	EN8	275
Emissions <sup>(2)</sup> , effluents and waste					
GHG emissions intensity (in tons $CO_2$ equivalent/sales in $\in$ million)	25	24	21	EN16	273
Direct CO <sub>2</sub> emissions from natural gas, butane, propane,					
coal and oil consumption (in kilotons CO2 eq.)	181	162	125	EN16	273
Indirect $CO_2$ emissions from steam, heat and electricity consumption					
(in kilotons CO <sub>2</sub> eq_)	326	324	277	EN16	273
Total $CO_2$ emissions from energy consumption (in kilotons $CO_2$ eq.)	508	486	402	EN16	273
Other direct $CO_2$ emissions from PFC and HFC ( <i>in kilotons <math>CO_2 eq</math>)</i>	2	1	1	EN16	273
Total CO <sub>2</sub> emissions from energy consumption and other direct emissions					
except $SF_6$ (in kilotons $CO_2$ eq.)	510	488	403	EN16	273
Intensity of GHG emissions from SF <sub>6</sub> (in tons $CO_2$ eq./SF <sub>6</sub> equipment/sales in $\epsilon$ million)	132	141	138	EN16	274
Total SF <sub>6</sub> losses (fugitive emissions) <i>(in tons)</i>	5.77	6.34	5.41	EN16	274
Company cars $CO_2$ emissions from gasoline ( <i>in kilotons <math>CO_2</math> eq.</i> )	8	6	9.41	EN16	274
Company cars CO <sub>2</sub> emissions from diesel oil ( <i>in kilotons CO<sub>2</sub>eq</i> )	16	16	20	EN16	274
Water emissions – Metals <i>(in tons)</i>	3	0.5	0.2	EN21	276
Water emissions – Chemical oxygen demand <i>(in tons)</i>	98	72	93	EN21	276
Water emissions – Suspended matters <i>(in tons)</i>	55	41	32	EN21	276
Water emissions – Hydrocarbons <i>(in tons)</i>	1	1	1	EN21	276
Non-methane Volatile Organic Compounds (VOCs) <i>emissions (in tons)</i>	- 1,227	804	716	EN16	276
Air emissions – SO, <i>(in tons)</i>	20	15	12	EN20	276
Air emissions – $NO_x$ (in tons)	114	117	93	EN20	276
Percentage of recovered waste	77%	78%	81%	EN22	277
	19,809	11,062	9,739	EN22	278
	27,808	116,524	103,295	EN22	278
	47,617	127,586	113,033	EN22	278
	34,650	28,056	21,537	EN22	278

(1) Excluding the energy used by the Birr (Switzerland) Research & Development test activity (gas and diesel oil as fuel).

(2) Excluding the CO<sub>2</sub> emissions due to Alstom Grid's SF<sub>6</sub> fugitive emissions and the CO<sub>2</sub> emissions related to the energy used by the Birr R&D test activity (emissions due to gas and diesel oil usage).

Indicators	2012/13	2013/14	2014/15	GRI (2) reference	Page
<u>Non-GRI</u>					
Total water used for open-circuit cooling and for test purpose					
with no environmental impact (in thousands of m <sup>3</sup> )	1,785	1,527	1,543	Non-GRI	275
Number of manufacturing sites with over 200 employees located					
at more than 1 km from legally protected areas	63	63	63	Non-GRI	279
Proportion of manufacturing sites with over 200 employees located					
at more than 1 km from legally protected areas ( <i>in</i> %)	90%	90%	90%	Non-GRI	279
$CO_2$ emissions from air travels ( <i>in kilotons</i> $CO_2$ eq.)	131	115	100	Non-GRI	274
CO <sub>2</sub> emissions from train travels ( <i>in kilotons CO<sub>2</sub> eq</i> )	-	2	2	Non-GRI	274
SYSTEM INDICATORS					
<u>Non-GRI</u>					
Proportion of manufacturing sites of more than 200 employees					
certified ISO 14001 (in %)	97%	100%	100%	Non-GRI	271
Number of Alstom Zero Deviation Plan official evaluations	160	169	173	Non-GRI	282
SOCIAL INDICATORS					
Employment					
Total workforce incl. Long Term Absentees (LTA)	94,545	94,719	89,459	LA1	283
Workforce by region (incl. LTA)				LA1	283
• Europe	55,550	55,545	52,709		
North America	10,266	9,639	7,725		
Central and South America	5,954	7,430	7,571		
Asia/Pacific	19,575	18,833	18,066		
Africa/Middle East	3,200	3,272	3,388		
Workforce by category (managers, incl. LTA, in %)	50.0%	50.9%	53%	LA1	283
Total workforce by type of contract (incl. LTA)				LA1	284
Permanent contracts	86,252	86,125	83,736		
Fixed-term contracts	8,293	8,594	5,723		
Temporary workers	8,035	8,020	7,535		
• Interns	2,265	2,208	2,108		
Workforce changes during fiscal year (incl. LTA)				LA2	284
Hiring on permanent contracts	9,905	8,275	7,022		
Hiring on fixed-term contracts	7,645	7,189	6,101		
Resignations	3,274	3,212	3,386		
Redundancies	837	693	1,074		
<ul> <li>Dismissals (permanent headcount)</li> </ul>	656	731	1,419		
<ul> <li>Other departures (incl. retirements, excl. acquisitions/disposals)</li> </ul>	3,393	3,238	2,954		
Number of annual performance interviews (managers & professionals)	42,500	43,900	44,200	LA2	289
Labour/Management relations					
Proportion of employees covered by a collective bargaining agreement (in %)	71%	64% (1)	67%	LA4	295
Occupational Health and Safety					
Number of employees' fatalities (Alstom employees)	1	0	0	LA7	281
Other fatalities linked with Alstom activities (contractors)	4	5	1	LA7	281
Number of occupational safety severe accidents reported (incl. fatal accidents)	29	37	29	LA7	281
Occupational injury frequency rate 1 (IFR1) (employees and contractors)	1.4	1.2	1.2	LA7	281
Employees Long-term Absenteeism (LTA)	1,639	1,717	1,610	LA7	283
	,		,		

(1) Data adjusted vs. last year's Registration Document.

Indicators	2012/13	2013/14	2014/15	GRI (2) reference	Page
Training					
Number of employees trained in EHS classroom trainings	3,411 <sup>(1)</sup>	3,250 <sup>(1)</sup>	7,430	LA12	281
Number of employees trained in EHS e-learning courses	-	35,196	10,829	LA12	281
Average training hours per employee	19 h	15 h	14 h	LA10	290
Total number of training hours	-	1,286,445 h	1,179,341 h	LA10	290
Proportion of employees trained (in %)	68%	67%	70%	LA12	290
Number of employees trained by Alstom University	15,817	11,191	28,766	LA12	290
Diversity and equal opportunity					
Proportion of women in the Group (in %)	16%	16.3%	16.9%	LA13	292
Proportion of female managers or engineers (in %)	15.3%	16.2%	16.4%	LA13	292
Proportion of executive women (in %)	11.6%	11.8%	12.0%	LA13	292
Proportion of disabled people per country (in %)				LA13	294
• France	3.9%	3.5%	4.4%		
• Germany	5.5%	5.6%	5.8%		
• Italy	2.4%	2.4%	2.8%		
• Spain	0.9%	0.6%	0.5%		
Prevention of corruption					
Number of employees who have received training on ethics					
(cumulative figure since 2006, approx.)	9,500	14,300	21,900 (2)	S03	286
Human Rights performance					
Number of assessed suppliers (cumulative figure over 4 fiscal years)	1,515	1,605	1,636	HR 2-6-7	302
Non-GRI					
Number of occupational diseases registered	82	60	53 <sup>(3)</sup>	Non-GRI	282
Rate of internal mobility (nomination of executives) (in %)	80%	75%	71%	Non-GRI	290
Number of employees under short-term incentive scheme	34,400	32,800	33,000	Non-GRI	287
Number of employees covered by a profit-sharing agreement		52,000	50,000	Non-GRI	287
Ratio of employees covered by a life insurance in case of accidental death (in %)	99.5%	97.3%	98.0%	Non-GRI	283
Ratio of employees covered by a life insurance giving one year salary (in %)		93.7%	87.2%	Non-GRI	283
Proportion of vacant positions internally posted (in %)		48%	43%	Non-GRI	290
Number of charters signed by suppliers (cumulative figure)	10,900	16,900	33,750	Non-GRI	302
Number of people trained in sustainable sourcing through a specific programme					
(cumulate figure over 4 fiscal years)	780	960	810	Non-GRI	302
Contractors' hours worked at Alstom sites and construction sites (in million)	120	125	119	Non-GRI	300

(1) Data adjusted vs. last year's Registration Document.
 (2) Including leavers.
 (3) France only.

# REPORT BY ONE OF THE STATUTORY AUDITORS, APPOINTED AS AN INDEPENDENT THIRD PARTY, ON THE CONSOLIDATED ENVIRONMENTAL, LABOUR AND SOCIAL INFORMATION PRESENTED IN THE MANAGEMENT REPORT

This is a free translation into English of the Statutory Auditors' report issued in French and is provided solely for the convenience of English speaking readers. This report should be read in conjunction with, and construed in accordance with, French law and professional auditing standards applicable in France.

For the year ended 31 March 2015

To the Shareholders,

In our capacity as Statutory Auditor of Alstom, appointed as an independent third party and certified by COFRAC under Nr. 3-1060<sup>(1)</sup>, we hereby present to you our report on the consolidated environmental, human resources and social information for the year ended 31 March 2015, presented in the management report (hereinafter the "CSR Information"), in accordance with Article L. 225-102-1 of the French Commercial Code (*Code de commerce*).

### Company's responsibility

The Board of Directors is responsible for preparing the Company's management report including CSR Information referred to in the Article R. 225-105-1 of the French Commercial Code *(Code de commerce),* in accordance with the "Environment, Health and Safety Reporting Manual" used by the Group's sites as well as HR standard "Census Rules" and social survey definitions used by the Company, (hereafter the "Criteria"), available on request to the CSR direction of the Company.

### Independence and quality control

Our independence is defined by regulatory texts, the French Code of Ethics *(Code de déontologie)* of our profession and the requirements of Article L. 822-11 of the French Commercial Code. In addition, we have implemented a system of quality control including documented policies and procedures regarding compliance with the ethical requirements, French professional standards and applicable legal and regulatory requirements.

### **Statutory Auditor's responsibility**

On the basis of our work, it is our responsibility to:

- attest that the required CSR Information is presented in the management report or, in the event that any CSR Information is not presented, that an
  explanation is provided in accordance with the third paragraph of Article R. 225-105 of the French Commercial Code (Attestation of completeness
  of CSR Information);
- express limited assurance that CSR Information, taken as a whole, is, in all material respects, fairly presented in accordance with the Guidelines (Formed conclusion on the fairness of CSR Information).

Our work was carried out by a team of 11 persons between end of November 2014 and mid April 2015 and took around 17 weeks. We were assisted in our work by our specialists in corporate social responsibility.

We performed our work in accordance with the French professional standards and with the order dated **13** May **2013** defining the conditions under which the independent third party performs its engagement and with ISAE **3000** <sup>(2)</sup> concerning our conclusion on the fairness of CSR Information.

<sup>(1)</sup> whose scope is available at www.cofrac.fr.

<sup>(2)</sup> ISAE 3000 – Assurance engagements other than audits or reviews of historical financial information.

# 1. Attestation regarding the completeness of CSR Information

On the basis of interviews with the individuals in charge of the relevant departments, we reviewed the Company's sustainable development strategy with respect to the labour and environmental impact of its activities and its social commitments and, where applicable, any initiatives or programmes it has implemented as a result.

We compared CSR Information presented in the management report with the list provided for by Article R. 225-105-1 of the French Commercial Code.

For any consolidated Information that was not disclosed, we verified that the explanations provided complied with the provisions of Article R. 225-105, Paragraph 3 of the French Commercial Code.

We verified that CSR Information covers the scope of consolidation, *i.e.*, the Company, its subsidiaries as defined by Article L. 233-1 and the entities it controls as defined by Article L. 233-3 of the French Commercial Code within the limitations set out in the methodological information presented in the methodology section of Chapter 6 of the management report.

Based on this work and given the limitations mentioned above, we attest that the required CSR Information has been disclosed in the management report.

# 2. Conclusion on the fairness of CSR Information

#### Nature and scope of our work

We conducted more than one hundred interviews with the persons responsible for preparing CSR Information in the departments responsible for collecting the information and, where appropriate, responsible for internal control and risk management procedures, in order to:

- assess the suitability of the Guidelines in terms of their relevance, completeness, reliability, neutrality and understandability, and taking into account best practices where appropriate;
- verify the implementation of data-collection, compilation, processing and control process to reach completeness and consistency of the CSR Information and obtain an understanding of the internal control and risk management procedures used to prepare the CSR Information.

We determined the nature and scope of our tests and controls according to the nature and importance of the CSR Information with respect to the characteristics of the Company, the human resources and environmental challenges of its activities, its sustainability strategy and industry best practices.

Regarding the CSR Information that we considered to be the most important (given in appendix):

- at parent entity level, we referred to documentary sources and conducted interviews to corroborate the qualitative information (organisation, policies, action), performed analytical procedures on the quantitative information and verified, using sampling techniques, the calculations and the consolidation of the data. We also verified that the information was consistent and in agreement with the other information in the management report;
- at the level of a representative sample of sites including the sub-units of Charleroi in Belgium, Canoas in Brazil, Ottawa in Canada, Satee, Wuhan
  and Beijing in China, Grenoble, Belfort, Reichshoffen, Ornans, La Défense, and Valenciennes in France, Kassel, Salzgitter, and Mannheim in Germany,
  Padappai, Naini, Hosur, Bangalore, Shahabad, and New Delhi in India, Sesto in Italy, Kuala Lumpur and Tanjung Bin in Malaysia, Wroclaw in Poland,
  Setubal in Portugal, Birr in Switzerland, Ashby, Manchester, Midlands and Preston in the United Kingdom, Charleroi, Windsor, Richmond and Hornell
  in the United States, selected by us on the basis of their activity, their contribution to the consolidated indicators, their location and risk analysis, we
  conducted interviews to verify that procedures are properly applied, and we performed tests of details, using sampling techniques, in order to verify
  the calculations and reconcile the data with the supporting documents. The selected sample represents 20% of headcount and between 15% and 37% of
  quantitative environmental data.

For the remaining CSR information, we assessed its consistency based on our understanding of the Company.

We also assessed the relevance of explanations provided for any information that was not disclosed, either in whole or in part taking into consideration, if any, industry best practices.

We believe that the sampling methods and sample sizes we have used, based on our professional judgement, are sufficient to provide a basis for our limited assurance conclusion; a higher level of assurance would have required us to carry out more extensive procedures. Due to the use of sampling techniques and other limitations inherent to information and internal control systems, the risk of non-detecting a material misstatement in the CSR information cannot be totally eliminated.

#### Conclusion

Based on our work, nothing has come to our attention that causes us to believe that CSR Information, taken as a whole, is not presented fairly, in all material respects, in accordance with the Guidelines.

Neuilly-sur-Seine, May 6, 2015

One of the Statutory Auditors PricewaterhouseCoopers Audit

Olivier Lotz Partner Sylvain Lambert

Partner in charge of the Sustainable Development department

# Appendix: List of information that we have considered to be the most important

#### Human resources information

- Total workforce, indicator group total workforce at the end of March 2015.
- Distribution of employees by gender, indicator distribution of total workforce men/women.
- Distribution of employees by geographic area, indicator distribution of total workforce by Region.
- Hiring and termination, indicators number of hiring and termination.
- Absenteeism, indicator absenteeism rate.
- Organization of labour relations, indicator percentage of employees covered by a collective agreement.
- Health and safety conditions.
- Work accident, especially frequency and severity, indicators number of fatal accident (Alstom employees), number of fatal accidents related to Alstom's activities (contractors), number of severe accident reported, frequency rate (Alstom employees).
- Number of training hours, indicator average number of training hours per employee.
- Measures taken in favour of the equality between men and women, indicator proportion of women, proportion of women managers, proportion of women executive officers.
- Respect for freedom of association and right to collective negotiation.

#### **Environmental information**

- Company organization to take into account environmental issues and if relevant, environmental evaluation and certification process.
- Amount of environmental provisions.
- Measures to prevent, reduce or repair releases in air, water and soil seriously affecting the environment, indicator VOC <sup>(1)</sup> emissions.
- Measures to prevent, recycle and eliminate waste, indicators hazardous and non-hazardous waste production, quantity of eliminated waste (not recovered).
- Water consumption and water procurement regarding local constraints, indicators consumption of water from public water supply, surface water and groundwater.
- Energy consumption and measures taken to improve energetic efficiency and the use of renewable energy, indicators consumptions of natural gas, butane/propane and other gas, oil, steam/heat, electricity, coal and other fuels.
- Greenhouse effect gas emissions, indicators direct <sup>(2)</sup> and indirect <sup>(3)</sup> emissions of CO<sub>2</sub>, emission of SF<sub>6</sub>.

#### Social information

- Territorial, economic and social impact of the Company activity in terms of employment and regional development.
- Inclusion of social and environment issues in the purchase policy.
- Importance of subcontracting and inclusion in the relationships with suppliers and subcontractors of their social and environmental responsibility, indicators number of suppliers evaluated, signature of the Sustainability Charter by all suppliers.
- Actions carried out to prevent corruption.

<sup>(1)</sup> Volatile Organic Compounds.

<sup>(2)</sup> Emissions due to natural gas, butane, propane, coal, oil and fugitive emissions of PFC and HFC.

<sup>(3)</sup> Emissions due to steam, heat and electricity consumption.

# TABLE OF COMPULSORY CSR INFORMATION

Information pursuant to Articles L. 225-10 and L. 225-1-102-1 al. 5 of the French Commercial Code.

			Pages of the Registration Documen
1.		financial key performance indicators cle L. 225-10 of the French Commercial Code)	
		hesis of non-financial key performance indicators	307-309
2		al information	507-505
2.		cles L. 225-1-102-1 al. 5 and R. 225-105-1 of the French Commercial Code)	
	•	Workforce	
		Total workforce and workforce breakdown by gender, age, geography	283-284, 294
		Hiring and dismissals/redundancies	284
		Compensation and compensation evolution	287
	2.2.	Working time	-
		Working time organisation	295
		Absenteeism	288
	2.3.	Industrial relations	
		Organisation of social dialogue, in particular processes of employee information and consultation,	
		and negotiation	295
		Assessment of collective agreements	295
	2.4.	Health and Safety	
		Health and safety working conditions	280-283
		Assessment of collective agreements on health and safety signed with employee representatives	282
		Accidents – in particular Injury frequency rate and severity rate – and occupational diseases	281-282
	2.5.	Training	
		Training policies	288-291
		Total number of training hours	290
	2.6.	Equal opportunity	
		Measures to favour gender equality	292-294
		Measures to favour employment and integration of people with disability	294
		Policy to fight against discrimination	286-287, 293
	2.7.	Promotion and respect for the conventions of the International labour organisation (ILO)	
		Respect of freedom of association and right of collective bargaining	286-287
		Eradication of discrimination in terms of employment	286-287, 293
		Eradication of forced or compulsory labour	286-287, 300
		Eradication of child labour	286-287, 300
3.	Envi	ronmental information	
	(Arti	cles L. 225-1-102-1 al. 5 and R. 225-105-1 of the French Commercial Code)	
	3.1.	Environmental policy	
		Company organisation to tackle environmental concerns, and if appropriate, assessment and certil approaches in terms of environment	fication 252-253, 266-268, 305
		Employee awareness and training actions on environmental issues	279
		Actions to prevent from environmental risks and pollution	266
		Amount of provisions and bonds for environmental risks	181
	3.2.	Pollution and waste management	
		Measures in favour of prevention, reduction and remediation for air, water and soil borne affecting	J
		seriously the environment	276-277
		Measures in favour of prevention, recovery and disposal of waste	277-278
		Noise pollution and other types of pollution linked to a specific activity	277

3.3	Sustainable use of resources	
5.5.	Water consumption and procurement, taking into account local constraints	275-27
	Raw material consumption and measures taken to raw material efficiency in use	27
	Energy consumption and measures taken to improve energy efficiency and the use of renewable energies	271-272, 274
	Ground footprint	27
3.4.	Climate change	
	Greenhouse gas emissions	272-27
	Adaptation to climate change effects	260-261, 266-26
3.5.	Protection of biodiversity	
	Measures taken to protect or encourage biodiversity	27
Infor	mation on social commitments in favour of sustainable development	
4.1.	Regional, economic and social impact of the Company's activity	
	Regional, economic and social impact in terms of employment and local development	302-30
	Regional, economic and social impact in terms of surrounding and local communities	302-30
4.2.		
	including associations to combat social exclusion, educational institutions, environmental and consumer	
	associations, and surrounding communities	
	Conditions of dialogue with those stakeholders	296-30
	Partnerships and charitable contributions	296-30
4.3.	Suppliers and contractors	
	Integration of social and environmental challenges in the sourcing policy	30
	Importance of contracting and integration of corporate social responsibility	
	in the relations with suppliers and contractors	286, 300-30
4.4.	Fair practices	
	Measures against corruption	285-286, 30
	Measures in favour of consumer's health and safety	25
	Other actions in favour of human rights	286-28
Infor	mation related to technological risks :le L. 225-102-2 of the French Commercial Code) <sup>(*)</sup>	

(\*) Not applicable.

# ADDITIONAL INFORMATION

INFORMATION ON THE GROUP AND THE HOLDING COMPANY	316
Historical information	316
Identity of the Company	316
Summary of key provisions of the Articles of Association	317
Documents accessible to the public	319
Activity of the holding company	319
Intellectual property	319
Real property	319
Agreements concluded by executive officers or major shareholders	
of the company with a company's subsidiary Defension of the company with a company's subsidiary	321
Material contracts	321
Details on shareholdings taken during fiscal years 2013/14 and 2014/15	322
Significant change in the financial or trading condition	322
Financial rating	323
INFORMATION ON THE SHARE CAPITAL	323
Financial authorisations 🖉 AFR	324
Changes in share capital	326
Ownership of ALSTOM shares 🖉 AFR	328
Securities and rights giving access to the share capital	330
Potential share capital	330
Repurchase of shares & AFR	331
Issue of debt securities	332
Dividends paid over the last three fiscal years 🖉 AFR	332
Elements which could have an impact in the event of a public offer ${}^{\oplus {\sf AFR}}$	332
Shareholders information	334
Listing of the shares	335
SIMPLIFIED ORGANISATION CHART AS OF 31 MARCH 2015	337
INFORMATION ON THE ANNUAL FINANCIAL REPORT	338
INFORMATION ON THE REGISTRATION DOCUMENT	339
Information included by reference	339
Statement by the person responsible for the Registration Document ************************************	339
TABLE OF RECONCILIATION	341

The Content of the Annual Financial Report is identified in the summary table with the help of the pictogram

# INFORMATION ON THE GROUP AND THE HOLDING COMPANY

# **HISTORICAL INFORMATION**

The Group was created in 1989, when the parent company GEC ALSTHOM NV was incorporated as a holding company under the laws of The Netherlands, by The General Electric Company plc ("GEC") and Alcatel, its 50-50 shareholders, in order to consolidate in one single Group the businesses until then carried out by certain of their respective subsidiaries. This joint venture, carried out during a time of consolidation in the energy sector, aimed at benefiting from certain complementary products and markets of Alcatel and GEC respectively.

At the end of 1997, the two shareholders decided to list the Company on the Paris, New York and London Stock Exchanges and to put part of their shares on the market. They chose Paris as the main listing exchange and they decided to transfer to a French public limited company (*société anonyme*), renamed ALSTOM (previously Jotelec), the whole of the activities until then carried out by GEC ALSTHOM NV. Before the IPO and listing on the Stock Exchange of ALSTOM (or the "Company"), almost all of the assets directly or indirectly held by GEC ALSTHOM NV were transferred to one of its French subsidiaries, ALSTOM France SA, 100% owned by ALSTOM. This company, since then renamed ALSTOM Holdings, is the sub-holding of the Group, which owns the operational subsidiaries of the Group (see below "Simplified organisation chart of the Group at 31 March 2015").

Since the listing of ALSTOM in 1998, the Group's scope has deeply changed. One of the most significant operations was the acquisition of ABB power generation activities in two phases: first, in July 1999, a

joint venture was set up and then in May 2000, Alstom bought ABB's share in the above-mentioned joint venture. At the same time, Alstom re-focused on its core business, notably by selling its Contracting Sector in July 2001.

The Group sold its Transmission & Distribution and Marine Sectors in 2004 and 2006 respectively. In June 2010, Alstom acquired the Transmission activities of AREVA, now the Grid Sector of the Group.

The operational activities of the Group are organised in four Sectors since July 2011: Thermal Power, Renewable Power, Grid and Transport.

On 4 November 2014, the Board of Directors of ALSTOM approved the signing of an agreement with General Electric to sell Alstom's Energy businesses, namely Power (electricity generation) and Grid, as well as shared and central services of Alstom. This transaction is accompanied by the reinvestment of part of the sale proceeds in joint-ventures to be created with General Electric in the nuclear, grid and renewables activities. The agreements also provide for the acquisition by Alstom of General Electric's Signaling business and the implementation of a global alliance in the rail sector. Alstom signed on 4 November 2014 with General Electric a set of agreements relating to this transaction. The transaction is still subject to the authorisations required from a regulatory and merger control standpoint. The process of obtaining such authorizations is ongoing (see in particular section "Management report on the consolidated financial statements fiscal year 2014/15 – Main events of fiscal year 2014/15").

# **IDENTITY OF THE COMPANY**

# Company name and registered office

#### ALSTOM

3, avenue André Malraux – 92300 Levallois-Perret

Tel.: +33 1 41 49 20 00

# Legal form

Limited liability company (French *"société anonyme à Conseil d'administration"*) incorporated under the laws of France and regulated notably by the French Commercial Code.

# Duration

ALSTOM was incorporated under the name "Jotelec" on 17 November 1992 and its existence will expire on 17 November 2091, unless it is earlier dissolved or its life is extended.

# **Registration number**

389 058 447 RCS Nanterre.

#### **Code APE**

66 19 A.

# SUMMARY OF KEY PROVISIONS OF THE ARTICLES OF ASSOCIATION

# Purpose of the Company

(Extract of Article 3 of the Articles of Association)

The purposes of ALSTOM are directly or indirectly:

- the conduct of all industrial, commercial, shipping, financial, real property and asset transactions in France and abroad, notably in the following fields:
  - energy,
  - transmission and distribution of energy,
  - transport,
  - industrial equipment,
  - naval construction and repair work,
  - engineering and consultancy, design and/or production studies and general contracting associated with public or private works and construction, and
  - more generally, activities related or incidental to the above;
- participation, by every means, directly or indirectly, in any operations which may be associated with its purpose, by the creation of new companies, capital contributions, subscription or purchase of stocks or rights, merger with such companies or otherwise, the creation, acquisition, lease or takeover of business goodwill or businesses; the adoption, acquisition, operation or sale of any processes and patents relating to such activities; and
- generally undertaking all industrial, commercial, financial and civil operations and real property and asset transactions that may be directly or indirectly associated with Alstom purposes or with any similar or related.

Furthermore, ALSTOM may acquire an interest, of whatever form, in any French or foreign business or organisation.

### **Fiscal year**

(Article 18 of the Articles of Association)

The financial year starts on 1 April and ends on 31 March.

# Shareholders' Meetings

(Article 15 of the Articles of Association)

#### Convening and proceedings – agenda

Ordinary and Extraordinary General Meetings, satisfying the legal conditions for quorum and majority voting, exercise the powers respectively attributed to them by the law. They are convened in accordance with the rules and the terms laid down by law.

Meetings are held at the registered office of Alstom or at any other place determined by the Board, either within the "département" in which the registered office is located or in any other French territory.

The agenda of the meeting is drawn up by the Board of Directors if the Board has called the meeting and, if not, by the person calling the meeting.

However, one or more shareholders satisfying the conditions laid down by law may request the inclusion of draft resolutions on the agenda. Questions not appearing on the agenda may not be considered.

#### Admission and representation

Ordinary and Extraordinary General Meetings are made up of all shareholders without distinction between the class of shares which they hold.

In all Shareholders' Meetings, shareholders are only entitled to exercise their right to vote if their shares have been recorded in the accounts in the name of the shareholder or the intermediary registered for its account pursuant to the legal and regulatory provisions on the second business day <sup>(1)</sup> preceding the date of the Shareholders' Meeting at midnight, Paris time, either in the accounts of registered securities held by the Company for registered shares, or in the accounts of bearer securities held by an intermediary authorised for bearer shares. This record is officially acknowledged in accordance with the terms laid down by law.

Shareholders may vote by proxy or by correspondence at General Meetings under the conditions laid down by law.

In order to be taken into account, the voting forms and proxies must be received by the Company at least two days prior to the Meeting, unless a shorter term is decided by the Board of Directors or is stipulated by law.

Pursuant to the Board of Directors' decision, communicated by way of notice of meeting and/or the convocation to the meeting, any shareholder may vote at a Shareholders' Meeting, by proxy or by correspondence *via* any electronic means of telecommunication in accordance with the conditions set by law. In these cases, forms for voting at a distance or by proxy, as well as participation certificates, can be completed by way of a duly signed electronic medium under the conditions set forth by the applicable legal and regulatory provisions.

To this end, completing and electronically signing the form can be done directly on the Internet site created by the centralizing agent of the Shareholders' Meeting. The electronic signature of the form can be carried out (i) by entering an identification code and password, under the conditions that comply with the provisions of the first sentence of the second paragraph of Article 1316-4 of the French Civil Code, or (ii) by any other process satisfying the conditions defined in the first sentence of the second paragraph of Article 1316-4 of the French Civil Code. The power to vote by proxy or the vote expressed as such before the Shareholders' Meeting by way of this electronic method as well as, if applicable, the proof of receipt delivered after the power to vote by proxy or the vote is expressed, will be considered as a written proof that is irrevocable and binding to all, excluding cases of sales of securities that are subject to the notification set forth in paragraph IV of Article R. 225-85 of the French Commercial Code.

Any shareholder having voted at a distance, or sent a proxy or requested his or her admission card or an attendance certificate, may at any time sell all or some of his or her shares pursuant to which he or she transmitted his or her vote or proxy or requested one of these documents. Any sale shall be taken into account in the conditions laid down by law.

<sup>(1)</sup> Article R. 225-85 of the French Commercial Code resulting from a decree dated 8 December 2014, amended the deadline applicable to the record dates for Shareholders' Meetings of listed companies from three business days before the meeting to two business days before the meeting. This is a public mandatory provision.

The Board of Directors shall have the powers to organise, within the limits of the law, the attendance and voting of the shareholders at General Meetings by videoconferencing or by any telecommunications means enabling the identification of such shareholders. If applicable, this decision of the Board of Directors shall be communicated in the notice of the meeting and/or the invitation to attend. Those shareholders attending Shareholders' Meetings by videoconference or by these other means are deemed to be present for the purposes of calculating the quorum and the majority.

#### Voting rights

Each member of the meeting is entitled to as many votes as the number of shares which he holds or represents.

At all Ordinary, Extraordinary or Special General Meetings, the voting right on shares shall, in cases where such shares are subject to usufruct, be exercisable by the usufructuary. There are no double voting rights.

Upon the law "aimed at recapturing the real economy", known as "Florange" Act, enacted in France on 29 March 2014, double voting rights will be fully allocated to shareholders holding registered shares for at least two years in a listed company, unless stated otherwise in a provision of the Articles of Association of the Company adopted after the entry in force of the new law. Given the accounting period which started on 1 April 2014 and in the absence of a contrary provision in the Articles of Association, double voting rights shall be automatically applied from 31 March 2016. The Ordinary and Extraordinary Shareholders' Meeting, convened on 1 July 2014, voted against the 20<sup>th</sup> resolution, which proposed to introduce in the ALSTOM's Articles of Association a new provision in order to maintain single voting rights.

# Notification of holdings exceeding certain percentages

#### (Extract of Article 7 of the Articles of Association)

In addition to the legal obligation to notify the Company of certain shareholding levels or voting rights, any individual or legal entity who holds directly or indirectly, alone or in concert pursuant to articles L. 233-10 *et seq.* of the *Code de commerce* a number of shares in the Company giving a shareholding equal to or in excess of 0.5% of the total number of shares or voting rights issued must notify the Company by recorded letter with proof of receipt within five trading days of this threshold being exceeded. Notification is to be repeated under the same conditions whenever a new threshold of a multiple of 0.5% of the total number of shares or voting rights is exceeded, up to and including threshold of 50%.

To determine these thresholds, shares assimilated to the shares owned as defined by the legislative and regulatory provisions of article L. 233-7 *et seq.* of the *Code de commerce*, will be taken into account.

In each of the above-mentioned notifications, the declaring person must certify that the notification includes all stock held or owned in the sense of the preceding paragraph. Such notification must also state: the declarer's identity as well as that of individuals or legal entities acting in concert with him, the total number of shares or voting rights that he holds directly or indirectly, alone or in concert, the date and the source of exceeding the threshold, as well as if needs be the information mentioned in the third paragraph I of article L. 233-7 of the *Code de commerce*.

Any shareholder whose participation in the shareholding or in voting rights falls below one of the above-mentioned thresholds is also required to notify the Company within the same length of time of five trading days and by the same means.

In the event of non-observance of the above provisions and in accordance with the conditions and levels laid down by law, the shareholder shall lose the voting rights relating to the shares in excess of the thresholds which should have been notified, if one or more shareholders holding at least 3% of the share capital or voting rights so requires.

### Identification of holders of bearer shares

(Extract of Article 7 of the Articles of Association)

The Company may, under the conditions laid down by the legal provisions in force, request any officially authorised organisation or intermediary to pass on all information concerning its shareholders or holders of its stock conferring an immediate or subsequent right to vote, their identity and the number of shares that they hold.

### Appropriation of income

(Extract of Article 20 of the Articles of Association)

The profits for fiscal year consist of the revenues relating to the preceding fiscal year, less overheads and other Company expenditure including provisions and depreciation allowances. At least 5% is set aside from the profits less any previous losses if appropriate to form the legal reserve fund. This provision ceases to be mandatory once the value of the fund reaches one-tenth of the share capital.

The remainder (less the above deductions) of the retained earnings and withdrawals from the reserves which the General Meeting has at its disposal shall, if the General Meeting so desires, be distributed among the shares, once the sums carried forward by the said Meeting or transferred by it to one or more reserve funds have been deducted.

After the General Meeting has approved the accounts, any losses are carried forward and imputed to the profits of future fiscal years until they are discharged.

Each shareholder may be granted, at the General Meeting, for all or part of the dividend or interim dividend to be distributed, an option to be paid the dividend or interim dividends in cash or in shares of Alstom, under the current legal and regulatory conditions.

The Articles of Association do not contain any provision, which may delay, postpone or prevent a change of control.

# DOCUMENTS ACCESSIBLE TO THE PUBLIC

The legal documents relating to the Company and the Group, which are required to be accessible by the shareholders according to the applicable law are available for inspection at the Company's registered office and some of them are available on the Group's website (http://www.alstom. com/fr/), in particular in sections "Investors / Regulated information" as per Article L. 451-1-2 of the French *Code monétaire et financier*,

"Investors / Share information / Capital structure" for the bylaws and "About us / Corporate-governance" for the Internal Rules and regulation of the Board of Directors and Internal Rules of the Committees of the Board. The Group Annual Reports for the last five fiscal years are also available on the Company's website, section "Investors / Publications / Registration Documents".

# ACTIVITY OF THE HOLDING COMPANY

ALSTOM is the holding company of the Group. ALSTOM investments consist exclusively of the shares of ALSTOM Holdings. ALSTOM centralises a large part of the external financing of the Group and directs the funds so obtained to its subsidiary ALSTOM Holdings through loans and a current account. Fees from its indirect subsidiaries for the use of the ALSTOM name are ALSTOM's main other source of revenue.

# INTELLECTUAL PROPERTY

The Group owns or benefits from licenses for the use of several trademarks, patents and other intellectual property rights. All these rights contribute to the good performance of the business, but none of

# REAL PROPERTY

The Group carries out its activities on certain real estate over which it has rights of different types. The Group has full ownership of most of its main industrial sites.

The Group set up a leasing strategy for its offices buildings, which applies notably to the headquarters of the Group and of the Sectors. The gross value of land and buildings fully owned and leased under financial leases as of 31 March 2015 is  $\in$  682 million <sup>(1)</sup>.

For more information, see section "Financial information - Statutory

accounts - Comments on statutory accounts".

the licenses alone currently has a material relevance for the activities of the Group.

The depreciation booked for the above is  $\epsilon$ 326 million <sup>(1)</sup>. These amounts do not include operating leases. The Group's tangible assets are subject to costs for general maintenance and repairs required for their good functioning, to meet with legal and quality requirements, including environmental, health and safety matters.

#### MAIN INDUSTRIAL SITES HELD (NON EXHAUSTIVE LIST)

Country	Site	Main Sector
Australia	Ballarat	Transport
Belgium	Marchienne-au-Pont	Thermal Power
	Charleroi	Transport
razil	Canoas	Renewable Power & Grid
	São Paulo	Transport
	Taubate	Renewable Power
	Itajuba	Grid
anada	La Prairie	Grid
	Sorel-Tracy	Renewable Power
hina	Beijing (Leasing)	Thermal Power
	Shanghai	Grid & Transport
	Suzhou (Leasing)	Grid
	Tianjin	Renewable Power
	Wuhan	Thermal Power & Grid
roatia	Karlovac	Thermal Power
inland	Tampere (Leasing)	Grid
rance	Aix-les-Bains	Grid
	La Rochelle	Transport
	Belfort	Thermal Power & Transport
	Grenoble	Renewable Power
	Le Creusot	Transport
	Ornans	Transport
	Reichshoffen	Transport
	Saint-Ouen (Leasing)	Transport
	Tarbes	Transport
	Valenciennes	Transport
	Villeurbanne	Grid & Transport
ermany	Berlin	Thermal Power
	Bexbach	Thermal Power
	Brunsweig (Leasing)	Transport
	Mannheim	Thermal Power
	Salzgitter	Transport
	Stuttgart	Thermal Power
	Ludwiglust	Grid
	Monchengladbach	Grid
	Stendal	Transport
ndia	Bengalore (Leasing)	Transport
	Chennai	Transport & Grid
	Coimbatore (Leasing)	Transport
	Durgapur (Leasing)	Thermal Power
	Hosur (Leasing)	Grid
	Naini	Grid
	Shahabad	Thermal Power
	Vadodara	Renewable Power & Grid

Country	Site	Main Sector
Indonesia	Surabaya (Leasing)	Thermal Power
Italy	Bologna (Leasing)	Transport
	Nola	Transport
	Noventa di Piave	Grid
	Savigliano	Transport
	Sesto (Leasing)	Transport & Power
Japan	Kobe (Leasing)	Thermal Power
Mexico	Toluca	Grid
	Morelia	Thermal Power
Poland	Elblag	Thermal Power
	Katowice (Leasing)	Transport
	Wroclav (Leasing)	Thermal Power
Portugal	Setubal	Thermal Power
Spain	Barcelona (Leasing)	Transport
Switzerland	Birr	Thermal Power
	Oberentfelden	Grid
Turkey	Gebze	Grid
United Kingdom	Stafford	Grid & Thermal Power
	Rugby (Leasing)	Thermal Power
USA	Charleroi (Pennsylvania)	Grid
	Chattanooga (Tennessee)	Thermal Power
	Hornell (New York) (Leasing)	Transport
	Jupiter (Florida) (Leasing)	Thermal Power
	Rochester (New York) (Leasing)	Transport
	Richmond (Virginia)	Thermal Power
	Waynesboro (Virginia)	Grid
	Windsor (Connecticut) (Leasing)	Thermal Power

# AGREEMENTS CONCLUDED BY EXECUTIVE OFFICERS OR MAJOR SHAREHOLDERS OF THE COMPANY WITH A COMPANY'S SUBSIDIARY

(Information as per paragraph 13 of Article L. 225-102-1 of the French Commercial Code) None.

# MATERIAL CONTRACTS

Alstom signed during fiscal year 2014/15 a set of agreements relating to the transaction contemplated with General Electric. Alstom signed during the fiscal year 2014/15 an important agreement with the US Department of Justice (DOJ) (see in particular section "Management report on the consolidated financial statements fiscal year 2014/15 – Main events of fiscal year 2014/15"). The main acquisitions, disposals, partnerships, joint ventures and changes in scope of consolidation are identified in Note 1 and in Note 4 of the consolidated financial statements as of 31 March 2015, in section "Management report on consolidated financial statements fiscal year 2014/15 – Main events of fiscal year 2014/15" and in section below "Details on shareholdings taken during fiscal years 2013/14 and 2014/15".

# DETAILS ON SHAREHOLDINGS TAKEN DURING FISCAL YEARS 2013/14 AND 2014/15

(Section including information as per Article L. 233-6 of the French Commercial Code)

### Fiscal year 2013/14

On 4 April 2013, ALSTOM Power Holdings and Arabian BEMCO Contracting Co. Ltd signed a joint venture agreement to create a company in Saudi Arabia to design and manufacture heat recovery steam generators and components.

On 25 April 2013, ALSTOM Vietnam Company Ltd, ALSTOM Asia Pacific Sdn Bhd and Phu My Thermal Power Company Ltd created a joint venture company in Vietnam named ALSTOM PMTP Power Service LLC. The company is involved in the reconditioning of gas turbine parts. Alstom owns 85% of the joint venture company.

On 30 April 2013, the Dutch joint venture company named ALSTOM-KER Engineering BV, owned 50% by ALSTOM Grid Holding BV and 50% by Komplexnye Energetischskye, created a Russian operating company called ALSTOM-KER DC Engineering Center in the Grid Sector.

On 24 June 2013, ALSTOM Grid Energia Ltda acquired from two individuals 100% of the share capital of Engeman Servicios e Manutençao Ltda., a Brazilian company engaged in field services for high voltage electrical systems.

On 11 July 2013, ALSTOM Transport SA acquired a participation of 35% in Croissance Rail, a *"fonds commun de placement à risques bénéficiant d'une procédure allégée"* which invests in the rail sector. The other participants are the FSI France Investissement III, SNCF Participations, La Régie Autonome des Transports Parisiens (RATP) and Bombardier Transport France SAS.

On 9 December 2013, ALSTOM Brasil Energia e Transporte Ltda and Construtora Andrade Gutierrez S.A. signed a joint venture agreement to create a company to carry on manufacturing and sale of metallic or hybrid wind towers and other metallurgical products to address wind farm projects in Brazil.

On 13 December 2013, ALSTOM Power Holdings SA acquired a participation of 7.5% in the *"Fonds de développement des entreprises nucléaires (FDEN)"* which supports companies in nuclear sector. The other participants are Fonds FSI France Investissement III, Bpifrance Investissement, EDEV, Areva NC, VINCI and EIFFAGE.

On 19 December 2013, ALSTOM Transport UK Limited, Babcock Rail Limited and Costain Limited created a joint venture company named ABC Electrification Limited, which is involved in the electrification of the rail network in England, Wales and Scotland. Alstom owns 33% of the joint venture. On 8 January 2014, ALSTOM Grid Energia Ltda acquired 100% of the share capital of Reason Technologia S.A. held by various individuals, ALSTOM Grid Inc. acquired 100% of the share capital of Reason Technology Inc. from one individual and ALSTOM Grid GmbH acquired 100% of the share capital of RT Measurement Technologies GmbH from one individual. The Reason companies acquired are involved in the design, manufacture and sale of equipment in the electronic, mechanic and information technology areas applied to the measurement and recording domains.

On 10 January 2014, ALSTOM Holdings acquired 25% of the share capital of SEC ALSTOM (Wuhan) Transformers Co. Ltd. from Shanghai Electric Company and 50% of the share capital of SEC ALSTOM (Wuhan) Transformers Co. Ltd. from SEC ALSTOM (Shanghai Baoshan) Transformers Co. Ltd.

### Fiscal year 2014/15

On 29 April 2014, ALSTOM-SOYUZ High Voltage BV, a Dutch joint venture holding company owned 51% by ALSTOM Grid Finance BV and 49% by Soyuz Holding SA, acquired from Soyuz Holding SA 100% of the share capital of Russian operating company ZAO High Voltage Switchgear Factory Soyuz, which notably conducts the test running and supply of high voltage circuit breakers.

On 20 July 2014, ALSTOM Power Holdings and Arabian BEMCO Contracting Co. Ltd formed a 50-50% joint venture company named ALSTOM Arabia Power Factory Co. Ltd. to notably design and manufacture heat recovery steam generators and components in the Kingdom of Saudi Arabia and other Middle Eastern countries.

On 11 August 2014, ALSTOM Energias Renovaveis Ltda and Construtora Andrade Gutierrez S.A. formed a joint venture company named Torres Eolicas Do Nordeste SA, held 49% by ALSTOM Energias Renovaveis Ltda and 51% by Construtora Andrade Gutierrez S.A., to carry on manufacturing and sale of metallic or hybrid wind towers and other metallurgical products to address wind farm projects in Brazil.

On 26 March 2015, ALSTOM Power Systems acquired a participation of 34.65% in the share capital of Dynamene (company headquartered in Belfort), a company involved in the creation and management of an innovation platform aiming to test innovative solutions in the design of energy systems. The other participants are notably the Belfort Chamber of Commerce and Industry, Vallée de l'Energie and Cegelec SAS.

See also "Management report on consolidated financial statements fiscal year 2014/15 – Main events of fiscal year 2014/15".

# SIGNIFICANT CHANGE IN THE FINANCIAL OR TRADING CONDITION

To the Company's knowledge and as of the date of this Registration Document, no significant change in the financial or trading condition of the Group has occurred since 5 May 2015, date of approval of the latest published statutory and consolidated accounts.

### **FINANCIAL RATING**

ALSTOM is rated by the rating agencies Moody's Investors Services and Standard & Poor's since May 2008. These ratings, and their evolution over the year are the following as of 5 May 2015.

Agencies	May 2014	May 2015
Moody's Investors Services		
Short-term rating	P-3	Р-3
Long-term rating <sup>(1)</sup>	Baa3 (outlook negative)	Baa3 (outlook positive)
Standard & Poor's		
Short-term rating	А-з	А-з
Long-term rating <sup>(2)</sup>	BBB - (outlook stable)	BBB - (outlook negative)

(1) Moody's Investors Services revised the long term credit rating from Baa2 to Baa3 (outlook stable) on 20 June 2013, and revised the long-term outlook from stable to negative on 23 January 2014 and then from negative to positive on 25 June 2014.

(2) Standard & Poor's revised the long term credit rating from BBB (outlook negative) to BBB - (outlook stable) and revised the short-term credit rating from A-2 to A-3 on 24 April 2014, and then revised the long-term outlook from stable to negative on 23 December 2014.

# INFORMATION ON THE SHARE CAPITAL

As of 31 March 2015, ALSTOM's share capital amounted to  $\epsilon$ 2,168, 547, 479 consisting of 309,792,497 shares of the same class and fully paid with a nominal value of  $\epsilon$ 7 per share, following the operations completed during fiscal year 2014/15, which are detailed in the table pages 326 and 327 in section "Changes in share capital" below.

As of 15 May 2015, the share capital amounted to  $\epsilon$ 2,169,293,924 divided into 309,899,132 shares of  $\epsilon$ 7 par value each, resulting from the issuance of 106,635 new shares since 31 March 2015, *i.e.* (i) 11,173 new shares following the exercise of stock options, and (ii) 95,462 new shares following the delivery of performance shares under the Plan 2012-LTI N°15 carried out on 15 May 2015.

There are no double voting rights or voting rights restrictions attached to the shares comprising the share capital. The number of voting rights is identical to the number of shares.

Upon the law "aimed at recapturing the real economy", known as "Florange" Act, enacted in France on 29 March 2014, double voting rights will be fully allocated to shareholders holding registered shares for at least two years in a listed company, unless stated otherwise in a provision of the Articles of Association of the Company adopted after the entry in force of the new law. Given the accounting period which started on 1 April 2014 and in the absence of a contrary provision in the Articles of Association, double voting rights shall be automatically applied from 31 March 2016.

To the knowledge of the Company, there is to date no pledge over the shares of the Company or of its significant subsidiaries.

Following the consolidation of the Company's shares completed on 3 August 2005, the shareholders had two years, *i.e.* until 4 August 2007, to claim the consolidated shares. On 6 August 2007, the consolidated shares not claimed by their beneficiaries were sold on the stock exchange and the net proceeds of the sale will be held at their disposal for a period of ten years on a blocked account opened with the financial institution appointed by the Company to hold the Company's share registry.

Following the decision of the Ordinary and Extraordinary General Meeting of 24 June 2008 in its 16<sup>th</sup> resolution, the par value of the share was split in two on 7 July 2008. Each share of par value  $\epsilon$ 14 comprising the share capital as of this date was in full right, exchanged for two shares of par value  $\epsilon$ 7 each and entitled to the same rights as the previous shares.

As a consequence of these operations, the number of shares that could possibly be obtained by the beneficiaries of stock options and free allocation of shares, as well as the redemption ratio of the ORA were adjusted.

## **FINANCIAL AUTHORISATIONS**

(Section including information as per Article L. 225-100 of the French Commercial Code)

The table below sets forth the financial authorisations that are in force as of 5 May 2015 and their use during fiscal year 2014/15:

Nature of the authorisation ISSUANCE OF SECURITIES	Maximum nominal amount authorised	Nominal amount used during expired fiscal year	Available amount	Expiry/ Duration
Delegation of competence to issue shares and securities giving access to the share capital with preferential subscription right and/or by capitalisation of reserves (AGM 1 July 2014, resolution No. 13)	Share capital: €1,080 million (corresponds to 50% of the share capital) <sup>(1)(s)</sup> Debt securities: €3 billion <sup>(2)</sup>	None	Maximum amount authorised	1 September 2016 (duration: 26 months)
Delegation of competence to issue shares and securities giving access to the share capital with cancellation of the preferential subscription right and public offer and option to offer a priority right (AGM 1 July 2014, resolution No. 14)	Share capital: $\[ensuremath{\in} 215\]$ million (corresponds to approximately 10% of the share capital) <sup>(6)</sup> , less any capital increase with cancellation of the preferential subscription right and private placement and any capital increase in consideration of contributions in kind issued by virtue of resolutions No. 15, 16 and 17 of the AGM dated 1 July 2014) <sup>(1)(3)</sup> Debt securities: $\[ensuremath{\in} 1.5\]$ billion <sup>(2)</sup>	None	Maximum amount authorised	1 September 2016 (duration: 26 months)
Delegation of competence to issue shares and securities giving access to the share capital with cancellation of the preferential subscription right and private placement (AGM 1 July 2014, resolution No. 15)	Share capital: $\[mathcapetcapetcapetcapetcapetcapetcapetcapet$	None	Maximum amount authorised	1 September 2016 (duration: 26 months)
Delegation of competence to increase by 15% the amount of the initial issue with maintenance or cancellation of the preferential subscription right (AGM 1 July 2014, resolution No. 16)	Not to exceed 15% of the initial issuance, and to be deducted from the maximum amounts authorised by the delegations of authority under which the initial issuance is carried out (resolutions No. 13, 14 and 15 of the AGM dated 1 July 2014) <sup>(1)(3)</sup> Debt securities: €1.5 billion <sup>(2)</sup>	None	Maximum amount authorised	1 September 2016 (duration: 26 months)
Delegation of authority to increase the share capital by up to 10% of the share capital in consideration of contributions in kind (AGM 1 July 2014, resolution No. 17)	10% of the share capital to be deducted from the overall limits set in resolutions No. 14 and 15 of the AGM dated 1 July 2014 $^{(1)(3)}$	None	Maximum amount authorised	1 September 2016 (duration: 26 months)

Nature of the authorisation	Maximum nominal amount authorised	Nominal amount used during expired fiscal year	Available amount	Expiry/ Duration
OFFERINGS TO EMPLOYEES AND EXECUTIV	/ES			
Delegation of competence to issue shares and other securities granting rights to the share capital with cancellation of the preferential subscription right reserved for members of a Group savings plan (AGM 1 July 2014, resolution No. 18)	2% of the share capital at the date of the Shareholders' Meeting, less any amount issued by virtue of resolution No. 19 of the AGM dated 1 July 2014 <sup>(1)(4)</sup>	None	Maximum amount authorised	1 September 2016 (duration: 26 months)
Delegation of competence to issue shares for the benefit of a category of beneficiaries with cancellation of the preferential subscription right (AGM 1 July 2014, resolution No.19)	0.5% of the share capital at the date of the Shareholders' Meeting, to be deducted from the overall limit set in resolution No. 19 of the AGM dated 1 July 2014 <sup>(1)(4)</sup>	None	Maximum amount authorised	1 January 2016 (duration: 18 months)
Authorisation of free allocation of existing or new shares (AGM 2 July 2013, resolution No. 9)	1% of the share capital at the date of the Shareholders' Meeting, to be deducted from the overall limit set in resolution No. 10 of the AGM dated 2 July 2013 <sup>(6)</sup>	None	2,084,157 shares <i>i.e.</i> 0.68% of the share capital <sup>(7)</sup> , to be deducted from the overall limit set in Resolution No. 10 below	1 September 2016 (duration: 38 months)
Authorisation to grant stock options to subscribe or purchase shares (AGM 2 July 2013, resolution No. 10)	2.5% of the share capital at the date of the Shareholders' Meeting, less any amount issued by virtue of resolution No. 9 of the AGM dated 2 July 2013 <sup>(6)</sup>	None	7,040,443 options less any amount issued by virtue of Resolution No. 9 above, resulting in a remaining balance available of 6,039,743 options <i>i.e.</i> 1.95% of the share capital <sup>(7)</sup>	1 September 2016 (duration: 38 months)
SHARE BUYBACK AND REDUCTION OF THE	SHARE CAPITAL			
Share buyback authorisation (AGM 1 July 2014, resolution No. 12)	10% of the share capital as of 31 March 2014	None	Maximum amount authorised	1 January 2016 (duration: 18 months)
Authorisation to reduce the share capital by cancellation of shares	10% of the share capital	None	Maximum amount authorised	2 July 2015 (duration: 24 months)

(AGM 2 July 2013, resolution No. 8)

(1) Global limitation of the capital increases resulting from these seven authorisations (resolutions n°13 et 19 of the Shareholders' General Meeting dated 1 July 2014) to €1,080 million corresponding to approximately 50% of the share capital as of 31 March 2014 (before any adjustments).

(2) Global limitation of the amount of debt securities resulting from these authorisations to  $\epsilon$ 3 billion.

(a) Global limitation of capital increases resulting from these four authorisations with cancellation of preferential subscription rights

(resolutions n°14,15,16 and 17 of the Shareholders' General Meeting dated 1 July 2014) to €215 million corresponding to approximately 10% of the share capital as of 31 March 2014(before any adjustments).

(4) Global limitation of capital increases related to employee shareholding to 2% of the share capital at the date of the Shareholders' General Meeting (before any adjustments).

(5) On the basis of the share capital as of 31 March 2014 which amounted to €2,160,915,022 consisting of 308, 702,146 shares with a nominal value of €7 per share.

(6) Global limitation of capital increases resulting from these authorisations to grant stock options and performance shares to 2.5% of the share capital as of the

Shareholders' General Meeting (before any adjustments). This amount does not reduce the global amount of €1,080 million.

(7) On the basis of the share capital as of 31 March 2015.

It will be proposed to the next Shareholders' General Meeting convened on 30 June 2015 to renew on similar terms the share buy-back authorisation and the authorization to reduce the share capital by cancellation of shares respectively granted by the Shareholders' General Meetings held on 1 July 2014 and 2 July 2013 which will expire during fiscal year 2015/16, with an overall capital increase limit maintained for each renewed authorization at 10% of the share capital.

## **CHANGES IN SHARE CAPITAL**

	Number of shares issued or cancelled	Nominal amount of capital increase or decrease $(in \epsilon)$	Paid in capital amount (in €)	Resulting total number of shares	Capital (in €)
31 MARCH 2012				294,533,680	2,061,735,760
Increase in share capital resulting from the exercise of options (30 April 2012)	3,079	21,553	26,075.52	294,536,759	2,061,757,313
Increase in share capital resulting from the exercise of options (31 May 2012)	81,657	571,599	3,214.40	294,618,416	2,062,328,912
Increase in share capital resulting from the exercise of options (30 June 2012)	190,071	1,330,497	907,313.60	294,808,487	2,063,659,409
Increase in share capital resulting from the exercise of ORA (*) and options (31 July 2012)	5,353	37,471	17,840.00	294,813,840	2,063,696,880
Increase in share capital resulting from the exercise of options (31 August 2012)	16,291	114,037	81,745.60	294,830,131	2,063,810,917
Increase in share capital resulting from the exercise of options (30 September 2012)	17,830	124,810	72,793.60	294,847,961	2,063,935,727
Increase in share capital without preferential subscription rights within the framework of an offer referred to in article L. 411-2-II of the French Monetary and Financial Code (4 October 2012)	13,133,208	91,932,456	250,735,537.71	307,981,169	2,155,868,183
Increase in share capital resulting from the exercise of options (31 October 2012)	367	2,569	560.00	307,981,536	2,155,870,752
Increase in share capital resulting from the exercise of options (30 November 2012)	28,600	200,200	162,688.00	308,010,136	2,156,070,952
Increase in share capital resulting from the exercise of options (31 December 2012)	27,311	191,177	231,520.00	308,037,447	2,156,262,129
Increase in share capital resulting from the exercise of options (31 January 2013)	20,419	142,933	147,649.60	308,057,866	2,156,405,062
Increase in share capital resulting from the exercise of options (28 February 2013)	25,526	178,682	154,020.48	308,083,392	2,156,583,744
Increase in share capital resulting from the exercise of ORA (*) and options (31 March 2013)	74,734	523,138	641,448.52	308,158,126	2,157,106,882
<b>31 MARCH 2013</b> Increase in share capital resulting from the exercise of				308,158,126	2,157,106,882
ORA (*) and options (30 April 2013)	816	5,712	4,310.40	308,158,942	2,157,112,594
Increase in share capital resulting from the exercise of options and allocation of performance shares under the plan LTI No. 13 (31 May 2013)	244,680	1,712,760	43,072.00	308,403,622	2,158,825,354
Increase in share capital resulting from the exercise of options (27 June 2013)	1,500	10,500	2,400.00	308,405,122	2,158,835,854
Increase in share capital resulting from the exercise of options and allocation of free shares under the plan Sharing Plus 2007 (31 July 2013)	86,663	606,641	9,600.00	308,491,785	2,159,442,495
Increase in share capital resulting from the exercise of options (31 August 2013)	6,700	46,900	40,416.00	308,498,485	2,159,489,395
Increase in share capital resulting from the exercise of options and allocation of performance shares under the plan LTI No. 12 (30 September 2013)	133,250	932,750	203,619.20	308,631,735	2,160,422,145
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	Number of shares issued or cancelled	Nominal amount of capital increase or decrease $(in \epsilon)$	Paid in capital amount (in €)	Resulting total number of shares	Capital (in €)
Increase in share capital resulting from the exercise					
of options (31 October 2012)	7,000	49,000	48,320.00	308,638,735	2,160,471,145
Increase in share capital resulting from the exercise					
of ORA $^{(\star)}$ and options (31 December 2013)	44,609	312,263	155,018.60	308,683,344	2,160,783,408
Increase in share capital resulting from the exercise					
of options, of ORA $^{(\star)}$ and allocation of performance					
shares under the plan LTI No. 13 (31 January 2014)	9,808	68,656	18,892.00	308,693,152	2,160,852,064
Increase in share capital resulting from the exercise					
of options (28 February 2014)	500	3,500	800.00	308,693,652	2,160,855,564
Increase in share capital resulting from the exercise					
of ORA (*) and options (31 March 2014)	8,494	59,458	42,037.60	308,702,146	2,160,915,022
31 MARCH 2014				308,702,146	2,160,915,022
Increase in share capital resulting from the exercise					
of options (30 April 2014)	3,000	21,000	4,800.00	308,705,146	2,160,936,022
Increase in share capital resulting from the exercise					
of options and allocation of performance shares under					
the plan LTI No. 14 (31 May 2014)	289,496	2,026,472	421, 475.20	308,994,642	2,162,962,494
Increase in share capital resulting from the exercise					
of options (30 June 2014)	37,690	263,830	191,616.00	309,032,332	2,163,226,324
Increase in share capital resulting from the exercise of					
ORA $^{(\star)}$ and options and allocation of free shares under					
the plan Sharing Plus 2009 (31 July 2014)	142,841	999,887	148,688.00	309,175,173	2,164,226,211
Increase in share capital resulting from the exercise					
of options (31 August 2014)	69,985	489,895	131,324.80	309,245,158	2,164,716, 106
Increase in share capital resulting from the exercise					
of options (30 September 2014)	133,692	935,844	334,547.20	309,378,850	2,165,651,950
Increase in share capital resulting from the exercise					
of options (31 October 2014)	13,500	94,500	146,880.00	309, 392,350	2,165,746,450
Increase in share capital resulting from the exercise					
of options (30 November 2014)	36,580	256,060	397,990.40	309,428,930	2,166,002,510
Increase in share capital resulting from the exercise					
of options and allocation of performance shares under					
the plan LTI No. 13 (31 December 2014)	272,901	1,910,307	86,339.75	309,701,831	2,167,912,817
Increase in share capital resulting from the exercise					
of options (31 January 2015)	24,669	172,683	305,749.11	309,726,500	2,168,085,500
Increase in share capital resulting from the exercise					
of options and allocation of performance shares under					
plans LTI No. 13, LTI No. 14 and LTI No. 15					
(28 February 2015)	14,982	104,874	163,006.00	309,741,482	2,168,190,374
Increase in share capital resulting from the exercise					
of ORA <sup>(*)</sup> and options (31 March 2015)	51,015	357,105	584,411.85	309,792,497	2,168,547,479
31 MARCH 2015				309,792,497	2,168,547,479

(\*) Subordinated bonds reimbursable into shares issue 2% December 2008.

## **OWNERSHIP OF ALSTOM SHARES**

(Information as per Articles L. 225-102 and L. 233-13 of the French Commercial Code)

To the Company's knowledge based on notifications received by the Company, the table below shows the voting rights and the shares held by shareholders with more than 0.50% of the Company's share capital as of 31 March 2015:

	Share capital as of 31 March 2015			Share capital as of 31 March 2014		Share capital as of 31 March 2013	
	Number of shares	% of the share capital and voting rights <sup>(1)</sup>	Number of shares	% of the share capital and voting rights <sup>(1)</sup>	Number of shares	% of the share capital and voting rights <sup>(1)</sup>	
Public	152,978,042	49.39%	147,545,217	47.79%	159,101,838	51.64%	
Bouygues SA <sup>(*)</sup>	90,543,867	29.23%	90,543,867	29.33%	90,543,867	29.38%	
FMR LLC	12,415,000	4.01%	12,420,078	4.02%	3,057,003	0.99%	
DNCA Finance & DNCA Finance Luxembourg	6,303,510	2.03%	1,634,710	0.53%	1,444,960	0.47%	
Franklin Resources Inc.	(3)	(3)	12,323,344	3.99%	21,595,004	7.01%	
State Street Corporation	6,295,305	2.03%	6,295,305	2.04%	-	-	
Amundi	6,129, 410	1.98%	4,601,874	1.49%	6,211,754	2.02%	
UBS Investment Bank	-	-	4,977,268	1.61%	1,523,431	0.49%	
Aviva Investors France	4,612,819	1.49%	4,096,878	1.33%	-	-	
Norges Bank	3,666,467	1.18%	4,623,147	1.50%	5,835,364	1.89%	
Employees (2)	3,255,708	1.05%	3,921,725	1.27%	4,024,891	1.31%	
Caisse des Dépôts et Consignations	3,112,659	1.00%	3,112,659	1.01%	3,056,418	0.99%	
HBK Master Funds	3,110,000	1.00%	-	-	-	-	
AXA SA	(3)	(3)	3,063,367	0.99%	3,096,450	1.00%	
Crédit Suisse Group AG	2,928,066	0.95%	3,056,647	0.99%	2,526,162	0.82%	
Citigroup Inc.	2,859,728	0.92%	992,004	0.32%	190,342	0.06%	
Covea Finance	1,996,760	0.64%	1,996,760	0.65%	-	-	
Legal & General Group plc	1,696,714	0.55%	1,512,457	0.49%	1,512,457	0.49%	
Edmond de Rothschild Asset Management	1,620,794	0.52%	1,620,794	0.53%	1,731,003	0.56%	
Eton Park	1,602,300	0.52%		-	-	-	
Schroders plc	1,570,516	0.51%		-	-	-	
Natixis Asset Management	1,549,832	0.50%	2,868,506	0.93%	4,409,981	1.43%	
Farallon Capital management	1,545,000	0.50%	-	-	-	-	
TOTAL	309,792,497	100.00%	308,702,146	100.00%	308,158,126	100.00%	

(\*) See below the concert declaration with the French Republic.

(1) % calculated based on the share capital as of 31 March of each year and not based on the share capital on the date of the declaration.

(2) Shares held by employees and former employees of the Group savings plan as of 31 March 2015, which corresponds to approximately 0.72% held directly and approximately 0.33% held through an employee mutual Fund (FCPE).

(3) Shareholders with less than 0.5% of the Company's share capital as of 31 March 2015.

To the knowledge of the Company, on the basis of declarations of threshold crossing received, excluding notifications received from registered brokers, no other shareholder holds, directly or indirectly, more than 0.50% of the share capital or voting rights of the Company as of 31 March 2015.

After 31 March 2015, the Company received the following declarations of threshold crossing:

- Natixis Asset Management notified that it held, on 8 April 2015, 1,511,882 shares (0.49% of the share capital and voting rights of ALSTOM);
- HSBC Asset Management (France) notified that it held, on 13 April 2015, 1,810,834 shares (0.58% of the share capital and voting rights of ALSTOM).

On 22 June 2014 Bouygues concluded with the French Republic (the "State"), represented by the *Agence des Participations de l'État* (State Shareholdings Agency, "APE"), an agreement under which the French Republic, or any other entity of its choice controlled by it, could purchase part of the ALSTOM shares held by Bouygues. A detailed description of the agreement is provided in notice 214C1292 published by the *Autorité des marchés financiers* (AMF) on 3 July 2014 in which the AMF concludes, after examining said agreement, that the State and Bouygues are acting in concert in respect of ALSTOM (see section "Elements which could have an impact in the event of a public offer" in the present chapter for a presentation of the main terms of the agreement appearing in the AMF notice).

Following the AMF's decision of 3 July 2014, the APE, controlled by the State, and Bouygues SA formally recorded that they are acting in concert in respect of ALSTOM under article L. 233-10 of the French Commercial Code. In the notification received by the Company from the members of the concert on 10 July 2014, they indicated that no members of the above-mentioned concert other than Bouygues SA holds, alone or in concert, shares or securities giving access to ALSTOM's capital and that only Bouygues SA holds ALSTOM shares, *i.e.* 90,543,867 ALSTOM shares representing 29.29% of this company's share capital and voting rights.

Moreover, pursuant to the provisions of articles L. 233-7°VII and L. 233-9°I°3° of the French Commercial Code and article 223-17°I of the AMF's General Regulations, the APE stated in the notification:

- that it was not acting in concert with persons other than Bouygues SA;
- that the shares that will be acquired in the event of the exercise of the put option granted by Bouygues SA to the APE under the terms of the agreement signed on 22 June 2014 between the French Republic represented by the APE and Bouygues SA (the "Agreement") will be financed out of its own funds;
- that it reserves the right to acquire shares on the market or from third parties, it being specified that the aim of the APE is to hold a stake equal to 20% of ALSTOM's capital and that it does not intend to increase its holding in ALSTOM's capital beyond the mandatory tender offer threshold or take control of ALSTOM;
- that it supports Alstom's strategy within the framework of the agreement signed between the French Republic, Alstom and General Electric on 21 June 2014;
- that it does not contemplate proposing a merger, reorganisation, liquidation or transfer project for Alstom assets nor a change in Alstom's business, other than those detailed in the agreement signed with General Electric on 21 June 2014, or a change in its articles of association or an issuance by Alstom of financial securities or the withdrawal of securities from the financial markets;
- that it will decide to exercise or not the put options described in the Agreement on the basis of market conditions;
- that, under the terms of the Agreement, Bouygues SA will loan, under the terms of a loan (*prêt de consommation*) to the APE, from the first stock exchange trading day following the Reference Date (*e.g.* the Reference Date being defined in the Agreement as the payment date of the exceptional dividend or any transaction with an equivalent effect following the completion of the transactions announced by ALSTOM on 21 June 2014) and up to the payment/delivery of the third put option, if it is exercised, or the expiry of the exercise period of the third put option, if it is not exercised, a number of shares such that the number of ALSTOM voting rights held by the APE (taking into account the voting rights acquired by the APE) including after the Reference Date is equal to 20% of the Alstom voting rights; and
- that it intends to request the appointment of the two representatives on Alstom's Board of Directors as from the Reference Date.

Bouygues SA has indicated that it was not obligated to issue a declaration of intent since it already held more than 25% of the capital and the voting rights prior to the concert being established, but nevertheless declared that, should it be necessary:

- it does not contemplate acquiring Alstom shares or control over Alstom;
- it supports the strategy decided upon by Alstom's general management and, in particular, the signing of the agreement concluded with General Electric on 21 June 2014;
- it does not contemplate proposing a merger, reorganisation, liquidation or asset transfer project for Alstom assets or a change in Alstom's business or a change to its articles of association or an issue of Alstom financial securities or the withdrawal of securities from the financial markets;
- that it has granted put options and a loan agreement for shares to the APE under the terms of the Agreement; and
- that it does not envisage requesting the appointment of additional representatives on ALSTOM's Board of Directors (given that Bouygues SA currently has two representatives on ALSTOM's Board of Directors and will keep one representative after the Reference Date).

The Company is not aware of the existence of a shareholders' agreement relating to the Company's capital other than the protocol concluded between Bouygues and the French Republic on 22 June 2014.

As of 5 May 2015, to the knowledge of the Company, 30,963 shares are held by the individual Directors of the Company and 64,613 shares are held by the members of the Executive Committee, representing in total approximately 0.03% of Alstom's share capital and voting rights. The company Bouygues SA, Director of Alstom since 18 March 2008, holds 90,543,867 shares, *i.e.* 29.23% of the share capital and voting rights of the Company as of 31 March 2015.

A table identifying the operations as per Article L. 621-18-2 of the French Monetary and Financial Code is available in section "Corporate governance – Interest of the officers and employees in the share capital".

ALSTOM does not hold, directly or indirectly through companies it controls, any of its own shares and each Director holds at least the number of shares recommended by the Director's Charter annexed to the Board Internal Rules. The Internal Rules of the Board, as amended on 17 March 2015, increased from 500 to 2,000 the number of shares needed to be held by each Director, which corresponds to approximately one year of Director's fees. Each Director shall have a period of two years from 1 January 2015 or the beginning of his or her mandate if later, to increase his or her number of shares at this minimum level. Shares shall be held in registered form.

## SECURITIES AND RIGHTS GIVING ACCESS TO THE SHARE CAPITAL

The securities and rights giving access to the Company's share capital are composed of:

- the rights resulting from free allocations of shares; and
- stock options to subscribe shares.

The subordinated 2% bonds due December 2008 reimbursable in Company's shares ("ORA") were reimbursed in shares on 31 December 2008, as described below.

There are no other securities giving rights to the share capital of the Company.

### Subordinated 2% bonds due December 2008 reimbursable in Company's shares ("ORA")

In December 2003 the Company issued subordinated 2% bonds due December 2008 for  $\notin$ 901,313,660.80 and reimbursable in Company's shares ("ORA") with preferential subscription rights which may lead to the issue of a maximum of 643,795,472 new shares with a ratio of 0.0628 ALSTOM share of  $\notin$ 7 par value, after adjustments of the redemption ratio following the operations on the share capital of the Company.

POTENTIAL SHARE CAPITAL

On 31 December 2008 the ORA were reimbursed in shares pursuant to the terms and conditions of the bonds.

As of 31 March 2015, 78,242 ORA, representing 0.01% of the issue, were held by bondholders who did not yet notify the Company if they request at redemption the number of shares resulting either from the rounding down to the nearest whole number (with cash compensation by the Company) or the rounding up to the nearest whole number (with cash payment by the bondholder).

### Free allocations of shares

See sections:

- "Corporate governance Interest of the officers and employees in the share capital – Stock options and performance share plans"; and
- "Corporate governance Interest of the officers and employees in the share capital Free shares plans for subscribers to "Alstom Sharing 2009" offer located outside France.

### **Stock options**

See section "Corporate governance – Interest of the officers and employees in the share capital – Stock options and performance share plans".

	Total number of shares that may be issued	Amount of corresponding capital increase (in $\epsilon$ )	% of the share capital as of 31 March 2015
Shares that may result from the exercise			
of existing stock option plans (*)	7,513,788	52,596,516	2.43%
Shares that may be issued on the basis performance shares plans $^{(\star)}$	1,560,141	10,920,987	0.50%
TOTAL (*)	9,073,929	63,517,503	2.93%

(\*) Subject to satisfaction of all performance conditions linked to fiscal years 2015/16 and 2016/17. See section "Information on the share capital – Interests of the officers and employees in the share capital – Stock options and performance shares plans" and Note 23 to the Consolidated Financial Statements for fiscal year 2014/15.

## **REPURCHASE OF SHARES**

(Information as per Article L. 225-11 of the French Commercial Code)

### Use by the Board of Directors of the authorisation granted by the Shareholders' Meeting

Acting pursuant to Article L. 225-209 and *seq.* of the French Commercial Code, the Ordinary and Extraordinary General Meeting held on 1 July 2014 authorised the Board of Directors to purchase on a stock exchange or otherwise, and by any means, Alstom's shares within the limit of a number of shares representing 10% of ALSTOM's share capital as of 31 March 2014, *i.e.* a theoretical number of 30,870,214 shares for a maximum purchase price of  $\epsilon$ 60, subject to adjustments in relation to operations on the share capital and for a duration of 18 months after the General Meeting expiring on 1 January 2016. The Company did not use this authorization during fiscal year 2014/15.

### Presentation of the share purchase programme submitted to the approval of the Ordinary and Extraordinary General Meeting called on 30 June 2015

The section below constitutes the presentation of the share purchase programme which will be submitted to the approval of the Ordinary and Extraordinary General Meeting called on 30 June 2015, pursuant to Article 241-2, I of the General Regulation of the French Autorité des marchés financiers.

## Number of shares and portion of the share capital held directly or indirectly by ALSTOM

ALSTOM does not hold directly or indirectly any shares composing its share capital and any securities giving access to its share capital.

#### Split by objectives of shares purchased

Not applicable.

#### Objectives of the share purchase programme

This share purchase programme may be used:

- with the purpose of cancelling the shares acquired under the conditions laid down by law;
- with the purpose of allocating or selling shares to employees, former employees or corporate officers of the Company and its affiliated companies as defined in Articles L. 225-180 and L. 233-16 of the French Commercial Code, in particular through employee purchase schemes, stock option plans, free allocations of shares, shareholding transactions reserved for employees or any share-based compensation system;
- to hold, sell, transfer or exchange the shares purchased as part of or following any external growth transactions within the limit set forth in the 6<sup>th</sup> paragraph of Article L. 225-209 of the French Commercial Code;
- to deliver shares upon exercise of rights attached to securities giving access to the share capital;

- to ensure the liquidity of the market and to manage the Company's market through an authorised investment services provider as part of a liquidity contract complying with a code of ethics agreed upon by the French Autorité des marchés financiers (AMF);
- as well as to implement any market practice that could potentially be allowed by the AMF and, more generally, to carry out any other transaction in compliance with applicable regulations.

The purchase, sale, transfer or exchange of these shares may occur, in accordance with the rules set by the relevant regulatory bodies, on regulated markets or off the market including multilateral trading facilities (MTFs) or *via* a systematic internaliser, by any means, including through block transfer or the use or exercise of any financial instruments, derivatives, particularly, through optional transactions such as the purchase and sale of options and at any time within the limits set forth by laws and regulations, excluding during any take-over period on the Company's share capital.

## Maximum portion of share capital and maximum number of shares which may be repurchased

Pursuant to Article L. 225-209 *et seq.* of the French Commercial Code, the Board of Directors is allowed to purchase Company shares up to the number of shares that represent 10% of the Company's share capital as of 31 March 2015, *i.e.*, a theoretical maximum number of 30,979,249 shares of  $\epsilon$ 7 nominal value, and a theoretical maximum aggregate purchase price of  $\epsilon$ 1,858,754,940 based on the maximum purchase price set hereafter.

#### Maximum purchase price

The purchase price may not exceed  $\epsilon$ 60 per share, subject to adjustments relating to transactions affecting the Company's share capital. In the event of transactions dealing with the Company's share capital and, in particular, in the event of an increase in the share capital by the incorporation of reserves and the allocation of shares, free of charge, as well as in the event of a split or a consolidation of the shares, the maximum price indicated above shall be adjusted by a multiplying ratio equal to the number of shares included in the share capital before the transaction divided by the number of these shares after the transaction.

#### Duration

The share purchase programme will be valid during 18 months after the Shareholders' Meeting called to be held on 30 June 2015, *i.e.* 30 December 2016.

## Characteristics of the shares which may be purchased

Shares listed on the Nyse Euronext Paris (Compartment A). Name: ALSTOM. ISIN Code: FR0010220475. Ticker: ALO.

## **ISSUE OF DEBT SECURITIES**

On 29 September 2014, the Board of Directors renewed the delegations of authority to the Chairman and Chief Executive Officer, for a one-year period, to issue, in one or more issuances, bonds within a maximum nominal amount of  $\notin$  billion.

During fiscal year 2014/15, the Company did not issue any debt securities.

## **DIVIDENDS PAID OVER THE LAST THREE FISCAL YEARS**

(Information as per Article 243 bis of the French General Tax Code)

The fiscal year ended 31 March 2015 records a loss which amounts to  $\epsilon$ 597,443,935.86. It will be proposed to the next Shareholders' Meeting called on 30 June 2015 to apply the total amount of this loss

on the account "general reserve" which as a result would amount to  $\epsilon$ 6,669,712,233.79. As a result, no dividend will be paid to the shareholders in respect of the fiscal year ended 31 March 2015.

The following dividends were distributed in respect of the previous fiscal years:

Fiscal year (in $\epsilon$ )	2013/14	2012/13	2011/12
Dividend per share (*)	-	0.84	0.80
(*) Amount divide for the tay reduction of (0) resulting from Article 150.2.2	of the French Constal Tay Cod		

(\*) Amount eligible for the tax reduction of 40% resulting from Article 158-3-2 of the French General Tax Code.

See section "Financial statements – Statutory accounts – Appropriation of the net income for the period ended 31 March 2015".

## ELEMENTS WHICH COULD HAVE AN IMPACT IN THE EVENT OF A PUBLIC OFFER

(Information as per Article L. 225-100-3 of the French Commercial Code)

### Structure of the Company's share capital

A table detailing the structure of ALSTOM's share capital is presented in section "Additional information – Information on the share capital – Ownership of Alstom shares".

### By-laws articles restricting the exercise of voting rights and the transfer of shares, or other clauses of agreements known by the Company

There is no statutory restriction other than those mentioned in Article 7 of the articles of associations which provides the loose of voting rights under certain conditions, for not giving to the Company notification of shareholding or voting rights exceeding certain levels set forth in the articles of association. See section "Additional information – Summary of key provisions of the articles of association – Notification of holdings exceeding certain percentages".

### Agreements of which the Company is aware in application of article L. 233-11 of the French Commercial Code

On 22 June 2014 Bouygues concluded with the French Republic (the "State"), represented by the *Agence des Participations de l'État* (State Shareholdings Agency, APE"), an agreement under the terms of which the French Republic or any other entity of its choice controlled by it,

may buy all or part of Alstom's capital held by Bouygues. A detailed description of the agreement is given in the notice 214C1292 published by the *Autorité des marchés financiers* (AMF) on 3 July 2014 in which the AMF concludes, after examining the said agreement, that the State and Bouygues are acting in concert in relation to the ALSTOM company. See also the section "Complementary information – Information on the share capital – Ownership of Alstom shares".

Under the terms of the agreement the State will benefit, during a period of eight days from the 60 trading day after the Reference Date, from a put option (the "First put option") on a number of shares representing 20% of ALSTOM's capital at the Reference Date at the unit price of  $\epsilon$ 35 (adjusted to take into account any exceptional dividend and any operation having an impact on ALSTOM's capital). The Reference Date is defined in the agreement as the date of payment of the exceptional dividend or any operation having an equivalent effect following the completion of the transactions announced by ALSTOM on 21 June 2014.

In the absence of the exercise of the First put option and for 17 months following the end of the exercise period of the First put option, the State will benefit from a put option (the "Second put option") on a number of shares representing 20% of ALSTOM's capital at the Reference Date at a unit price equal to 95% of the weighted average of the volumes of the share's market price over a reference period of sixty trading days preceding the exercise date; the price may not be less than €35 per share (adjusted to take into account any exceptional dividend and any transaction affecting ALSTOM's capital).

In the absence of the exercise of the First put option or the Second put option, the State shall benefit, for a period of 8 trading days following the end of the exercise period of the Second put option, from a third put option (the "Third put option") on a number of shares representing 15% of ALSTOM's capital at the reference Date at a price per share equal to 98% of the weighted average of the volumes of the ALSTOM share market price over a reference period of 60 trading days preceding the end of the 17-month period detailed above.

In the event of very significant negative variations in the market (such as a stock market crash) over the 60 trading days preceding the start of the exercise period of the Third put option, the parties have agreed to discuss in good faith the terms of the sale during a period which may not exceed 30 days from the first day of the exercise period of the Third put option. The exercise of the Third put option shall thus be suspended during the discussion period and shall recommence at the end of this period, including in the absence of agreement between the parties.

Bouygues shall be free to sell all or part of the shares covered by the put options (after having sold all the other ALSTOM shares it holds) subject to having previously offered them to the APE.

In addition, as from the first trading day following the Reference Date and up to the exercise or expiry of the put options granted to the State, Bouygues has undertaken to grant the State a loan of shares covering a number of shares such that the number of Alstom voting rights held by the State equals 20% <sup>(1)</sup>. Any sale of shares to the APE will extinguish the loan of shares in the amount of the shares sold.

The above-mentioned provisions of the agreement (*i.e.* put options and loan of shares) are subject to the completion of the operations announced by Alstom on 21 June 2014.

The other main clauses of the agreement also contain the following principles:

- Acting in concert: should the AMF consider that the parties are acting in concert, the parties shall make the required declarations. If this is the case, each of the parties agrees to do nothing which would cause them, in concert, to exceed the threshold of 30% of the capital or voting rights of ALSTOM. The party which would fail to comply with this commitment shall be solely responsible for the consequences of this failing and, in particular, for any mandatory public offer that may be demanded as a consequence.
- Voting undertaking: Bouygues has committed to vote at ALSTOM general meetings against any resolution which would jeopardise the statutory and/or legal provisions permitting the APE to acquire double voting rights at the end of a holding period of registered shares of two years. Should Bouygues hold, at any ALSTOM Shareholders' General Meeting held after the Reference Date, more voting rights than the APE (taking account, for the APE, of the shares loaned by Bouygues), Bouygues has agreed not to exercise any more voting rights than the APE holds at the said general meeting.

This undertaking led Bouygues to vote against the twentieth resolution of the Shareholders' General Meeting of 1 July 2014 which proposed the introduction into the articles of association of a measure to keep single voting rights.  Governance: Bouygues and the APE have undertaken to do their best efforts for 10 years as from the signing of the agreement so that the ALSTOM Board of Directors, after the Reference Date, includes one director appointed by Bouygues, provided that Bouygues holds at least 1% of the ALSTOM capital, and two directors proposed by the APE or the State.

# Direct or indirect shareholdings in the Company

As of 5 May 2015, Bouygues SA and the French Republic hold in concert 29.23% of the share capital and voting rights of ALSTOM.

See also section "Additional information – Information on the share capital – Ownership of Alstom shares".

# List of holders of any security granting special control rights

None.

# Control mechanisms within employee shareholding schemes

The rules of the Alstom savings plan ("FCPE Alstom") provide that the Supervisory Board of the FCPE Alstom is entitled to vote in Alstom Shareholders' Meetings, and not employees directly.

Therefore only the Supervisory Board is entitled to decide on the answer to be given in case of a public offer. The FCPE Alstom held 0.33% of the Company's share capital and voting rights as of 31 March 2015.

### Shareholders' agreements that may restrict the transfer of shares and the exercise of voting rights

To the knowledge of Alstom, there are no other shareholders' agreements that may restrict the transfer of Alstom's shares and/or the exercise of Alstom's voting rights than the memorandum of understanding entered into between Bouygues and the French Republic on 22 June 2014, as mentioned above. See also section "Additional information – Information on the share capital – Ownership of the capital".

### Specific rules governing the nomination and replacement of Directors, and the modification of the Company's by-laws

None.

<sup>(1)</sup> This provision is being challenged by the French association of minority shareholders (ADAM), which requested its cancellation to the Paris Commercial Court on 17 December 2014.

The Shareholders' Meeting held on 1 July 2014 authorised the Board of Directors to acquire the Company's shares, within the limits set forth by laws and regulations, excluding during any take-over period in respect of the Company's share capital.

It will be proposed to the next Ordinary and Extraordinary General Meeting to be held on 30 June 2015 to renew this authorisation, excluding during any take-over on the Company's share capital. See also section "Additional information – Information on the share capital – Repurchase of shares".

### Agreements that may be amended or terminated in case of a change of control of the Company

The financing agreements, the terms of bonds issues and bonding programmes of the Group include change of control clauses.

All ALSTOM's bond issues, including the one presented in section "Information on the Share capital – Issue of debt securities", contain each a change of control clause that allows any bondholder to request the early reimbursement of its bonds during a specific period of time, in case of change of control of ALSTOM.

The committed Credit Facility, amounting to  $\leq$ 1.350 billion, maturing in December 2016 and the additional facilities amounting to a total of  $\leq$ 1.600 billion, fully undrawn as of 31 March 2015, contains a change of control clause that allows each financial institution party to this agreement to request the cancellation of its credit commitment and the early reimbursement of its participation in the facility in case of change of control of Alstom.

The revolving committed bonding facility of a maximum amount of  $\epsilon$ 9 billion maturing 27 July 2016 also contains a change of control clause which may result, in case of a change of control, in the programme being suspended, in the obligation to procure new bonds to replace outstanding bonds or to provide cash collateral, as well as the early reimbursement of the other debts of the Group as a result of their cross-default or cross-acceleration provisions. For further information on these facilities and the revolving committed bonding facility, see section "Financial risks – Liquidity risks".

The joint venture agreements that Group entities have signed generally contain change of control clauses, that may trigger the obligation to sell our shareholding in these joint ventures.

### Agreements providing indemnities to Board members or employees, if they resign or are dismissed without actual and serious reason or if their employment ends due a public offer

None. See section "Corporate governance – Corporate governance and Executive and Non-Executive Directors' compensation report".

## SHAREHOLDERS INFORMATION

The role of the Investor Relations team is to provide the whole financial community – individual shareholders, institutional investors and financial analysts – with complete and updated information on the Group's financial situation, strategy and its implementation.

# Communication policy for individual shareholders

During the fiscal year 2014/15, the Group called for an Extraordinary Shareholders' Meeting, convened on 19 December 2014, to vote on the transaction to sell Alstom's Energy businesses to General Electric. Besides the Annual General Meeting, Alstom develops opportunities to meet and communicate with its individual shareholders.

The Group also organises site visits in France for individual shareholders to give them a better insight into the way the business works. This year, some of them had the opportunity to visit the Aytré-La Rochelle site, Alstom's global manufacturing and design centre for trams and very high speed trains.

In addition to periodical financial publications, Alstom offers its shareholders a range of information tools, including the shareholders' letter published twice a year in conjunction with the main financial events of the Group. Alstom is issuing this shareholders' letter in digital format to reduce its carbon footprint and paper consumption.

# Relations with institutional investors and financial analysts

Roadshows are organised on several occasions over the year in major US and Europe financial centres (France, the United Kingdom and Switzerland) in addition to individual and group meetings with investors and analysts throughout the year.

The Group also participates in general or sectorial conferences organised by brokerage firms in France, the United Kingdom or the United States of America. During the fiscal year, the Group also had the opportunity to exchange on its corporate governance policy as well as its Social and Environmental Responsibility.

### Stock market news

In 2014/15, ALSTOM's share price increased by 45%. On 31 March 2015, the share price closed at €28.73 and the Group's stock market capitalisation stood at €8.9 billion.

### **Keeping investors informed**

#### www.alstom.com

The Investors' section of the Alstom website has been especially designed to provide shareholders with easy access to all of the Group's financial communications: share price quotes, the possibility to download the past five years' historical data, as well as financial results, presentations, Registration Documents, shareholders' letters, dates of important meetings, frequently asked questions, and a subscription service to receive the Group's press releases by e-mail. Printed copies of the Registration Document and shareholders' letters can be obtained in French and English by sending a request to the Investor Relations Department.

### **Contacts**

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Toll free number from France: 0800 50 90 51, from Monday to Friday, from 9 am to 7 pm.

From abroad: +33 1 41 49 79 75 (calls will be charged at your local operator's standard international rate).

### LISTING OF THE SHARES

### ALSTOM Share as of 31 March 2015

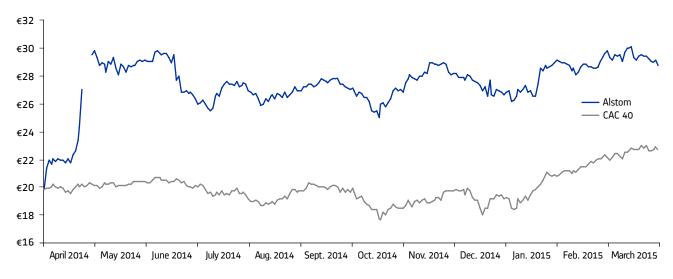


Place of listing:	Euronext Paris
ISIN Code:	FR0010220475
Ticker:	ALO
Nominal value:	€7
Number of shares:	309,792,497
Market capitalisation:	€8,898,872,778
Main indexes:	CAC 40
	SBF 120

Euronext 100

The ALSTOM shares are no longer listed on the London Stock Exchange since 17 November 2003, nor on the New York Stock Exchange since 10 August 2004.

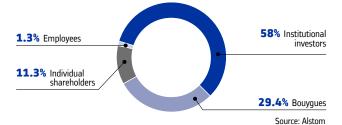
The Company has chosen not to create or otherwise sponsor an American Depositary Receipt (ADR) facility in respect of its shares. Any ADR facility currently in existence is "unsponsored" and has no ties whatsoever to the Company. This means that the Company cannot be relied upon to ensure the proper operation of such facility or to protect the rights of ADR holders, and the Company expressly disclaims any liability or submission to jurisdiction to any courts in the United States in respect of such facility. Persons choosing to deposit Alstom shares into such a facility or to acquire ADRs issued from such a facility do so at their own risk and on the basis of their own analysis of such facility. SHARE PRICE EVOLUTION (IN €) – APRIL 2014/MARCH 2015



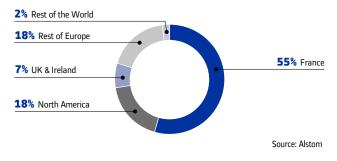
Alstom basis as of 31<sup>st</sup> Mars 2014: €19.82 Source: Euronext Paris.

### Shareholder structure

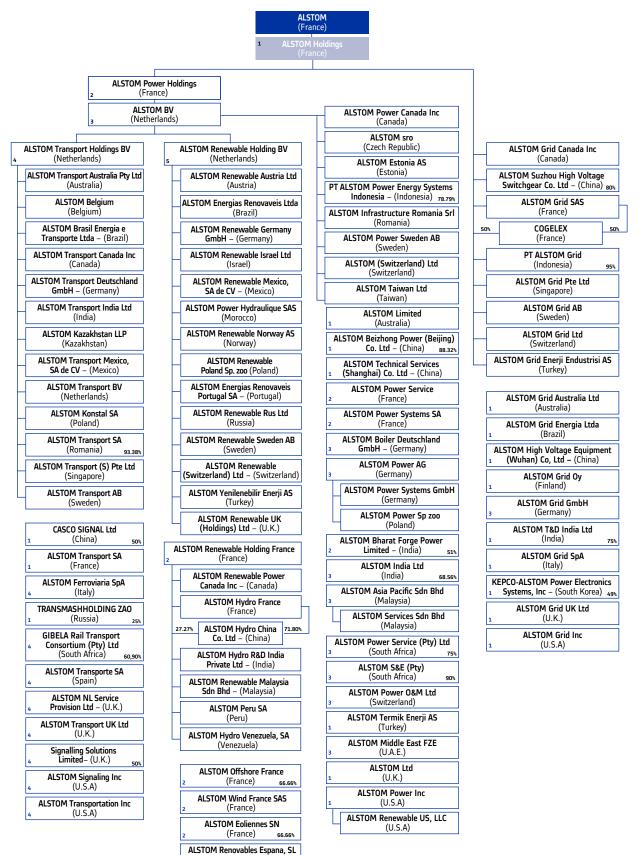
According to a shareholder study carried out by Euroclear France and Orient Capital, the Group's capital is held by approximately 250,000 shareholders. On 31 March 2014, the share capital was distributed as follows:



**CAPITAL STRUCTURE BY REGION** 



# SIMPLIFIED ORGANISATION CHART AS OF 31 MARCH 2015



Nota : Unless otherwise stated, companies are directly or indirectly wholly owned. The reference number in blue given to some subsidiaries indicates their direct or indirect link in share capital with the holding company having the same number, in black.

(Spain)

# INFORMATION ON THE ANNUAL FINANCIAL REPORT

The Alstom Annual Financial Report for fiscal year 2014/15, established pursuant to Article L. 451-1-2 of the French Monetary and Financial Code and Article 222-3 of the General Regulation of the French *Autorité des marchés financiers*, is made up of the sections at sub-sections of the French Registration Document identified in the table below:

Sections of the Registration Document	Pages of the Registration Document
Consolidated financial statements	72 to 145
Statutory accounts	148 to 165
Management report	
<ul> <li>Management report on consolidated financial statements fiscal year 2014/15, which constitutes the Board of Directors' report on the Group management for the fiscal year ended 31 March 2015 and to which the Chairman's report (Article L. 225-37 of French Commercial Code) is attached as well as the Statutory Auditors' report prepared in accordance with Article L.225-35</li> </ul>	
of the French Commercial Code on the report prepared by the Chairman of the Board	49 to 69
- Group description of activities, which is included in the Board of Directors' report on the Group management	5 to 47
- Risk factors, which is included in the Board of Directors' report on the Group management	173 to 192
- Chairman's report (Article L. 225-37 of French Commercial Code)	194 to 237
- Information on social, environmental and societal commitments	
(Articles L.225-100 and L.225-1-102-1 5 <sup>th</sup> paragraph of French Commercial Code)	313-314
- Comments on statutory accounts, information on trade payables, five-year summary results	165-166
- Agreements concluded by senior executives or major shareholders with a Company's subsidiary	321
- Details on shareholdings taken during fiscal years 2013/14 and 2014/15	322
- Financial authorisations, which includes the table of the authorisations to increase the share capital	324-325
- Ownership of ALSTOM shares	328-329
- Repurchase of shares	331
- Dividends paid over the last three fiscal years	332
- Elements which could have an impact in the event of a public offer	332 to 334
Statement by the person responsible	339
Statutory Auditors' report on the consolidated financial statements	146-147
Statutory Auditors' report on the statutory financial statements	167-168
Statutory Auditors' report (Article L. 225-235 of the French Commercial Code)	239

## INFORMATION ON THE **REGISTRATION DOCUMENT**

### **INFORMATION INCLUDED BY REFERENCE**

Pursuant to Article 28 of EC Regulation No. 809-2004 of the Commission of 29 April 2004 regarding prospectuses, the following information is included by reference in this Registration Document:

- the consolidated and statutory financial statements for the fiscal year ended 31 March 2014, the Auditors' reports thereto and the Group's management report, as shown at pages 86 to 148, 151 to 166, 149 to 150, 168, 62 to 84, 174 to 187 and 6 to 59 respectively, of the Registration Document No. D.14-0550 filed with the French Stock Market Authority (Autorité des marchés financiers) on 20 May 2014; and
- the consolidated and statutory financial statements for the fiscal year ended 31 March 2013, the Auditors' reports thereto and the Group's management report, as shown at pages 76 to 132, 135 to 149, 133 to 134, 152, 52 to 72, 156 to 163 and 6 to 49 respectively, of the Registration Document No. D.13-0571 filed with the French Stock Market Authority (Autorité des marchés financiers) on 29 May 2013.

The sections of these documents not included here are either not relevant for the investor, or covered in another part of this Registration Document.

## STATEMENT BY THE PERSON RESPONSIBLE FOR THE REGISTRATION DOCUMENT <sup>(1)</sup>

After taking all reasonable measures, I state that, to my knowledge, the information contained in this Registration Document is accurate. There is no other information the omission of which would alter the scope thereof.

I state that, to my knowledge, the statutory accounts and the consolidated financial statements of ALSTOM (the "Company") for the fiscal year 2014/15 are established in accordance with applicable accounting standards and give a true and fair view of the assets and liabilities, financial position and results of operations of the Company and all enterprises included in the consolidation perimeter, and the elements of the management report included in pages 50 to 69 and pages 174 to 192 and 6 to 47 presents a true and fair view of the evolution of the operations, results of operations and financial position of the Company and all enterprises included in the consolidation perimeter, as well as a description of the main risks and uncertainties faced by them.

I have obtained from the Auditors, PricewaterhouseCoopers Audit and Mazars, a letter of completion of work in which they indicate that they have verified the information relating to the financial situation and financial statements given in this Registration Document and have read the whole Registration Document.

The historical financial information presented or included by reference in the Registration Document has been the subject of reports by the Auditors included on pages 146 to 147 and 167 to 168 for the year ended 31 March 2015, and included by reference in this Registration Document for the years ending 31 March 2014 and 31 March 2013. The Auditors' report on the consolidated financial statement for fiscal year 2012/13 do not contain any emphasis of matter while the Auditors' report on the consolidated financial statement for fiscal year 2013/14 issued without qualifications contains an emphasis relating to change in method in connection with the revision of IAS 19. The Auditors' report on the consolidated financial statement for the year ending 31 March 2015 issued without qualifications, draws attention to the two following matters:

- Note 1.1 "Alstom strategic move", Note 3 "Comparability", Note 4 "Assets held for sale and discontinued operations" and Note 27.5 "Liquidity risk management" which set out the accounting treatment and impacts of the Group's Energy activities planned transaction with General Electric.
- Note 1.2 "Agreement between Alstom and the US Department of Justice" and Note 30.2 "Disputes – Alleged illegal payments", which set out the consequences of the agreement concluded with the US Department of Justice.

ALSTOM - REGISTRATION DOCUMENT 2014/15

Levallois-Perret, 21 May 2015.

Patrick Kron Chairman and Chief Executive Officer

1	Persons responsible	
1 2		339
2 3	Statutory Auditors Selected financial information	249
, 3.1	Historical information	E4 EE: 230
	Interim information	54-55; 339 N/A
3.2 4	Risk factors	
•		123; 124 to 128; 129 to 137 139 to 141; 156 to 158; 173 to 192
5	Information about the issuer	
5.1	History and development of the issuer	
	5.1.1. Legal and commercial name	1; 310
	5.1.2. Place of registration and registration number	310
	5.1.3. Date of incorporation and duration	310
	5.1.4. Headquarters, legal form, applicable law, country of incorporation, address and telephone number of registered headquarters	310
	5.1.5. Important events in the development of the business	310
5.2	Investments	
	5.2.1. Principal investments over the last three fiscal years	52 to 53; 63 to 67; 99 to 10
	5.2.2. Principal investments in progress	52 to 53; 63 to 67; 99 to 10:
	5.2.3. Principal future investments	50; 53; 10
5	Business overview	
5.1	Principal activities	6 to 8; 10 to 16; 19 to 29 30 to 37; 39 to 4
5.2	Principal markets	6 to 8; 10 to 16; 19 to 29 30 to 37; 39 to 4
5.3	Exceptional events that have influenced the principal activities or principal markets	N/A
5.4	Potential dependence on certain patents, licences, contracts or processes	N/A; 31
5.5	Basis of any statement made by the issuer regarding its competitive position	9; 22; 33; 4:
,	Organisational structure	
7.1	- Brief description	33
7.2	List of significant subsidiaries	144 to 145; 16
;	Property, plants and equipments	· · · · ·
3.1	Material tangible fixed assets	99 to 101; 108 to 112; 319 to 32:
3.2	Environmental issues that may affect the use of tangible fixed assets	N/A
)	Operating and financial review	
).1	Financial condition	50 to 69
9.2	Operating results	
	9.2.1. Significant factors materially affecting income from operations	50 to 69
	9.2.2. Description of important changes in net sales or revenues	50 to 6
	9.2.3. External factors (governmental, economical, budget, monetary or political) that have materially affected, or could materially affect operations	6 to 8; 21 to 22; 31 to 33; 4
.0	Capital resources	
.0.1	Issuer's capital resources	63 to 64; 77; 117; 15
.0.2	Cash flows sources and amounts	51 to 52; 62; 65 to 66; 75 to 7
.0.3	Borrowing requirements and funding structure	52; 56; 129; 129 to 137; 159 to 16
.0.4	Information regarding any restrictions on the use of capital resources that have materially	134; 159 to 160; 182 to 18
	affected or could materially affect the issuer's operations	
10.5	Anticipated sources of funds to finance commitments mentioned in 5.2.3 and 8.1	N//
1	Research and development, patents and licences	10; 16 to 18; 29; 37 to 38; 45 to 47
		52 to 53; 61; 101; 177; 189; 31

12	n of Annex 1 to European Regulation No. 809/2004 Trend information	Pages of the Registration Document
12 12.1		55
12.1	Most significant trends in production, sales and inventory, and costs and selling prices since the end of the last fiscal year	22
.2.2	Known trends, uncertainties, demands, commitments or events that are likely to have	6 to 8; 9 to 10; 19 to 22;
_	a material effect on prospects, at least for the current fiscal year	30 to 32; 39 to 40
.3	Profit forecasts or estimates	N/A
4	Administrative, management and supervisory bodies and Senior Management	
.4.1	Administrative and management bodies	195 to 207; 238
.4.2	Administrative and management bodies conflicts of interest	208 to 209
.5	Remuneration and benefits	
.5.1	Amount of the remuneration paid and benefits in kind	138; 164; 165; 219 to 226; 238
.5.2	Total amount set aside or accrued by the issuer or its subsidiaries to provide pension, retirement or similar benefits	124 to 128; 143; 156; 158 164; 222 to 223; 238
6	Board practices	
.6.1	Date of expiration of current term of offices	196
.6.2	Service contracts of members of the Board	208
.6.3	Information about the Audit Committee and the remunerations Committee	211 to 212; 214 to 217; 230
6.4	Corporate governance in force in the issuer's country of origin	194; 208 to 227
.7	Employees	
7.1	Number of employees	54; 138; 283 to 284
7.2	Shareholdings and stock options	118 to 122; 162 to 164; 240 to 247
7.3	Description of any arrangements for involving the employees in the issuer's capital	247 to 248
8	Major shareholders	
8.1	Interests held above the threshold for notification (known interests)	328 to 329
8.2	Different voting rights	N/A; 323
8.3	Control of the issuer	N//
8.4	Potential agreement known to the issuer, the operation of which may at a subsequent date result in a change of control of the issuer	N//
.9	Related party transactions	142 to 143
0	Financial information concerning the issuer's assets and liabilities, financial position and profit and losses	
20.1	Historical financial information	72 to 145; 146 to 147; 148 to 165
		167 to 168; 339
0.2	Pro forma financial information	N//
0.3	Annual financial statements	72 to 145; 148 to 165
0.4	Auditing of historical annual financial information	
	20.4.1. Auditing of the historical financial information	328
		169 to 172; 239; 310 to 312; 313 to 314
	20.4.3. Financial data in the Registration Document that is not extracted from the issuer's audited financial statements	66 to 69
0.5	Age of latest financial information	81
0.6	Interim and other financial information	-
0.0	20.6.1. Quarterly or half yearly financial information published since the date of the last audited financial statements	N/A
	20.6.2. Interim financial information covering the first six months of the fiscal year	N/4
0 7	after the end of the last audited fiscal year	
0.7	Dividend policy	166; 332
20.8	Legal and arbitration proceedings Significant change in the issuer's financial or trading condition	139 to 141; 157
20.9		N/A; 322

Sectio	n of Annex 1 to European Regulation No. 809/2004	Pages of the Registration Document
21.1	Share capital	
	21.1.1. Issued capital and authorised capital	323; 324 to 325
	21.1.2. Shares not representing capital	N/A; 323
	21.1.3. Shares held by the issuer or its subsidiaries	N/A; 331
	21.1.4. Securities granting future access to the issuer's share capital	240 to 247; 330
	21.1.5. Terms of any acquisition rights and/or obligations over capital issued but not paid, or any capital increase	N/A
	21.1.6. Capital of any member of the Group which is under option	N/A
	21.1.7. History of the issuer's share capital over the last three fiscal years	326 to 327
21.2	Memorandum and Articles of Association	
	21.2.1. Issuer's objects and purposes	317
	21.2.2. Provisions of statutes and charters with respect of the members of the administrative, management and supervisory bodies	194; 198; 210 to 212 216; 217; 317 to 318
	21.2.3. Rights, preferences and restrictions attaching to each class of the existing shares	N/A; 323
	21.2.4. Action necessary to change the rights of shareholders	N/A
	21.2.5. Manner in which Annual General Meetings of shareholders are called including the conditions of admission	317 to 318
	21.2.6. Provisions of the issuer's statutes, charter or bylaws that would have the effect of delaying, deferring or preventing a change in the issuer	332 to 334
	21.2.7. Provisions of the statutes governing the ownership threshold above which share ownership must be disclosed	318; 328
	21.2.8. Conditions governing changes in the capital that are more stringent than is required by law	N/A
22	Material contracts	50 to 51; 53; 79 to 81; 96 to 98;
		152 to 153; 321; 322
23	Third party information and statement by experts and declarations of interest	N/A
24	Publicly available documents	319
25	Information on holdings	144 to 145; 154; 165; 322; 337

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