

ALSTOM IN ROMANIA

For **over 20 years**, Alstom has been a pioneer for a modern railway transport in Romania.

As consortium leader in the project Border-Curtici-Arad-Km 614, Alstom has built the **first state-of-the-art traffic management and control centre** in Romania.

In 2016, as part of the Simeria – Sighisoara rehabilitation project, Alstom has delivered its very first train to Romania – the regional modular train **Coradia Polyvalent**, ERTMS Level 2-enabled, which will perform as a laboratory train for CFR SA.

In a long-term contract, the company is ensuring **metro train maintenance** for the entire fleet of the Bucharest metro.

KEY FIGURES

450 permanent employees

22 years in Romania

15 years – the duration of the ongoing maintenance contract for Bucharest metro trains

83 metro trains maintained day-in, day-out in Bucharest

7 major projects ongoing

4 modern industrial platforms in Bucharest plus Country HQ

2 offices in Alba Iulia



ONGOING PROJECTS

BUCHAREST METRO TRAIN FLEET MAINTENANCE

- Ongoing contract signed with METROREX (Bucharest state-owned metro company) in 2004, with a duration of 15 years

COMPLEX INFRASTRUCTURE AND REHABILITATION PROJECTS

- Section Hungarian Border – Curtici – Km 614. Works are currently completed; monitoring phase
- Section Simeria – Sighisoara; ongoing signalling works

RAILWAY ELECTRIFICATION PROJECTS

- Section Simeria – Vințu de Jos
- Section Coșlariu – Micăsasa
- For both projects, works are ongoing, including supply and catenary; passenger information and announcement systems

OTHER INFRASTRUCTURE PROJECTS

- Hot Box detectors – Infrastructure project designed to detect possible flaws in the train wheels, in order to prevent line deterioration and increase safety. Currently in execution in 21 locations on Corridors 4 and 9, in Eastern and Western Romania
- Electrification project in Pancevo, Serbia; works currently completed; monitoring phase

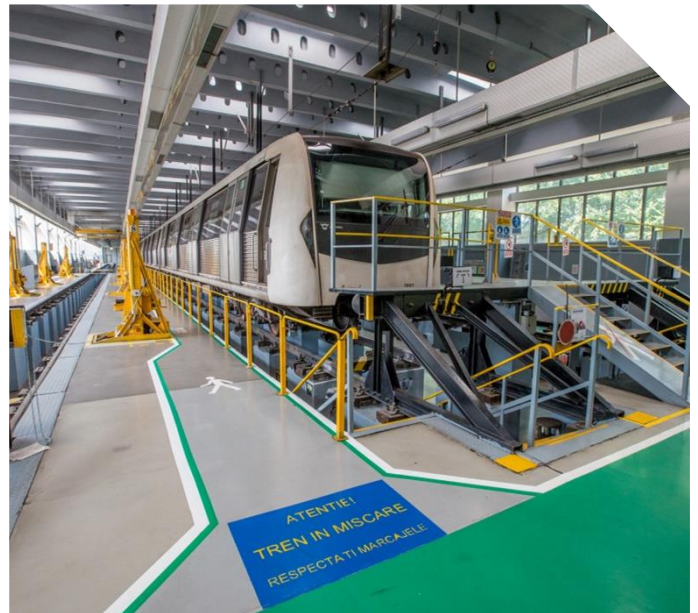
MAIN REFERENCES

▪ **BORDER-CURTICI-ARAD-KM. 614: a totally rebuilt railway line for faster and more efficient traffic**

- In March 2012, an Alstom-led consortium formed of five companies was entrusted the full rehabilitation of the 41-km long double track railway line section
- Alstom was directly responsible for the implementation of a modern traffic control centre, ERTMS Level 2, interlocking, passenger information systems and catenary upgrading through electric traction substations
- Increased safety and speed of freight and passenger transportation, increased traffic capacity by over 25%
- One of the first conventional lines in the world equipped with ERTMS Level 2 signalling system
- Arad Railway Station became one of the most modern stations in Romania and in South-East Europe, thanks to its state-of-the-art traffic management system (Iconis)

▪ **PANCEVO, SERBIA: Alstom Romania is showcasing its regional capabilities**

- Alstom has delivered its latest signalling interlocking technology (Smartlock 400) to the Serbian Railway Company, working in close cooperation with the Serbian Mihajlo Pupin Institute
- With 8 out of 17 lines being dedicated exclusively to freight transport, Pancevo is one of the largest and most important Serbian railway stations



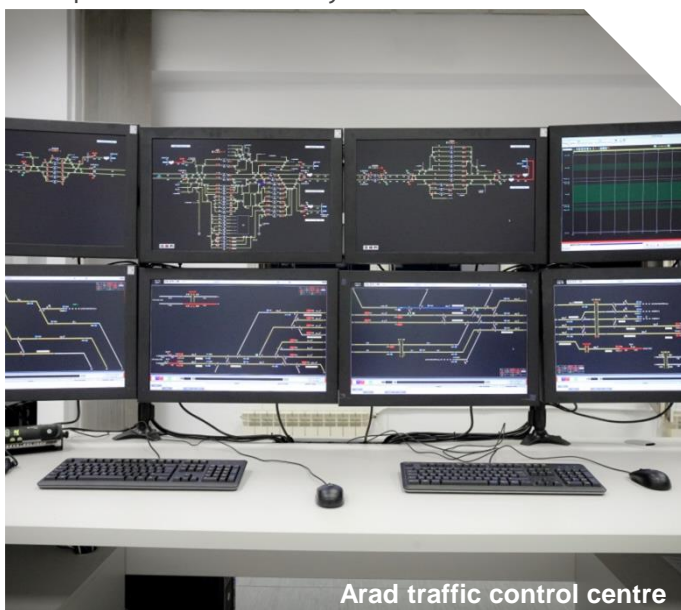
PROJECTS ONGOING

▪ **Preventive and corrective maintenance of the train fleet of Bucharest metro company Metrorex**

- 83 trains are being maintained and repaired every day by Alstom team
- Signed in 2004, for a period of 15 years, it is one of the most important ongoing projects for Alstom in Romania
- Over 300 employees are working on this project

▪ **Simeria-Sighisoara railway rehabilitation project**

- The rehabilitation projects includes the installation of Alstom's Atlas 200, its ERTMS Level 2 solution for the Sighișoara-Coșlariu-Simeria railway segment.
- At the end of July 2016, the first Alstom train arrived to Romania as part of this project
- Following extensive interior fitting works currently performed in Bucharest in accordance with client requirements, the Coradia Polyvalent will be used as laboratory train for CFR S.A.



Arad traffic control centre