**Product Launch - New Optical Instrument Transformer technology**

Paris – 23 August 2010

Alstom Grid’s Instrument Transformers product line has developed a new range of digital instrument transformers solutions enabling full IEC 61850 implementation and contributing to transmission architectures for today’s and tomorrow’s smart electricity grids.

This new range, called COSI – Compact Optical Sensor Intelligence- is made up of innovative products serving both AC (up to 1200 kV) and DC (up to 800 kV) transmission systems but also high current DC applications such as aluminium electrolysis.

The COSI range brings key technological features and benefits such as wider dynamic range (1 A to 4800 A). It is Smart Grid ready, delivering direct digital output for metering applications. It also has measurement improvements resulting from the fact that there is no saturation of the network and a high bandwidth. COSI products offer greater flexibility due to the ratio being modifiable at any time via a computer connection. There are also considerable economical features compared with conventional instrument transformers: the COSI product range is more compact and lighter, uses less wiring (all signals are transmitted through a standard fiber optic cable), requires less maintenance, is very easy to install with greater flexibility (bus mounting, horizontal mounting or direct assembly on the circuit breakers) and easy to upgrade.

This range is also more environmentally friendly and more secure with the risk of explosion minimized, leakage reduced, no use of oil or SF6, and no issue for end-life-disposal. Typically an optical sensor represents only 10% of the weight of an oil filled transformer, reducing transportation costs and the quantities of materials used. Our impact on the environment is thus considerably reduced. COSI sets the benchmark in transmission network architectures for today’s and tomorrow’s electricity networks.
IEC 61850 is the latest communication protocol in substations enabling integration of all protection, control, measurement and monitoring functions within a substation, and additionally providing the means for high-speed substation protection applications, interlocking and intertripping. It combines the convenience of Ethernet with the performance and security which is essential in substations today.

For more information:
Communications Department
Tel.: 0034 91 305 9203
Website [www.alstom.com](http://www.alstom.com) y [www.grid.alstom.com](http://www.grid.alstom.com)