



Press release

## Portugal Telecom makes the first 100G connection in Portugal over its optical fiber network

*Made in partnership with Alcatel-Lucent, the demo increases PT's network capacity and speed by a factor of ten, using optical and IP technologies*

**Paris and Lisbon, November 26, 2010** – Portugal Telecom has performed, for the first time in the country, a 100Gbps (Gigabit per second) connection, between Lisbon and Oporto, demonstrating the highest speed possible today, on a full in service telecom network.

The event showcased end-to-end optical/IP 100G connectivity across an existing active dense wavelength division multiplexing (DWDM) link covering over 400km. Using optical transmission and switching and routing IP/MPLS equipment, the demonstration proved these velocities are already possible over optical fiber existing networks which are processing live traffic, as is the case with PT's fixed telecom network.

The network capacity reinforcement provides PT with the ability to increase bandwidth to address the growing demand for video and multimedia, with exceptional quality of experience across TV, PC and mobile devices, while simultaneously providing access to new cloud services over its existing triple play network.

"In keeping with industry trends, we're expecting that video will account for well over half of our consumer traffic. This kind of demand requires higher speed, higher capacity technology," said Alfredo Baptista, Portugal Telecom CTO. "This fully integrated IP/optical 100G connection, together with the previously announced evolution of our fiber access network with GPON and 10GPON technologies, is one further step towards a Next Generation Network with full end-to-end IP connectivity with high quality standards and very high speeds, being these unique characteristics not replicable on other type of technologies.

Portugal Telecom recently reaffirmed its commitment to invest in its Optical Fiber network to the customer home with the objective of covering another 600 000 houses in addition to the over one million homes already serviced by the network. The network expansion will use about 300,000km of fiber, or the equivalent of 7.5 trips around the globe, and shall involve approximately 1500 people between PT collaborators and external suppliers. Once complete, PT's fiber network will reach over 50% of homes in Portugal.

"The upgrading of service provider networks to 100G will be a major focus and business area for several years to come and these speeds will become the new currency of IP and optical networks," said Adolfo Hernandez, president of Alcatel-Lucent's activities in EMEA. "This demonstration brings to light the years of investment PT has made on future proof optical and IP infrastructure which is compatible with today's 100G technology. In seizing today's opportunity with PT, Alcatel-Lucent shows it is in a unique and enviable position bringing together the most tightly integrated, broadest range of high speed solutions across optics and IP in the industry."

For this demonstration, PT used Alcatel-Lucent's 1626 Light Manager enhanced with 100G next-generation coherent technology and the Alcatel-Lucent 7750 Service Router equipped with 100GE cards for IP/MPLS routing and services. The unique combination of Alcatel-Lucent 100G optical transport and 100G Ethernet technologies enables unmatched end-to-end scalability, performance and compatibility across core, edge and metro networks. Blending innovative 100G

technology in IP and optics with groundbreaking IP/optics integration, Alcatel-Lucent supports continuous bandwidth scaling, lowest-cost-per-bit transport and reduced total cost of ownership - all of which are central to the Alcatel-Lucent Converged Backbone Transformation solution and High Leverage Network™ architecture.

#### **About Portugal Telecom**

Portugal Telecom is a global telecommunications operator with around 80 million clients worldwide. In Portugal, where it holds a leading position in the markets in which operates, it provides a wide portfolio of fixed and mobile services, including broadband access, voice and television, acting in all segments of the telecommunications sector: private, residential, enterprise solutions and wholesale. Portugal Telecom assumes itself as the Portuguese entity with the biggest national and international projection and has a diversified business portfolio in which quality and innovation are determinant aspects, being on the same level of the most advanced international companies in the sector. Portugal Telecom is ranked on the Euronext and New York Stock Exchange. Information about the company is available in Reuters via the code PTC.LS and PT and in Bloomberg via the code PTC PL.

#### **About Alcatel-Lucent's High Leverage Network™**

The Alcatel-Lucent High Leverage Network™ (HLN) architecture addresses the dual challenges of simultaneously scaling and managing network capacity to meet increasing bandwidth demand while delivering differentiated, revenue generating services. It achieves this by delivering scalable bandwidth at the lowest cost per bit and by embedding intelligence in the network to enable dynamic service creation and delivery. The foundation for the Alcatel-Lucent Application Enablement vision, the HLN architecture collapses multiple complex costly overlay networks into a simpler, fully optimized network that leverages technical innovations and embraces existing environments.

#### **About Alcatel-Lucent**

Alcatel-Lucent (Euronext Paris and NYSE: ALU) is the trusted transformation partner of service providers, enterprises, strategic industries such as defense, energy, healthcare, transportation, and governments worldwide, providing solutions to deliver voice, data and video communication services to end-users. A leader in fixed, mobile and converged broadband networking, IP and optics technologies, applications and services, Alcatel-Lucent leverages the unrivalled technical and scientific expertise of Bell Labs, one of the largest innovation powerhouses in the communications industry. With operations in more than 130 countries and the most experienced global services organization in the industry, Alcatel-Lucent is a local partner with a global reach. Alcatel-Lucent achieved revenues of Euro 15.2 billion in 2009 and is incorporated in France, with executive offices located in Paris. For more information, visit Alcatel-Lucent on the Internet: <http://www.alcatel-lucent.com>, read the latest posts on the Alcatel-Lucent's blog <http://www.alcatel-lucent.com/blog> and follow us on Twitter: [http://twitter.com/Alcatel\\_Lucent](http://twitter.com/Alcatel_Lucent).

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