

## **Sébastien Bigo, Alcatel-Lucent Bell Labs researcher, receives the first joint IEEE France Section / SEE Léon-Nicolas Brillouin award**

**Paris, January 13, 2009** - The Léon-Nicolas Brillouin prize was given on December 2008 by Lewis M. Terman, 2008 IEEE President and Jean-Gabriel Rémy, SEE honorary chairman, to Sébastien Bigo, head of optical networks department, at Alcatel-Lucent Bell Labs (Euronext Paris and NYSE: ALU) in Nozay, France.

This award recognizes Bigo's theoretical and experimental contributions to furthering understanding propagation effects, notably non-linear optical effects, in optical fibers. Applying this knowledge, Sébastien conceived several major innovations designed to take better advantage of, or alternatively, reduce non-linear effects, and to supersede the limits of terrestrial and submarine optical communications systems. His work demonstrated the links between science, research, experimentation and industrialization. Among the innovations that resulted from his contributions were the TeraLight fiber and several patented technologies that are currently used in WDM systems, or have potential applications in future WDM systems. Bigo's work integrated science, research, experimentation and industrialization.

During his speech given at the award ceremony, Termansaid: "Sébastien and his team have achieved major breakthroughs in better understanding the physics of light. He is among those great engineers and researchers whose contributions continue to help advance humankind through the creation and application of technology."

During the last ten years, Sébastien Bigo has contributed to the achievement of more than 21 optical transmission records, including the first 10-Terabit/s transmission in 2001, and more recently, in February 2008, the first 16-Terabit/s transmission (the equivalent of delivering 400 DVD in one second) on a single fiber over 2,550 km.

He also authored or co-authored more than 160 articles in international scientific publications and conferences, and 31 patents.

According to Ovum, Alcatel-Lucent is the worldwide leader in optical networks.

### **About the Léon-Nicolas Brillouin award**

In order to promote the interaction in between research, higher education and industry, as well as to bring a contribution to the triangle: sciences, technology and innovation, two awards Léon-Nicolas Brillouin (even years) and Alain Glavieux (odd years) have been created in a joint way by the two societies:

- SEE (Société de l'Electricité, de l'Electronique et des Technologies de l'Information et de la Communication)
- IEEE France Section, representative of IEEE (Institute of Electrical and Electronics Engineers, Inc.)

The awards deal with physics, optics, material for electronics, power electrical engineering, micro- and nano-electronics, information and communication sciences and related fields. The Léon-Nicolas Brillouin Award will be given in 2008 in the domain of physics, optics, material for electronics and power electrical engineering.

### **About Alcatel-Lucent**

Alcatel-Lucent (Euronext Paris and NYSE: ALU) is the trusted partner of service providers, enterprises and governments worldwide, providing solutions that deliver voice, data and video communication services to end-users. A leader in fixed, mobile and converged broadband networking, IP 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 17.8 billion in 2007 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>

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