

# PRESS RELEASE



## ASN launches next gen coherent optics to reduce network power consumption in subsea networks

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ASN today announced a next generation modem equipped with Nokia sixth-generation super-coherent Photonic Service Engine, the PSE-6s.

Since Claude Shannon's masterpiece work on mathematical theory of communication published 75 years ago which laid the foundation for modern communication systems, Nokia's PSE coherent modems have evolved significantly to meet the operators need to add massive capacity in response to ever-increasing worldwide interconnection demand.

The new generation of Submarine Line Terminating Equipment (SLTE) terminals by ASN leverage Nokia's PSE coherent optics to provide higher data rates and greater capacity across long distances subsea networks, and to enable a new step of energy-efficient solutions to reduce the carbon footprint.

Used across ASNs and Nokia's portfolio of high-performance optical transport solutions, the PSE-6s strengthens the PSI-SUB SOFTNODE SLTE platform, optimizing its unique modem integration capabilities to efficiently deliver high-speed trans-oceanic 400 Gigabit Ethernet (GE) and 800 Gigabit Ethernet (GE) services over subsea cables of any distance.



Nokia PSE-6s optical engine tightly integrates the latest generation of 5nm coherent digital signal processors (DSPs) with Nokia's high-performance CSTAR silicon photonics. Operating at 130 Gbaud, the PSE-6s powers the next generation of coherent transport at up to 1.2Tb/s of capacity per wavelength, and powerful increases in capacity-reach performance for challenging long-haul and subsea links. PSE-6s offers a simple upgrade path for operators, allowing them to upgrade their networks to PSE-6s across the 1830 family of optical networking platforms, including the 1830 PSS, 1830 PSI-M, 1830 PSS-x and 1830 PSI-SUB.

**Olivier Courtois**, ASN Product Strategy Director, said: "*The new PSE-6s, with its unique continuous baud rate adjustment capabilities, will efficiently fill any subsea cable link and maximize total cable fiber capacity on the new innovative SDM2 submarine cables. Subsea operators can take immediate advantage of its capabilities and energy-efficiency which reduces SLTE power consumption by up to 35%.*"

Optical networking equipment containing the new PSE-6s is expected to be available for customer network trials in the second half of 2023.

For more information: PSE-6s: A new frontier in scale, performance and sustainability  
<https://www.nokia.com/networks/optical-networks/pse-6s/#products-and-solutions>

### About Alcatel Submarine Networks

Alcatel Submarine Networks, part of Nokia, leads the industry in terms of transmission capacity and installed base with more than 750,000 km of optical submarine systems deployed worldwide, enough to circumnavigate the globe almost 19 times. From traditional telecom applications to content and "over the top" service provider infrastructures, as well as to offshore oil and gas applications, ASN provides all elements of turnkey global undersea transmission systems, tailored to individual customer's needs. An extensive services portfolio completes its comprehensive offering for the submarine business, including project management, installation, and commissioning, along with marine and maintenance operations performed by ASN's wholly owned fleet of cable ships.

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