

## EXTENDING THE DISTANCE IN RUSSIA: T8 AND OFS DEMONSTRATE SUCCESSFUL ERROR-FREE 100 Gb/s UNCOMPENSATED TRANSMISSION TOGETHER WITH 40 Gb/s TRANSMISSION OVER 4000 KM IN 8 Tb/s DWDM SYSTEM

Moscow, Russia, May 30, 2012 - OFS, a leading designer, manufacturer and supplier of innovative fiber-optic network products, and T8, a leading Russian designer, manufacturer and supplier of DWDM transmission equipment extend their record in error-free 100G uncompensated transmission over 4000km of OFS optical fiber, coexisting with legacy 40G channels, double the distance of their demonstration at Sviaz-Expocomm earlier this month This achievement is enabled by the new 100G dual-polarization quadrature phase shift keying (DP-QPSK) aggregation transponder developed by T8 and OFS AllWave® Zero Water Peak (ZWP) optical fiber.

This achievement brings the commercial use of 8 Tb/s long-haul DWDM systems closer to reality, to help meet exploding bandwidth demand generated by video and cloud computing applications.

"This successful trial was possible due to the hard-work of T8's R&D team who used the most innovative telecommunication solutions including a 100G DP-QPSK modulation format, polarization multiplexing and Software Forward Error Correction (SoftFEC), and signal processing for automatic dispersion compensating up to 75,000 ps/nm. The T8 transponder has outstanding performance for the critical optical signal noise ratio (OSNR) tolerance, at 12.5 dB, which helps 100G signals to be successfully carried over networks originally optimized for 10G or 40G DWDM traffic. We also demonstrated 100G DP-QPSK and 40G non-return to zero differential phase-shift keying (NRZ-DPSK) transmission with a 50GHz grid. These good results were possible due to cooperation with a world leading innovator of optoelectronics components and optical fiber – Furukawa Electric/OFS," said Vladimir Treshchikov, T8 General Director during the live demonstration of 100G transmission.

Alexander Mikilev, Marketing Director of OFS Russia, added, "The new achievement is a good example of cooperation between our companies resulting in a key benchmark in DWDM system performance operating over the proven transmission media, AllWave ® Zero Water Peak fiber. The all-synthetic silica construction, tight geometry, and zero-water peak performance of the AllWave ZWP fiber lowers attenuation and splice loss across the full spectrum of wavelengths to help achieve the longer reach and higher data rates needed to meet the bandwidth demands of our video connected, mobile society"

"This is the second step which we have made together with T8 and this transmission accomplishment," said Michael Pavlychev, the General Director of OFS office in Russia. We have already demonstrated 40G data transmission via 2000km earlier this year and this is now the second step: 100G together with 40G transmission on a single AllWave® ZWP fiber."

## **About T8**

The Company "T8" LLC is the CIS leader in the sphere of DWDM technology adoption. Specialists from the Russian Academy of Sciences with an extensive experience in engineering and installation of DWDM highway systems form the foundation of the company. "T8" LLC is the only company in Russia developing DWDM systems by means of the world's leading modeling system OptSim. The company has Russia's leading fiber optic communications testing laboratory, which is equipped with more than 100 devices for complex measurements during commissioning and start-up of DWDM systems, for the analysis of optical line parameters like chromatic dispersion, polarization mode dispersion (PMD), for transmission quality testing, GbE measuring and many others.

To learn more of T8, please visit <a href="https://www.t8.ru">www.t8.ru</a>.

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**About OFS** 

OFS is a world-leading designer, manufacturer and provider of optical fiber, optical fiber

cable, connectivity, FTTx and specialty photonics solutions. Our marketing, sales,

manufacturing and research teams provide forward-looking, innovative products and

solutions in areas including Telecommunications, Medicine, Industrial Automation, Sensing,

Government, Aerospace and Defense applications. We provide reliable, cost effective

optical solutions to enable our customers to meet the needs of today's and tomorrow's

digital and energy consumers and businesses.

OFS' corporate lineage dates back to 1876 and includes technology powerhouses such as

AT&T and Lucent Technologies. Today, OFS is owned by Furukawa Electric, a multi-billion

dollar global leader in optical communications.

For more information, please visit www.ofsoptics.com.

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