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### **Photonic Transport Network**

A communication node (OADM) using an optical switch has been proposed and commercialized worldwide. Optical/electrical conversion and electrical switch processing are no longer required, as a result of low power consumption, and this has been deployed worldwide.

OADM: Optical Add Drop Multiplexing

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### **10 Terabit-class OTN Basic Technology**

Toward the realization of 10Tbit/s class ultra-high-speed large-capacity long-distance optical networks (OTN), demonstrating ultra-high-speed channel transoceanic long-distance transmission using multi-carrier OFDM digital coherent infrastructure technology, a digital signal frame technology to accommodate ultra-high-speed Ethernet was proposed, led by international standardization, and the feasibility of 10Tbit/s class OTN was demonstrated for the first time in the world.

OTN: Optical Transport Network

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### **Ultra-high-speed OTDM Technology**

Terabit transmission has been demonstrated for the first time in the world by using optical amplification technology and WDM technology, a light source using a super continuum and OTDM technology of 100Gbit/s, and Duo-binary modulation technology.

OTDM: Optical Time Division Multiplexing