

THE VERIZON TELEPHONE COMPANIES

TARIFF F.C.C. Nos. 1 and 11

IntelliLight[®] Optical Transport Service (IOTS)

Enhancements

DESCRIPTION

Transmittal No. 546

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INTRODUCTION

The Verizon Telephone Companies (Verizon) are submitting tariff pages to enhance IntelliLight[®] Optical Transport Service (IOTS) in its Tariffs F.C.C. Nos. 1 and 11.

IOTS provides a customer with managed optical transport of multiple protocols that are transmitted over a single fiber optic pair. The service is configured in a full or partial ring architecture allowing for point-to-point optical services of varying wavelengths to be multiplexed on to or off of the ring. The ring architecture is comprised of dense wave division multiplexing devices (DWDM nodes or amplifiers) connected with fiber optic facilities. Nodes are available in 4 or 16 channel capacities. A 4-channel node supports 4 protected channels or 8 unprotected channels. A 16-channel node supports 16 protected channels or 32 unprotected channels. With a protected channel, the same signal is duplicated and sent over separate diverse routes (a working route and a protect route) within the IOTS network. The capacity of a node may be may be increased by adding an expansion node.

With IOTS, the wavelengths are arranged in a channelized format such that the protocol transmitted over each channel is independent of every other channel on the ring. The protocols that may be transmitted over IOTS include Synchronous Optical NETWORK (SONET channels at capacities of OC3, OC12 or OC48), Enterprise Service CONnection (ESCON channels at 200 Mbps), Fiber CONnection (FICON channels at 1 and 2 Gbps), Fibre Channel at 1.0625 Gbps-531 Mbps-266 Mbps-and 133 Mbps signals, Fibre Channel at 2.125 Gbps, External Timing Reference/Control Link Oscillator (ETR/CLO signals at 8 Mbps), Fiber Distributed Data Interface (FDDI channels at 100 Mbps), Intersystem Channel (ISC signals at 1.06 Mbps), ISC3

(ISC signals at 2.125 Gbps), Fast Ethernet at 100 Mbps, Gigabit Ethernet at 1.0 Gbps, 10 Gbps LAN-PHY, 10 Gbps WAN-PHY, and D1 Video at 270 Mbps.

Verizon is introducing two new Optical Transport Service options (protocols) for transport over the wavelengths provided with IOTS. The following new options are introduced in this filing:

- OC192 for transmission of 9.953 Gbps synchronous optical data transmission capability
- OC192C for transmission of concatenated 9.953 Gbps synchronous optical data transmission capability

The attached tariff pages provide a complete description of the IOTS optical transport channel options that are introduced in this filing.