Your new fibre optic transport solution

**Architecture**


**Framing & Interfaces**


G.959.1, Optical transport network physical layer interfaces.

**Equipment Functions**


G.8251, The control of jitter and wander within the optical transport network (OTN).

**Network Management**

G.874. Management aspects of the optical transport network element.

G.874.1, Optical transport network (OTN) protocol-neutral management information model for the network element view.

G.875, Optical transport network (OTN) management information model for the network element view.

**Related Recommendations**

G.7041/Y.1303, Generic framing procedure (GFP).

G.7042/Y.1305, Link capacity adjustment scheme (LCAS) for virtual concatenated signals.

G.65x Series on optical fibre cables and test methods.

G.693, Optical interfaces for intra-office systems.

G.7710/Y.1701, Common equipment management function requirements.

G.806, Characteristics of transport equipment - Description methodology and generic functionality.

G.807/Y.1302, Requirements for automatic switched transport networks (ASTN).

G.8080/Y.1304, Architecture for the automatically switched optical network (ASON).

**OTN means**

- Transport for all digital payloads with superior performance and support for the next generation of dynamic services with operational efficiencies not expected from current optical wavelength division multiplexing (WDM) transport solutions.

- Support for a wide range of narrowband and broadband services like:
  - SDH/SONET
  - IP based services
  - Ethernet services
  - ATM services
  - Frame Relay services
  - Audio/Video services

Given the global scope of fibre optic transport networks based on WDM, the OTN market potential is bright.

**WDM spending Forecast worldwide**

Source: RHK, Inc.
Global Optical Transport Network to Support Today’s and Future Services

User or carrier may originate and terminate the OTN framing for any digital payload, IP, ATM, SDH, PDH, etc.

Single and multi-channel interfaces with performance monitoring for every application.

IaDI = Intra-Domain Interface
IrDI = Inter-Domain Interface
NE = Network Element

(Figure above represents one of many possible implementation scenarios)

ITU-T SG15 Question 19 is responsible for tracking and coordinating the development of Recommendations in the OTN area. For more detailed information the «Optical Transport Networks & Technologies Standardization Work Plan» has been developed. See http://www.itu.int/itudoc/tu-t/com15/otn for more details.