

**ITU-T The leader on OTN standards**

**ARCHITECTURE**

**G.872** (11/2001), Architecture of optical transport networks  
Network requirements and architectural framework of the optical transport network family of Recommendations.

**FRAMING AND INTERFACES**

**G.709/Y.1331** (03/03), Interface for the Optical Transport Network (OTN) Framing structure ('digital wrapper'), overhead bytes, multiplexing and payload mappings for all payload types.

**G.959.1** (03/06), Optical transport network physical layer interfaces

**EQUIPMENT FUNCTIONS**

**G.798** (12/06), Characteristics of optical transport network (OTN) hierarchy equipment functional blocks

**G.8251** (11/01), The control of jitter and wander within the optical transport network (OTN)

**NETWORK MANAGEMENT**

**G.874** (03/08), Management aspects of the optical transport network element

**G.874.1** (01/02), Optical transport network (OTN): Protocol-neutral management information model for the network element view

**RELATED RECOMMENDATIONS**

**G spp1.43** (02/08), Transport of IEEE 10G Base-R in Optical Transport Networks (OTN)

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

**G.664** (03/06), Optical safety procedures and requirements for optical transport systems

**G.693** (05/06), Optical interfaces for intra-office systems

**G.806** (03/06), Characteristics of transport equipment – Description methodology and generic functionality

**G.870/Y.1352** (06/04), Terms and definitions for Optical Transport Networks (OTN)

**G.873.1** (03/06), Optical Transport Network (OTN): Linear protection

**G.7041/Y.1303** (08/05), Generic framing procedure (GFP)

**G.7042/Y.1305** (03/06), Link capacity adjustment scheme (LCAS) for virtual concatenated signals

**G.7710/Y.1701** (07/07), Common equipment management function requirements

**G.8080/Y.1304** (06/06), Architecture for the automatically switched optical network (ASON)

**G.8201** (09/03), Error performance parameters and objectives for multi-operator international paths within the Optical Transport Network (OTN)

**NOTE: G.65x** - hyperlink is to the ITU-T G-Series Recommendations page, and not to a specific G-Series Recommendation.

**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.**

For more information on other ITU-T activities:  
workshops: [www.itu.int/ITU-T/worksem/](http://www.itu.int/ITU-T/worksem/)  
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technology watch: [www.itu.int/ITU-T/techwatch](http://www.itu.int/ITU-T/techwatch)

**OTN**

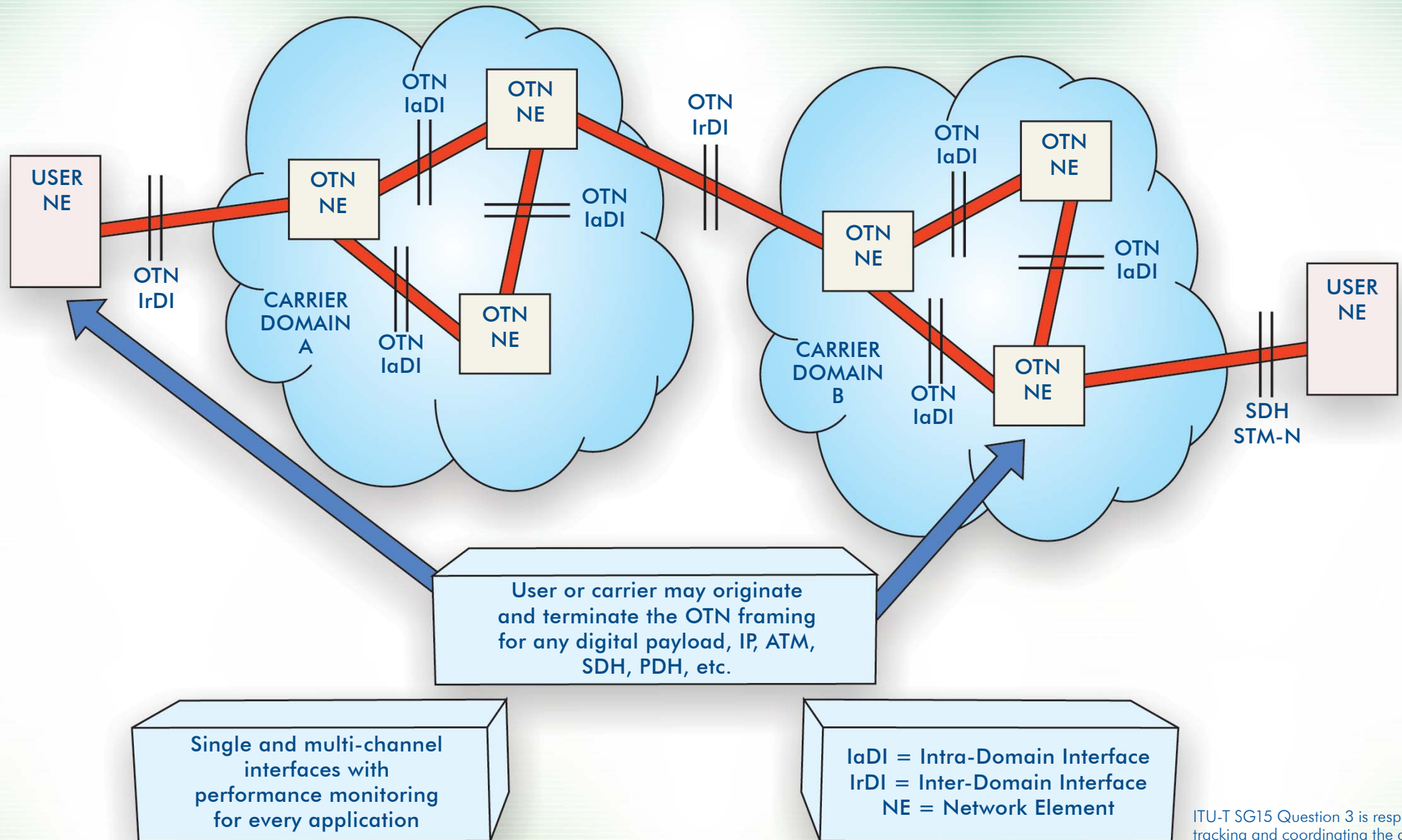
**OPTICAL TRANSPORT NETWORK**

**Your new fibre optic transport solution**

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ITU-T

Global Optical Transport Network to Support Today's and Future Services



(The figure above represents one of many possible implementation scenarios)

ITU-T SG15 Question 3 is responsible for tracking and coordinating the development of Recommendations in the OTN area.

For more detailed information, the "Optical Transport Networks and Technologies Standardization Work Plan" has been developed. See [www.itu.int/ITU-T/studygroups/com15/otn](http://www.itu.int/ITU-T/studygroups/com15/otn)