## TELECOMMUNICATION STANDARDIZATION SECTOR

STUDY PERIOD 2009-2012

## STUDY GROUP 15 TD 522 (WP 3/15)

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## TEMPORARY DOCUMENT

**Source:** Rapporteur Q12/15

**Title:** Clarification of the PTN/solution X environment

The text below was developed during a meeting of Q.12/15 during Q3 and Q4 of Tuesday 22 February:

## PTN/X environment:

- 1. This application is intended to include the deployment of multi technology transport nodes that may include MPLS-TP, Ethernet, OTN and SDH transport technologies
- 2. Multiple transport layers may be supported by a common node
- 3. In a network where the primary requirements are driven by a desire for consistency from the perspective of Transport Network (SDH/OTN) operational behaviour, operational functionality and operational process
  - a. In particular compatibility with the existing OAM and protection switching paradigm for SDH, OTN, Ethernet. i.e. provide the same controls and indications.
  - b. Compatibility (consistency) means that the same management information model is be used. This enables upgrades of the OSS infra structure in which it is only necessary to recognize the new type of layer network technology.
  - c. Minimize the impact on the workforce that operates the existing transport network. e.g. retraining about the same as for SDH to OTN.
- 4. G.7710; G.806: G.808.1; draft G.808.2 provide the common behaviour (also see RFC5951 for G.7710)
- 5. Transport Network: A connection oriented network who's connections provides connectivity between service switches.
- 6. Currently connections are limited to point to point co-routed bidirectional transport path.
  - a. Future requirement to support uni-directional point to multipoint.
- 7. Independence between services and transport i.e. the transport network is service agnostic
  - a. Provides a transport path for a PW or a LSP

Interconnection scenarios as described in appendix 1 of C.1124

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