Framework for DWDM interface Management and Control

draft-ietf-ccamp-dwdm-if-mng-ctrl-fwk-06

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Motivation

- The deployment of DWDM interfaces outside the DWDM network leads to the following issues:
  - Interfaces and DWDM equipment may be implemented by different vendors, so there is a need for a common parameter set
  - The network and the terminal equipment need at least to exchange interface characteristics, operational state and verify the connectivity quality.

- A multivendor packet-optical network requires a common network model to ensure an efficient operation and management of the network

- Deeper integration to achieve a higher degree of automation in network operation and a more efficient interworking between IP and DWDM layer
Document Scope

- The document covers management and control/management plane aspects for single channel DWDM interfaces.
- This document describes use cases and requirements for the control and management of single channel optical interfaces.
- The purpose is to identify the necessary information elements and processes for the given architecture.
- The focus is on automating the network operation process irrespective on how it is triggered.
- Guidance for the following drafts:
  - draft-dharinigert-ccamp-dwdm-if-lmp
  - draft-dharini-ccamp-dwdm-if-param-yang
Solution initially in scope.

**NMS IP**

**NMS Optics**

**NMS IP**

**SNMP**

**DWDM Network**

**LMP**

**Terminal #1 (vendor B1)**

**E₁ (vendor X)**

**Netconf /Yang**

**Terminal #2 (vendor B2)**

**Rx (vendor Y)**

**E₂**

NMS – Network Management System

**OM**

Optical path (incl. e.g. OAs, OADMs)

**OD**
Modifications in version 06

- New co-author added Julien Meuric, Orange
- New version of the document was submitted in July
- Document was updated twice since March
- Authors addressed the comments from the list
- Re-phrasing and error correction
- Improved readability
Major Diffs in detail

• Introduction section updated
• Updated the figures to harmonize explaining text and figures
• Update the Control Plane Consideration section (section 4.2)
• Updated the Use Case section, main changes in section 5.1 Service Setup
• Updated the requirements section (removed the PRE-FEC BER requirement)
Next steps

- Updating the reference section
- Authors think that the doc is ready for WG last call