Framework for DWDM interface Management and Control

draft-ietf-ccamp-dwdm-if-mng-ctrl-fwk-04

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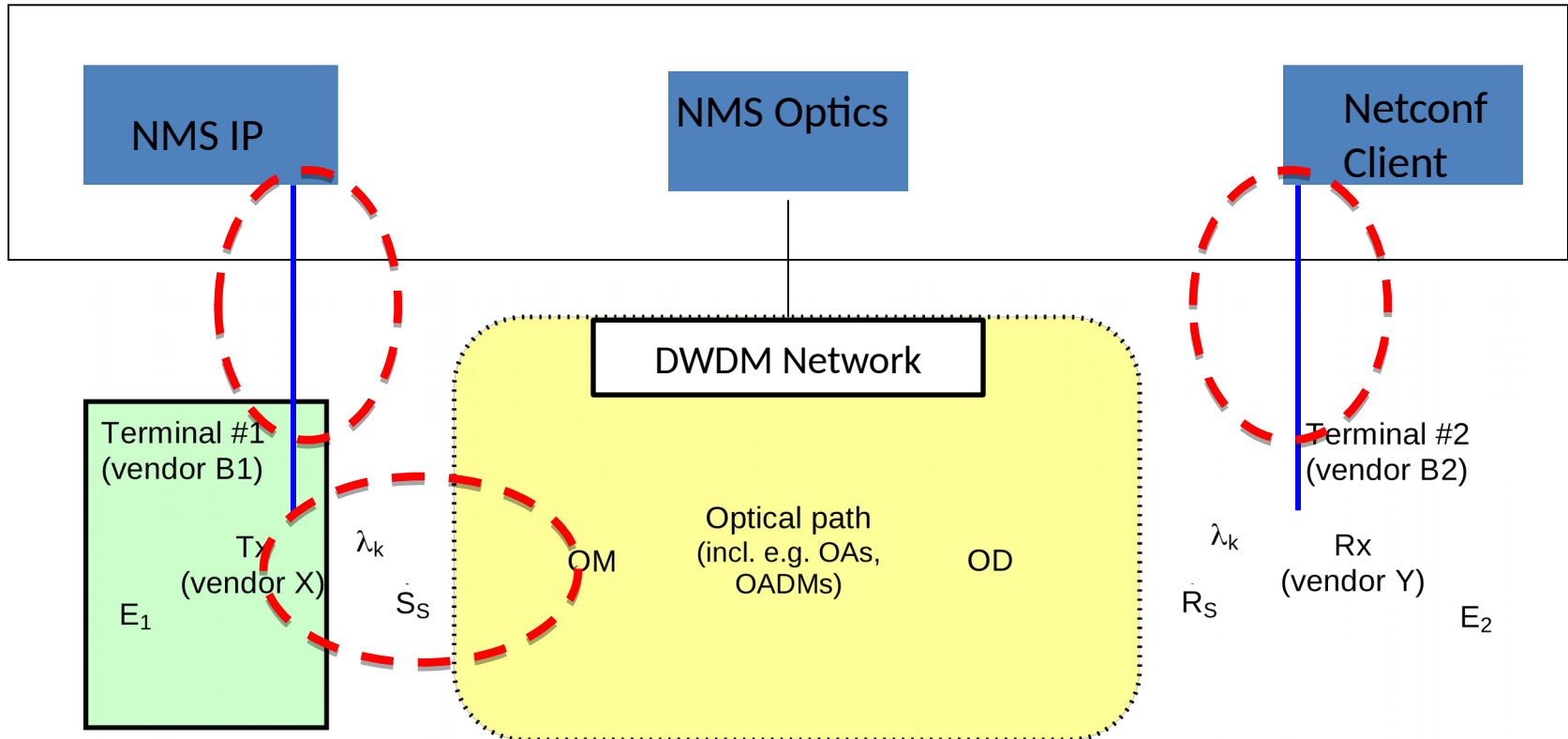**Dieter Beller**   Nokia

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 defining the line side of the network

    - The network and the terminal equipment need at least to exchange interface characteristics, operational state and verify the inter-layer 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

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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

Netconf Client

DWDM Network

Terminal #1 (vendor B1)

Tx (vendor X)

λ_k

S_S

E_1

OM

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

OD

Terminal #2 (vendor B2)

λ_k

Rx (vendor Y)

R_S

E_2

EMS – Element Management System
NMS – Network Management System

Modifications in version 04

- New version was submitted in March

- Requirements section updated.

- Addressed the comments from the chairs

- Re-phrasing and error correction

- Improved readability, deleted some paragraphs (unnecessary text)

Next steps

- Discussion on the list, requesting feedback from the WG

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

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