CCAMP update

• YANG models:
  – Optical networks: Wavelength Switching
    • L0 types (RFC9093) – common data types and grouping in YANG. To be imported for WSON and FlexiGrid. Working on a BIS to include transponders and impairment awareness.
    • WSON topology (RFC9094) – TE topology in wavelength switched optical networks.
    • WSON tunnel model (WG) – model for WSON tunnels
    • Flexi grid topology (WG) – module to support flexi-grid optical networks.
    • Flexi grid tunnel (WG) - module to support flexi-grid tunnels.
    • Optical impairments topology YANG (WG) – module to support impairments aware optical networks.
    • DWDM interface parameters: module to support optical interface parameters for an external transponder in a WDM network
  – OTN networks: Electrical layer of optical network (TDM)
    • L1 types (WG) – common data types for OTN networks.
    • OTN topology (WG)
    • OTN tunnel model (WG)
    • OTN slicing (alignment with TEAS in progress)
  – Microwave networks:
    • Microwave radio link (RFC8561)
    • Microwave topology (WG)
CCAMP update

• YANG models cont’d:
  – Services
    • L1CSM (WG) - YANG data model for Layer 1 Connectivity Service Model (L1CSM). Can be utilized by a customer network controller to initiate a service request or retrieve service states in a L1 network.
  
  – Client signals and topologies
    • YANG model for client signals (WG) - Describes how the client signals are carried over transport network and defines YANG data models which are required during configuration procedure. E.g ETH, STM-n, FC
    • YANG model for Ethernet TE topologies (WG) – Describes the topology of Ethernet with TE as client network of the server transport network.

  – Network inventory (alignments with other WGs needed?)
    • Network inventory YANG: Data model for network hardware inventory
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• Other topics
  – Applicability of GMPLS to OTN networks beyond 100 G (WG) – No extension required, just applicability statement.
  – Transport NBI applicability statement: Analysis of the applicability of the YANG models defined in TEAS and CCAMP to support ODU services, transparent client services and EPL/EVPL Ethernet services over OTN single and multi domain scenarios.
  – LMP (CCAMP owned protocol for Link Management)
    • Extensions to LMP for DWDM optical line systems to manage the application code of optical interfaces
    • Flexi grid
  – Optical2cloud problem statement: Problem Statement and Requirements of Accessing Cloud via Optical Network
OTN slicing (alignment with TEAS)

- Option 1: IETF-NSC --> PNC.
- Option 2: IETF-NSC --> OTN-SC --> PNC.
- Option 3: Orchestrator --> OTN-SC --> PNC

Figure 2: Positioning of OTN Slicing Interfaces
This document defines a YANG data model for network hardware inventory data information.

The YANG data model presented in this document is intended to be used as the basis toward a generic YANG data model for network hardware inventory data information which can be augmented, when required, with technology-specific (e.g., optical) inventory data, to be defined either in a future version of this document or in another document.
Milestones: to be updated

<table>
<thead>
<tr>
<th>Date</th>
<th>Milestone</th>
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<tbody>
<tr>
<td>Sep 2021</td>
<td>Submit Info Model for WSON with impairments validation to IESG for review</td>
</tr>
<tr>
<td>Jul 2021</td>
<td>Submit YANG modelling for flexi grid draft to IESG for review</td>
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<tr>
<td>Mar 2021</td>
<td>Recharter or close Working Group</td>
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</tbody>
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Next step: to be reviewed and updated