A YANG model to manage the optical interface parameters of DWDM applications

`draft-dharini-netmod-g-698-2-yang-00`

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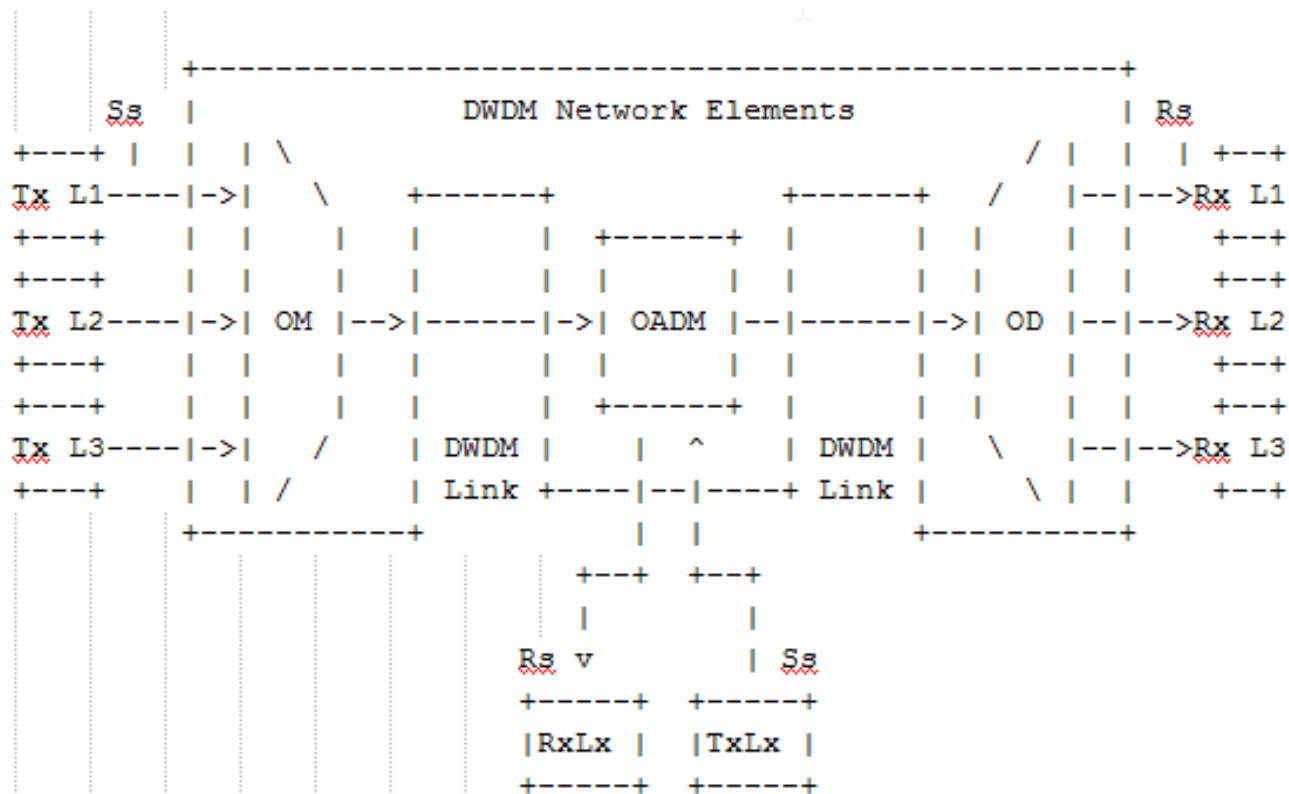
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Document History

- IETF 90:   First Draft

G.698.2 aka Black Link

```
             +----------------------------------------------------+
      Ss  |                 DWDM Network Elements              |  Rs
 +---+ |  |  | \                                        / |  |  | +--+
 Tx L1----|->|    \       +------+              +------+   /    |--|-->Rx L1
 +---+    |  |    |        |      |      +------+ |        |  |    |  |    +--+
 +---+    |  |    |        |      |      |  |   | |        |  |    |  |    +--+
 Tx L2----|->| OM |-->|------|->| OADM |--|------|->| OD |--|-->Rx L2
 +---+    |  |    |        |      |      |  |   | |        |  |    |  |    +--+
 +---+    |  |    |        |      |      +------+ |        |  |    |  |    +--+
 Tx L3----|->|    /       | DWDM |      |   ^   | DWDM |   \    |--|-->Rx L3
 +---+    |  | /          | Link +----|--|----+ Link |     \ |  |    +--+
          +----------+          |  |         +----------+
                               +--+  +--+
                               |        |
                           Rs v        | Ss
                           +-----+   +-----+
                           |RxLx |   |TxLx |
                           +-----+   +-----+

 Ss = reference point at the DWDM network element tributary output
 Rs = reference point at the DWDM network element tributary input
 Lx = Lambda x
 OM = Optical Mux
 OD = Optical Demux
 OADM = Optical Add Drop Mux
```

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Motivation & Problem statement

Problem:

- In the past DWDM was vendor specific for Tx, Rx and line. Optical interoperability was not specified in standads like G.872 and G.874.1
- ITU-T G.698.2 (aka. Black Link) is the first standard defining Multi-vendor interoperability at optical level.
- The Yang model defined in this memo is used for Optical Parameters monitoring and configuration of WDM interfaces.

Motivation:

- Provide a standard way to manage DWDM Interfaces from different vendors

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Status

- Yang Module "ietf-opt-if-g698-2" is defined as an extension to ietf interfaces.

- Content aligned with draft-dharinigert-ccamp-g-698-2-lmp-07.txt

Next Steps

- Align terminology as indicated by comments on CCAMP list

- Generalize approach for optical interfaces in line with LMP draft -> probably requires re-naming the draft

- Keep alignment with related effort in CCAMP