

A YANG model to manage the optical interface parameters for an external transponder in a WDM network

[draft-dharini-ccamp-dwdm-if-param-yang-01](#)

<https://tools.ietf.org/html/draft-galimbe-ccamp-iv-yang-02>

Document History

IETF 90: First Draft presented to netmod WG

IETF 91: Align yang model with SNMP draft

IETF 92: incorporate Yang doctor's suggestions

IETF 93: Alignment with discussions at IETF 92

IETF 94: replaced draft-dharini-netmod-g-698-2-yang-04 by
draft-dharini-netmod-g-698-2-yang for a more generic approach

IETF 95: switched to draft-dharini-netmod-dwdm-if-yang, reducing
dependency from progress in non-IETF standard bodies

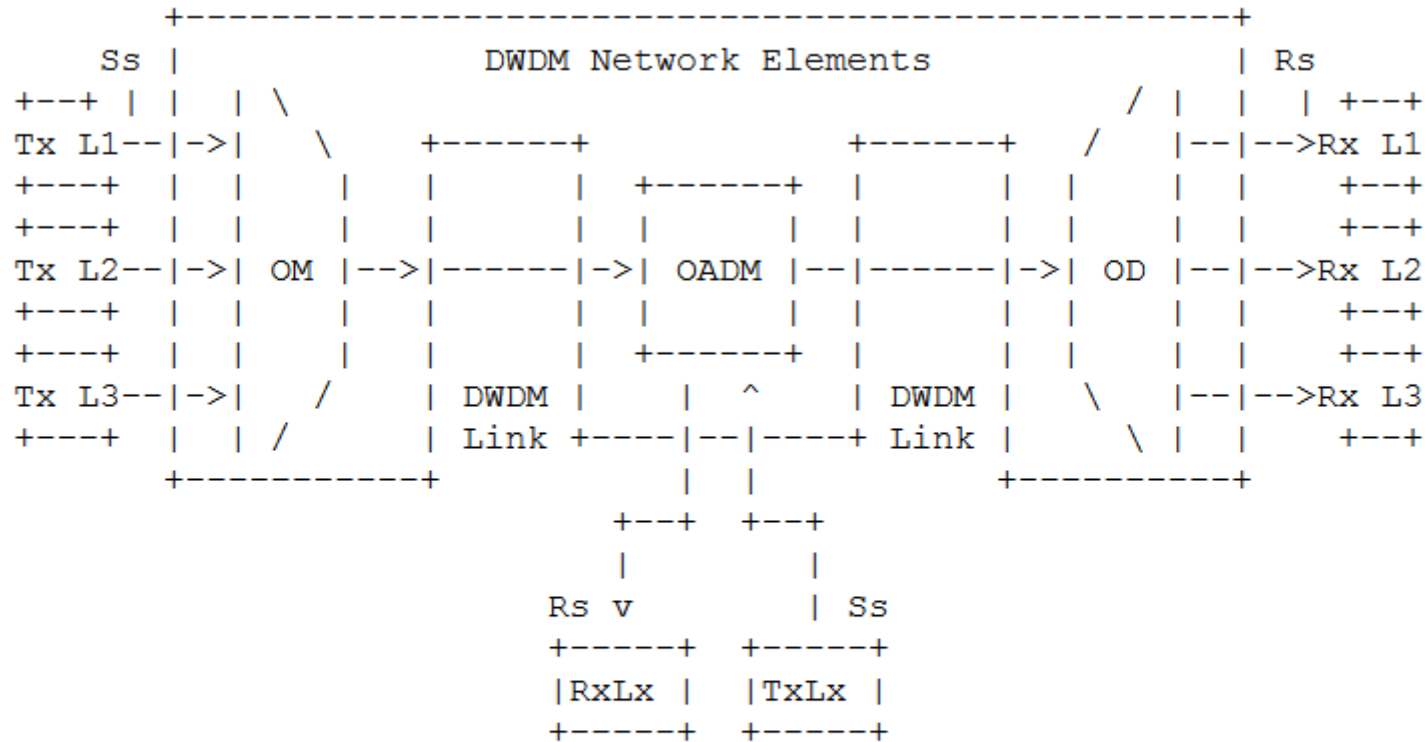
IETF 96: deciding to go for experimental, given the lack of standards

IETF 96: presented draft-galimbe-ccamp-iv-yang, for Optical Parameters

IETF 97: Experimental draft in conjunction with a problem statement

IETF 98: Introducing mode parameters

External Transponder Model



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

Motivation & Problem statement

Problem:

- Coherent transceivers not covered by standards today
- Supporting several combinations of parameters with interdependency between each other
- Current YANG models do not support the planning aspect allowing to select the best parameter combination
- Yang models definition according to existing draft like: draft-ietf-ccamp-wson-iv-info, draft-martinelli-ccamp-wson-iv-encode and RFC6566

Motivation:

- Provide a consistent way to pan and operate wavelength Interfaces with netconf/yang
- More about the motivayion can be found in: [draft-many-coherent-dwdm-if-control-01](#)

Status

- Yang Module draft-dharini-ccamp-dwdm-if-param-yang-01.txt defined as an extension to ietf interfaces.
- Yang module <https://tools.ietf.org/html/draft-galimbe-ccamp-iv-yang-02> removed some parameters already present in the if-param-yang draft, cosmetic and typo modification
- Dropped intention to align with G.698.1. Details see [draft-many-coherent-dwdm-if-control-01](#)
- Changes since IETF97
 - Introduced the notion of potential and actual mode supported by transceivers
 - Introduced boundary conditions for proper functioning of the module
 - Adding threshold crossing notifications
 - Fixed typos

Next Steps

- Keep alignment with related effort in CCAMP
- Focus on operational aspects