

Optical interface parameters for an external transponder in a WDM network: LMP

draft-ietf-ccamp-dwdm-if-imp-01

Ruediger Kunze	RKunze@telekom.de
Gabriele Galimberti	ggalimbe@cisco.com
Dharini Hiremagalur	dharihi@juniper.net
Gert Grammel	ggrammel@juniper.net
Dieter Beller	Dieter.Beller@nokia.com

LMP Considerations

- LMP covers the discovery/parameter-negotiation use case
- LMP is not used for configuration or provisioning and there is no mentioning of configuration or provisioning in these drafts
- Discovery determines the limitations of the single channel interface to a WDM line system

draft-ietf-ccamp-dwdm-if-imp-01



What is defined here:

- Extension to the Link Management Protocol (LMP/DWDM -rfc4209) for Dense Wavelength Division Multiplexing (DWDM) Optical Line Systems to manage the application code of optical interface parameters in DWDM application
- Output Power
- Current Input Power
- Input power range

Document history

- Working group document in March 2019 (-00)
- No presentation IETF-104 and IETF-105
- Updated in November 2019 (-01)
- Changed from the previous version:
 - Added Use Cases – have a look !!
 - Rename some parameters
 - Improved the parameters description
 - Removed some obsolete references
 - Fixed typos

Next Steps

- Update references to ITU-T recommendations
- Work to support the sson in draft draft-ggalimbe-ccamp-flex-if-imp
- Go to last call request

Keep in mind: LMP is not for configuration!

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

draft-ietf-ccamp-dwdm-if-param-yang-02

Ruediger Kunze

RKunze@telekom.de

Gabriele Galimberti

ggalimbe@cisco.com

Dharini Hiremagalur

dharinih@juniper.net

Gert Grammel

ggrammel@juniper.net

Motivation & Problem statement



Problem:

- Supporting several combinations of DWDM interface 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-ietf-ccamp-wson-iv-encode and RFC6566
- This model augment the IETF interface model:
 - URI: urn:ietf:params:xml:ns:yang:ietf-interfaces:ietf-ext-xponder-wdm-if

Motivation:

- Provide a consistent way to plan and operate wavelength Interfaces with netconf/yang
- Complement the [draft-ietf-ccamp-optical-impairment-topology-yang](#) models

Document history

- Working group document in March 2019 (-00) - No presentation IETF-104
- Updated in July 2019 (-01)
- Updated in November 2019 (-02)
- Changed from the previous version:
 - Rename some parameters
 - Improved the parameters description
 - Removed some obsolete references
 - Fixed typos

Next Steps

- Refine the ITU-T definitions and models
- Keep alignment with [draft-ietf-ccamp-optical-impairment-topology-yang](#)
 - Align on the terminology
 - Keep alignment on the contents: the two drafts are complementary
- Work for the last call

Thank You!