

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

draft-dharinigert-ccamp-DWDM-if-Imp-00

IETF 94 – CCAMP WG

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Agenda

- Changes
- Related ITU-T activities
- Next steps

Changes

- Changed name from [draft-dharinigert-ccamp-g-698-2-imp-10](#)
- Use cases were moved to [draft-kdkgall-ccamp-dwdm-if-mng-ctrl-fwk-00](#)
- In line with [draft](#) [-galikunze-ccamp-dwdm-if-snmp-mib-00](#) and [draft-dharini-netmod-dwdm-if-yang-00](#)

Data Plane Reference Model

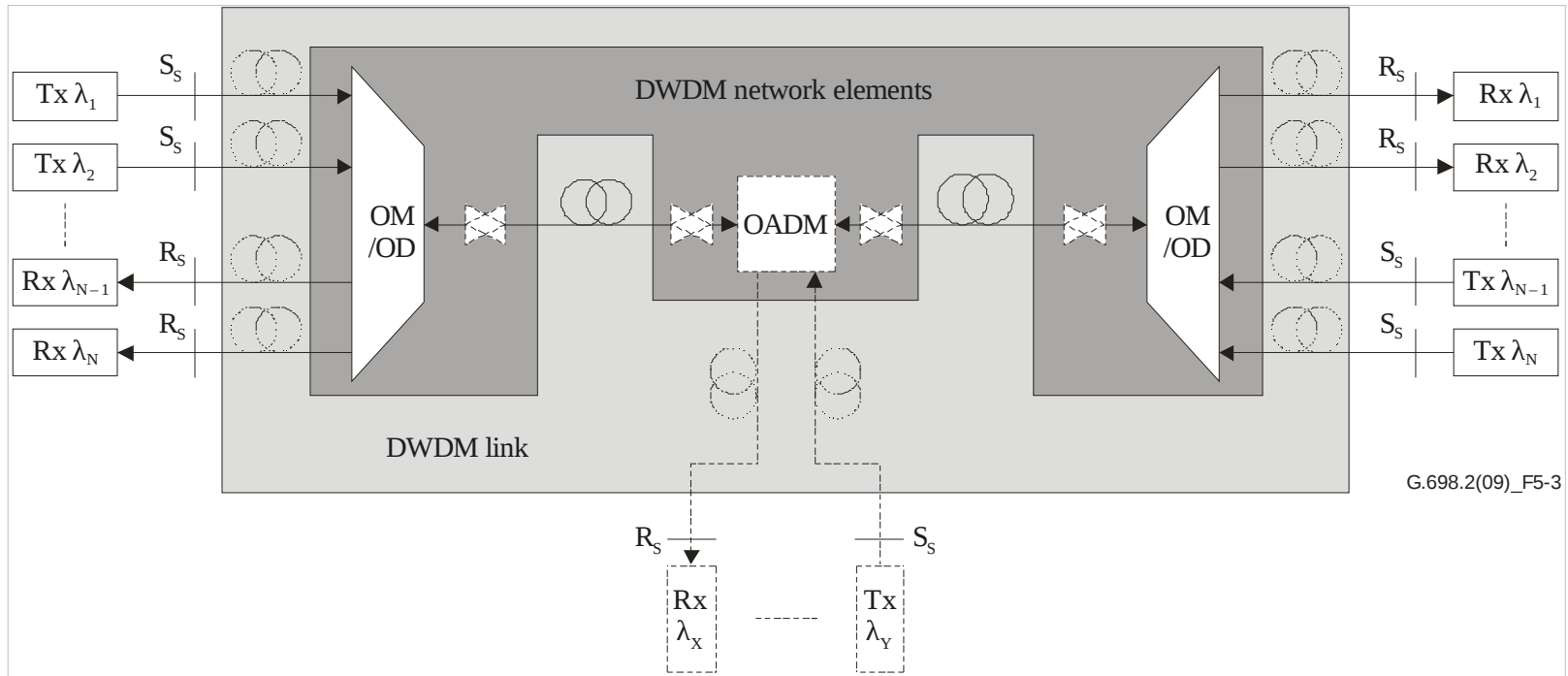


Figure 5-3 – Linear "black link" approach for bidirectional applications

LMP Extensions

- Access Link (AL) Power Monitoring:
 - LMP shall be capable to convey the current transmit power P_{Tx} and the received power P_{Rx} from the external transponder to the physically adjacent ROADM on the DWDM network boundary
- Power Control Loop:
 - In addition to the above requirement, LMP shall be capable to convey a “set P_{Tx} ” command from the ROADM on the DWDM network boundary to the external transponder to modify the transponder’s transmit power. The P_{Tx} value must be within the P_{Tx} power range defined by Application Code currently in use.

Related ITU-T SG15 Activities

- A multi-company ITU-T contribution C1454 (ALU, Cisco, DT) was submitted to the SG15 meeting (22 June - 3 July 2015):
 - Proposal: extend G.874 (management requirements) and the OTN information model as defined in G.874.1.

“It is proposed to define single channel optical power monitors (see G.697, section 6.1.2) for the optical tributary signal as information model extension for the network element supporting the G.698.2 application”
 - SG15 meeting outcome:
 - It was agreed that G.874 and G.874.1 will be enhanced as proposed
 - The **power monitoring** capability will be specified as an **optional** feature and is **not** supposed to be **mandatory for G.698.2 implementations**

Next Steps

- Solicit feedback/comments from the group.
- Authors will help ITU-T Q14/15 to define the G.874 and G.874.1 extensions to support the optional optical power monitoring points.

Thank You!