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Extension to the Link Management Protocol (LMP/DWDM - rfc4209) for Dense Wavelength Division Multiplexing (DWDM) Optical Line Systems

`draft-dharinigert-ccamp-g-698-2-lmp-06.txt`

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Document History

- IETF 84-00: first submission
- IETF 85-01: explanatory changes
- IETF 86-02: included parameter objects
- IETF 87-03: split draft into standard and non-standard extensions:
  - draft-dharinigert-ccamp-g-698-2-lmp-03.txt
    - Includes standard application codes, Transceiver power and frequency (or bandwidth)
  - draft-dharinigert-ccamp-opt-imp-lmp-01-txt
    - Includes all optical parameters defined in G.698.2 and extensions such as status information.
- IETF 88-05: clean-up of draft-dharinigert-ccamp-g-698-2-lmp-03.txt: Substantial WG support for the work

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Work with ITU-T SG15/Q6

- The authors presented a contribution to Q6 with the intention to improve operational aspects:
  - WD06-19 contained a proposal to add a new appendix on link management protocol (LMP) to G.698.2 and to send a Liaison Statement to IETF's CCAMP WG with a list of parameters that could be exchanged via LMP. During the discussion on WD06-19 it became clear that this proposal is intended to enable operators to use different boundaries than provided by the specifications in G.698.2. There was no support for this contribution because:
    - G.698.2 is about a binary state of being compliant to an application code specification: Yes or No.
    - How to do joint engineering, in particular inside a black link, is outside the scope of G.698.2.
    - The possibilities when modifying parameter values are outside the scope of G.698.2.
    - An architectural need to perform degradation management and operating of links outside the boundaries of the specifications of G.698.2 has not yet been established by Q14/15.

➔ The authors therefore decided to *__not__* include additional parameters in **draft-dharinigert-ccamp-g-698-2-lmp-06.txt**

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Motivation & Problem statement

- ITU-T G.698.2 defined the "Application Codes" to design a DWDM system in a multi-vendor approach.
- LMP is protocol to exchange optical link property between client and server devices
- NON-GOAL: LMP doesn't replace routing or signalling

Motivation:

- Provide a standard way to exchange parameters between client (TX, Rx) and server (optical system).
- Support client and server devices to access local and remote optical parameters for property correlation
- Provide a simple way to share across packet and optical devices for fault management

Status

- Changed from previous version:
  - Clean-up of text to avoid ambiguity

- Kept alignment with http://tools.ietf.org/html/draft-galikunze-ccamp-g-698-2-snmp-mib-06

Next Steps

- The authors believe this draft is ready to be adopted as WG document

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