We’d ask for input from Q6 on work related to an SNMP MIB and LMP extensions for G.698.2 links.

Ongoing work can be found in <http://tools.ietf.org/html/draft-dharinigert-ccamp-g-698-2-lmp-06> and <http://tools.ietf.org/html/draft-galikunze-ccamp-g-698-2-snmp-mib-06>

# Prior Work

## Link Management protocol for optical line systems (RFC4202)

The two core procedures of LMP are control channel management and

link property correlation. Control channel management is used to

establish and maintain control channels between adjacent nodes. This

is done using a Config message exchange and a fast keep-alive

mechanism between the nodes. The latter is required if lower-level

mechanisms are not available to detect control channel failures.

Link property correlation is used to synchronize the TE link

properties and verify the TE link configuration.

RFC4209 extended this concept to Optical Line Systems

## Definitions of Managed Objects for the Optical Interface Type (RFC3591)

This memo defines a portion of the Management Information Base (MIB)

for use with Simple Network Management Protocol (SNMP) in TCP/IP-

based internets. In particular, it defines objects for managing

Optical Interfaces associated with WavelengthDivision Multiplexing

systems or characterized by the Optical Transport Network (OTN) in

accordance with the OTN architecture defined in ITU-T Recommendation

G.872.

The MIB module defined in this memo can be used for performance

monitoring and/or configuration of such optical interface.

# Actual work

draft-dharinigert-ccamp-g-698-2-lmp-06 and draft-galikunze-ccamp-g-698-2-snmp-mib-06 aim to add the use of G.698.2 compliant interfaces to the existing work. Both drafts benefit from the same information model.

Issues found:

1. RFC3591 defines objects to measure actual power values and set thresholds on monitoring points. However communication from Q6 seem to discourage measuring power values at S/R interfaces. We’d welcome comments on whether RFC3591 is applicable to G.698.2 interfaces.
2. In LMP neighboring nodes exchange their parameters to verify the link property. In case a WDM system is an LMP speaker and part of a G.698.2 compliant link, the Ss and Rr reference points are in between the transceiver and WDM node. Exchanging application codes only would lead to a false positive if the link between the LMP speakers is degraded. To supervise the link property between TX/RX and LMP enabled WDM node, actual power values based on RFC3591 are exchanged. During discussion in Orlando Q6 members indicated that wavelength and power are sufficient for that purpose. Later comments from Q6 Members seem to discourage the use of a power loss measurement between TX/RX and WDM system for preventive maintenance. We’d welcome comments about the way to supervise the segment between a WDM and a Transceiver module.