

# A Framework for Management and Control of Optical Interfaces supporting G.698.2

draft-kunze-g-698-2-management-control-framework-02

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# Motivation

- Define a Framework for the Control and Management of Optical Interfaces according to the Black Link approach
  - Develop Enhancements for **Control & Management** to leverage the Black Link approach in large-scale carrier networks
  - Major Use Case: Interworking between third party systems  
Router <-> DWDM <-> Router
  - Support Status-Quo as well as future network management and control concepts
- Black Link according to ITU-T G.698.2 provides options to deploy Optical Interfaces in a WDM network
  - currently defined up to 10G
  - being extended by ITU-T for 40G, 100G and beyond

# Document Scope and Perspective

- Solutions for Control and Management of Optical Interfaces
  - Operational Scenarios and Uses Cases
  - Identifying missing issues regarding existing standards
- Interoperable Control and Management Solutions required
  - Supporting multivendor transverse interoperability DWDM networking
  - Initially considering just one optical network operator (i.e. one administrative domain)
  - Data Plane under consideration is well-defined and standardized (ITU-T G.698.2)
  - IETF work focuses on the **control and management** aspects for the optical interface / optical system (excluding active optical components)
- WSON work is complementary
- Alignment with work going forward in ITU-T

# Current Status & Modifications

- New Co-Author on the document:
  - Juniper Networks - quite a lot feedback received
  - BT is actively involved with the proposal, has some key suggestions and intends to assist pro-actively in the near future
  
- Draft was updated twice since last presentation at IETF 81
  - Quite a lot changes and rephrasing text
  - Added section dealing with Control Plane and GMPLS UNI modifications
  - Addressed the feedback from the working group and from ITU-T
  - Text aligned to ITU-T terminology (G.698.2)
  - LMP use cases

# Next Steps

- Extending the Control Plane section with the black link parameters needed to exchange between Client (e.g. OXC/Router) and OLS
- Modifying the drawings to clarify the information exchange that is needed between Client and OLS
- Use Cases will be finalized (work is in progress)
- Next version will be uploaded after this IETF

# Next Steps

- Corresponding MIB document (draft-galimbe-kunze-g-698-2-snmp-mib-02.txt) in progress and is presented afterwards
  - Parameter Base for Management and **Control Plane** solutions
- Working Group Adoption?