

GMPLS OSPF Enhancement for Signal and Network Element Compatibility for Wavelength Switched Optical Networks

draft-ietf-ccamp-wson-signal-compatibility-ospf-11.txt

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WSON Overview

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OSPF - Changes from 09/10 versions

- Replace FEC and Modulation sub-TLVs in the Resource Block Info TLV with **Optical Interface Class (OIC) sub-TLV** as defined in [WSON-Encode].
- Four ITU-T Application Codes are referenced in [WSON-Encode].
 - [ITU-G.698.1] application code.
 - [ITU-G.698.2] application code.
 - [ITU-G.959.1] application code.
 - [ITU-G.695.1] application code.

Overview of WSON related Drafts

- **summary of the objectives:** These drafts provide information model and its protocol independent encodings that capture RWA issues with non-impairment constraints such as signal compatibility (FEC, Modulations, etc.), wavelength conversion, port wavelength restrictions, etc. along the lightpath (OCh).
- **assumptions/dependency on Q6 related documents/terminology/technology:** Re-used G.694.1/2 frequency/spectral grids definitions.
 - [G.694.1] ITU-T Recommendation G.694.1, Spectral grids for WDM applications: DWDM frequency grid, June 2002.
 - [G.694.2] ITU-T Recommendation G.694.2, Spectral grids for WDM applications: CWDM wavelength grid, December 2003.
 - [G.695] ITU-T Recommendation G.695, Optical interfaces for coarse wavelength division multiplexing applications, October, 2010.
 - [G.959.1] ITU-T Recommendation G.959.1, Optical transport network physical layer interfaces, February, 2012.

Overview of WSON related Drafts

- Routing and Wavelength Assignment Information Model for Wavelength Switched Optical Networks ([draft-ietf-ccamp-rwa-info-17](#)) -- Stable
- No pending issues for WSON-specific Drafts
 - Routing and Wavelength Assignment Information Encoding for Wavelength Switched Optical Networks ([draft-ietf-ccamp-rwa-wson-encode-19](#))
 - GMPLS OSPF Enhancement for Signal and Network Element Compatibility for Wavelength Switched Optical Networks ([draft-ietf-ccamp-wson-signal-compatibility-ospf-11](#))
 - Signaling Extensions for Wavelength Switched Optical Networks ([draft-ietf-ccamp-wson-signaling-05](#))
- No pending issues for Generalized Drafts
 - General Network Element Constraint Encoding for GMPLS Controlled Networks ([draft-ietf-ccamp-general-constraint-encode-10](#))
 - OSPF-TE Extensions for General Network Element Constraints ([draft-ietf-ccamp-gmpls-general-constraints-ospf-te-04.txt](#)) Expired

Next Steps

- Ready for WG LC