

Information Model & Encoding for WSON Impairments Validation

draft-martinelli-ccamp-wson-iv-info-04
draft-martinelli-ccamp-wson-iv-encode-04

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Outline

- Provide updates on the information model.
- The encoding draft just presented as a consequence of info-model updates.
- Iv-Info list of changes:
 - Section 2.1 “Definitions”.
 - Section 3 “ITU-T List Of Optical Parameters”.
 - Appendix A. “FAQ”. Added.
- Iv-encode list of changes:
 - Section 2.1 “Optical Parameter”.

1. iv-info Editorial Changes:

- Section 2.1 “Definitions”
 - Added the “DWDM Line Segment” since introduced by G.680 and useful for other considerations.
- Appendix with FAQ
 - Application Codes
 - Multivendor
- Some Clean up in remaining sections

2a. iv-info Sec 3, List of Parameters: RECAP

- Draft initially considered only content of G.680 computational model.
- CCAMP received a liaison (LS78) with a full list of parameters required to apply.

This draft version:

- We put the two list together and providing a minimum set of parameters.

2b. iv-info Sec 3, List of Parameters

G.680

- G-1 OSNR
- G-2 CD
- G-3 PMD
- G-4 PDL

LS78

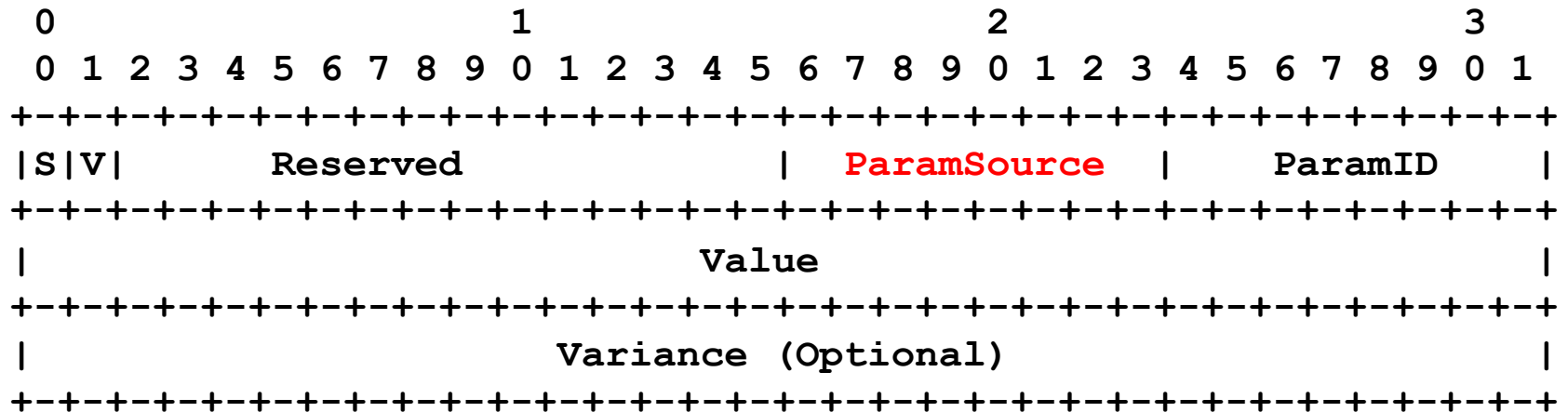
- L-1 Channel Freq Range
- L-2 Modulation Format and Rate
- L-3 Channel Power
- L-4 Ripple
- L-5 Channel ASE
- L-6 Channel Chromatic Disp.
- L-7 Channel Local Chromatic Disp.
- L-8 DGD
- L-9 PMD
- L-10 PDL
- L-11 Reflectance
- L-12 Isolation
- L-13 Channel extinction
- L-14 Attenuation Coefficient
- L-15 Non Linear coefficient

Minimum Set of Parameters

1. iv-encode Changes

- Version 03 had only the initial G.680 set of parameters, and reuses the encoding by G.697 appendix V.
- New parameters are required as per info-model.
- Room as been provided using the existing encoding schema.

Details: Sec. 2.1 Optical Parameter



- **ParamSource:**
 - 1: means G.697.
 - **0**: current list of LS78 parameters (value 0, TBD)

Details: Sec. 2.1 Optical Parameter

- ParamSource = 0

ParamID.

. . .

1. Ripple (dBm). L-4 in ...
2. Channel signal-spontaneous noise figure. L-5 ...
3. DGD, Differential Group Delay. L-8 in ...
4. Reflectance. L-11 in ...
5. Isolation. L-12 in ...
6. Channel extinction. L-13 in ...
7. Attenuation Coefficient. L-14 in ...

Conclusion

- With latest updates both drafts are in good shape.
- Authors think drafts are ready for WG adoption.
 - Natural evolution of existing wson document
 - Will continue to evolve according to WG inputs and future ITU Liaisons.

THANK YOU!