Framework and Information model for G. 709 Optical Transport Network (OTN)

draft-ietf-ccamp-gmpls-g709-framework-06
draft-ietf-ccamp-otn-g709-info-model-03

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Draft Framework Changes from version .05 to .06 (1)

- Major change is related to the introduction of sub-chapter 5.5 with typical scenarios for backward compatibility.
  - A new Switching Type (OTN-TDM = 101) has been introduced to enable backward compatibility procedure.

- Refinement on signaling constraints for support of layer multiplexing hierarchy signaling.
  - Need at both ends of a server LSP for support of specific client multiplexing/demultiplexing.
  - Requirement to send adaptation information (e.g. hierarchical information and TSG) to select proper link for carrying specific client.
Draft Framework Changes from version .05 to .06 (2)

- **Signaling implication for Control of hitless adjustment of ODUflex**
  - Indication of similarity with respect control of bandwidth increasing and decreasing as depicted in RFC 3209

- **Routing implication for Control of hitless adjustment of ODUflex**
  - Routing needs to know whether an ODU link can support hitless adjustment of ODUflex (GFP) and how much resources available for resizing
  - To do that a new signal type “ODUflex(GFP-F) resizable” indicating the support of the resizing for that link has been introduced.
Updated section 4.1 on Tributary slot granularity as discussed in Taipei meeting.

Chapter has been split into “data plane” and “control plane” part.

A sub-chapter explaining payload type and tributary slot granularity relationship has been added.
Payload type is a one-byte in the OPUk OH able to indicate the composition of the OPUk signal.

When PT assumes 20/21 value, it is used to characterize the ODU multiplexing structure.

These two values together with OPUk type (k=1,2,3 or 4), are able to discriminate how OPUk will be structured (TS 1.25 or 2.5)
TSG and PT relationship (2)

- OPUk structured at 1.25 Gb/s
- OPUk structured at 2.5 Gb/s

**OPUk (k=2.3)**
- OPU4
  - TSG 1.25
  - ODTUGk
    - PT=21
    - ODTUjk
      - ODUjk
        - Client
    - ODTUjk
      - Client
- OPU1
  - TSG 1.25
  - ODTUGk
    - PT=20
    - ODTUjk
      - ODUjk
        - Client
    - ODTUjk
      - ODUjk
        - Client
Next steps

■ Authors think that both the drafts have reached a good levels of content and clarity.

■ Authors think drafts can be ready for last call