

# ***RSVP-TE Signaling Extension for Explicit Control of LSP Boundary in MRN/MLN***

[draft-fuxh-ccamp-boundary-explicit-control-ext-03.txt](#)

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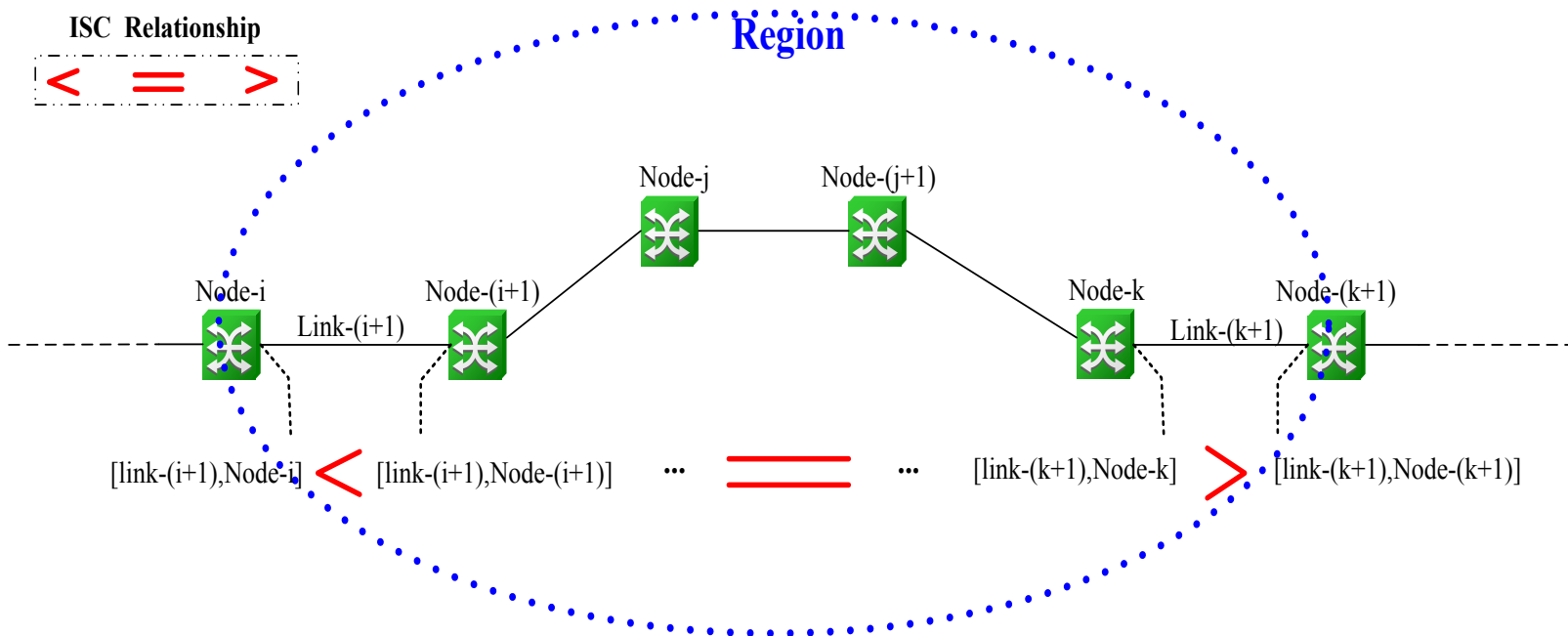
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# Changes since last version

- Adding a boundaries determination mechanism
- Refining requirement
- Editorial changes

# Boundaries Determination Mechanism

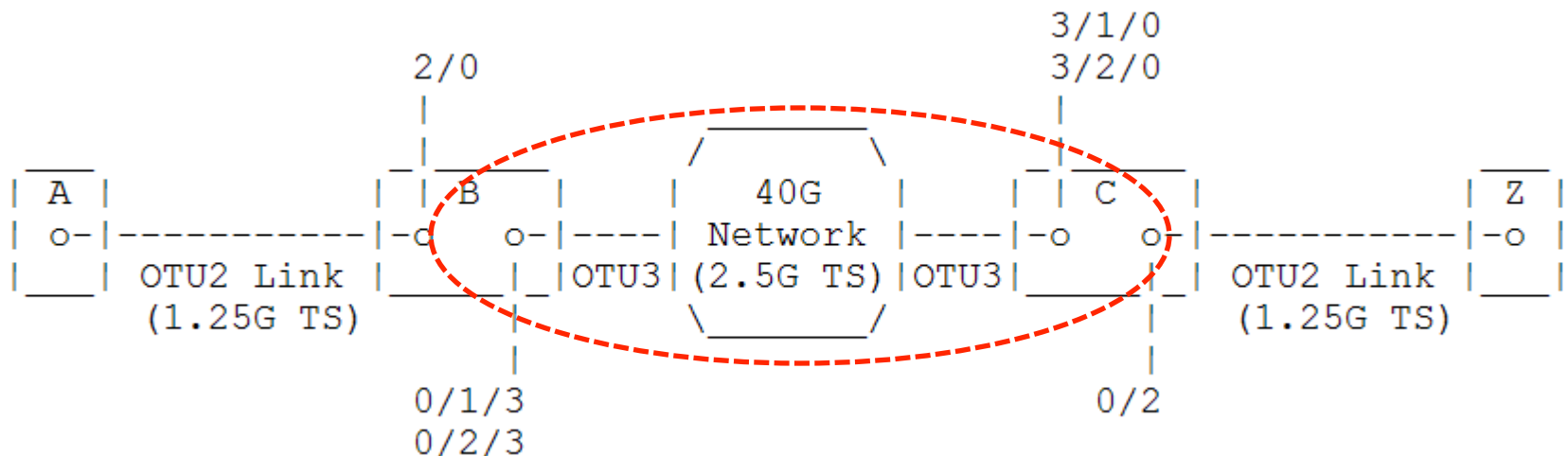
- Problem Statement
  - The boundary determination mechanism in [RFC4206] depends on the comparing of interface switching capabilities.
  - For TDM switching capability, the comparing of interface switching capabilities relies on the max LSP bandwidth of interface.



# Boundaries Determination Mechanism

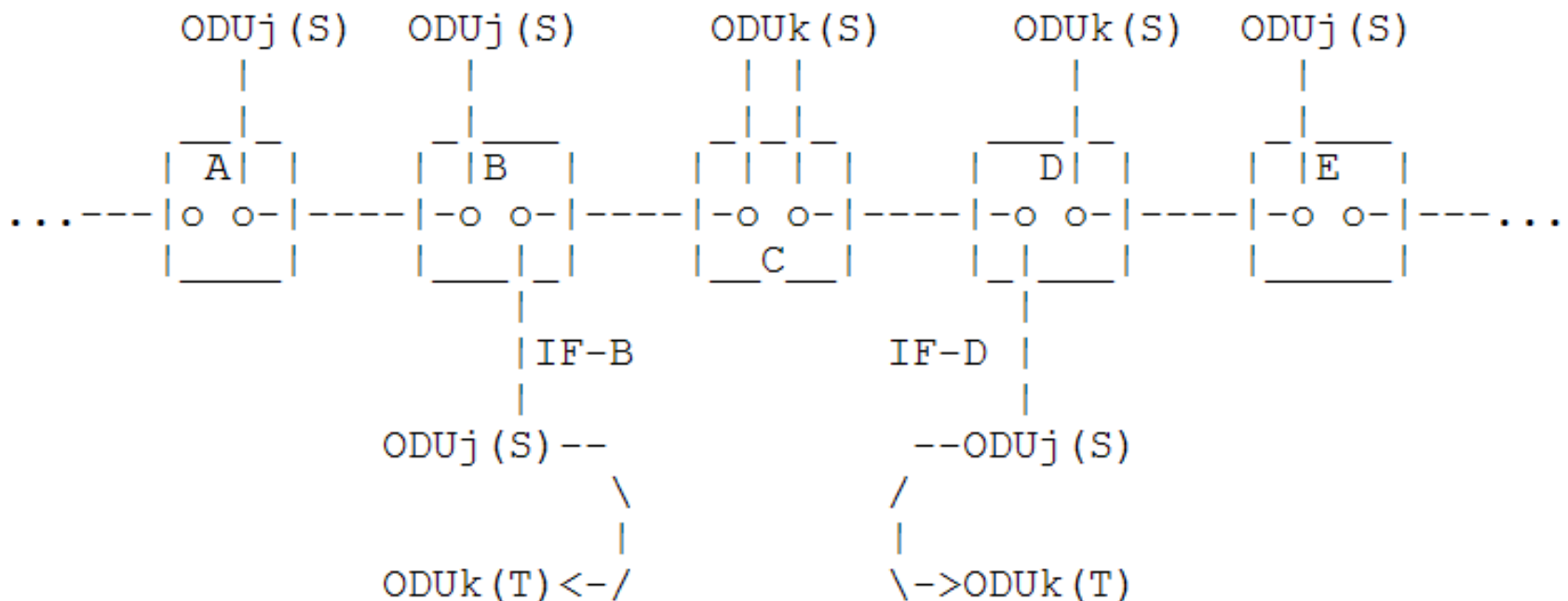
- Problem Statement

- One interface in OTN network could support several ODUk signal types. The max LSP bandwidth makes no any sense to path computation entity. So the mechanism in [RFC4206] isn't applied to OTN multi-layer network.
- For example, PCE don't know which are the boundary nodes of FA-LSP (e.g., ODU1 or ODU2) for e2e ODU0 LSP based on [RFC4206].
- This document introduces a generic mechanism for MRN/MLN to determine the boundaries of FA-LSPs by using termination and switching capability from IGP database.



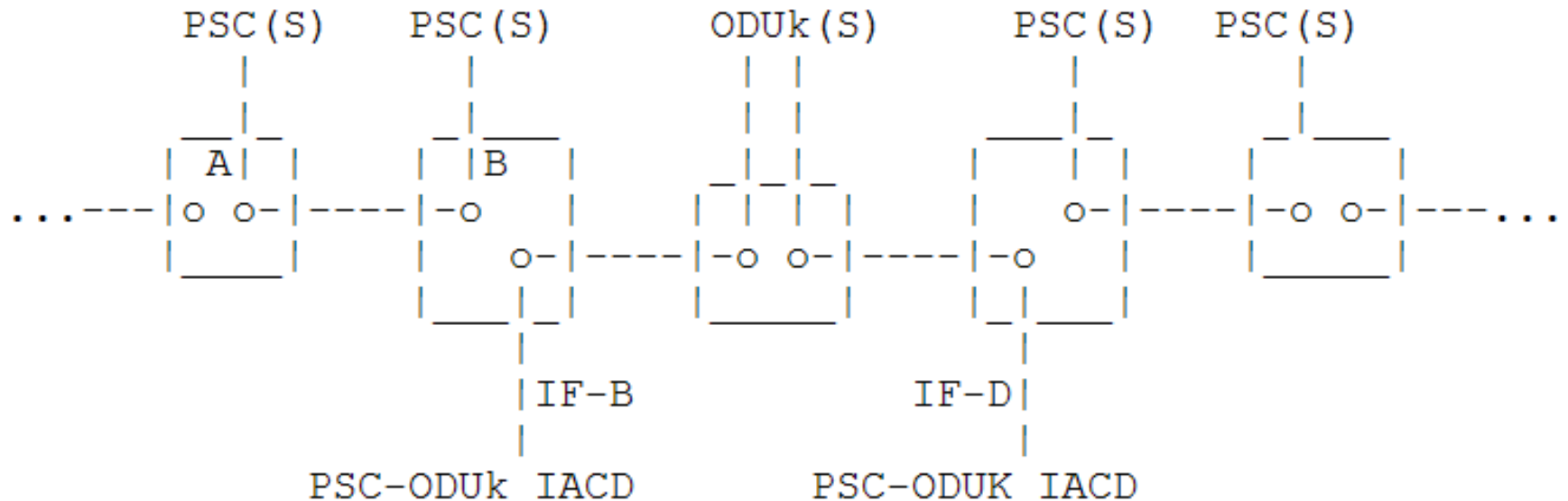
# Boundaries Determination Mechanism

- Example: Node B and D support ODU<sub>j</sub> being mapped into ODU<sub>k</sub> (k>j). Interface IF-B and IF-D support ODU<sub>j</sub> switching capability (ODU<sub>j</sub>(S)) and ODU<sub>k</sub> termination capability (ODU<sub>k</sub>(T)). Interface within node C only supports ODU<sub>k</sub> switching capability. So Node B and D could be boundaries of ODU<sub>k</sub> FA-LSP for ODU<sub>j</sub> LSP.



# Boundaries Determination Mechanism

- Example: Hybrid node B and D support PSC being mapping into ODUk (e.g., by GFP-F). Interface IF-B and IF-D support PSC switching capability (PSC(S)) and ODUk termination capability (ODUk(T)). Interface within node C only supports ODUk switching capability. So Node B and D could be boundaries of ODUk FA-LSP for PSC LSP.



# Next steps

- Refine the document according to the feedback of meeting and mailing list.