

Transport NBI Design Team Update

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IETF 104 (Prague)

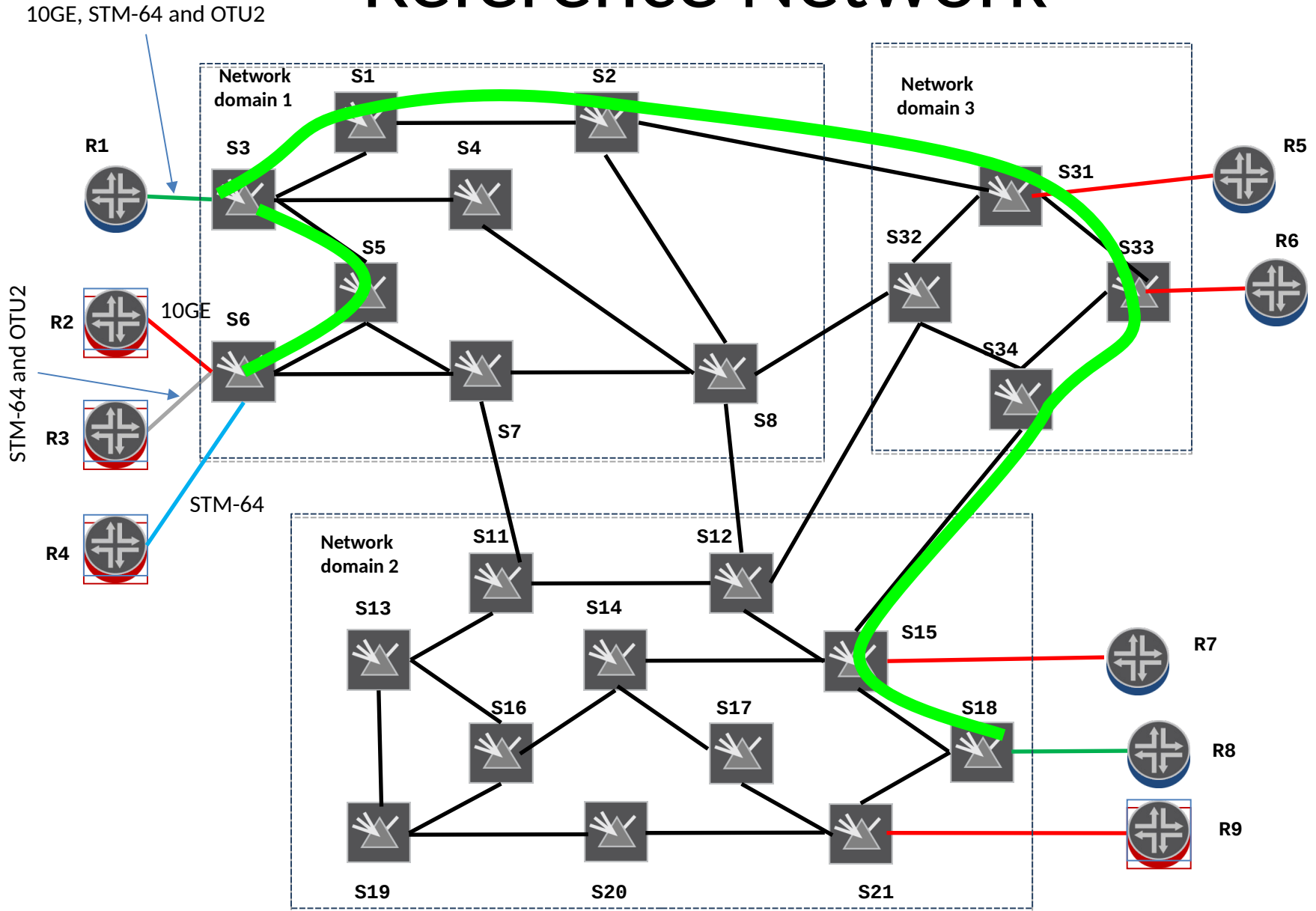
Transport NBI DT

- Design Team's Goals and Deliverables:
 - Develop use cases and gap analysis
 - Identify a set of technologies use cases and providing a gap analysis against existing models
 - Identify missing models or capability
 - Coordinate requirements with appropriate WGs
 - Including TEAS, RTGWG and CCAMP itself
 - Providing guidelines in terms of how all the related models can be used in a step-wise manner
 - Using a couple of well identified transport network use cases
- Working methods
 - Mailing lists & Conference calls
 - GitHub: <https://github.com/danielkinguk/transport-nbi>

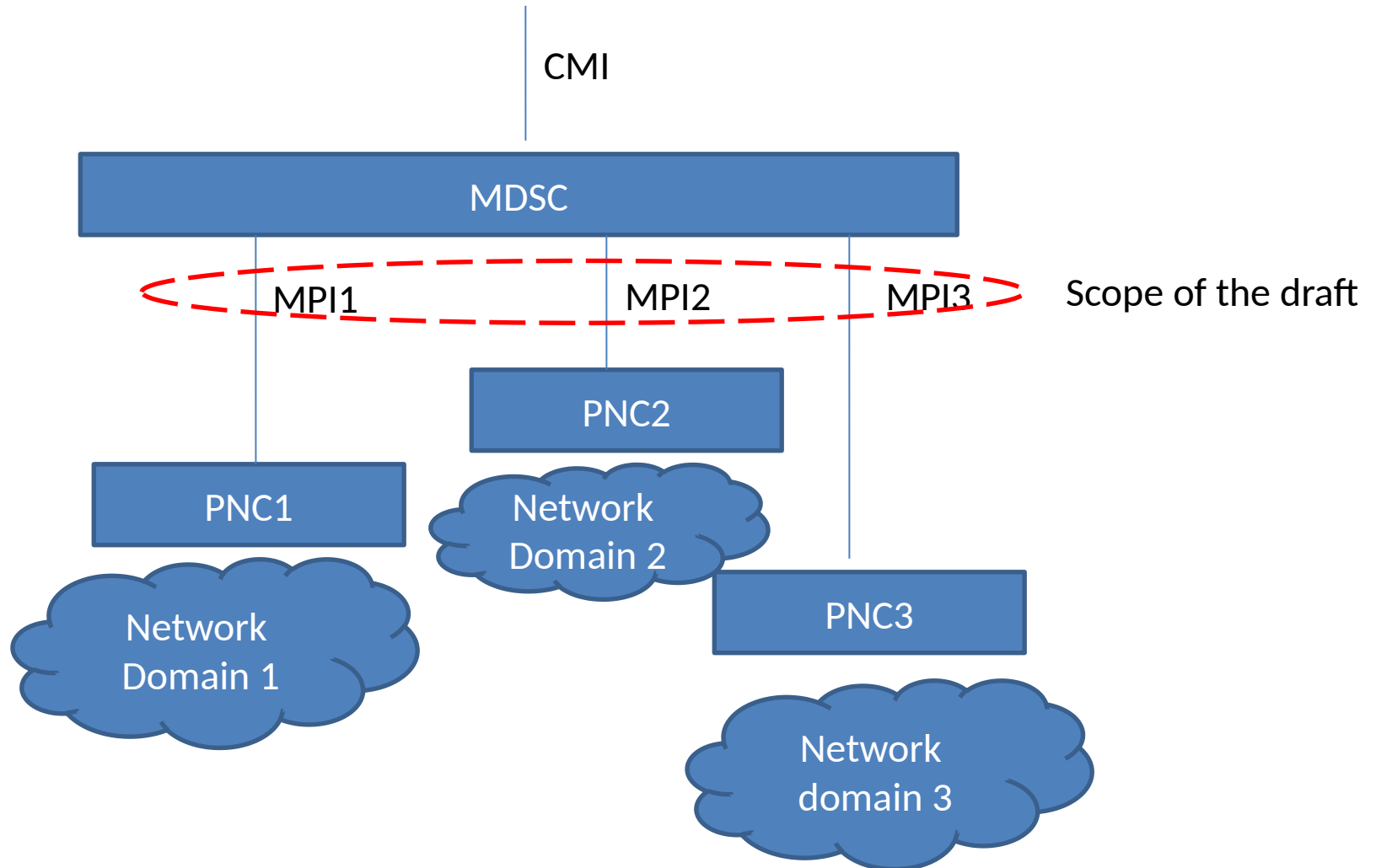
Applicability Statement Updates

- Major updates since IETF 103
 - Agreed definition of “Domain”
 - Further describes the control of access links which support different technology configuration (e.g., STM-64, 10GE or OTU2) depending on the type of service
 - Completed Ethernet service and topology description
 - Updated “Protection and Restoration Configuration” section
 - Improved overall readability
 - [draft-ietf-ccamp-transport-nbi-app-statement-05](#)

Reference Network

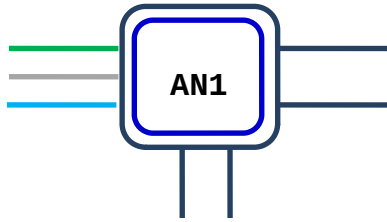


Control Hierarchy

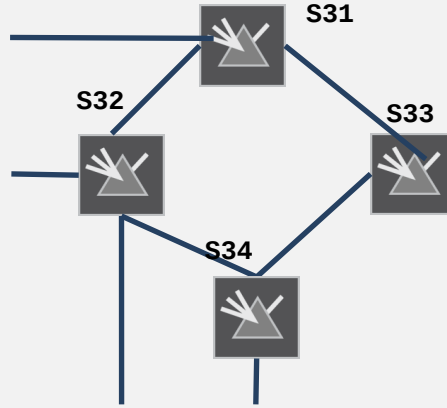


OTN and ETH TE Topology Abstraction

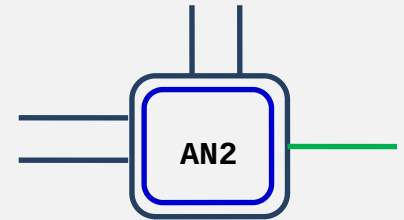
PNC1 black topology (OTN)



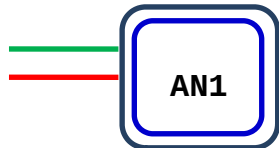
PNC 3 white topology (OTN)



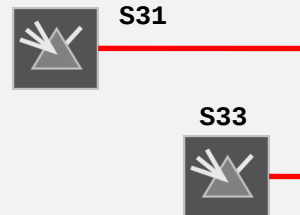
PNC 2 black topology (OTN)



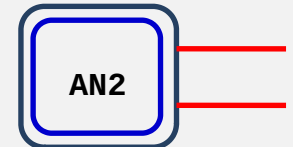
PNC1 black topology (ETH)



PNC 3 white topology (ETH)

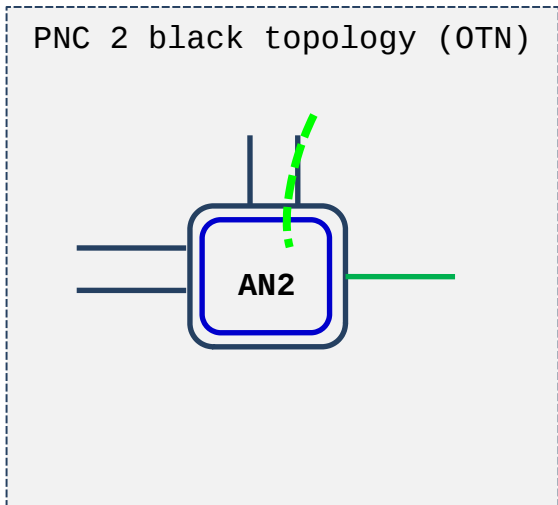
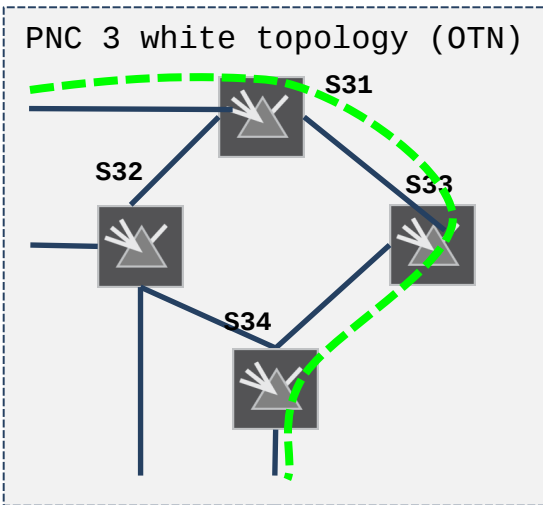
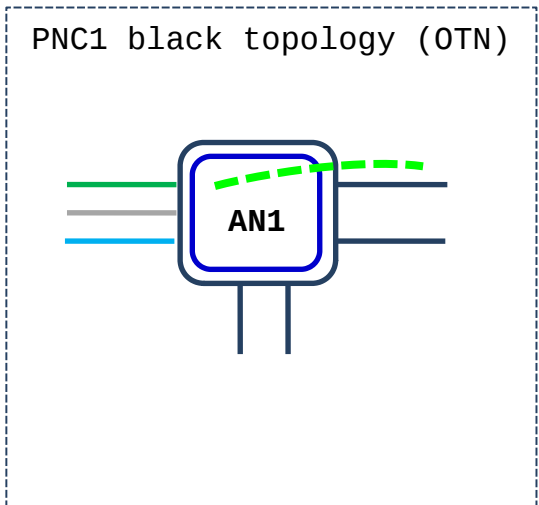
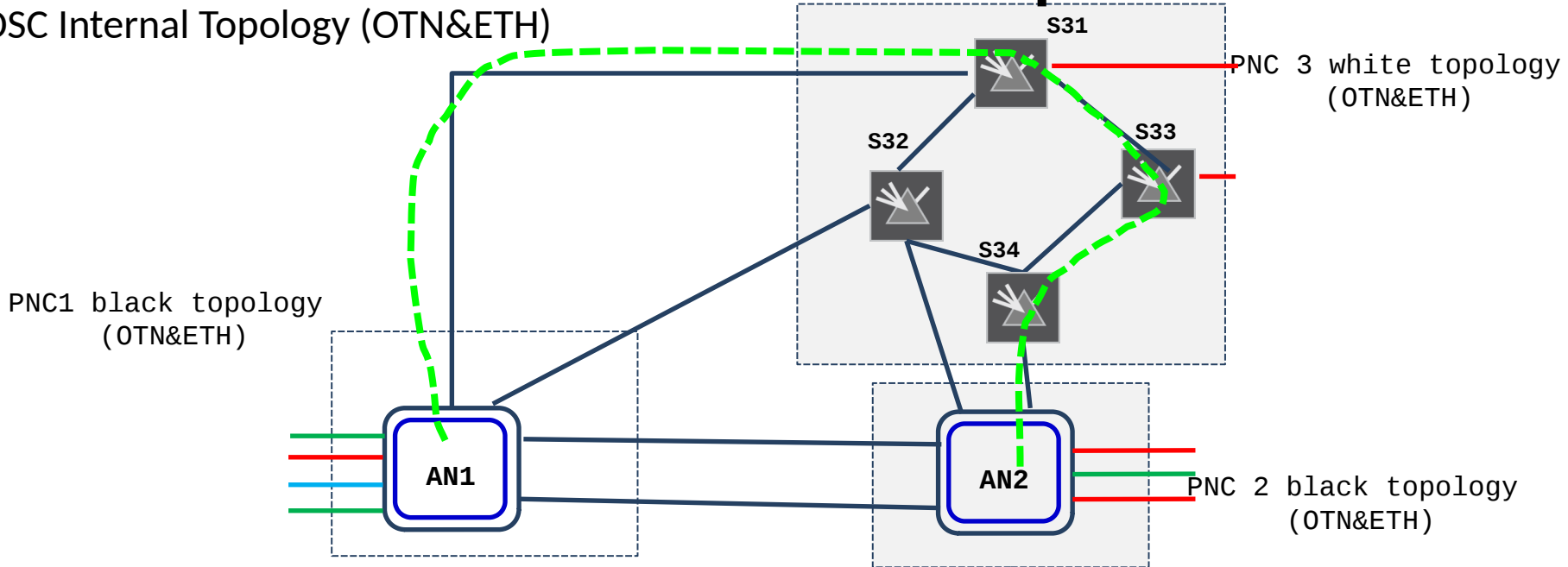


PNC 2 black topology (ETH)



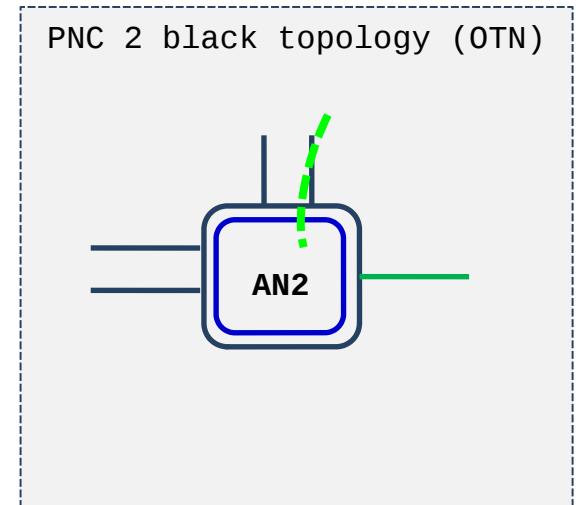
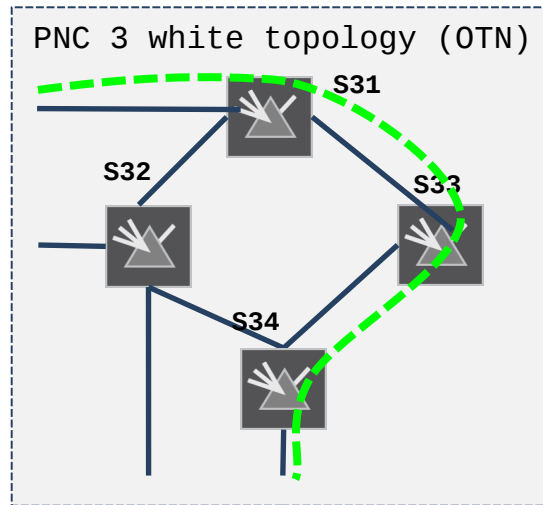
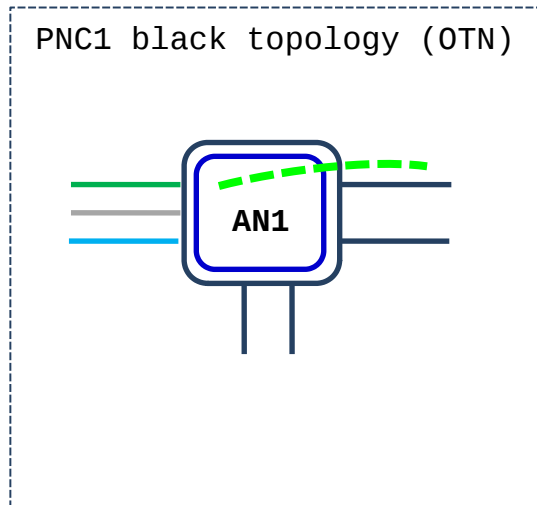
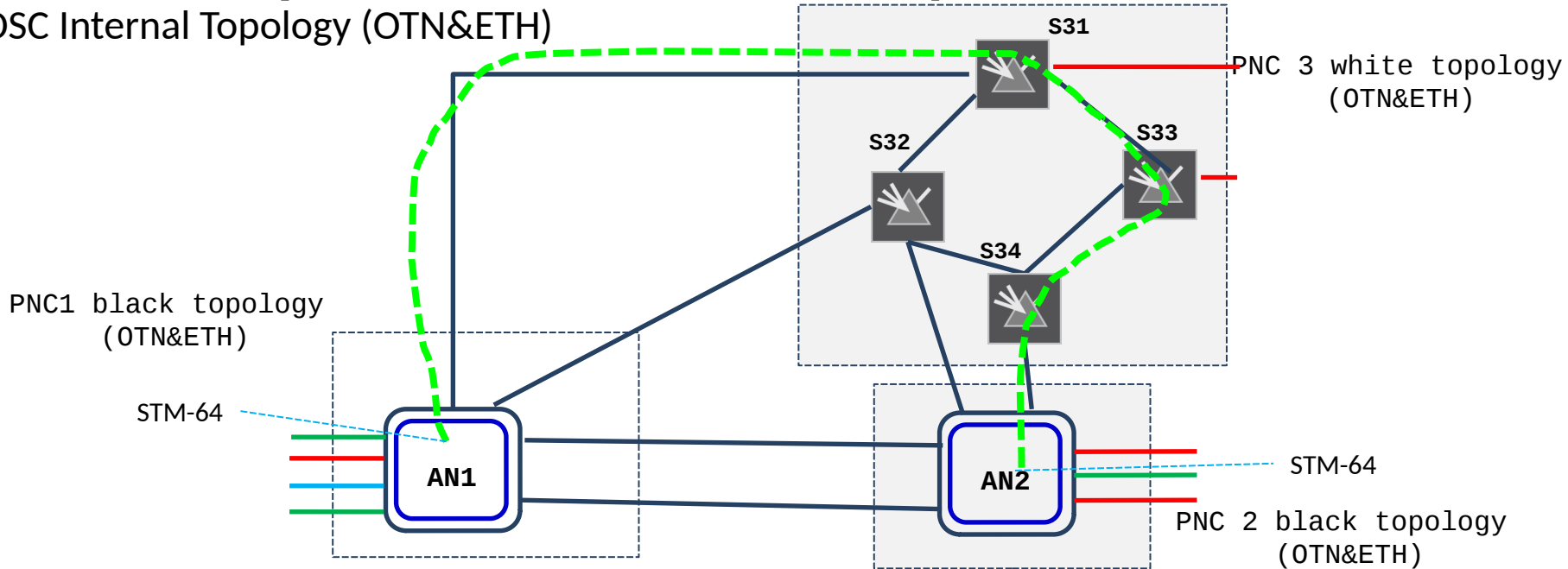
TE Tunnel Setup

MDSC Internal Topology (OTNÐ)



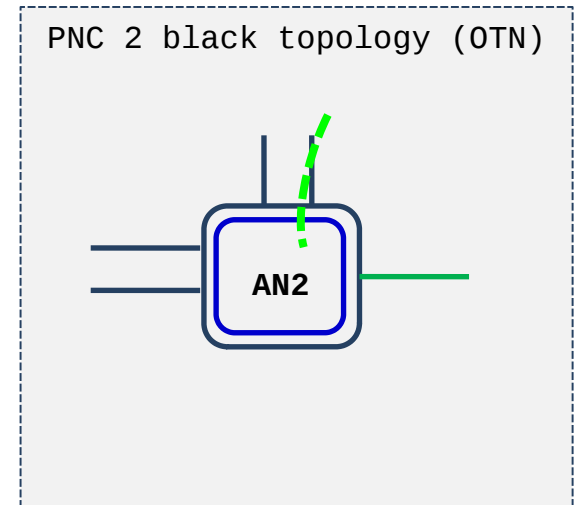
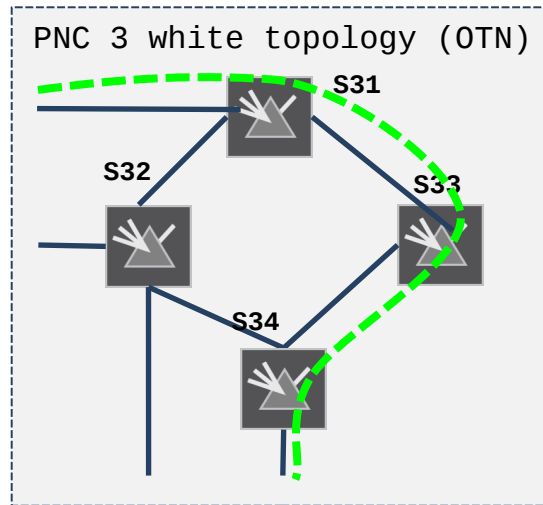
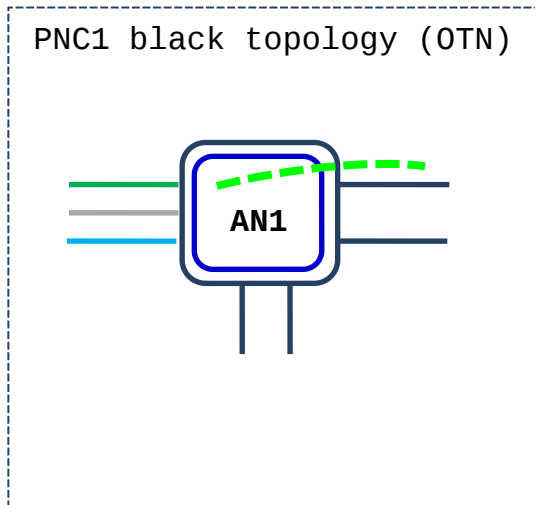
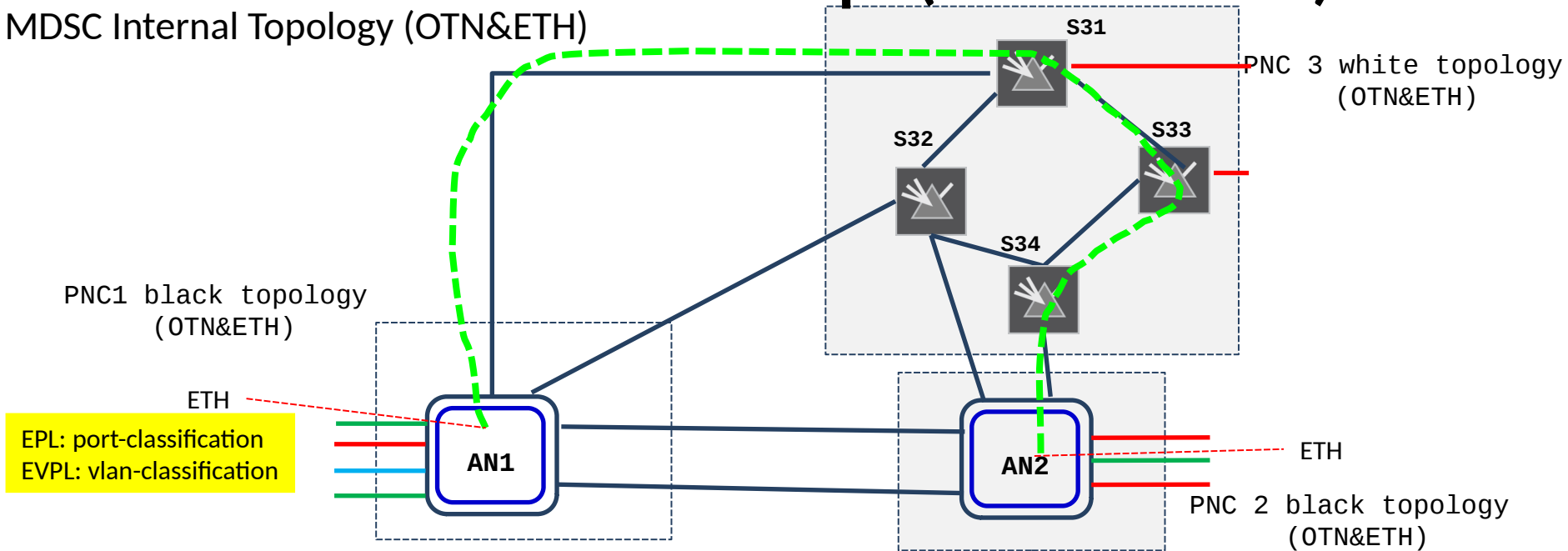
Transparent Client Setup (STM-64 PL)

MDSC Internal Topology (OTNÐ)



ETH Client Setup (EPL/EVPL)

MDSC Internal Topology (OTNÐ)



Applicability Statement Updates

- JSON code folded using the method described in:
<https://tools.ietf.org/html/draft-ietf-netmod-artwork-folding>
 - Appendix A. Validating a JSON fragment against a YANG Model
 - A.1 Manipulation of JSON fragments
 - A.2 Comments in JSON fragments
 - A.3 Validation of JSON fragments: DSDL-based approach
 - A.4 Validation of JSON fragments: why not using a XSD-based approach
 - Appendix B. Detailed JSON Examples
 - B.1 JSON Examples for Topology Abstraction
 - B.1.1 JSON Code: mpi1-otn-topology.json
 - B.2 JSON Examples for Service Configuration
 - B.2.1 JSON Code: mpi1-odu2-service-config.json
 - B.2.2 JSON Code: mpi1-odu2-tunnel-config.json
 - B.2.3 JSON Code: mpi1-epl-service-config.json

Next Steps

- Document has a number of enhancements queued
 - <https://github.com/danielkinguk/transport-nbi/issues>
 - Editors, authors and contributors need to agree which are useful, nice to have, unnecessary
- Face-to-face DT meeting planned during IETF 104
 - Review open issues and enhancements
 - Wednesday 13:30-15:00 (Karlin 1/2)
- Submit for Last Call in June