IETF Network Slice Application in 5G End-to-End Network Slice

draft-teas-5g-network-slice-application

TEAS WG

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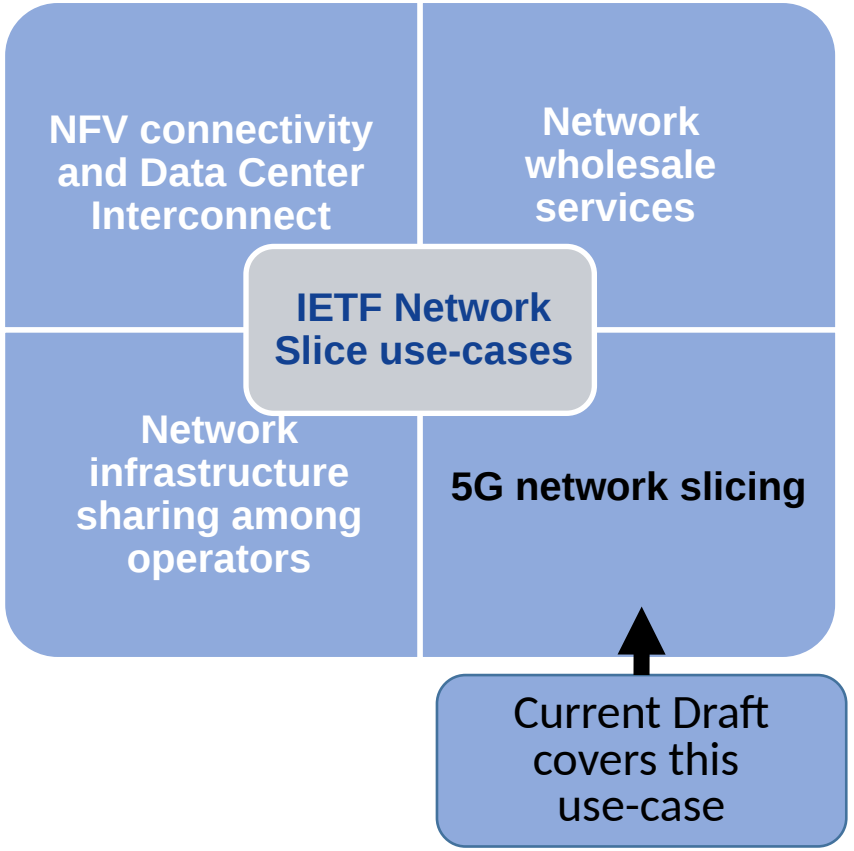
Background Introduction

- Among various network slicing use cases, 5G is one of the (most) important application scenarios of IETF Network Slice
- At IETF 114, the WG has decided to merge 3 5G Network Slice application drafts into one draft (the current draft)
- After IETF 115, authors modified the document and clarify the relationship between this document and other existing IETF work.
- After IETF 116, the document is WG adopted. The authors kept modifying the document based on WG's comments in the following aspects:
  - Document structure modification to make the overall logic easier to understand
  - Add a new example of 5G Network Slice Mapping to go align with the process of 3GPP
  - Terminology and figure number alignment

Define in Framework for IETF Network Slices (draft-ietf-teas-ietf-network-slices)



Structure Modification

- Introduction
- 5G E2E Network Slice
- 5G E2E Network Mapping Procedure
- 5G E2E Network Slice Mapping in Management and Control Plane
- 5G E2E Network Slice Mapping in Data Plane
- IETF Network Slice Request through IETF Network Slice NBI
- Gap Analysis
- 3GPP Network Slice Mapping Parameters
- Data Plane Mapping Options

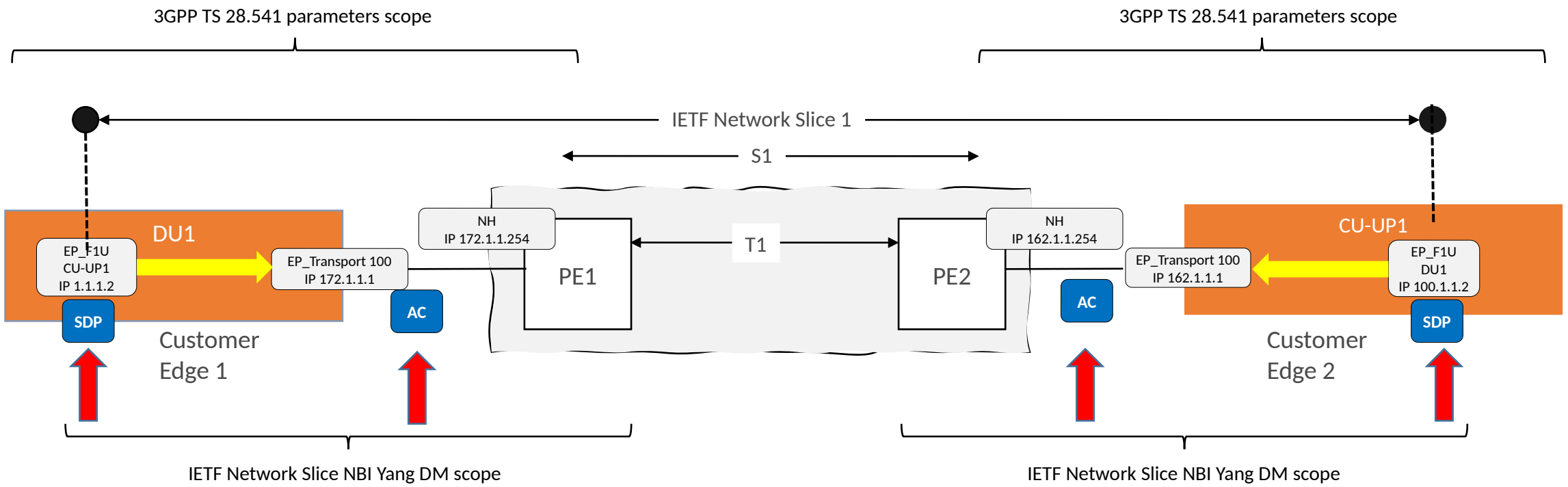
The scope of the document in different possible 5G scenario, including

The combination of Management plane and control plane

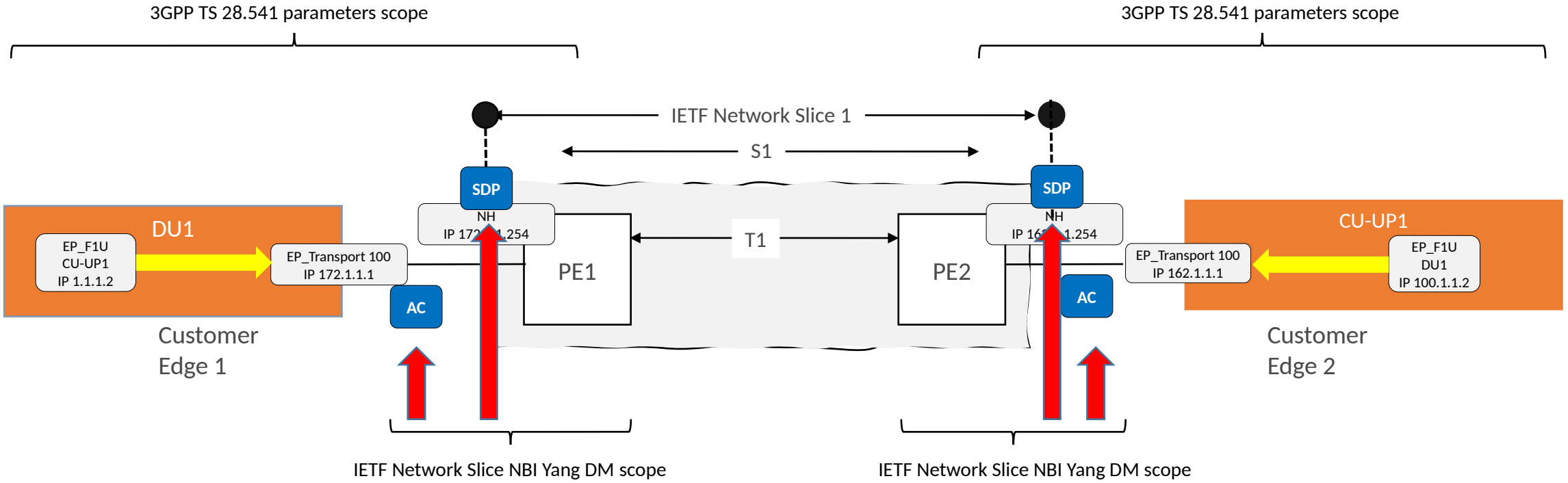
Adding examples especially with the existing NBI YANG Model

Move the background information of 3GPP and the implementation related options to annex

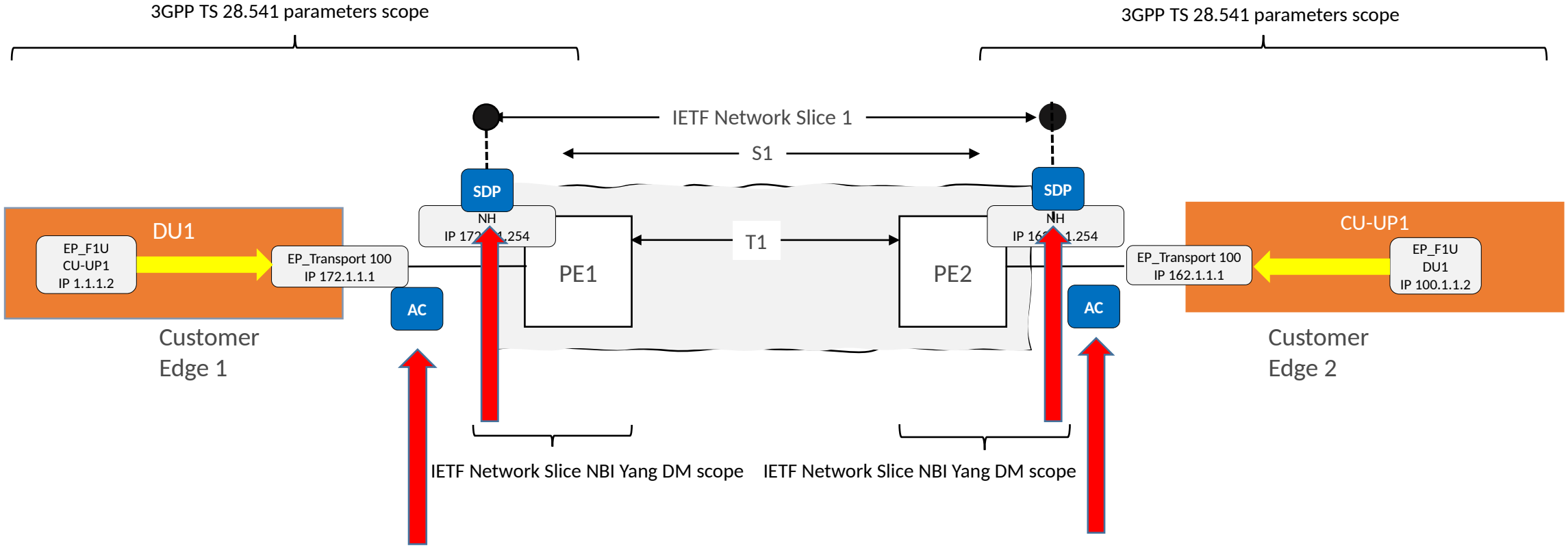
Example of 5G Network Slice Mapping
Example #1
CE-based SDP



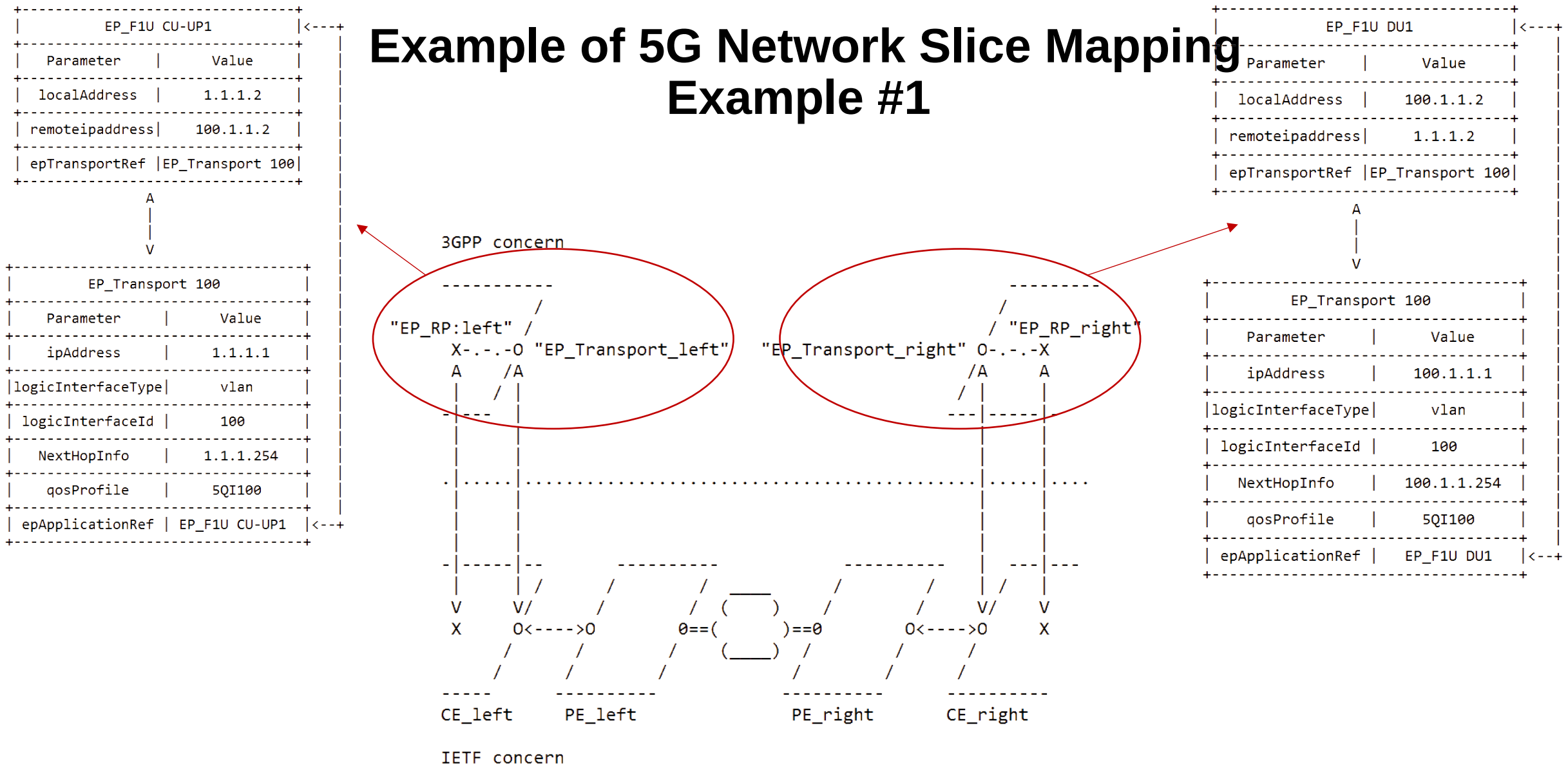
Example of 5G Network Slice Mapping
Example #2
PE-based SDP



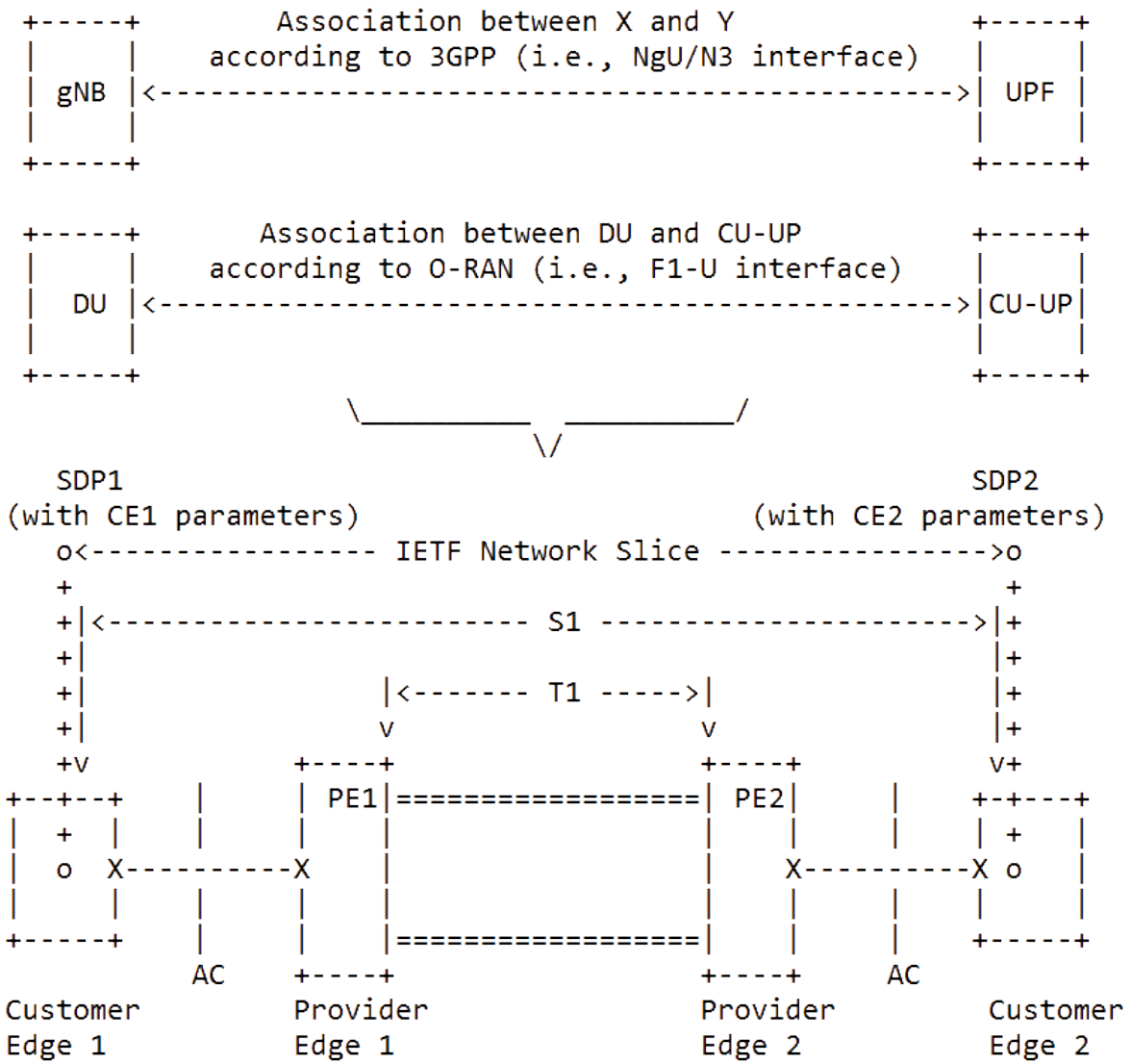
Example of 5G Network Slice Mapping
Example #3
PE based SDPs & ACaaS



Example of 5G Network Slice Mapping Example #1

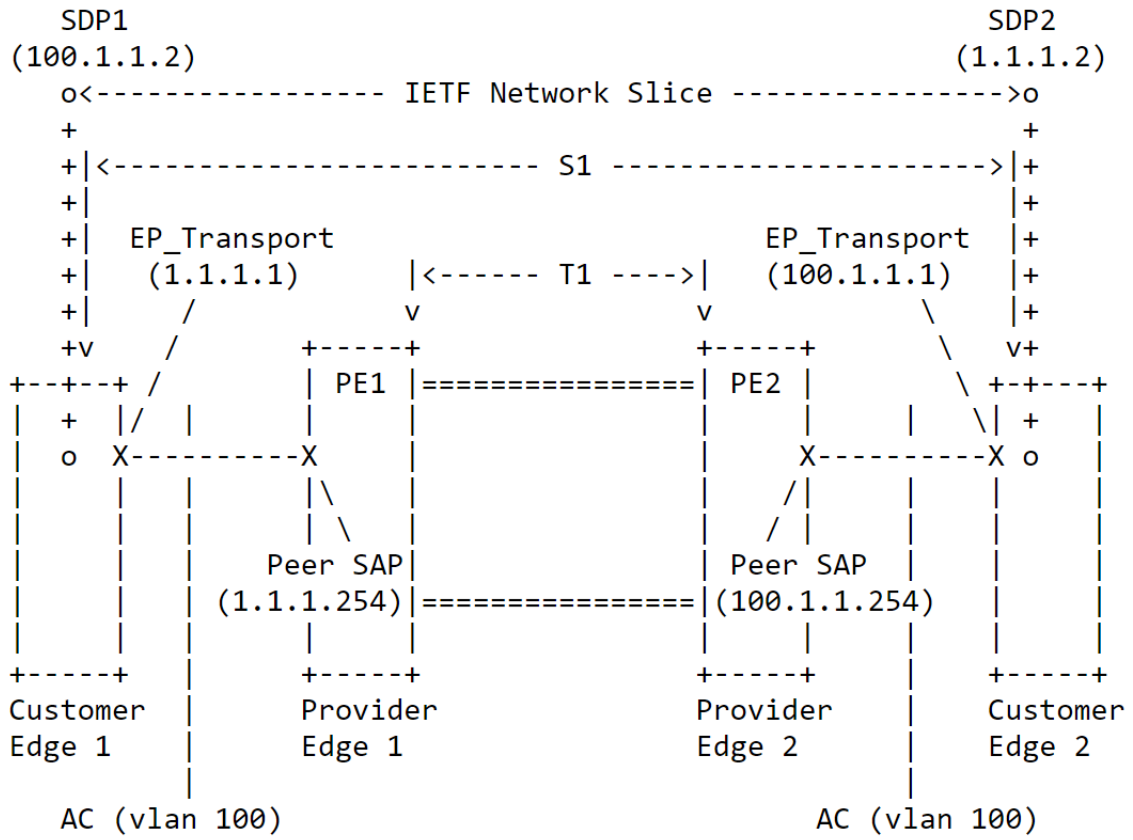


Example of 5G Network Slice Mapping Example #1



Example of 5G Network Slice Mapping Example #1

Mapping between 3GPP and NS NBI

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Comments Collected and the Next Step

- Structure modification, especially the logical relationship among different part
  - Keep doing
- Clarifying the scope of this document and relationship with other related IETF work
  - Mostly done
- Terminology alignment
  - Keep doing
- Text modification
  - Keep doing
- Gap analysis and coordination and collaboration with 3GPP SA5 for NRM network slice model, draft-boro-opsawg-teas-attachment-circuit
  - Keep doing
- Comments are welcome

Thank You!