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

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

TEAS WG

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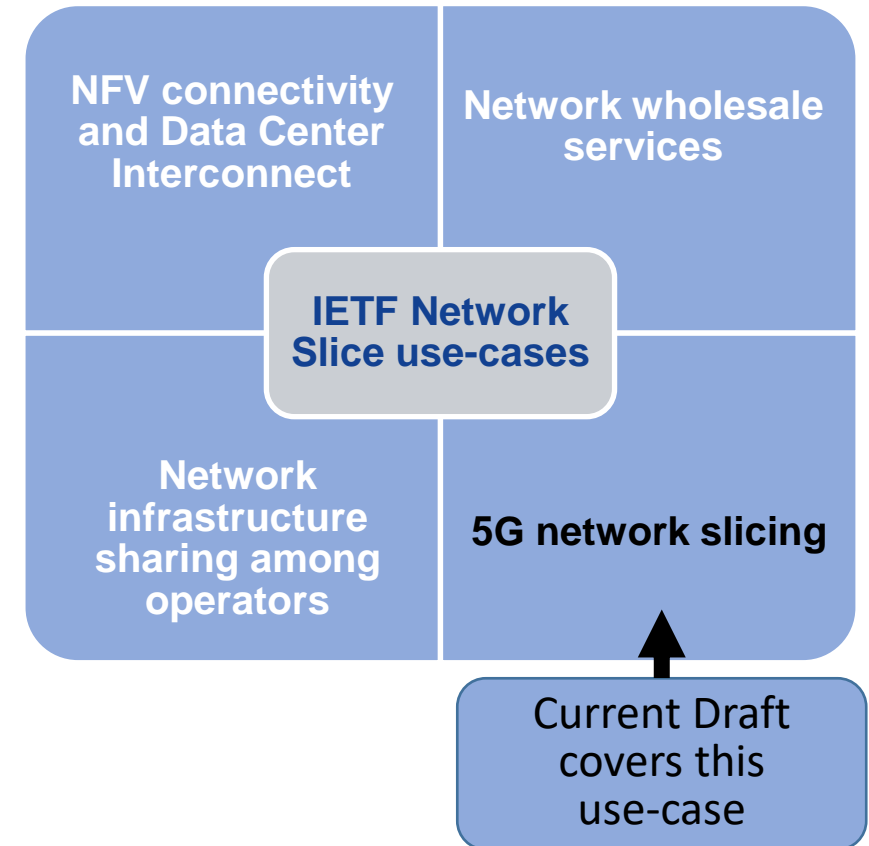Reza Rokui (Ciena - Presenting)
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Background Introduction

- 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.

- Updates presented at IETF 117.

- Meeting and alignment between authors of [I-D. ietf-teas-5g-network-slice-application] and [I-D.ietf-teas-5g-ns-ip-mpls] during IETF 118 In order to ensure consistency of both drafts

  - Identified few points that require minor clarifications in both sides

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

NFV connectivity and Data Center Interconnect	**Network wholesale services**
Network infrastructure sharing among operators	**5G network slicing**

IETF Network Slice use-cases

Current Draft covers this use-case

Changes from -01

- Added clarification text for the relationship of application [I-D. ietf-teas-5g-network-slice-application] and realization [I-D.ietf-teas-5g-ns-ip-mpls] drafts:

  "This document focuses on the mapping between 5G Slices and underlying Transport Networks. Specifically, the document describes how RFC XXXX Network Slice Services can be derived in the context of a 3GPP Slice Service. To that aim, the document explores how and whether 3GPP Slice Service parameters are mapped to parameters that are exposed in IETF service data models (mainly, IETF Network Slice Service Model, Attachment Circuits'-as-a-Service (ACaaS), and bearers). It is out of scope of this document to elaborate on the realization of RFC XXXX Network Slices. These considerations are discussed in [I-D.ietf-teas-5g-ns-ip-mpls]."

Changes from -01

- Simplification of 5G E2E Network Slice Mapping Procedure in section 4

- Representation of EP_RP object in Figure 8

- Alignment in terminology from "IETF network slice service" to "RFC XXXX Network Slice service", as well as terminology related to the AC in the NBI YANG model

Next steps

- Elaborate some more examples?
  - Currently we cover three: CE-Mode, PE-Mode and PE-Mode with ACaaS
  - Potential new ones: dual-homed 5G entity, and the case when the 5G entity is instantiated in the internals of a cloud
- Ensure full alignment with the latest version of RFC XXXX Network Slice service YANG model
- Encourage WG to review the mapping examples for detecting issues / errors

- After liaison with 3GPP, we could expect some comments/alignments from it to be addressed as soon as received

- Request WGLC facing IETF 119

Thank You!