

TEAS-NS-DT Framework Draft Status

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Major text additions from multiple DT members

Current Status

- Presented prior status at the TEAS Interim following IETF 107
 - Interim: <https://datatracker.ietf.org/meeting/interim-2020-teas-01/session/teas>
 - Presentation: <https://www.ietf.org/proceedings/interim-2020-teas-01/slides/slides-interim-2020-teas-01-ssa-4c-draft-nsdt-teas-ns-framework-00.pptx>
- Summary:
 - Framework – not requirements or architecture
 - Implementation/Technology agnostic “Transport Slices”
 - Brief description of draft content
 - Proposed next steps
- Postponed adoption request pending resolution of objections to the definition draft

Changes to this draft since IETF 107 + Interim

- Editorial Changes
 - Minor editorial improvements to Abstract, ToC, Introduction
 - Improved capitalization consistency (transport slice, telemetry, statistics, states)
 - consistent with definition draft as well
 - Punctuation, usage corrections
 - Corrected paste error for ACTN references
 - Removed vestigial or redundant text
 - Usual reference updates
- Clarified the limited applicability of ACTN to generic transport slices
 - This involved much iterative discussion
 - Some interpretations of roles defined in ACTN result in hiding relevant transport slice elements
 - This is a result of the potential for overlap between CNC/MDSC and transport slice elements
 - Other role comparisons and overlap are possible, but only CNC/MDSC overlap is in scope
 - Clarified that the comparison discussed is one of many and is included because of applicability and scope

Changes currently pending

- Technical comments (mostly from Kiran)
 - Need to clarify the role of NBI as a new interface (in multiple places)
 - Provide an earlier introduction for “SLO” and related terminology
 - Deal with confusing and (possibly) vestigial text related to isolation
 - Consistently use ‘transport slice consumer” (in sync with similar changes to definition draft)
 - Improve the comparison figure in ACTN applicability by removing ambiguous “customer”
 - Refer to transport slices instead of transport slice services
- Need specific (acceptable) text proposals to address some issues
 - Resolve “network structure”/”topology” tension
 - Resolve issues with apparent preference for using existing technologies
 - Objections to repeated references to VPN+ draft
 - Use of “intent” verses “objective”
- Resolve potential discussion of SBI
- Sync potential changes to Figures (1 in this draft and 4 in definitions)

ACTN Applicability

- In addition to this section in this draft, there is a resurrected draft that specifically addresses applicability of ACTN to TE Network Slicing
 - Draft draft-king-teas-applicability-actn-slicing-06
 - Version -04 expired in April, 2019
 - New versions -05 and -06 posted in June and July of this year
- Outlines ACTN applicability specifically:
 - For TE networks
 - Using IETF technology
- May be a good candidate to refer to in the applicability of ACTN section of this draft

Next Steps

- Request WG adoption
- Working Group review and comments
- See draft posted at:
 - <https://tools.ietf.org/html/draft-nsdt-teas-ns-framework>
 - Current posted version is -04

TEAS NSDT Draft Status

IETF Definition of Transport Slice

draft-nsdt-teas-transport-slice-definition-04

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Jeff Tantsura (Apstra)

Virtual meeting, Sep 23, 2020

IETF NSDT Problem Statement

Which term to use to describe “Connection”? These are a few options in order of authors preference (under discussion):

1. **Connection Slice** □ **draft author’s preference**
2. Transport Slice
3. Transport Network Slice
4. Use 3GPP phrase: “Transport network supporting connectivity”
5. Other suggestions??

“Others” depends on use-case of network slicing and might exist in some use-cases

E2E network slice contains one or more connections.

E2E network slice

Others

Connectivity in TN 1

Connectivity in TN 2

Connectivity in TN M

Connectivity in TN N

Others

User-x
...

Transport Network 1

Transport Network 2

Transport Network M

Transport Network N

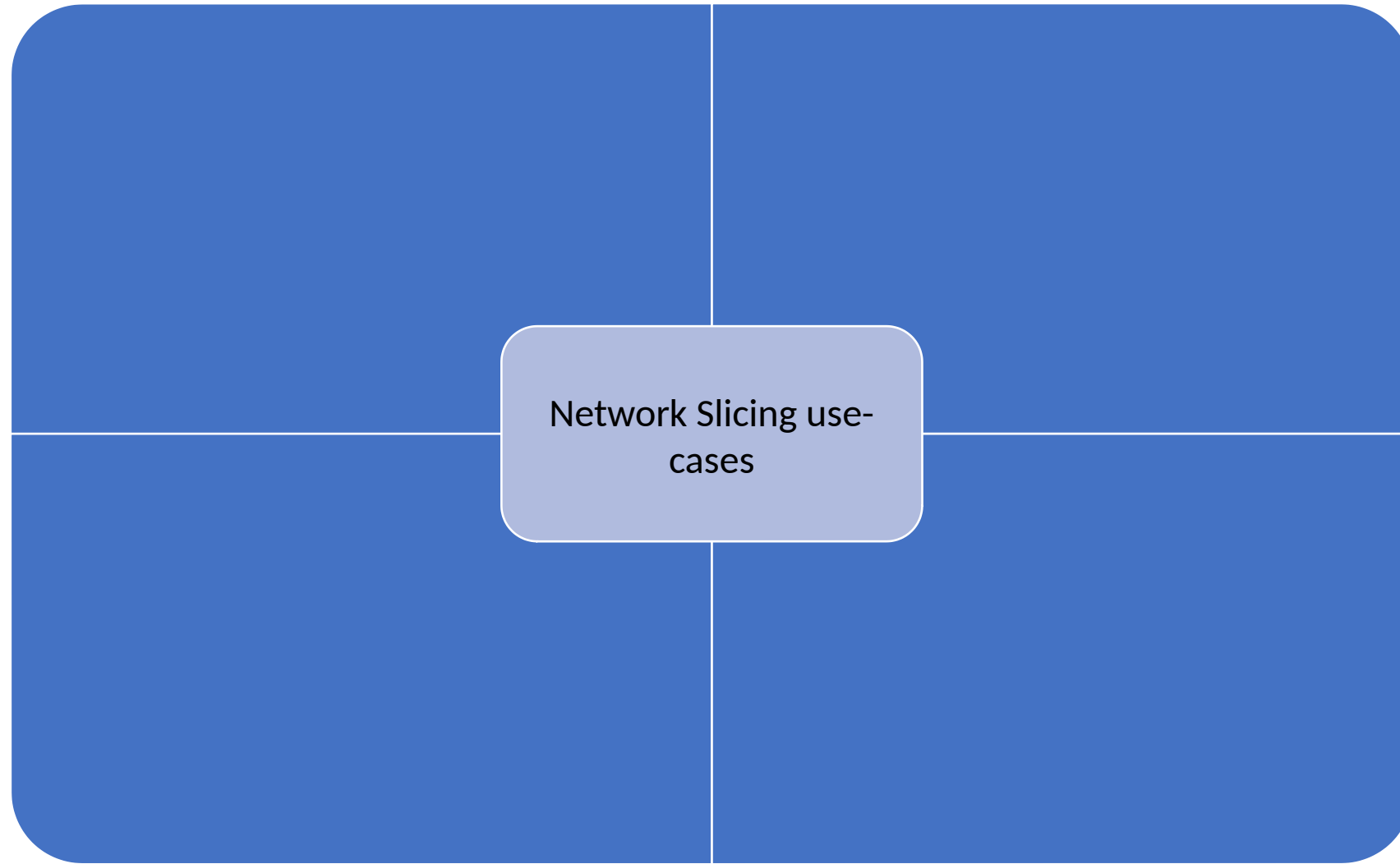
User-y
...

IETF NSDT

- **Complements IETF work**
- **Addresses the characteristics of various connections which are among VNF/PNF/Applications**
- **The realization of connections in transport networks complements IETF models (e.g. ACTN F/W, L3SM, L2SM, EVPN etc.)**
- **Addresses the data model to model these connections and its NBI**

Each Transport Network could contain technologies such as IP/MPLS, with or without TE, PON, Optics, Microwave etc.

Network Slicing use-cases



IETF NSDT addresses all use-cases