

# IETF Network Slice Service YANG Model

[draft-ietf-teas-ietf-network-slice-nbi-yang](#)

## TEAS WG

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- Bo Wu (Huawei Technologies)
- Dhruv Dhody (Huawei Technologies)
- **Reza Rokui (Ciena) (presenting on behalf of authors)**
- Tarek Saad (Cisco)
- Liuyan Han (China Mobile)
- John Mulooly (Cisco)

Contributors : Luis M. Contreras (Telefonica)

# Summary of issues addressed since IETF116

Resolved comments from Mohamed Boucadair, Ryan Hoffman, Italo Busi, Sergio Belotti, and Ladislav Lhotkas's (**YANG doctor early review**)

## Issues status

- Open issues, 1 open issues, 31 closed:
  - <https://github.com/lana-wu/ietf-ns-nbi/issues>

# Summary of issues addressed since IETF116

## Rev-04 summary:

1. Perform **IETF Network Slice feasibility checks** before instantiation it
  - Using the NS is configured in 'compute-only' mode to distinguish it from the default behavior (see Section 5.2.6)
2. Add **operational Status** to **AC** and connectivity construct (**CC**)
3. Add SLO **percentile-value**
4. IETF Network Slice Service Custom Topology
  - INS customer might ask for some level of control to customize the service paths in a network slice
  - The reference to **network topology** (RFC 8345) is added
  - Therefore, both TE topology constraints and **routing constraints** can also be applied
5. Remove “**opaque**” attributes from “protocol-tag” and “service-tags” for better **YANG validation**
6. Editorial and YANG improvements per the comments
7. Move the **YANG tree** to the appendix

# SDP Attachment Circuit (AC)

(Raised by Med (Mohamed Boucadair))

## Issues:

- How attachment circuit (AC) used in NSI YANG can be generalized and be aligned with AC IETF Yang models?
- See YANG ~~service~~ data model for Attachment Circuits (ACs) draft
  - draft-boro-opsawg-teas-attachment-circuit ← Attachment Circuits (ACs) **Service** YANG module
  - draft-boro-opsawg-ntw-attachment-circuit ← Attachment Circuits (ACs) **Network** YANG module
  - draft-boro-opsawg-teas-common-ac ← Attachment Circuits (ACs) **common type** YANG module
- **Proposal-1**: Suggested to use the **AC Service model (“ac-svc-name”)** mentioned above
- **Proposal-2**: Suggested to reuse L2/L3 connection from LxNM “vpn-network-access” or draft-boro-opsawg-teas-common-ac

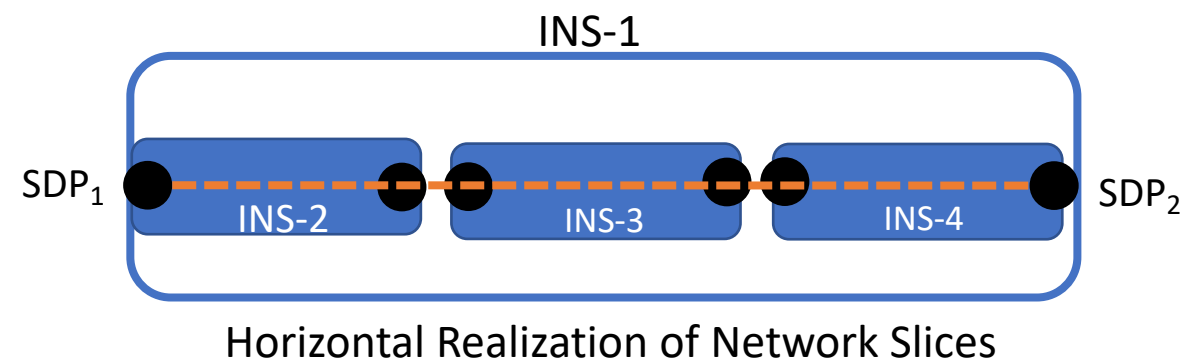
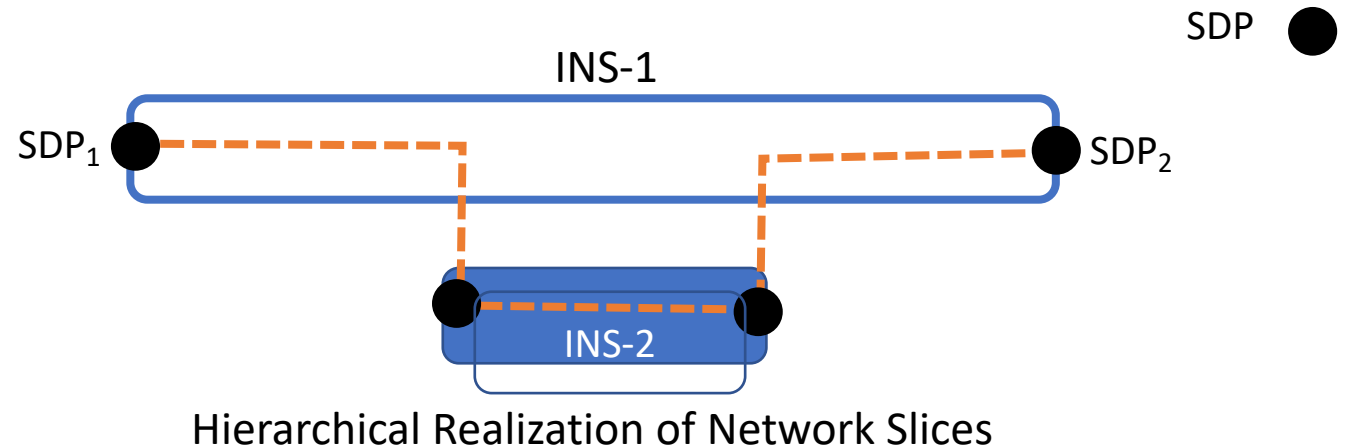
## Proposal:

Both suggested accepted to allow flexibility in NSI NBI Yang model (note that AC is technology specific and there are many different deployment methods)

- For pre-existing ACs, a new node, “ac-svc-name” (**Proposal-1**) is added to NBI YANG to reference them (to both SDP and attachment-circuit)
- For augmentation example, in Appendix A. Attachment Circuit Augmentation Considerations, reuses grouping structures defined in the **Proposal-2**

# NBI Yang Model for Hierarchical & Horizontal Realization of Network Slices

- IETF Network Slice Service INS-1 between SDP1 & SDP2
- NSC can realize the INS-1 using Hierarchical & Horizontal (See INS Framework draft)
- **NBI Yang model supports both**
- For example, for Hierarchical
  - Use NBI Yang to create INS-2
  - Then use NBI Yang to create INS-1
  - During the realization of INS-2, NSC might use INS-2.
  - i.e., It is up to NSC to use INS-2 or not



# Next step

- Request further review and address comments
- Asking for WGLC

Thank You!