

# YANG Data Models for OTN Topology & OTN Tunnel

CCAMP WG, IETF99, Prague

## draft-ietf-ccamp-otn-topo-yang-00

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## draft-sharma-ccamp-otn-tunnel-model-02

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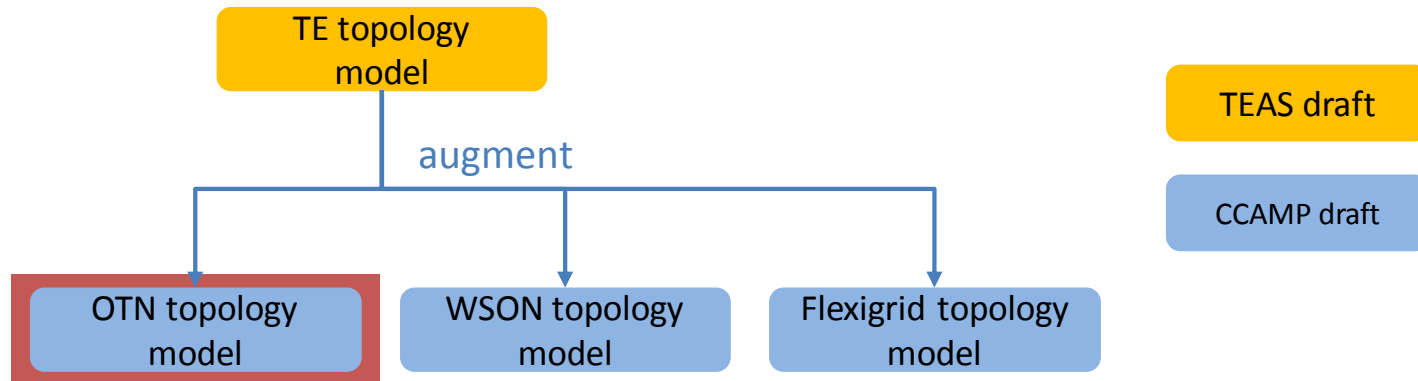
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# draft-ietf-ccamp-otn-topo-yang-00

- Scope
  - YANG data model for OTN topology
  - Focus on electrical layer



# draft-ietf-ccamp-otn-topo-yang-00

- Model is independent of control plane protocols
- Augment TE topology data model
  - “otn-topology” network type under “te-topology”
  - “name” with string type for networks and nodes
  - Available ODU information for each priority in TE link
  - ODU termination point information under TE link termination-point (Igor suggested to TTP)

# draft-ietf-ccamp-otn-topo-yang-00

```
module: ietf-otn-topology
augment /nd:networks/nd:network/nd:network-types/tet:te-topology:
  +--rw otn-topology!
augment /nd:networks/nd:network:
  +--rw name? string
augment /nd:networks/nd:network/nd:node:
  +--rw name? string
augment /nd:networks/nd:network/lnk:link/tet:te/tet:config:
  +--rw available-odu-info* [priority]
  | +--rw priority uint8
  | +--rw odulist* [odu-type]
  |   +--rw odu-type identityref
  |   +--rw number? uint16
  +--rw distance? uint32
```

# draft-ietf-ccamp-otn-topo-yang-00

augment /nd:networks/nd:network/nd:node/lnk:termination-point  
/tet:te/tet:config:

```
+--rw client-facing?      empty
+--rw tpn?                 uint16
+--rw tsg?                 identityref
+--rw protocol-type?      identityref
+--rw adaptation-type?    adaptation-type
+--rw sink-adapt-active?  boolean
+--rw source-adapt-active? boolean
+--rw tributary-slots
| +--rw values*  uint8
+--rw supported-payload-types* [index]
  +--rw index      uint16
  +--rw payload-type? string
```

# Diff

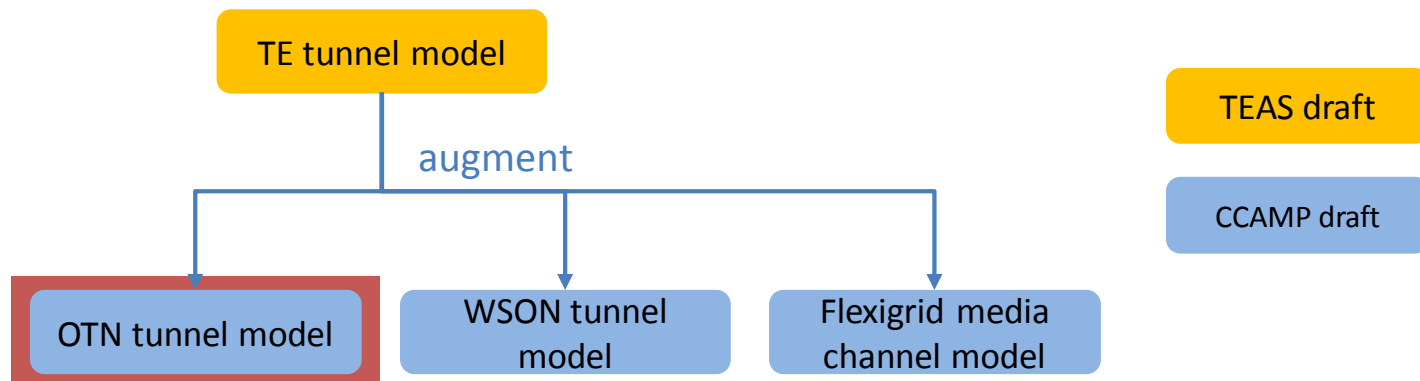
- Change authors' and contributors' information

# Next Step

- Address open issue
- Change the model to be NMDA-compliant

# draft-sharma-ccamp-otn-tunnel-model-02

- Recently adopted by WG
  - Uploaded draft-ietf-ccamp-otn-tunnel-model-00
- Scope
  - YANG data model for OTN tunnel
  - YANG data model for transport types based on G.709 (2016)





# draft-sharma-ccamp-otn-tunnel-model-02

- Augment TE tunnel data model to have parameters for tunnel endpoints in OTN
  - “payload-treatment”
    - For multi-domain scenario, OTN services can be either transported or switched
  - “src-client-signal” and “dst-client-signal”
    - OTN tunnel can be either bookended or non-bookended

# draft-sharma-ccamp-otn-tunnel-model-02

```
module: ietf-otn-tunnel
augment /te:te/te:tunnels/te:tunnel/te:config:
  +-rw payload-treatment? enumeration
  +-rw src-client-signal? identityref
  +-rw src-tpn?          uint16
  +-rw src-tsg?          identityref
  +-rw src-tributary-slot-count?  uint16
  +-rw src-tributary-slots
  | +-rw values*  uint8
  +-rw dst-client-signal? identityref
  +-rw dst-tpn?          uint16
  +-rw dst-tsg?          identityref
  +-rw dst-tributary-slot-count?  uint16
  +-rw dst-tributary-slots
  +-rw values*  uint8
```

# Diff

- Change authors' and contributors' information

## Next Step

- Looking forward to more discussions and comments in the mailing list
- Follow TE tunnel model when it becomes NMDA-compliant

Thank you!