

# OTN Service YANG Model

NETMOD WG, IETF96, Berlin, Germany

draft-sharma-ccamp-otn-service-model-00

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# Motivation

- TE Tunnel model (ietf-te) is an abstract model to create TE Tunnels.
- OTN Service YANG Model augments the TE Tunnel model, to create OTN service.
  - OTN service is created in the OTN Topology that is based on Network Topology (i2rs) and TE Topology (TEAS).

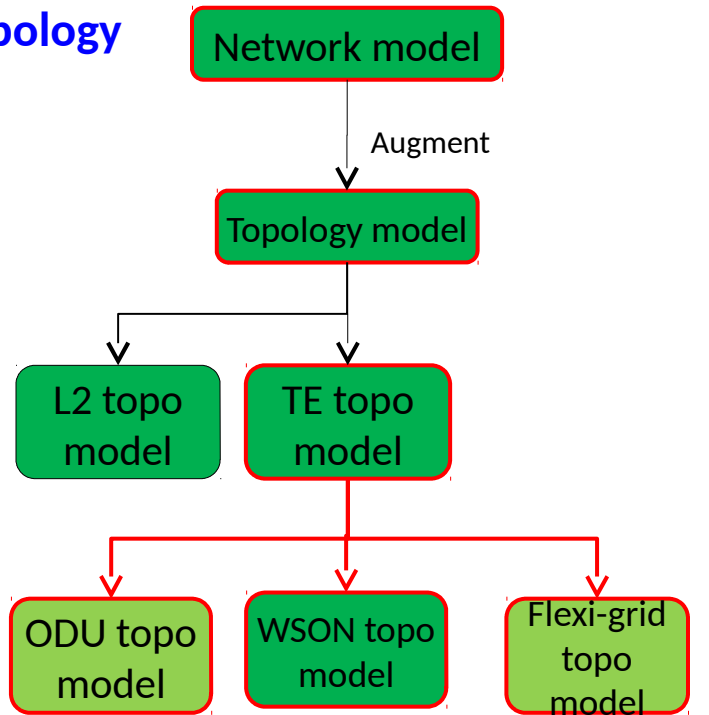
# The List of YANG Models for Transport Controller NBI : Overview

In WG draft

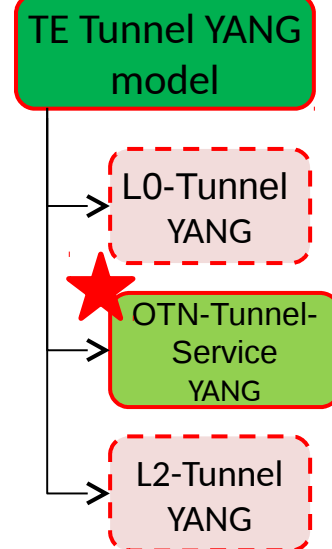
In I-D

Missing

## Topology



## Tunnel



## Other Key Models

Connectivity Service Model (In I-D)

Advanced service model (Missing)

Scheduling (In I-D)

Fault Model (In I-D)

# YANG Tree Overview

```
module: ietf-otn-service
```

```
augment /te:te/te:tunnels/te:tunnel/te:config: Augments TE Tunnel (config)
```

```
+--rw payload-treatment? enumeration
+--rw src-client-signal? identityref
+--rw src-tpn? uint16
+--rw src-tsg? identityref
+--rw src-timeslot-count? uint16
+--rw src-timeslots
| +--rw values* uint8
+--rw dst-client-signal? identityref
+--rw dst-tpn? uint16
+--rw dst-tsg? identityref
+--rw dst-timeslot-count? uint16
+--rw dst-timeslots
    +--rw values* uint8
```

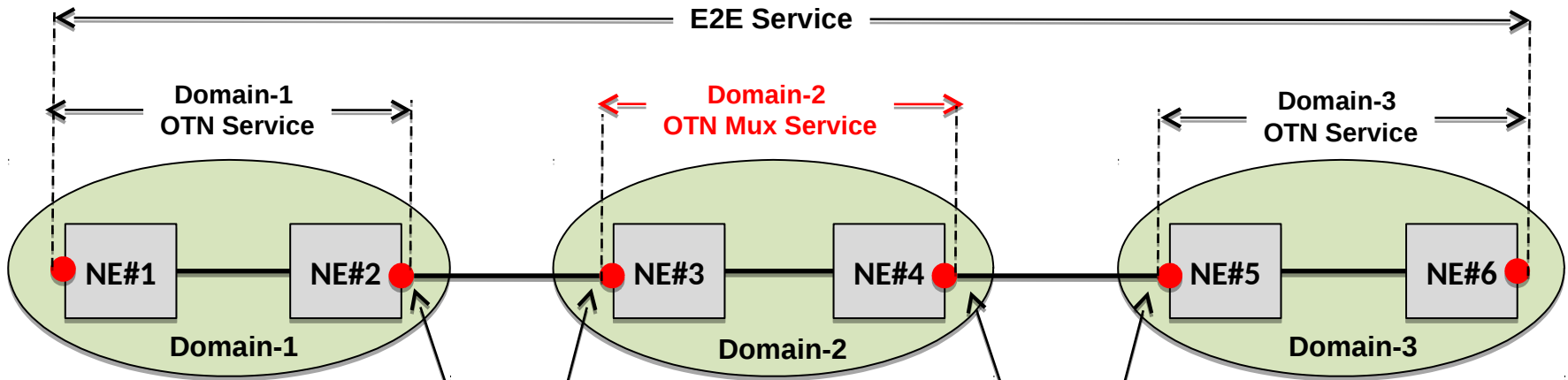
```
augment /te:te/te:tunnels/te:tunnel/te:state: Augments TE Tunnel (state)
```

```
+--ro payload-treatment? enumeration
+--ro src-client-signal? identityref
+--ro src-tpn? uint16
+--ro src-tsg? identityref
+--ro src-timeslot-count? uint16
+--ro src-timeslots
| +--ro values* uint8
+--ro dst-client-signal? identityref
+--ro dst-tpn? uint16
+--ro dst-tsg? identityref
+--ro dst-timeslot-count? uint16
+--ro dst-timeslots
    +--ro values* uint8
```

# Supported Usecases

- OTN Service YANG Model can be used for the following use cases:
  - OTN Mux Service
  - Bookended and Non-Bookended OTN services
  - OTN service between client ports
  - OTN service / tunnel between network ports

# OTN Mux Service Example



Same OTN Service Attributes on LO-ODU

1. Tributary Port Number
2. Tributary Slot Numbers
3. Tributary Slot Granularity
4. Client Signal

Same OTN Service Attributes on LO-ODU

1. Tributary Port Number
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4. Client Signal

# Next Steps

- Transport related comments have been given to the TE Tunnel model.
  - Update the OTN service model once TE tunnel incorporates transport comments.
- Received some review comments on the model.
  - Incorporate review comments.
- Evaluate if the current model is suitable for supporting various protected OTN services.