

# Flexi-Grid YANG Models Update

CCAMP Working Group  
IETF 112

## A YANG Data Model for Flexi-Grid Optical Networks

Versions: ([draft-vergara-ccamp-flexigrid-yang](#))  
[00](#) [01](#) [02](#) [03](#) [04](#) [05](#) [06](#) [07](#) [08](#) [09](#) [10](#)

|                                |                                |
|--------------------------------|--------------------------------|
| CCAMP Working Group            | J. Lopez de Vergara            |
| Internet-Draft                 | Naudit HPCN                    |
| Intended status: Informational | D. Perdices Burrero            |
| Expires: January 13, 2022      | Universidad Autonoma de Madrid |
|                                | D. King                        |
|                                | Old Dog Consulting             |
|                                | Y. Lee                         |
|                                | Samsung                        |
|                                | H. Zheng                       |
|                                | Huawei Technologies            |
|                                | July 12, 2021                  |

A YANG Data Model for Flexi-Grid Optical Networks  
draft-ietf-ccamp-flexigrid-yang-10

### Abstract

This document defines a YANG module for managing flexi-grid optical networks. The model defined in this document specifies a flexi-grid traffic engineering database that is used to describe the topology of a flexi-grid network. It is based on and augments existing YANG models that describe network and traffic engineering topologies.

The YANG data model defined in this document conforms to the Network Management Datastore Architecture (NMDA).

<https://github.com/ietf-ccamp-wg/draft-ietf-ccamp-flexigrid-yang>

## A YANG Data Model for Flexi-Grid Media Channels Tunnels

Versions: ([draft-vergara-ccamp-flexigrid-media-channel-yang](#))  
[00](#) [01](#) [02](#) [03](#) [04](#)

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|                                | D. King                        |
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|                                | V. Lopez                       |
|                                | Nokia                          |
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|                                | Y. Lee                         |
|                                | Samsung                        |
|                                | G. Galimberti                  |
|                                | Cisco                          |
|                                | July 12, 2021                  |

A YANG Data Model for Flexi-Grid Media Channels  
draft-ietf-ccamp-flexigrid-media-channel-yang-04

### Abstract

This document defines a YANG model for managing flexi-grid optical media channels, complementing the information provided by the flexi-grid topology model.

The YANG data model defined in this document conforms to the Network Management Datastore Architecture (NMDA).

<https://github.com/ietf-ccamp-wg/draft-ietf-ccamp-flexigrid-media-channel-yang>

# A YANG Data Model for Flexi-Grid Optical Topologies

- Used to describe the flexi-grid optical topology
  - [draft-ietf-ccamp-flexigrid-yang](#)
  - (Recently) submitted draft-ietf-ccamp-flexigrid-yang-11
  - Updates include:
    - Addressed the YANG DR Early Review Comments
    - Update to Security section based on recent RFC Editor best practice
  - Refers to draft-ietf-ccamp-flexigrid-tunnel-yang-00
  - YANG code updated
  - <https://github.com/ietf-ccamp-wg/draft-ietf-ccamp-flexigrid-yang/issues>
- Ready for WG Last Call

# A YANG Data Model for Flexi-Grid Tunnels

- Used to describe the flexi-grid optical tunnels (media channels)
  - (Recently) submitted draft-ietf-ccamp-flexigrid-tunnel-yang-00
  - Updates include:
    - Using “flexgtnl” prefix
    - Removed RPC Path Computation Functions
    - Updated YANG Tree and Code
  - Various open issues
    - See next page(s), or
    - <https://github.com/ietf-ccamp-wg/draft-ietf-ccamp-flexigrid-media-channel-yang/issues>

# A YANG Data Model for Flexi-Grid Tunnels

- Scope
  - Flexi-grid is designed to support transceivers requiring an optical bandwidth exceeding, or not fitting the ITU-T fixed grid (e.g., 50 or 100GHz).
  - Legacy transceivers are not applicable to this draft.
- Several open GitHub issues, including:
  - #25 Show relationships between YANG models used in document
  - #35 Clarify scope (per above discussion point)
  - #40 OTSi Information in the Flexi-grid tunnel model
  - #42 Improve Model Overview section

# A YANG Data Model for Flexi-Grid Tunnels

- Side discussion on operational aspects of flexi-grid networks
  - Investigating techniques for flexi-grid network performance, fault management, and alarms
- Need further reviews from WG and vendors implementing flexi-grid
- Weekly call (not during IETF 112 week)
  - Thursdays @ 14:00 CET
    - <https://zoom.us/j/96715237995?pwd=WmcwMVZ3c1kyY0pucUhNcWVNOHNvdz09>