

# Applicability of GMPLS for fine grain OTN

draft-lin-ccamp-gmpls-fgOTN-applicability-02

Yi Lin (Presenter)

Huawei

Liuyan Han

China Mobile

Yang Zhao

China Mobile

Raul Muñoz

Centre Tecnològic de Telecomunicacions de Catalunya (CTTC)

Yanxia Tan

China Unicom

# Main Ideas and Changes

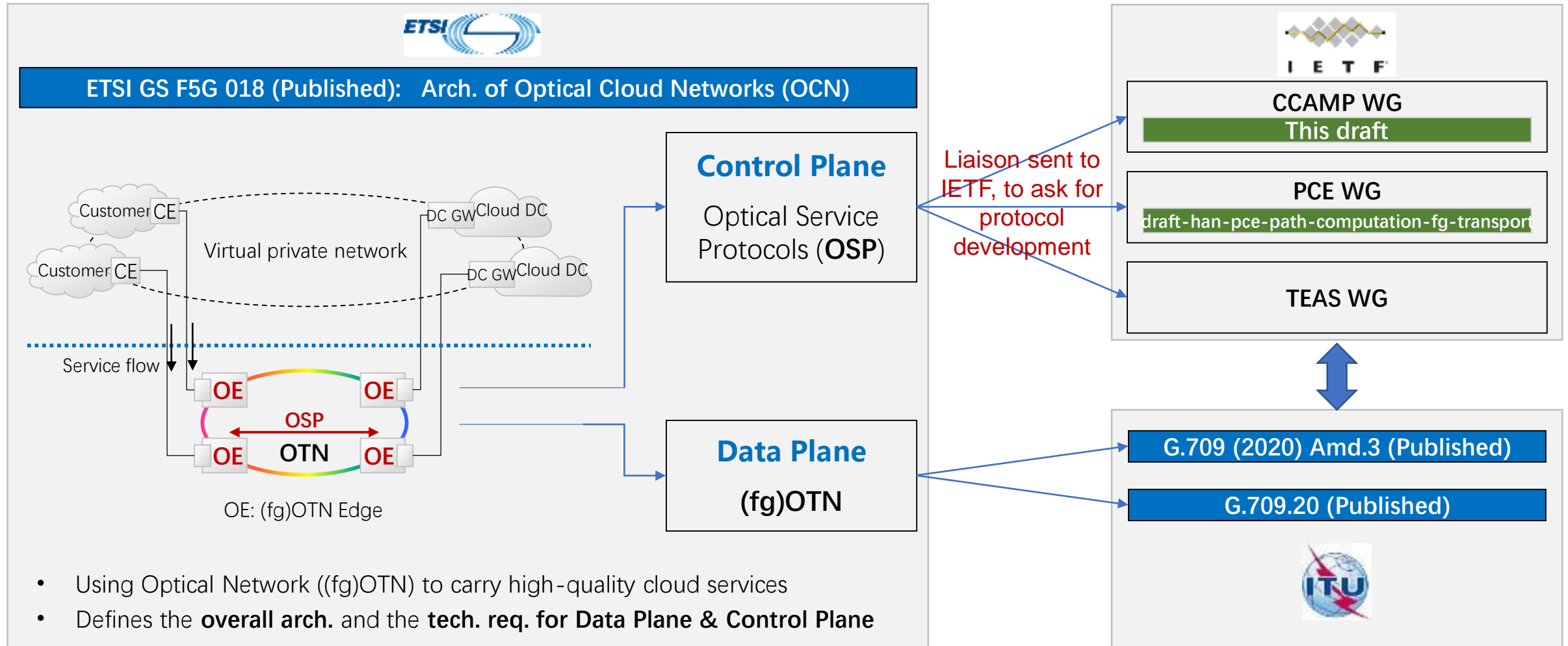
## ➤ Main ideas:

- Overview of **latest OTN standards** (including **fgOTN**)
- Examines the **applicability** of using existing **GMPLS** control plane & **PCEP** for **fgOTN**
  - **Connection control** consideration
  - **Service control** consideration
  - **Routing** Consideration

## ➤ Main changes from -01 to -02

- **Added the reference to ETSI GS F5G 018**, which specifies the architecture of Optical Cloud Networks, and their technical requirements for the (fg)OTN Control Plane
- Added Yanxia Tan (China Unicom) as co-author

# SDO Collaboration on fgOTN Control

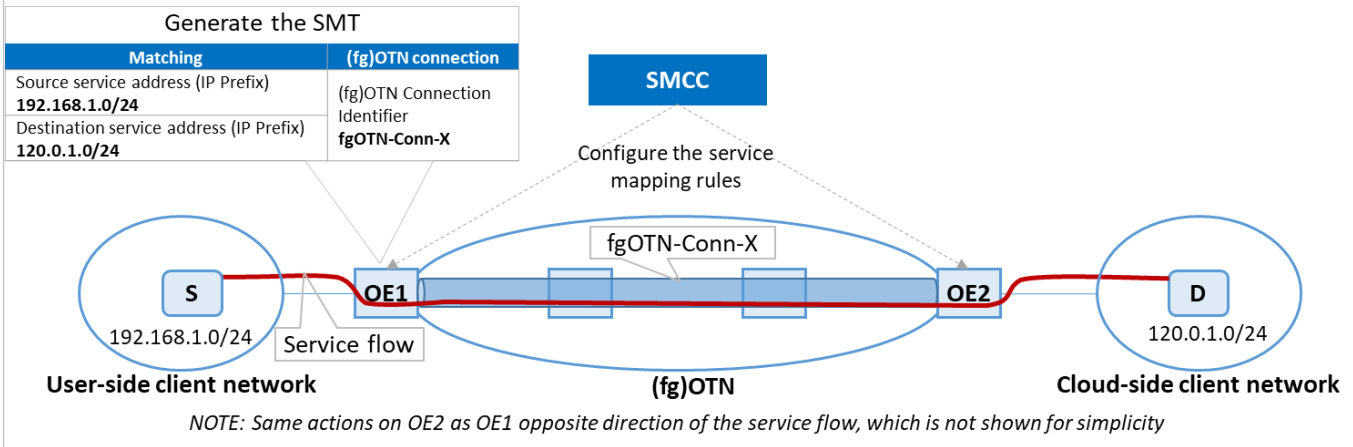


# Matching with ETSI OSP Requirements



## OSP Service Control

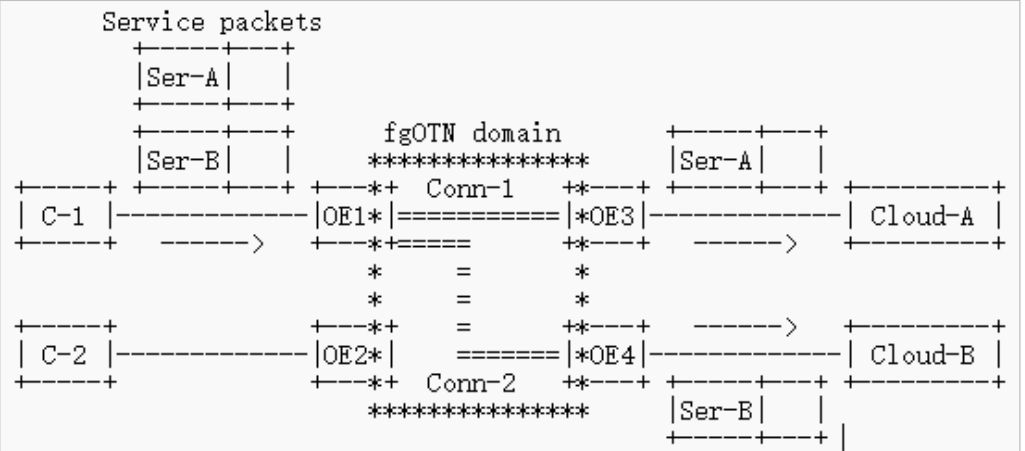
To enable the OTN edge node to map service flows to the appropriated (fg)OTN connection and carry the services end-to-end



## This Draft

### Session 4: fgOTN service control consideration

- Propose the centralized way, with extension to PCEP



## OSP Connection Control

- (fg)OTN connection creation
- (fg)OTN connection BW modification (including hitless BW adjustment)
- (fg)OTN connection deletion
- (fg)OTN connection recovery

### Session 5: fgOTN Connection Control Consideration

- Connection Hierarchy and connection control
- Hitless Resizing
- Scalability, especially on the large-number connection restoration

# Next Steps

- Cooperate with other SDOs (ETSI, ITU-T) on the development of fgOTN control protocols
- Work on protocol extension for fgOTN control
  - Collaborate with [draft-han-pce-path-computation-fg-transport]
- Comments are always appreciated

Thank you