

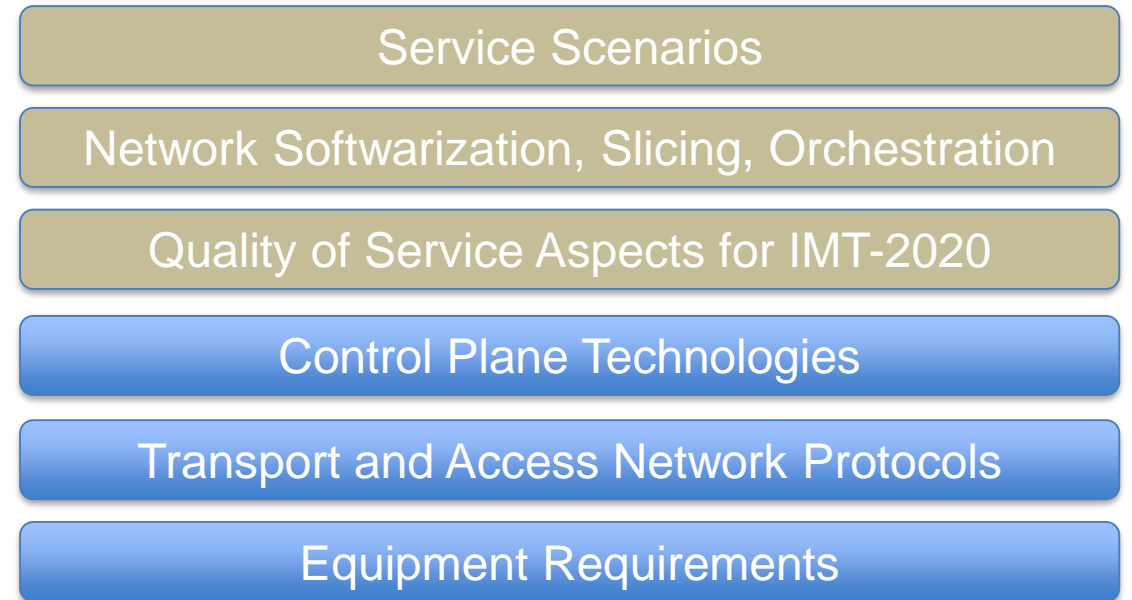
# Transport SDN to support 5G

IMT-2020/5G systems - “Transport, slicing, FMC”

*Scott Mansfield SG-13 Vice Chair*

# Transport Network Building Blocks

- ITU-T Study Groups 13 and 15 are an integral part of the Standard Ecosystem necessary to enable the Transport Network capable of supporting 5G

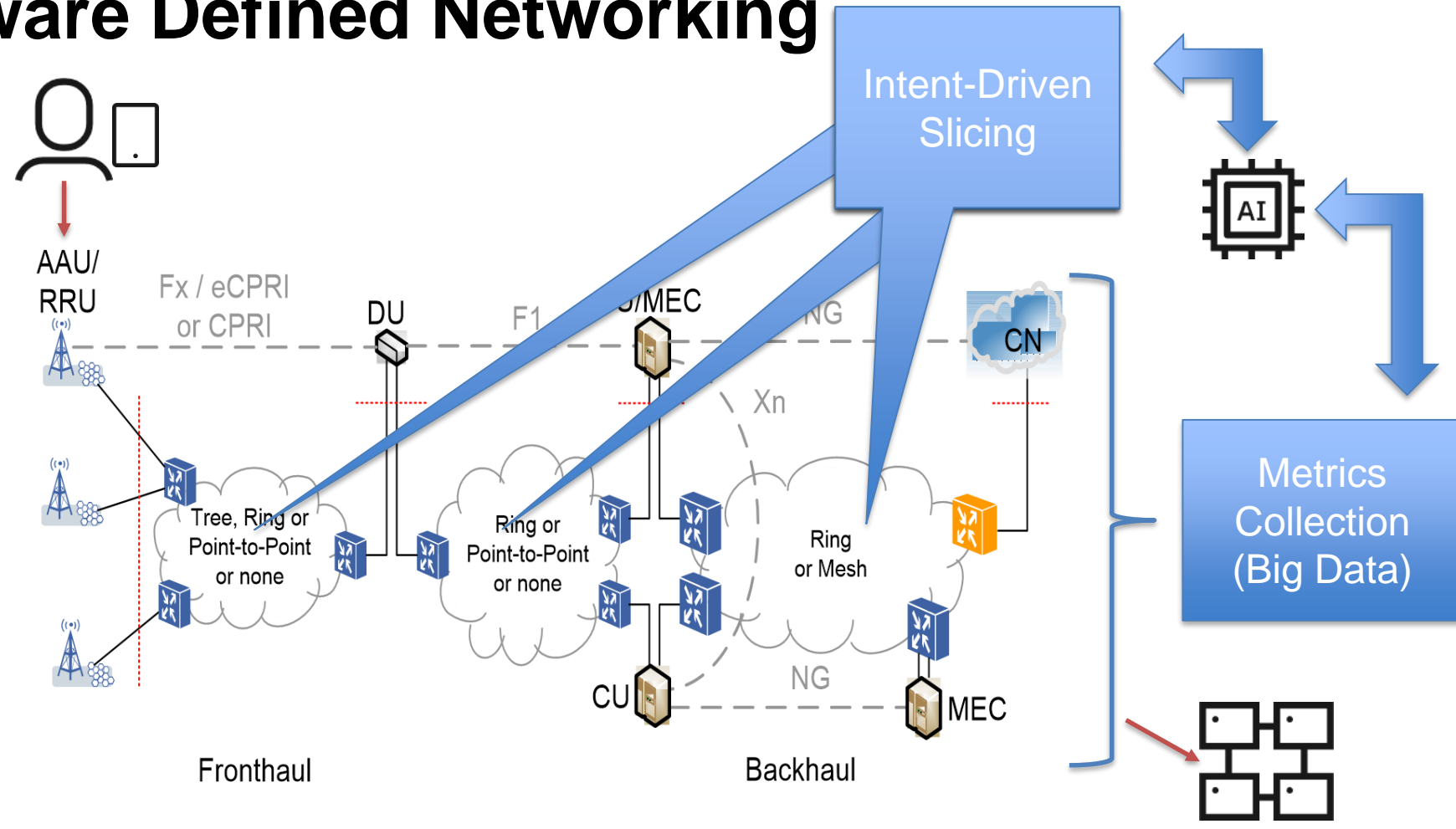


SG 13

SG 15

# Transport Software Defined Networking

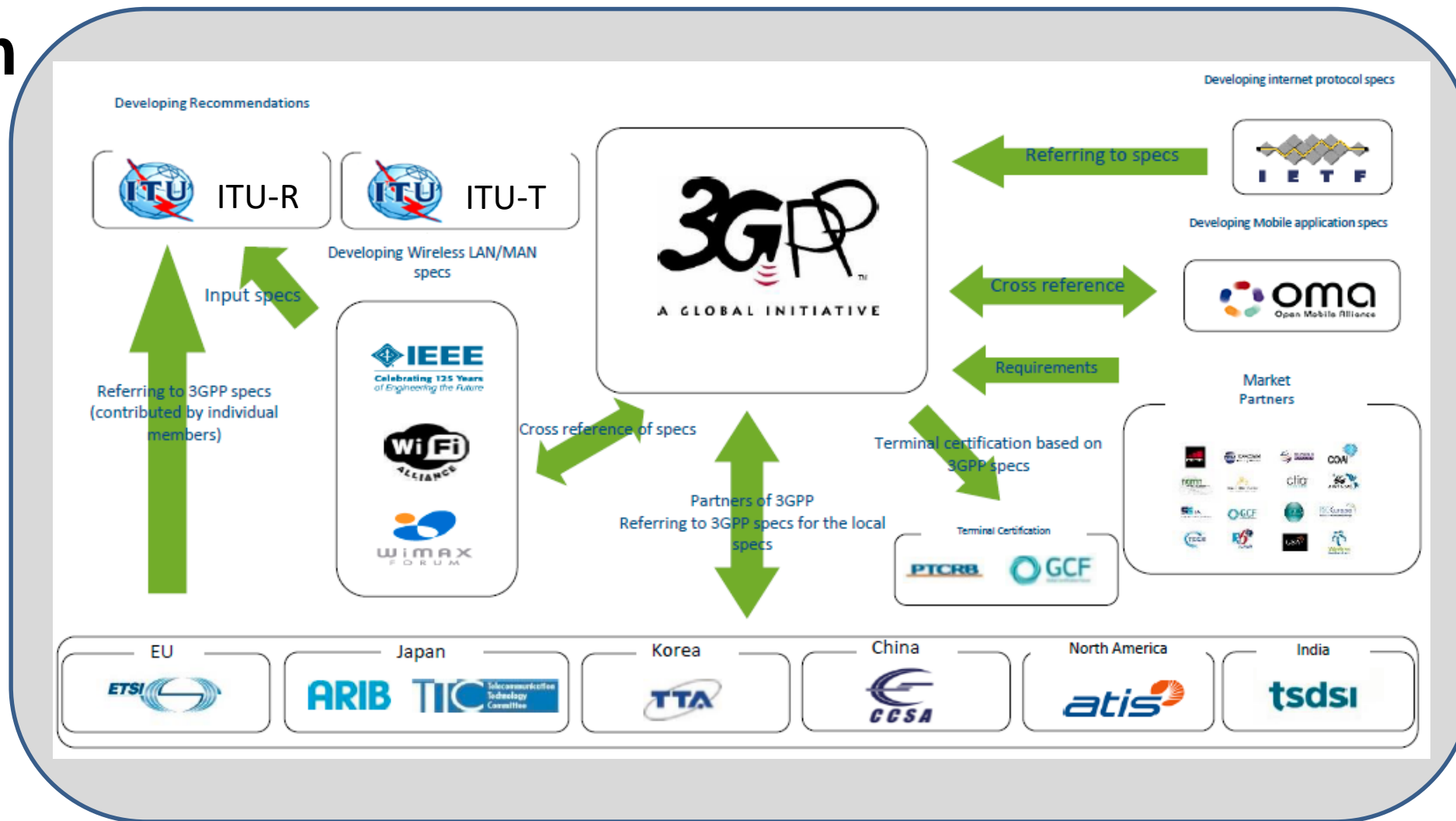
- Once the network can be controlled programmatically (data and control planes)
- Addition of Machine Learning/Adaptive Artificial Intelligence is logical next step



2018 Joint Force  
(3GPP Mobile, MEF/ONAP Wireline & Cohesive E-2-E)

 ONAP  
(E-2-E Services, Network, Network Slicing, Orchestration)

## Ecosystem



## Strategic direction to be taken by ITU-T

- ITU-T Foundation is sound
- Build on the Foundation through continued coordination within the 5G ecosystem
- Key areas for further study are
  - AI and ML specifically related to large transport networks and software defined wide area networks
  - Timing and Synchronization enhancements
  - Automation and hierarchical orchestration
  - Faster speeds and feeds, including beyond optical transport

## Questions for SGLA discussion

- What is new about the idea of Network Slicing, and how will it enable efficient build-out of networks to support ubiquitous 5G?
- What is the most important technological advancement needed to realize the promise of frictionless communication?
- What will be the regulatory impact of AI controlling the routing of traffic in global networks?
- What would be the optimal structural/procedural arrangement to continue studies on 5G in ITU-T, or are the current Questions in SGs 13 and 15 sufficient, pending their possible revision?