ITU-T SG15
5G related activies

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ITU-T Study Group 15

- Networks, Technologies and Infrastructures for Transport, Access and Home
  - SG-15 has responsibility for the transport network

- Three Working Parties with 19 Questions
  - WP1: Transport aspects of access, home and smart grid networks
  - WP2: Optical technologies and physical infrastructures
  - WP3: Transport network characteristics

Interest in 5G

- Assessment of the impact on transport networks when supporting the 5G ecosystem is driving analysis of the current capabilities of the transport network such as capacity, synchronization, latency, redundancy, and management/control

Technical Report (TR) GSTR TN5G

- "Transport network support of IMT-2020/5G"
  - Reference Model for the IMT2020/5G transport network
  - Deployment Scenarios
  - Identify how IMT2020/5G requirements will drive modifications to the existing transport network recommendations

GSTR TN5G Outline

- A reference model for the IMT-2020/5G transport network (with the terminology clarified)
- A set of deployment scenarios including details on:
  - Transport network topology
  - Interfaces between the IMT-2020/5G entities to the transport network
    - distance between these entities
    - number of interfaces; interface bit rate; total capacity
    - latency requirements
    - synchronization requirements
- Control/Management interfaces
- Support of IMT-2020/5G network slicing (data plane and control plane)

Work Items affected by 5G

- Network Slicing
  - Coordinate with 3GPP and SG-13
  - Determine requirements and applications and then look at impact of particular transport technologies
- Synchronization
  - Considering new requirements impacting
    - TDD Operations
    - Support Functions
      - Carrier Aggregation
      - Coordinated Multipoint
  - Q13/15 is requesting more information from 3GPP to help define the problem space
    - radio access phase synchronization requirements from 3GPP
- 5G wireless fronthaul requirements in a PON context
  - Work started by Q2/15, will create a supplement (G.sup.5GP)

ITU

Liaising

- 3GPP RAN
- 3GPP SA2
- 3GPP SA5
- BBF
- CPRI Cooperation
- IEEE 802.1

- IEEE 802.3
- IETF
- ITU-T JCA-IMT2020
- ITU-T SG13
- MEF
- NGMN

Upcoming Meetings

- 5G focused interim meeting Q11/15 and Q12/15
  - 16-20 October 2017, Europe
- SG15 Plenary
  - 29 Jan 2018 – 9 Feb 2018

References

- TIES account needed…

- Initiation of work to support IMT-2020/5G in the Transport Network
  - https://www.itu.int/ifa/t/2017/ls/sg15/sp16-sg15-oLS-00054.docx
- Proposed work plan for IMT-2020/5G Transport
  - https://www.itu.int/md/meetingdoc.asp?lang=en&parent=T17-SG15-170619-TD-GEN-0080
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