3GPP TSG CT#101
Bangalore, India; 11. - 12. September 2023

CP-232261

On planning for IMT-2030 & 6G

Qualcomm

ITU-R & 3GPP

- Also see LS CP-232245

IMT-2030 @ ITU-R WP 5D

Highlights from the “Framework” document (former “Vision”)

- 15 capabilities defined
  - 6 new
  - 9 enhanced
  - Range of values defined so far for some capabilities
  - Overall set of KPIs to be finalized in the next phase of the work

IMT-2030 @ ITU-R WP 5D (cont.)

Highlights from the “Framework” document (former “Vision”)

- 6 usage scenarios defined
  - 3 “evolutionary” from IMT-2020 (5G)
    - eMBB -> Immersive Communication
    - mMTC -> Massive Communication
    - uRLLC -> HRLLC
  - 3 new ones
    - Artificial Intelligence + Communication
    - Sensing + Communication
    - Ubiquitous Connectivity

Spectrum & Regional groups

- IMT-2030 & 6G feature prominently in discussions around future spectrum for IMT systems
  - Various spectrum ranges being considered from low band to very high band to everything in between
  - Ongoing discussions about spectrum needs linked to specific use cases
  - System design of technical, operational characteristics as well as sharing compatibility are highly dependent on the frequency ranges.

- Regional groups have been active in pretty much every geography exploring concepts towards a new generation of cellular systems
  - Different regions are finalizing their positions on specific new IMT spectrum bands to be supported at the upcoming WRC-23
  - WRC-23 (Nov/Dec 2023) will establish agenda item for new IMT bands to be studied towards WRC-27

What should 3GPP do?

It is time for 3GPP to get organized!

- 3GPP should start getting organized for IMT-2030 & 6G with a project plan at TSG level

- The plan would ideally cover the following
  - (a) Date of 3GPP TSG-wide 6G workshop
  - (b) Tentative start dates of 6G-related work in RAN, SA, and CT as well as RAN WGs, SA WGs and CT WGs
  - (c) Tentative completion date of first version of 3GPP 6G specs

- Working on such a plan would also send a message of commitment from 3GPP & its OPs

- **Proposal**:
  - 3GPP to have an organized discussion on the project plan for 6G starting from TSG #102
  - 3GPP to discuss along the lines of a/b/c above with the aim to reach a conclusion in TSG #102 or TSG #103

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