

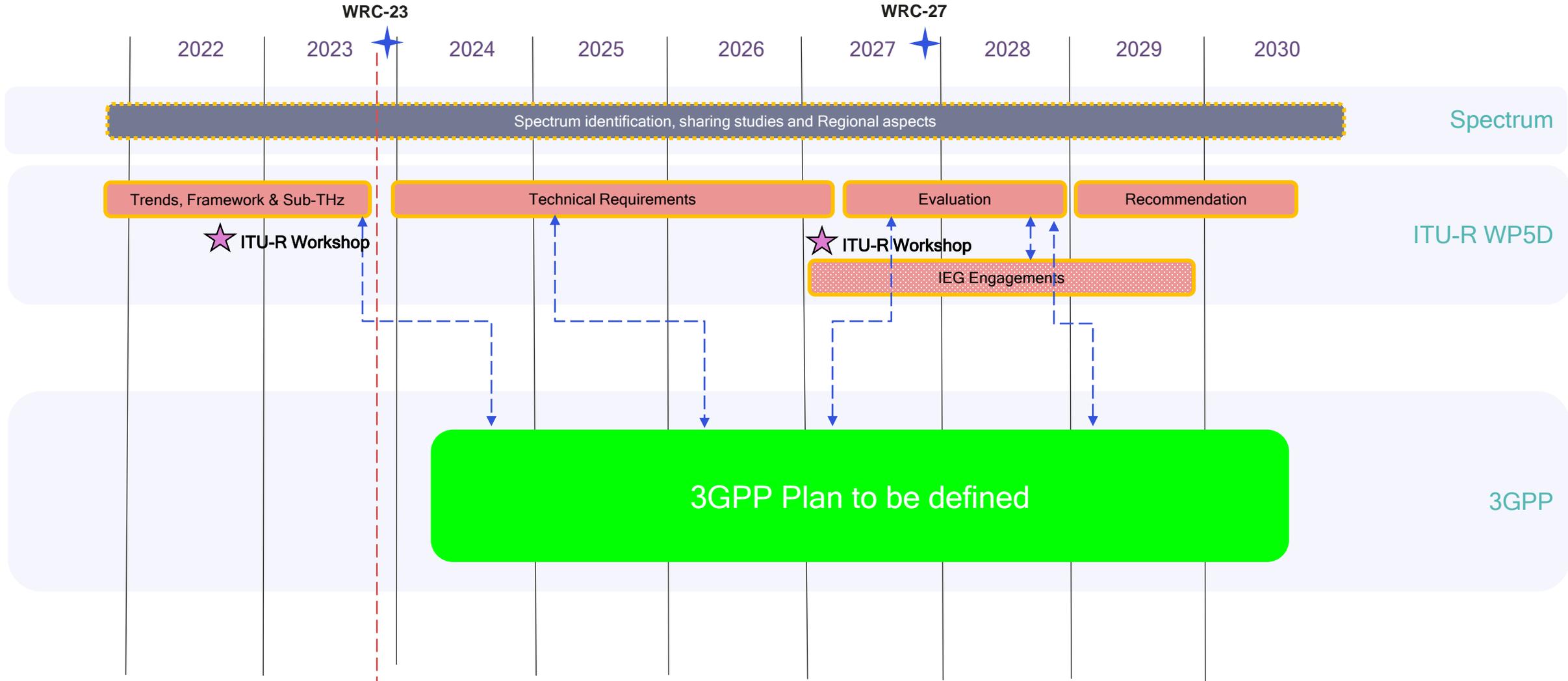
On planning for IMT-2030 & 6G

AI: 2.1

Document for: Discussion

Qualcomm

ITU-R & 3GPP



• Also see LS SP-230862

IMT-2030 @ ITU-R WP 5D

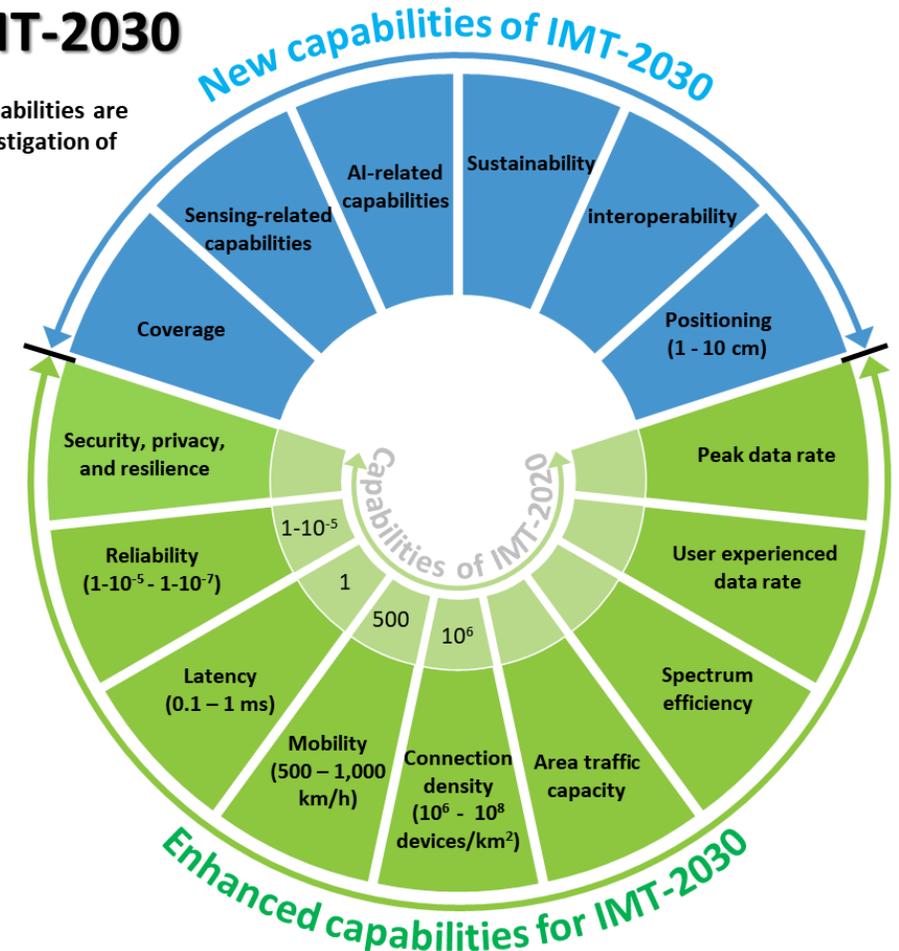
Highlights from the “Framework” document (former “Vision”)

- 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

Capabilities of IMT-2030

NOTE: The range of values given for capabilities are estimated targets for research and investigation of IMT-2030.

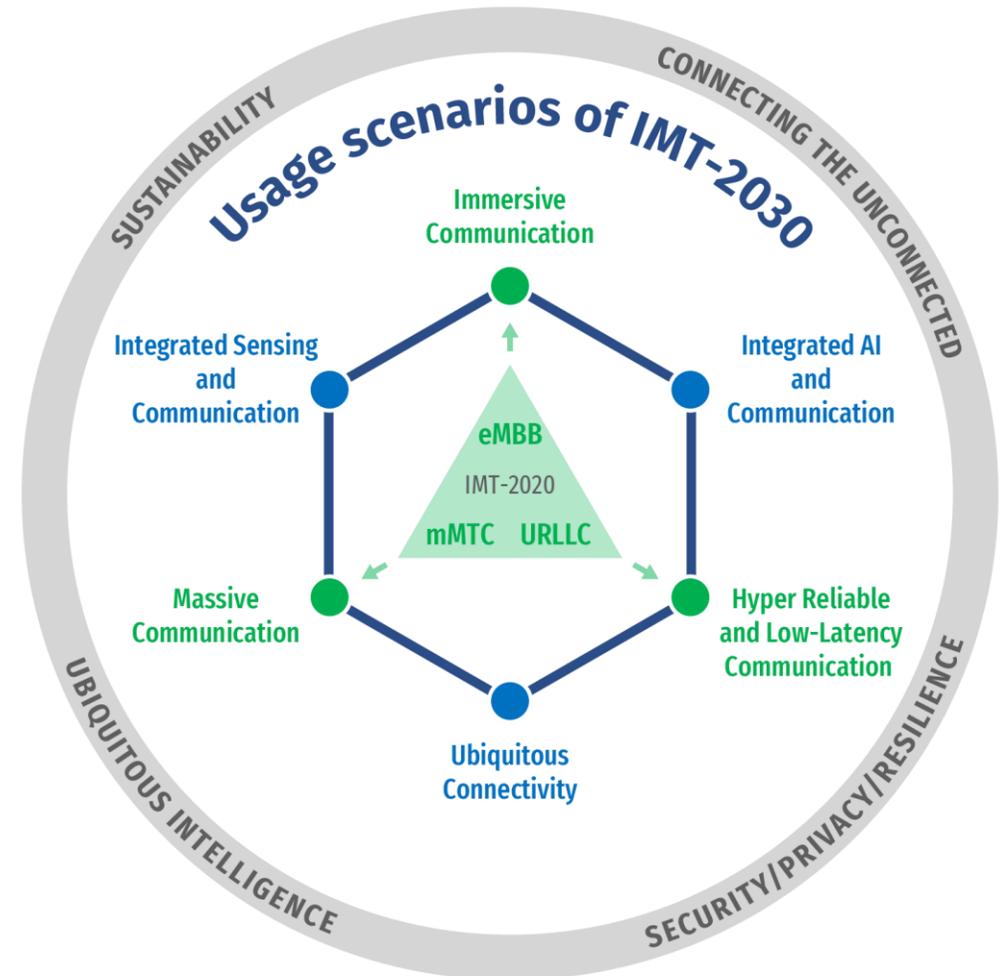


IMT-2030 @ ITU-R WP 5D (cont.)

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



Thank you!

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