

3GPP TSG RAN #103

Maastricht, Netherlands, 18-21 March 2024

RP-240464

# Further discussion on 3GPP planning towards IMT-2030

Agenda Item:

15

Source:

Intel Corporation

Document for:

Discussion



# Background

- RAN#102 agreed on some first key aspects related to 6G timeline (SP-231693/RP-233985)
  - May '24 – 3GPP Stage-1 workshop on IMT-2030 use cases
  - March '25 – 3GPP wide workshop to kick off Rel-20 technical studies in SA and RAN
  - June '25 – Approval of SA2 and RAN WG studies on 6G
  - 6G Studies in Release 20 and 6G normative work in Release 21
  - Release 21 is expected to be delivered with a single drop (i.e., a single code freeze)
  - Target TSG#103 (March'2024) for the remaining detailed 6G timeline decisions
- Open points, for discussion and agreement at TSG#103
  - RAN Plenary study item timing
  - Release 20 and Release 21 durations
  - Approval of SA (other than SA1 and SA2) and CT WG SIDs
    - This contribution focusses on first 2 points, and a companion paper submitted to SA/CT addresses the final point.

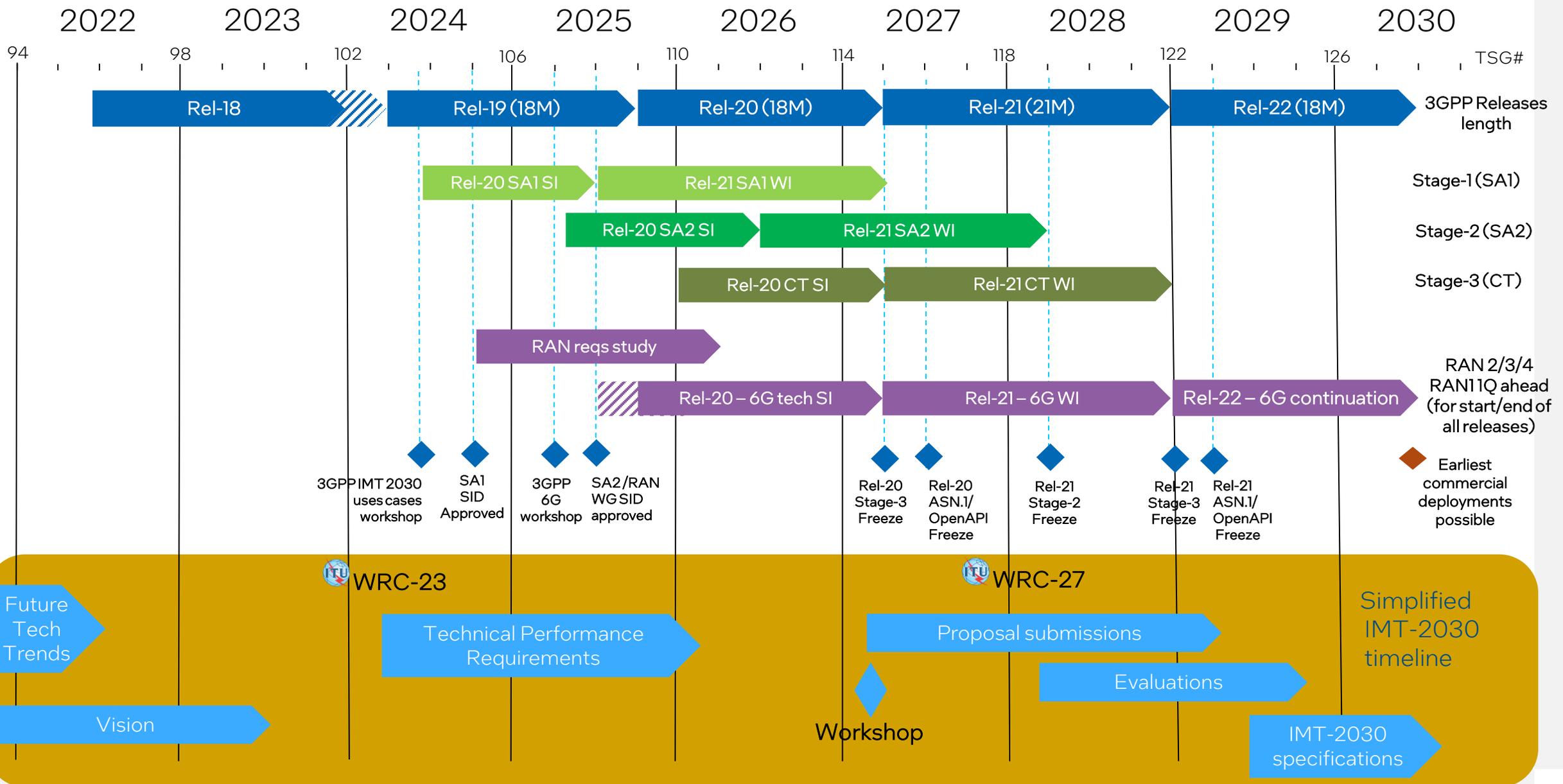
# Discussion

- RAN Plenary Study Item
  - Considerations:
    - 6G requirements from the study should be used as a basis for the WG technology studies. Hence, the RAN plenary study should start well in advance of WG studies. This did not happen in 5G where the plenary and WG studies were very much in parallel.
    - There should be the possibility for discussions and outcomes from the RAN plenary study to feed into the IMT-2030 Technical Performance Requirements. Hence, the RAN plenary study should not start too late in the TPR work.
      - RAN discussions start in Dec '24 give the opportunity for input to 4 WP5D meetings before the completion of the TPR.
    - The scope of the RAN plenary study should be similar to that in 5G. Additionally, it would be useful to study the phasing of 6G features to be included in Release 21 and beyond. SI scoping may be discussed further in future RAN plenary meetings.
  - **Proposal**
    - RAN level requirements study to be approved in Sept 2024 to start discussion in Dec 2025 (RAN#106) and complete in Mar 2026.
- Release length for Rel-20 and Rel-21:
  - Considerations:
    - Study and normative releases of 5G were very short. This should be avoided in 6G to enable better consideration of technology options during the study and higher quality specifications at the official completion.
    - Rel-20 will also introduce 5G-Adv functionality - 18 month duration gives earlier availability of this functionality.
    - With 18 month Rel-20, Rel-21 could be 21 month duration and still enable completion in time for submission into the IMT-2030 process.
    - Rel-21 timing/duration may be revisited in future TSG meetings based on the progress on Rel-20 (business as usual)
  - **Proposal**
    - 18 months for Rel-20 (stage 3 completion Mar 27, ASN.1/Open API freeze Jun 27)
    - 21 months for Rel-21 (stage 3 completion Dec 28, ASN.1/Open API freeze Mar 29)
    - 3GPP submission to IMT-2030, Dec 28

# Summary

- Proposals
  - RAN level requirements study to be approved in Sept 2024 to start discussion in Dec 2025 (RAN#106) and complete in Mar 2026.
  - 18 months for Rel-20 (stage 3 completion Mar 27, ASN.1/Open API freeze Jun 27)
  - 21 months for Rel-21 (stage 3 completion Dec 28, ASN.1/Open API freeze Mar 29)
  - 3GPP submission to IMT-2030, Dec 28
  
- Following slide shows the 3GPP timeline for 6G including these proposals

# 6G – 3GPP + ITU timelines



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