

Agenda: 9.3

Document for : Discussion

3GPP & ITU-R WP 5D Coordination on “5G”

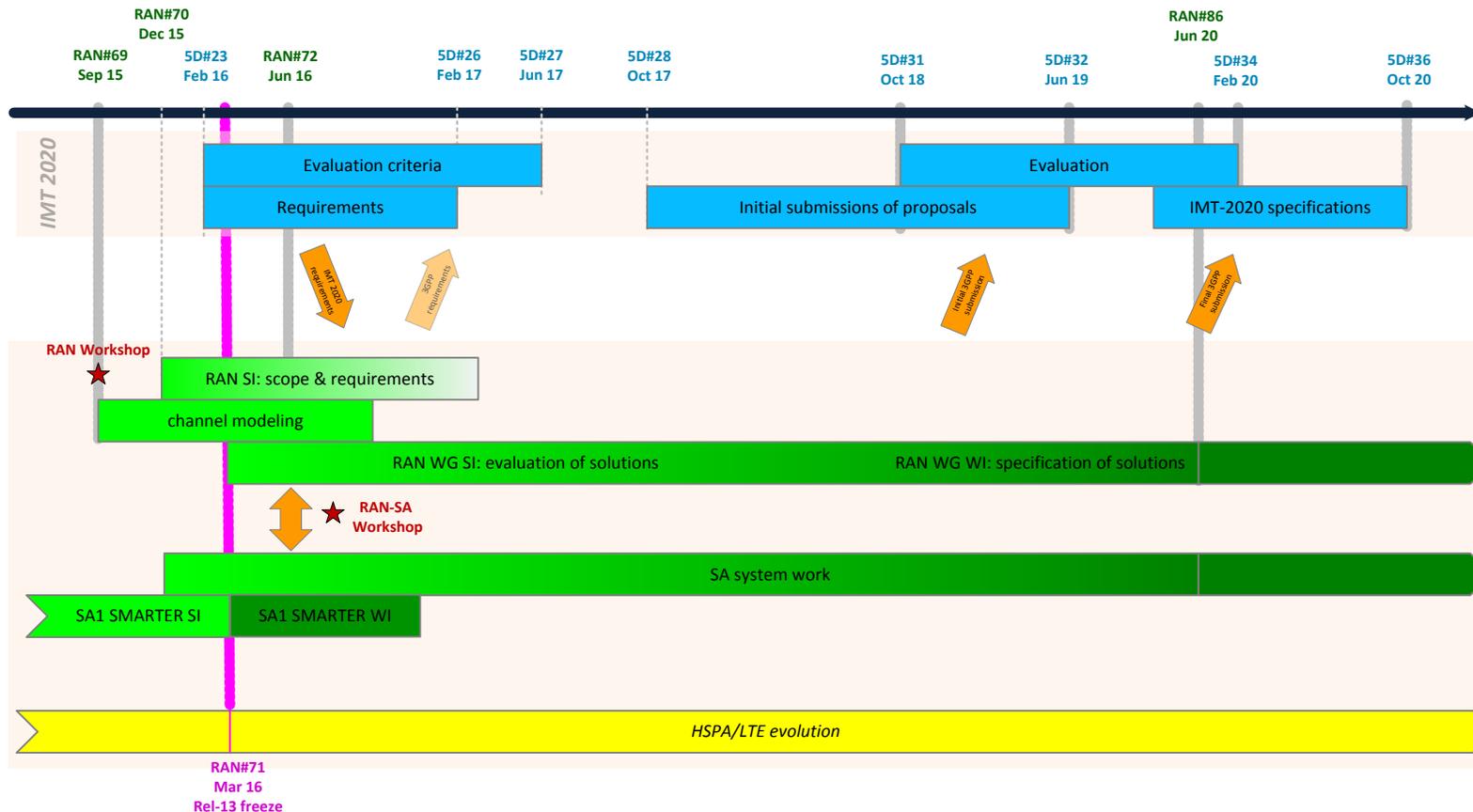
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Introduction

- This document summarizes items related to 3GPP & ITU-R Working Party 5D (WP 5D) coordination on “5G”.
- There are two on-going activities in WP 5D which would need coordination with 3GPP.
 - **IMT-2020 candidate technology submission.**
 - **IMT-2020 parameters required for sharing studies in preparation for WRC-19 agenda item 1.13.**
- Taking into account these two activities, 3GPP RAN4 needs to develop detailed work plan for the new Study Item on “Study on New Radio Access Technology”, which was approved in RAN#71 ([RP-160671](#)).

IMT-2020 candidate technology submission

- Results of the study item will be a basis for a candidate technology submission to the IMT-2020 process triggered by ITU-R WP 5D ([RP-150041](#) or [5/LCCE/59](#)).
 - Initial technology submission by ITU-R WP 5D meeting #32, June 2019
 - Detailed specification submission by ITU-R WP 5D meeting #36, October 2020



From [SP-150149](#)
"5G" timeline in 3GPP

Preparation for WRC-19 agenda item 1.13 (1)

- For preparatory studies of WRC-19 agenda item 1.13, ITU-R WP 5D is to conduct the studies on IMT between the 24.25 and 86 GHz range with regards to:
 - Spectrum needs,
 - Technical and operational characteristics including protection criteria, and deployment scenarios.
- The results of the studies by WP 5D need to be liaised to ITU-R Task Group (TG) 5/1 by 31 March, 2017.
- **WP 5D is now seeking the technical information on IMT-2020 technology related parameters in the frequency range 24.25-86 GHz** from the external organizations.
 - The information will be used for sharing and compatibility studies by TG 5/1.
- In this regard, RAN#71 received a liaison statement from WP 5D ([RP-160508](#)).
 - Initial system characteristics by WP 5D meeting #25, October 2016, additionally any views on the items included in the Table on the next slide.
 - Final system characteristics by WP 5D meeting #26, February 2017, specifically the final values to be included in the Table on the next slide.

Preparation for WRC-19 agenda item 1.13 (2)

- The information requested by WP 5D.

IMT-2020 technology related parameters in the frequency range 24.25-86 GHz

No.	Parameter	IMT-2020	
		Base station	Mobile station
1	Access technique		
2	Modulation parameters		
3	Channel spacing		
4	Channel bandwidth (MHz)		
5	Signal bandwidth (MHz)		
6	Transmitter characteristics		
6.1	Power dynamic range (dB)		
6.2	Spectral mask		
6.3	ACLR		
6.4	Spurious emissions		
7	Receiver characteristics		
7.1	Noise figure		
7.2	Sensitivity		
7.3	Blocking response		
7.4	ACS		

Summary

- When developing a detailed work plan for RAN4 under the new Study Item on “Study on New Radio Access Technology”, the following two items triggered by WP 5D should be considered.
 - **#1: IMT-2020 candidate technology submission.**
 - **#2: IMT-2020 parameters between 24.25-86 GHz required for sharing studies in preparation for WRC-19 agenda item 1.13.**

	#1: IMT-2020 candidate technology submission	#2: IMT-2020 parameters for WRC-19 agenda item 1.13
Deadline	<ul style="list-style-type: none">• Initial technology submission by WP 5D meeting #32, June 2019• Detailed specification submission by WP 5D meeting #36, October 2020	<ul style="list-style-type: none">• Initial system characteristics by WP 5D meeting #25, October 2016• Final system characteristics by WP 5D meeting #26, February 2017
Scope of frequency ranges	Up to 100 GHz (including ranges of the existing 3GPP bands)	24.25-86 GHz

- **RAN4 needs to take into account the above aspects and develop its detail work plan, which enables to conduct relevant RAN4 studies in an efficient manner within limited time schedule.**