

IAFI Conference

Learnings from WRC-23

A glimpse to WP 5D#45 Outcomes

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Key developments

WP5D#45

This was the first WP5D meeting for the new ITU-R Study Cycle and it is primarily focused on creating the appropriate structure for this Working Party and initiate the work towards WRC-27. It also dealt with ongoing IMT work from the previous cycle.

1. **WP 5D Working Group (WG) structure** remains relatively the same and minor adjustments to the Sub-WG (SWG) level for WG Spectrum Aspect & WRC Preparation (SWG in blue new or reformed ones):
 - a) SWG Sharing Studies chaired by Mr. Sarunas OBERAUSKAS (Lithuania),
 - b) SWG Frequency Arrangements chaired by Ms. Amy L. SANDERS (USA),
 - c) **SWG IMT Characteristics** chaired by Mr. Rauno RUISMÄKI (Nokia, Finland),
 - d) **SWG IMT-MSS** chaired by Dr. Golnar KHOMAMI (Telstra, Australia),
 - e) **SWG WRC-27 AI 1.7** chaired by Mr. Geraldo NETO (TMG, Brazil)

2. **SWG IMT Characteristics**
 - a) A LS was drafted to External Organizations (i.e. 3GPP RAN, RAN4) to seek input on frequency bands 4400-4800 MHz, 7125-8400 MHz and 14.8-15.35 GHz as well as any possible updates on the antenna modelling for AAS implementations. WRC-27 AI 1.7 New IMT allocation in 4400-4800 MHz, 7-15 GHz
 - b) The SWG agreed to create a separate document on “Elements towards Enhanced Active Antenna Array Radiation Pattern Model for IMT Base Stations and User Equipment” which will be further considered after more information and input from EOs.
 - c) The SWG will further consider creating an ITU-R Report to capture the IMT-2020 characteristics used for sharing studies in the previous study cycles at the next WP 5D meeting.

Key developments

WP5D#45

3. SWG Sharing Studies:

- The work on Mitigation Measures between FSS & IMT in 3.4-3.6 GHz (in cooperation with WP 4A) will continue at the next meeting.
- The work on coordination between IMT and RAS in 42.5-43.5 GHz (in cooperation with WP 7D) will continue at the next meeting.
- A reply liaison statement to WP 1A was drafted indicating the need to assess the impact of Beam WPT on IMT stations in the frequency band 24.25-27.5 GHz. The proposed Beam WPT operates in the frequency band 24.1-24.15 GHz and it has the potential to interfere with the IMT stations.

4. SWG WRC-27 Agenda Item 1.7:

- The SWG discussed how to organize the work in response to WRC-27 agenda item 1.7, developed a liaison statement to all ITU-R contributing groups to initiate communications and prepared a detailed workplan for this activity.

5. SWG IMT-MSS:

- **There was some heated discussions regarding WP 5D's responsibilities and role in WRC-27 Agenda Item (AI) 1.13 - and the overall debate what this AI is about. In the end, an LS was sent to WP 4C with some initial information and how close co-operation and work is needed between WP 4C and WP 5D.**

Suggested actions for India

- IMT Characteristics will be available by end of 2024
- Interference scenarios are quite complicated for this agenda, depending upon the operational models
- Examine the frequency arrangements in M.1036, from Indian deployments perspective
- Closely understand the incumbent operations in various ranges

Let' do ground work on such studies as a starting point

- **Interference analysis RLAN-IMT 6 425-7 125 MHz**
 - Russia had an input on interference analysis from RLAN to IMT-2020 in the frequency band 6 425-7 125 MHz (5D/56).
 - **After Offline, there still were differing opinions on the proposed study activity.** Further discussion is expected at the next WP 5D meeting.

Key developments

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5. SWG Radio Aspects:

- a) **IMT Above 100 GHz:** Report was agreed to be sent for 5G5 for adoption.
- b) **IMT-2030 Technical Performance Requirements (TPRs):**
 - Radio Aspects SWG kicked off the work on TPRs for IMT-2030 and agreed the workplan until Feb 2026. Working document created.
 - TSPs need to enlighten us on key test environments needed in India, especially given that NTN is an integral part of IMT-2030 architecture and remote / low density coverage may be supplemented by NTN rather than unnecessarily stretching the terrestrial ISDs and compromising the Spectral efficiency.

6. SWG Evaluation:

- a) **Preparations for step 4 of IMT-2020:** TBA
- b) **Preparations for IMT-2030 Eval related part:**
 - SWG Evaluations discussed preparation for IMT-2030 based on input contributions and points raised during the meeting. Although the actual work is scheduled to start only in October 2024, input contributions are encouraged already for the next WP 5D meeting in June to facilitate discussion in relation to TPRs.
 - **As above**

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