CPM27-2 and WRC-27 preparations- Focus on WAS/RLAN

DSA Global Summit 2025

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Radiocommunication Bureau

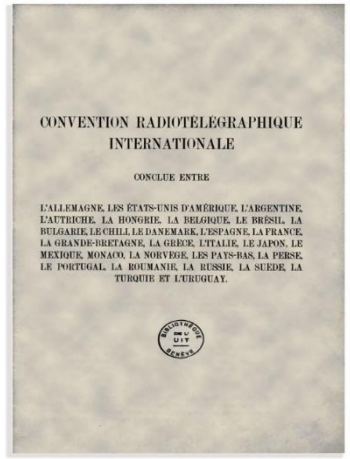
160 YEARS OF INNOVATION

1865 — 1906 — 1934 — 1947 — 2025

From the first **International Radiotelegraph Convention** to the current **Radio Regulations**

From **International Telegraph Union** → To **International Telecommunication Union** → Became **UN Agency** in 1947

founded on **17 May 1865** by **20 nations**


CONVENTION RADIOTÉLÉGRAPHIQUE INTERNATIONALE

CONCLUE ENTRE

L'ALLEMAGNE, LES ÉTATS-UNIS D'AMÉRIQUE, L'ARGENTINE, L'AUTRICHE, LA HONGRIE, LA BELGIQUE, LE BRÉSIL, LA BULGARIE, LE CHILI, LE DANEMARK, L'ESPAGNE, LA FRANCE, LA GRANDE-BRETAGNE, LA GRÈCE, L'ITALIE, LE JAPON, LE MEXIQUE, MONACO, LA NORVÈGE, LES PAYS-BAS, LA PERSE, LE PORTUGAL, LA ROUMANIE, LA RUSSIE, LA SUÈDE, LA TURQUIE ET L'URUGUAY.

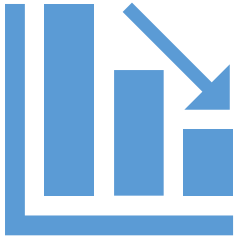
Radio Regulations follow and anticipate technological advancements

International treaty

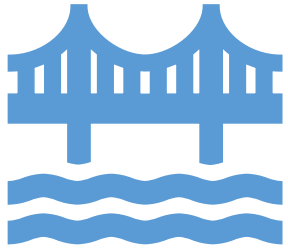
Today **194** countries and over 1,000 companies, universities, research institutes and international organisations

ITU’s mission

Connecting everyone and leaving no one behind is not just a vision—it is a necessity in today’s interconnected world.



Affordable access to communications: foundation for economic growth, education, healthcare, environmental sustainability, and social inclusion.



Working together—ITU, governments, regulators, industry, civil society—can ensure that spectrum serves as a bridge, not a barrier, to connectivity.

Spectrum is the invisible infrastructure that enables all of the above!

WRCs ROLE

Allocate **spectrum/orbit resources** for emerging radio applications, while protecting the existing usage

Maintain the **right balance** between the spectrum requirements of all radiocommunication services, and Spectrum usage, including sharing whenever possible

Achieve **global spectrum harmonization** for economies of scale and interoperability of the equipment

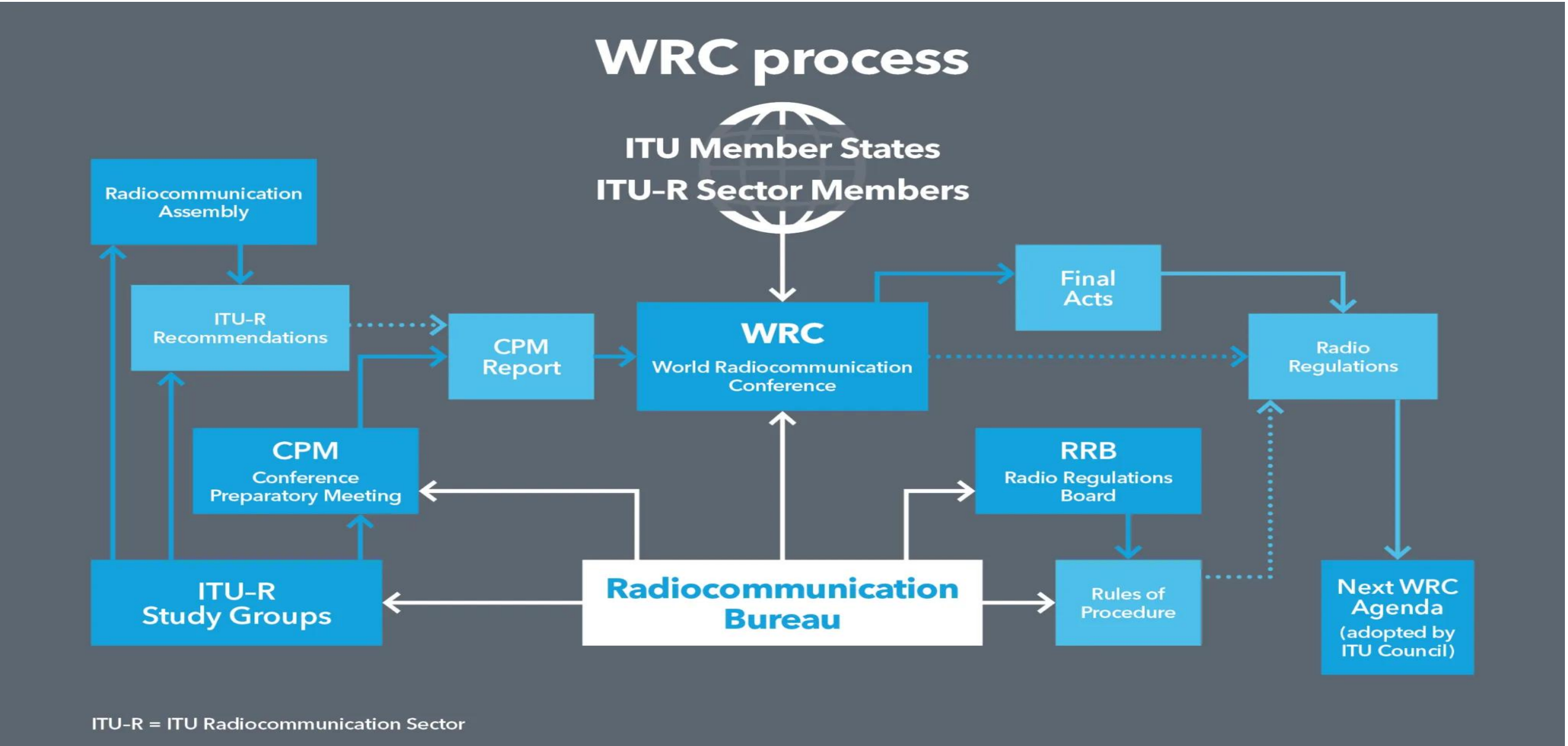
Create **regulatory certainty** for users, regulators and telecommunication industry

WRCs are organized every 3-4 years

WRCs update the Radio Regulations (RR)

RR is intergovernmental treaty ratified by governments –> **mandatory for application by countries**

The WRC cycle



Outcome of WRCs on WAS/RLANs

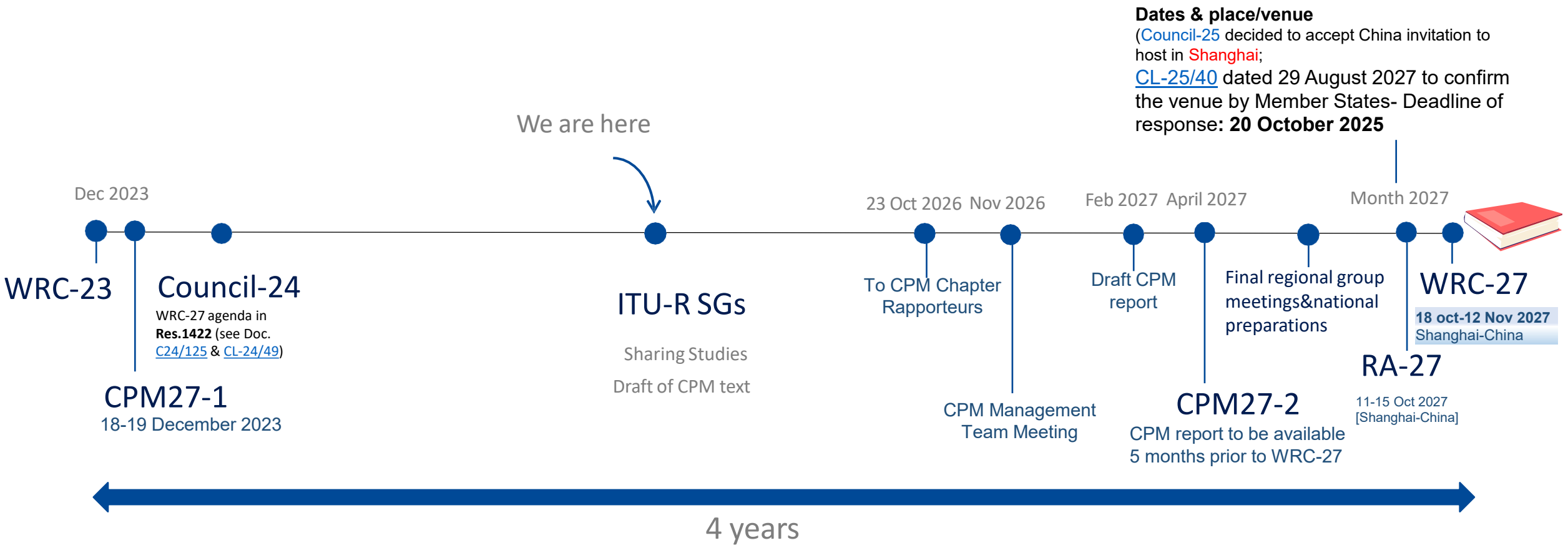
WRC-03 allocated the frequency bands 5 150-5 350 MHz and 5 470-5 725 MHz on a primary basis to the mobile service for the implementation of WAS/RLANs;

WRC-19: 5 150 - 5 250 MHz: Changed the regulatory conditions by allowing the use of WAS/RLANs in trains and cars and a limited outdoor deployment due to protection of space services.

WRC-23: 6425-7125 MHz (R1), 6425-7125 MHz (2 countries in R2), 6425-7025 MHz (3 countries in R3) and 7025-7125 MHz (R3) identified for IMT. But also used for the implementation of WAS/RLAN.
→ flexibility remains for national regulators or Regional decisions.

Until WRC-27: No agenda item on WAS/RLAN. However, studies on possible IMT identifications in the band 7125-7250 and 7750-8400 MHz in Region 1, 7125-8400 MHz in Region 2 and 3, are ongoing in WP5D/5A.

Preparations for CPM27-2, RA-27 and WRC-27



Some history

- Prior to 1992, WARC agendas were set by the ITU Council. This body has limited membership and little radio expertise.
- In 1992 it was decided to hold WRCs on a regular basis and task each WRC with agreeing a draft agenda for the following WRC.
- The ITU council still retains responsibility for the final approval of the agenda, timing and place of each WRC.

Inter-regional Information Sessions on WRC-27 Preparation (IRIS)

WRC-27 Inter-regional Information Sessions (IRIS)	
	1st Inter-regional Information Sessions on WRC-27 Preparation 3-5 December 2025
	2nd Inter-regional Information Sessions on WRC-27 Preparation [4-12 December 2026]
	3rd Inter-regional Information Sessions on WRC-27 Preparation (tbc: Q3/Q4 2027)

Thank you!

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DSA Global Summit 2025- Dubai 17 November 2025

Radio Regulation Navigation Tool (RRNT) and RR5 Table of Frequency Allocation (RR5 TFA)

- The RRNT is a Java-based desktop application that provides a streamlined PDF viewing experience on Windows, macOS, and Linux.
- Features
  - Browse the latest editions of the Radio Regulations (4 Volumes), the Rules of Procedure, and the ITU Constitution and Convention.
  - Jump from those publications to cited (but not incorporated) ITU-R Recommendations-no additional downloads required.

The 2025 edition, released in October 2025, incorporates both 2024 RR and the most recent updates to the 2021 Rules of Procedure.

- The ITU RR5 TFA is a stand-alone application that runs on individual user's PC and requires neither network nor Internet connection.
- Features:
  - Query and analyze the Table of Frequency Allocations and its associated footnotes, as in Article 5 of the RR.
  - Export data to various formats, trace and compare the evolution of the Article 5 Table and its associated footnotes (from the 2001 Edition onward).
  - provides for the extraction and modification of the National Table of Frequency Allocations for a given geographic area (country), based on the corresponding "International Plan" which results after combining the information contained in Article 5 of the Radio Regulations.

The 2024 version incorporates the RR2024 and the latest updates to the 2021 Rules of Procedure.

RR24 NavTool

The software is free to use: Windows | Mac

The software can be purchased from here

Questions to brmail@itu.int or BR-RRTools@itu.int

WRC-27 agenda – FSS, BSS and MSS issues

No.	WRC-27 Agenda Item	Description	WRC-23 Resolution	Responsible ITU-R Group
1.1	Aeronautical/maritime ESIMs 47.2-50.2 GHz / 50.4-51.4 GHz	Studies for M-ESIMs/A-ESIMs, actions at WRC-27 to meet increasing needs in mobile satellite broadband	176	WP 4A
1.2	FSS earth stations with smaller antenna in 13.75-14 GHz	Revise sharing conditions in 13.75-14 GHz to allow FSS ES with smaller antennas, to provide for more spectrum	129 (COM6/1)	WP 4A
1.3	Enabling gateway stations in 51.4-52.4 GHz for NGSO FSS	Revise conditions in 51.4-52.4 GHz to enable FSS NGSO gateways for broadband services	130 (COM6/3)	WP 4A
1.4	FSS/BSS allocations in 17 GHz in Region 3	FSS allocation in 17.3-17.7 GHz and BSS in 17.3-17.8 GHz in R3, to globally harmonize FSS, provide BSS spectrum	726 (COM6/24)	WP 4A
1.5	Unauthorized operation of NGSO earth stations	Limit unauthorized operation of NGSO earth stations of FSS/MSS and associated issues of the service area	14 (COM6/6)	WP 4A
1.6	Equitable access to FSS in 40 GHz, 42GHz, 48GHz, 50 GHz	Technical, regulatory measures for equitable access to FSS 37.5-42.5 GHz/42.5-43.5 GHz/47.2-50.2 GHz/50.4-51.4 GHz	131 (COM6/7)	WP 4A
1.11	Space-to-space links in MSS bands 1.5/1.6 GHz, 2.5 GHz	Space-to-space links in MSS bands 1.5/1.6 GHz, 2.5 GHz, for near-real time relay of data to or from the ground	249	WP 4C
1.12	MSS allocations for IoT developments	MSS allocations in 1 427-1 432 MHz, 1 645.5-1 646.5 MHz, 1 880-1 920 MHz for development of IoT through NGSO	252 (COM6/8)	WP 4C
1.13	MSS – IMT direct to device connectivity	MSS allocations in 694 - 2 700 MHz for direct connectivity between space stations and IMT terrestrial devices	253 (COM6/9)	WP 4C
1.14	Additional MSS allocations	Additional MSS allocations in 2 010-2 025 MHz, 2 160-2 170 MHz in R1&3 and in 2 120-2 160 MHz globally	254 (COM6/10)	WP 4C

WRC-27 agenda – Fixed, mobile, science services

No.	WRC-27 Agenda Item	Description	WRC-23 Resolution	Responsible ITU-R Group
Fixed, mobile, radiolocation services				
1.7	IMT in 4400-4800 MHz / 7125-8400 MHz / 14.8-15.35 GHz	IMT identifications in in 4400-4800 MHz / 7125-8400 MHz / 14.8-15.35 GHz, mainly for IMT-2030 and beyond	**256 (COM6/26)**	WP 5D
1.8	Radiolocation in 231.5-275 GHz / 275-700 GHz	Allocations/ identification to RLS in 231.5-275 GHz/275-700 GHz for radars and radiometers for imaging and localization	**663**	WP 5B
1.9	Modernization of AP26 – High Frequency AM(OR)S	Introduction of wide-band digital channels in **AP26** – Plan for HF aeronautical mobile (off-route) service	**411 (COM6/2)**	WP 5B
1.10	PFD and EIRP limits in 71-76 GHz, 81-86 GHz	Inclusion pfd, e.i.r.p. limits in Article **21** for FSS, MSS, BSS to protect fixed and mobile services in 71-76 GHz, 81-86 GHz	**775**	WP 5C
Science services				
1.15	SRS for lunar communications	New/modified SRS allocations for systems on lunar surface and between systems in lunar orbit and on lunar surface	**680 (COM6/4)**	WP 7B
1.16	Radioastronomy operating in specific Radio Quiet Zones	Protection of radioastronomy from NGSO systems in Radio Quiet Zones in some bands between 10.6 and 134 GHz	**681 (COM6/11)**	WP 7D
1.17	Space weather sensors	Allocations to MetAids service for receive-only space weather sensors and developing protection criteria	**682 (COM6/12)**	WP 7C
1.18	EESS and Radioastronomy above 76 GHz	Protection of EESS (passive) and radio astronomy above 76 GHz from unwanted emissions of active services	**252 (COM6/8)**	WP 7C
1.19	EESS (passive) in 4 200-4 400 MHz and 8 400-8 500 MHz	Global allocations to EESS in 4200-4400 MHz, 8 400-8 500 MHz for measurements of sea surface temperature	**674 (COM4/8)**	WP 7C