WRC-27 Agenda Items

22nd Feb 2024, Bangalore

Sendil Kumar, Director – Standards & Spectrum
GFTL – S&I

WRC-27: AIs

Fixed, Mobile and Radiolocation issues	Mobile Satellite issues	Science issues	Fixed Satellite and broadcasting satellite	General issues
1.7 IMT identification (RES 256)	1.11 Space-to-space	1.15 SRS allocations	1.1 ESIM 50 GHz	2 incorporation by ref in RR
1.8 Radiolocation >230 GHz	1.12 MSS low data rate NGSO	1.16 RAS protection	1.2 FSS UL 14 GHz	4 editorial review
1.9 Appendix 26	1.13 MSS D2D (RES253)	1.17 Space weather sensors	1.3 Gateway earth stations 51 GHz	8 deletion footnotes
1.10 FS and mobile protection @71- 76 GHz and 81-86 GHz from FSS, MSS, BSS	1.14 MSS 2 GHz (RES254)	1.18 EESS protection > 81 GHz	1.4 FSS 17 GHz	10 AI for WRC-31
		1.19 EESS 4 200-4 400 MHz and 8 400-8 500 MHz, (RES 674)	1.5 unauthorized FSS, MSS	
			1.6 FSS 37, 42, 47, 50 GHz	
			7 Resolution 86	

https://www.itu.int/en/ITU-R/study-groups/rcpm/Pages/wrc-27-studies.aspx

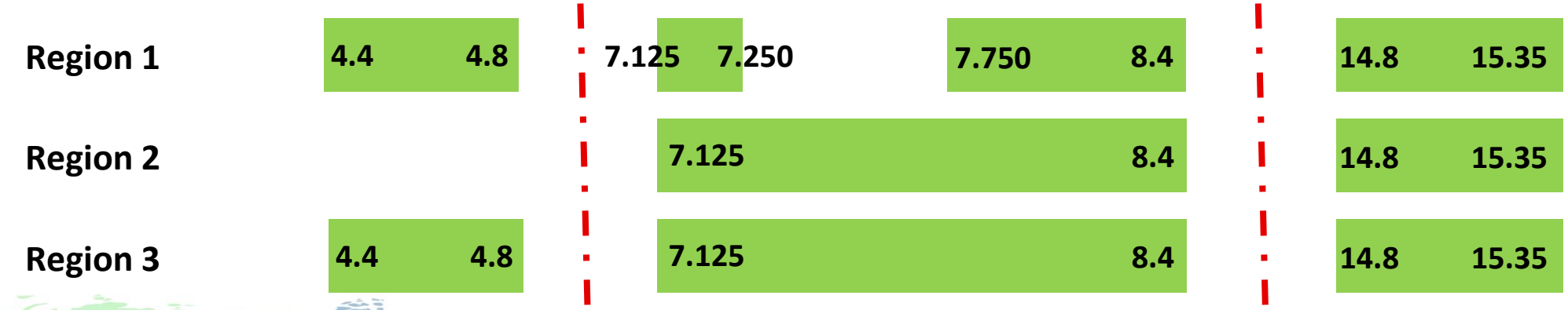
WRC-31 Preliminary Agenda Items

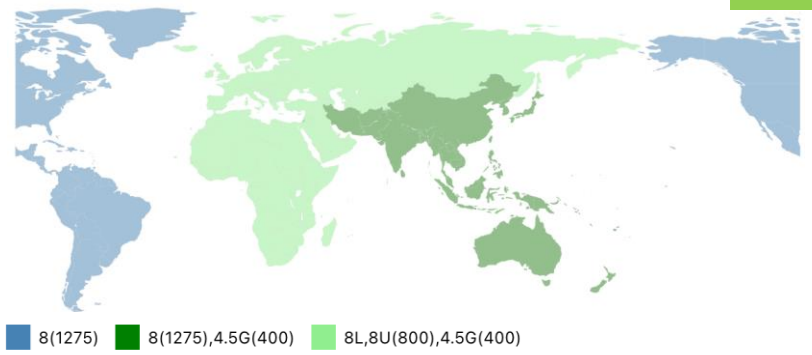
2.1	new allocations to the FS,MS, RLS, amateur, amateur-satellite, RAS, EESS (passive and active) and SRS (passive) services above 275-325 GHz	Res. 721 (WRC-23) (ex.COM6/13)	WP 1A
2.2	New bands for Wireless Power Transfer	Res. 910 (WRC-23) (ex.COM6/14)	WP 1A
…	….	…	…
2.4	inter-satellite service, 5925-6425MHz, 3700-4200MHz	Res. 683 (WRC-23) (ex.COM6/16)	WP 4A
2.5	to consider a possible primary allocation in the frequency bands [694-960 MHz, or parts thereof, in Region 1], 890-942 MHz, or parts thereof, in Region 2, and [3 400-3 700 MHz, or parts thereof, in Region 3] to the aeronautical mobile service for the use of International Mobile Telecommunications (IMT) user equipment in terrestrial IMT networks by non-safety applications, in accordance with Resolution 251 (Rev.WRC-23);	Res. 251 (Rev.WRC-23)	WP 5D
2.6	to consider the identification of the frequency bands [102-109.5 GHz, 151.5-164 GHz, 167-174.8 GHz, 209-226 GHz and 252-275 GHz] for International Mobile Telecommunications, in accordance with Resolution 255 (WRC-23);	Res. 255 (WRC-23) (ex.COM6/17)	WP 5D (1)
…	…	…	…
2.12	to consider possible new allocations to the Earth exploration-satellite service (active) in the frequency bands [3 000-3 100 MHz] and [3 300-3 400 MHz] on a secondary basis, in accordance with Resolution 686 (WRC-23);	Res. 686 (WRC-23) (ex.COM6/21)	WP 7C

https://www.itu.int/en/ITU-R/study-groups/rcpm/Pages/wrc-31-preliminary-studies.aspx

6G/IMT-2030 spectrum – Agenda Item 1.7 towards WRC-27 (RES 256)

…to consider studies on sharing and compatibility and develop technical conditions for the use of International Mobile Telecommunications (IMT) in the frequency bands 4 400-4 800 MHz, 7 125-8 400 MHz (or parts thereof), and 14.8-15.35 GHz taking into account existing primary services operating in these, and adjacent, frequency bands, in accordance with Resolution COM6/26 (WRC-23)

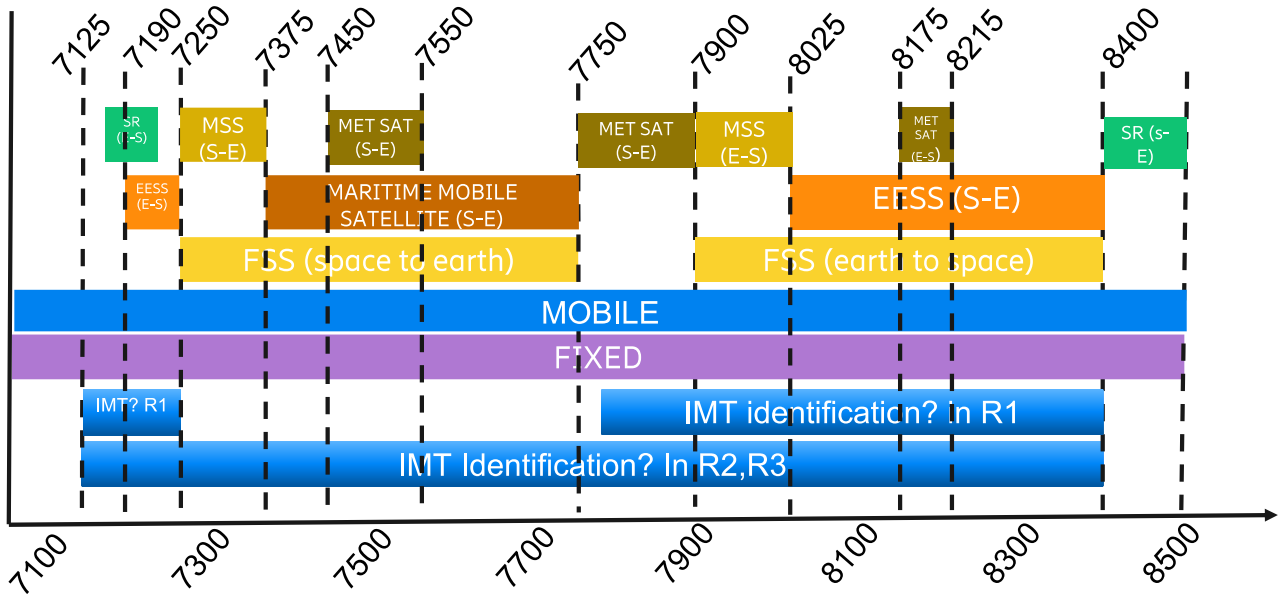




7.125 – 8.4 GHz , lowest part of centimetric wave spectrum large contiguous range

Agenda Item 1.7 : Sharing and Compatibility studies

Topic	Responsible group	Action to be taken by the group	Contributing group
1.7 to consider studies on sharing and compatibility and develop technical conditions for the use of International Mobile Telecommunications (IMT) in the frequency bands 4 400-4 800 MHz, 7 125-8 400 MHz (or parts thereof), and 14.8-15.35 GHz taking into account existing primary services operating in these, and adjacent, frequency bands, in accordance with Resolution **256 (WRC-23)**;			
Resolution **256 (WRC-23)** Sharing and compatibility studies and development of technical conditions for the use of International Mobile Telecommunications (IMT) in the frequency bands 4 400-4 800 MHz, 7 125-8 400 MHz (or parts thereof), and 14.8-15.35 GHz for the terrestrial component of IMT	**WP 5D**	*resolves to invite the ITU Radiocommunication Sector to complete in time for the 2027 world radiocommunication conference* 1 the appropriate studies of technical, operational and regulatory issues pertaining to the possible use of the terrestrial component of IMT in the frequency bands listed in *resolves to invite the ITU Radiocommunication Sector to complete in time for the 2027 world radiocommunication conference* 2, taking into account: – evolving needs to meet emerging demand for IMT; – technical and operational characteristics of terrestrial IMT systems that would operate in these specific frequency bands, including the evolution of IMT through advances in technology and spectrally efficient techniques; – the deployment scenarios envisaged for IMT systems and the related requirements of balanced coverage and capacity; – the needs of developing countries; and – the time-frame in which spectrum would be needed; 2 sharing and compatibility studies, with a view to ensuring the protection of services to which the frequency band is allocated on a primary basis, including protection of stations operating in international waters or airspace which cannot be registered in the MIFR, without imposing additional regulatory or technical constraints on those services, and also on services in adjacent bands, for the frequency bands: – 4 400-4 800 MHz; – 7 125-8 400 MHz; and – 14.8-15.35 GHz, ... *invites the 2027 world radiocommunication conference* to consider, based on results of studies, the identification of frequency band(s): – 4 400-4 800 MHz, or parts thereof, in Region 1 and Region 3; – 7 125-8 400 MHz, or parts thereof, in Region 2 and Region 3; – 7 125-7 250 MHz and 7 750-8 400 MHz, or parts thereof, in Region 1; – 14.8-15.35 GHz, for the terrestrial component of IMT.	**WP 1B** **WP 3K** **WP 3M** **WP 4A** **WP 4C** **WP 5A** **WP 5B** **WP 5C** **WP 7B** **WP 7C** **WP 7D**



Regional variations of incumbents

7.125 – 8.4 GHz , lowest part of centimetric wave spectrum large contiguous range

Agenda Item 1.7 : Sharing and Compatibility studies 4400-4800 MHZ

Allocation	Band (MHz)	Responsible ITU-R group
Fixed service	4400-4800	WP5C
FSS (S-E)	4400-4800	WP4A
Mobile	4400-4800	WP5A
Radio altimeters	4200-4400	WP5B
WAIC	4200-4400	WP5B

5.436, 5.437, 5.438, 5.439, 5.440, 5.440A, 5.441 (AP30B)

Wireless Avionics Intra- Communications (WAIC)

Mobile Satellite Service (MSS) – AI 1.12

"to consider, based on the results of studies, possible allocations to the mobile-satellite service and possible regulatory actions in the frequency bands 1 427-1 432 MHz (space-to-Earth), 1 645.5-1 646.5 MHz (space-to-Earth) (Earth-to-space), 1 880-1 920 MHz (space-to-Earth) (Earth-to-space) and 2 010-2 025 MHz (space-to-Earth) (Earth-to-space) required for the future development of low-data-rate non-geostationary mobile-satellite systems, in accordance with Resolution COM6/8 (WRC-23);"

i) that the frequency band 1 427-1 432 MHz is identified for IMT globally, in accordance with Resolution **223 (Rev.WRC-23)**;

j) that the frequency bands 1 880-1 920 MHz and 2 010-2 025 MHz are identified for IMT globally in accordance with Resolution **212 (Rev.WRC-23)** and are included in arrangement B1 for implementation of IMT in Recommendation ITU-R M.1036;

h) that in Regions 1 and 3, the frequency band 2 010-2 025 MHz may be used by high-altitude platform stations as base stations to provide International Mobile Telecommunications (IMT), in accordance with No. **5.388A**;

c) that low-data-rate MSS systems in non-GSO orbits should, in the context of this Resolution have the following properties:

– not including telephony;

– transmitting data in bursts;

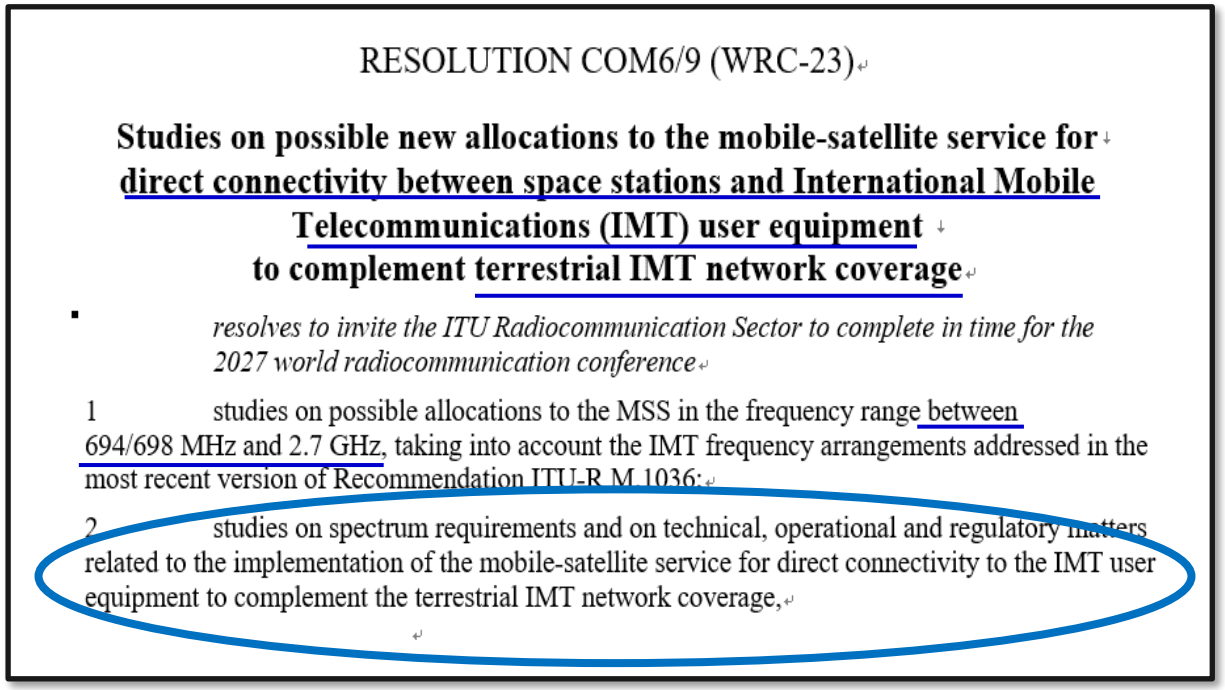
– capable of operating with periodic or intermittent data transmission;

– capable of maintaining a service while experiencing packet loss;

Mobile Satellite Service (MSS) – AI 1.13

AI 1.13 MSS in IMT bands between 694/698 MHz and 2 700 MHz; new allocation for *"direct connectivity between space stations and IMT user equipment to complement terrestrial IMT network coverage"*, i.e. **D2D using 3GPP technology**.

"to consider studies on possible new allocations to the mobile-satellite service for direct connectivity between space stations and International Mobile Telecommunications (IMT) user equipment to complement terrestrial IMT network coverage, in accordance with Resolution [COM6/9] (WRC-23);"



RESOLUTION COM6/9 (WRC-23)

Studies on possible new allocations to the mobile-satellite service for direct connectivity between space stations and International Mobile Telecommunications (IMT) user equipment to complement terrestrial IMT network coverage

resolves to invite the ITU Radiocommunication Sector to complete in time for the 2027 world radiocommunication conference

1 studies on possible allocations to the MSS in the frequency range between 694/698 MHz and 2.7 GHz, taking into account the IMT frequency arrangements addressed in the most recent version of Recommendation ITU-R M.1036;

2 studies on spectrum requirements and on technical, operational and regulatory matters related to the implementation of the mobile-satellite service for direct connectivity to the IMT user equipment to complement the terrestrial IMT network coverage,

Mobile Satellite Service (MSS) – AI 1.14

AI 1.14 MSS in the 2 GHz bands; a potential allocation for systems in the 2 GHz bands that are identified to, and heavily used, by IMT.

Studies on possible new frequency allocations to the mobile-satellite service in the frequency bands 2 010-2 025 MHz (Earth-to-space) and 2 160-2 170 MHz (space-to-Earth) in Regions 1 and 3 and 2 120-2 160 MHz (space-to-Earth) in all Regions

Resolution COM6/10 (WRC-23)

resolves to invite the ITU Radiocommunication Sector to complete in time for the 2027 world radiocommunication conference

1 studies on relevant spectrum requirements and technical, operational and regulatory matters for the MSS in connection with possible new allocations to the MSS in the frequency bands 2 010-2 025 MHz (Earth-to-space) and 2 160-2 170 MHz (space-to-Earth) in Regions 1 and 3 and 2 120-2 160 MHz (space-to-Earth) in all Regions;

2 studies on sharing and compatibility of possible new allocations to the MSS in the frequency bands being studied to ensure the protection of existing services allocated on a primary basis, and also in adjacent frequency bands, without adversely affecting those services;

3 studies on possible technical, operational and regulatory measures that ensure the protection of existing services and their continued operation and future development without imposing additional regulatory or technical constraints on those services, while ensuring their protection from harmful interference, when considering possible additional allocations to the MSS,

invites the 2027 world radiocommunication conference

to consider, based on results of studies conducted under *resolves to invite the ITU Radiocommunication Sector to complete in time for the 2027 world radiocommunication conference*, possible new allocations and associated regulatory conditions for the MSS, while ensuring the protection of existing primary services.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