

ADVANTAGE CONSULTING

& ENGINEERING SERVICES

#### CTU SPECTRUM MANAGEMENT TASK FORCE WRC-27 AGENDA ITEMS

15-16 May 2025 Carmelo Rivera

## CITEL WRC Preparation Documents

- Preliminary Views (PV): and informatl statement that a CITEL Member State is considering possible Preliminary Proposals on specific themes.
- Preliminary Proposal (PP): a proposal by a CITEL Member State that has not been supported by another Member State.
- Draft Inter-American Proposal (DIAP): PP that has been supported by at least one other CITEL Member State.
- Inter-American Proposal (IAP): DIAP that has the support of at least six CITEL Member States, discussion of the agenda item has finished, and not opposed by more than 50% of the number of supports obtained.

## WRC-27 Chapter 1

- Fixed-satellite and Broadcasting-satellite issues
- Agenda Items 1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 7
- Coordinator: Luciana Ferreira (B) lucianarn@anatel.gov.br

To consider the technical and operational conditions for the use of the frequency bands 47.2 - 50.2 GHz and 50.4 - 51.4 GHz (Earth-to-space), or parts thereof, by aeronautical and maritime earth stations in motion communicating with space stations in the fixed-satellite service and develop regulatory measures, as appropriate, to facilitate the use of the frequency bands 47.2 - 50.2 GHz and 50.4 - 51.4 GHz (Earth-to-space), or parts thereof, by aeronautical and maritime earth stations in motion communicating with geostationary space stations and non-geostationary space stations in the fixed-satellite service, in accordance with Resolution 176 (Rev. WRC-23)

Brazil, Mexico and the United States have submitted PVs to support studies to consider appropriate conditions to allow operation of aeronautical and maritime earth stations in motion in the bands mentioned above.

To consider possible revisions of sharing conditions in the frequency band 13.75 - 14 GHz to allow the use of uplink fixed-satellite service earth stations with smaller antenna sizes, in accordance with Resolution 129 (WRC-23)

Brazil, Canada, Mexico and the United States have submitted PVs supporting studies regarding possible revisions of sharing conditions to allow the use of uplink FSS earth stations with smaller antenna sizes and revised power limitations.

To consider studies relating to the use of the frequency band 51.4 - 52.4 GHz to enable use by gateway earth stations transmitting to non-geostationary satellite orbit systems in the fixed-satellite service (Earth-to-space), in accordance with Resolution 130 (WRC-23)

Brazil, Mexico and the United States have submitted PVs supporting studies and the development of a regulatory framework to enable use of the above frequencies by NGSO FSS.

To consider a possible new primary allocation to the fixed-satellite service (space-to-Earth) in the frequency band 17.3 - 17.7 GHz and a possible new primary allocation to the broadcasting-satellite service (space-to-Earth) in the frequency band 17.3 - 17.8 GHz in Region 3, while ensuring the protection of existing primary allocation in the same and adjacent frequency bands, and to consider equivalent power flux-density limits to be applied in Regions 1 and 3 to non-geostationary satellite systems in the fixed-satellite service (space-to-Earth) in the frequency band 17.3 - 17.7 GHz, in accordance with Resolution 726 (WRC-23)

The United States has submitted a PV supporting studies to develop appropriate regulatory provisions to facilitate a new primary allocation to FSS.

To consider regulatory measures, and implementability thereof, to limit the unauthorized operations of non-geostationary satellite orbit earth stations in the fixed-satellite and mobile-satellite services and associated issues related to the service area of non-geostationary satellite orbit satellite systems in the fixed-satellite and mobile-satellite services, in accordance with Resolution 14 (WRC-23)

Brazil, Canada, Mexico and the United States have submitted PVs with various statements regarding studies and whether or not changes within the Radio Regulations are needed.

To consider technical and regulatory measures for fixed-satellite service satellite networks/systems in the frequency bands 37.5 - 42.5 GHz (space-to-Earth), 42.5 - 43.5 GHz (Earth-to-space), 47.2 - 50.2 GHz (Earth-to-space) and 50.4 - 51.4 GHz (Earth-to-space) for equitable access to these frequency bands, in accordance with Resolution 131 (WRC-23)

### Agenda Item 7

To consider possible changes, in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, on advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks in accordance with Resolution 86 (Rev. WRC-07), in order to facilitate the rational, efficient and economical use of radio frequencies and any associated orbits, including the geostationary-satellite orbit

## WRC-27 Chapter 2

- Fixed, Mobile and Radiolocation Issues
- Agenda Items 1.7, 1.8, 1.9, 1.10
- Coordinator: Geraldo Neto (B) Geraldo@tmgtelecom.com

To consider studies on sharing and compatibility and develop technical conditions for the use of International Mobile Telecommunications (IMT) in the frequency bands 4400 - 4800 MHz, 7125 - 8400 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)

Brazil, Colombia, Mexico, and Peru have submitted PVs supporting studies on the possible identification of frequency bands for the terrestrial component of IMT.

To consider possible additional spectrum allocations to the radiolocation service on a primary basis in the frequency range 231.5 - 275 GHz and possible new identifications for radiolocation service applications in the frequency bands within the frequency range 275 - 700 GHz for millimetric and sub-millimetric wave imaging systems, in accordance with Resolution 663 (Rev. WRC-23)

Mexico has submitted a PV pointing out the importance of specific technical conditions that must be taken into consideration when conducting sharing studies in the above bands.

To consider appropriate regulatory actions to update Appendix 26 of the Radio Regulations in support of aeronautical mobile (OR) high frequency modernization, in accordance with Resolution 411 (WRC-23)

Mexico, and the United States have submitted PVs supporting studies on introducing new technologies to the AM(OR)S in the HF band.

To consider developing power flux-density and equivalent isotropically radiated power limits for inclusion in Article 21 of the Radio Regulations for the fixed-satellite, mobile-satellite and broadcasting-satellite services to protect the fixed and mobile services in the frequency bands 71 - 76 GHz and 81 - 8 GHz, in accordance with Resolution 775 (Rev. WRC-23)

Mexico has submitted a PV supporting studies in order to protect the Fixed and Mobile services operating in the bands mentioned above.

## WRC-27 Chapter 3

- Mobile Satellite Issues
- Agenda Items 1.11, 1.12, 1.13, 1.14
- Coordinator: Mike Razi (CAN) mrazi@parscom.ca

To consider the technical and operational issues, and regulatory provisions, for space-to-space links among non-geostationary and geostationary satellites in the frequency bands 1518 - 1544 MHz, 1545 - 1559 MHz, 1610 - 1645 MHz, 1646 - 1660 MHz, 1670 - 1675 MHz and 2483.5 - 2500 MHz allocated to the mobile-satellite service, in accordance with Resolution 249 (Rev. WRC-23)

Canada, Mexico and the United States have submitted PVs supporting the consideration of appropriate technical and regulatory provisions to address providing for accommodating space-to-space links in the above frequency bands.

To consider, based on the results of studies, possible allocations to the mobile-satellite service and possible regulatory actions in the frequency bands 1427 – 1432 MHz (space-to-Earth), 1645.5 – 1646.5 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 252 (WRC-23)

Canada has submitted a PV supporting studies and based on the results of the studies, taking appropriate regulatory actions in the bands under this Agenda Item.

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 253 (WRC-23)

Brazil, Canada, Colombia and Mexico have submitted PVs supporting studies on possible new allocations to MSS in bands identified for the terrestrial component of IMT.

The administrations of Brazil, Canada, Colombia and Mexico note the overlapping frequency bands between Agenda Items 1.12, 1.13, and 1.14, which should also be considered during studies under each of these Agenda Items.

To consider possible additional allocation to the mobile-satellite service, in accordance with Resolution 254 (WRC-23)

Canada, Mexico and the United States have submitted PVs supporting studies on possible new MSS frequency allocations.

## WRC-27 Chapter 4

- Science Issues
- Agenda Items 1.15, 1.16, 1.17, 1.18, 1.19
- Coordinator: Edwin Montes De Oca (MEX) edwin.montesdeoca@ift.org.mx

To consider studies on frequency-related matters, including possible new or modified space research service (space-to-space) allocations, for future development of communications on the lunar surface and between lunar orbit and the lunar surface, in accordance with Resolution 680 (WRC-23)

Mexico has submitted a PV pointing out the studies considering the spectrum requirements of SRS systems should take into account all existing application and other services that could be affected within the same band or adjacent bands where appropriate.

To consider studies on the technical and regulatory provisions necessary to protect radio astronomy operating in specific Radio Quiet Zones and, in frequency bands allocated to the radio astronomy service on a primary basis globally, from aggregate radio-frequency interference caused by non-geostationary satellite orbit systems, in accordance with Resolution 681 (WRC-23)

Brazil, Canada, Mexico and the United States have submitted PVs supporting sharing and compatibility studies while assessing possible regulatory measure and technical conditions to protect the Radio Astronomy Service.

To consider regulatory provisions for receive-only space weather sensors and their protection in the Radio Regulations, taking into account the results of ITU Radiocommunication Sector studies, in accordance with Resolution 682 (WRC-23)

Brazil, Mexico and the United States have submitted PVs supporting the review of regulatory provisions for the protection of receive only meteorological sensors and the consideration of new primary allocations to MetAids (space weather).

To consider, based on the results of ITU Radiocommunication Sector studies, possible regulatory measures regarding the protection of the Earth exploration-satellite service (passive) and the radio astronomy service in certain frequency bands above 76 GHz from unwanted emissions of active services, in accordance with Resolution 712 (WRC-23)

Mexico and the United States have submitted PVs supporting sharing and compatibility studies.

To consider possible primary allocation in all Regions to the Earth exploration-satellite service (passive) in the frequency bands 4200 – 4400 MHz and 8400 – 8500 MHz, in accordance with Resolution 674 (WRC-23)

Brazil and Mexico have submitted PVs supporting studies toward consideration of possible primary allocations in all Regions to the Earth exploration satellite service (passive).

## WRC-27 Chapter 5

- General Issues
- Agenda Items 2, 4, 10
- Coordinator: Amy Sanders (USA) asanders@ntia.gov

### Agenda Item 2

to examine the revised ITU-R Recommendations incorporated by reference in the Radio Regulations communicated by the Radiocommunication Assembly, in accordance with *further resolves* of Resolution **27 (Rev.WRC-19)**, and to decide whether or not to update the corresponding references in the Radio Regulations, in accordance with the principles contained in *resolves* of that Resolution;

#### Agenda Item 4

in accordance with Resolution **95 (Rev.WRC-19)**, to review the Resolutions and Recommendations of previous conferences with a view to their possible revision, replacement or abrogation;

## Upcoming Dates

 Next CITEL PCC.II meetings scheduled for: June 2 – 6, 2025 Mexico City, Mexico. Face-to-face and virtual.
September 29 – October 3, 2025 TBD, Brazil

## References

#### WRC-23 Provisional Final Acts

R-ACT-WRC.15-2023-PDF-E.pdf (itu.int)

#### CPM 27-1 Final Report

[270] Results of the first session of the Conference Preparatory Meeting for WRC-27 (CPM27-1) (itu.int)

# Allocation of ITU-R Preparatory Work for WRC-27

Agenda Item	Responsible Group
1.1, 1.2, 1.3, 1.4, 1.5. 1.6	WP 4A
1.7	WP 5D
1.8, 1.9	WP 5B
1.10	WP 5C
1.11, 1.12, 1.13, 1.14	WP 4C
1.15	WP 7B
1.16, 1.17, 1.18. 1.19	WP 7C & WP 7D

#### Any Questions?

Thank you!

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