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INTERNATIONAL CIVIL AVIATION ORGANIZATION

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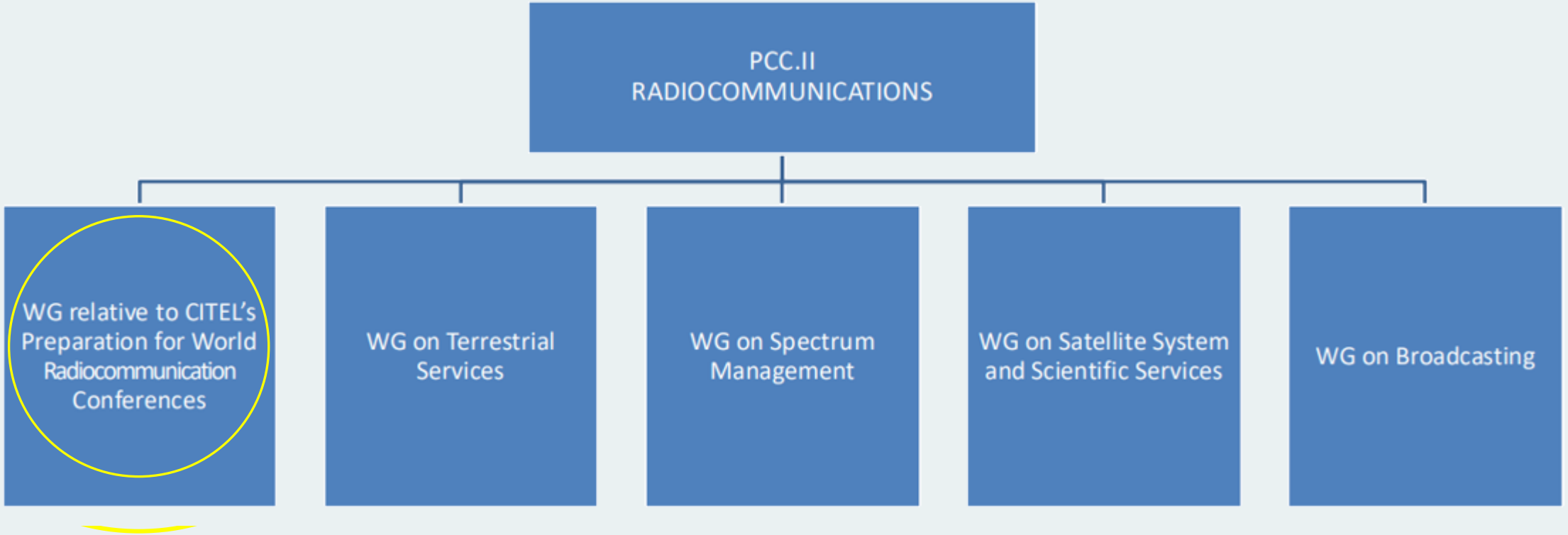
Inter-American Telecommunication Commission (CITEL)

Permanent Consultative Committee II: Radiocommunications (PCC.II)
WRC-27 Preparation

Draft Structure of PCC.II for the period 2022-2026



Working Groups for CITEL's Preparation for WRC

Chairman: Ricardo MARTÍNEZ (CLM). ricardo.martinez@ane.gov.co
Vice-Chairman: Carolina JACQUET (PRG). carolinajacquet@conatel.gov.py
Vice-Chairman: Sandra WRIGHT (USA). sandra.a.wright@faa.gov
Vice-Chairman: Maria MYERS-HAMILTON (JMC). mmyers-hamilton@sma.gov.jm

Sub-working Group	Issues	Agenda Items	Coordinator	Vice – Coordinator
SGT-1	FIXED AND BROADCAST SATELLITE SERVICES	1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 7, 9.2 (FSS&BSS/SFSSRS), 9.3(FSS&BSS/SFS/SRS)	Luciana FERREIRA (B) lucianarn@anatel.gov.br	Jennifer MANNER (USA) jmanner@ntia.gov
SGT-2	FIXED, MOBILE BROADCAST AND RADIOLOCATION	1.7, 1.8, 1.9, 1.10, 9.2 (TERR)	Geraldo NETO (B) geraldo@tmgtelecom.com	
SGT-3	MOBILE SATELLITE SERVICE	1.11, 1.12, 1.13, 1.14, 9.2 (MSS/SMS), 9.3(MSS/SMS)	Michael RAZI (CAN) mrazi@parscom.ca	
SGT-4	SCIENCE SERVICES	1.15, 1.16., 1.17, 1.18, 1.19	Edwin MONTES (MEX) edwin.montesdeoca@ift.org.mx	
SGT-5	GENERAL REGULATORY, FUTURE AGENDA ITEMS & OTHER	2, 4, 10	Amy SANDERS (USA) asanders@ntia.gov	

CITEL Working Instruments for the WRC (1 of 2)

- **Preliminary View (PV):** Initial statement that one (1) or more OAS/CITEL Member States make in relation to a specific item on the WRC agenda.

- **Preliminary Proposal (PP):** a proposal that one (1) OAS/CITEL Member State presents to PCC.II, and that has not yet been supported by any other OAS/CITEL Member State.

- **Draft Inter-American Proposal (DIAP):** a PRELIMINARY PROPOSAL that has been supported by at least one (1) other OAS/CITEL Member State.

- **Inter-American Proposal (IAP):** DRAFT INTER-AMERICAN PROPOSAL, for which the PCC.II has declared the end of its consideration and discussion as early as the LIMIT MEETING but not later than the FINAL MEETING; ; it must be supported by at least 6 (six) Administrations and not opposed by more than 50% (fifty per cent) of the total number of endorsements obtained.

CITEL Working Instruments for the WRC (2 of 2)

- **Modified Inter-American Proposal (IAP-M):** INTER-AMERICAN PROPOSAL submitted to the WRC, but was modified and adopted by CITEL due to the progress of work during the Conference.

- **Inter-American Proposal Developed at a WRC (IAP-N):** Proposal submitted during the course of the WRC, whose contents deals only with and is the result of discussions on:

  i) the items of the agenda of future Conference or.

  ii) any position of the Region adopted in response to WRC issues that were not anticipated during preparations prior to the WRC.

- **Limit Meeting:** The penultimate PCC.II meeting before the WRC, where DIAPs and PPs under preparation will be submitted. It is the final opportunity to submit new PPs for all agenda items, **except Agenda Items 2, 4, 9.2, 9.3 and 10**.

- **Final Meeting:** **T**he final PCC.II meeting before the WRC, where DIAPs and PPs previously under preparation will be considered. New PPs may be submitted for agenda items 2, 4, 9.2, 9.3 and 10.

WRC-27 Agenda Item 1.5

- ***Agenda Item 1.5 –*** *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);*

- **Preliminary Views (PV)**

- Brazil:
  - Supports ITU-R studies on regulatory measures to limit unauthorized non-GSO FSS/MSS earth-station operations.
  - Recommends exploring territorial control measures, including:
  - Restricting operation to terminals licensed by the host administration.
  - Limiting coverage contours over non-consenting countries.
  - Using geolocation-based activation/deactivation of terminals.
  - Notes risk of illegal handheld D2D terminals complicating enforcement.

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- **Preliminary Views (PV)**

- Canada:
  - Supports studies on regulatory measures to limit unauthorized uplinks.
  - Emphasizes sovereign rights over transmissions within national territory.
  - Urges evaluation of new measures' effectiveness and implementability without harming authorized non-GSO services.
  - Calls for reference to Article 18 and Resolutions 22 & 25 (Rev.WRC-23).

WRC-27 Agenda Item 1.5

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- **Preliminary Views (PV)**

- Colombia:
  - Supports developing balanced regulatory measures under Res. 14.
  - Measures should prevent unauthorized operations without disrupting authorized services.
- Dominica;
  - Notes that existing rules (Art. 18, Res. 22 & 25) have not resolved violations.
  - Advocates additional measures, notably:
  - Requiring service providers to verify authorization and location before network access.
  - Suggests adding a new clause to Res. 22 to codify this requirement.
  - Opposes unnecessary complexity or technology-specific mandates.

WRC-27 Agenda Item 1.5

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- **Preliminary Views (PV)**

- Mexico;
  - Supports ITU-R studies to review adequacy of current provisions (Art. 18, Res. 22 & 25).
  - States that studies should not include allocation or compatibility work.
  - Rejects technical measures that could alter system design parameters of authorized FSS/MSS non-GSO systems.
- United States:
- Supports Res. 14 studies to confirm adequacy of existing regulatory framework (Art. 18, Res. 22 & 25).
  - Emphasizes mandatory authorization and licensing already ensure sovereign control of non-GSO transmissions.
  - Opposes new rules that could disrupt essential safety-of-life and emergency non-GSO services.

WRC-27 Agenda Item 1.7

- ***Agenda Item 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* ***265 (WRC-23)****;*
- **Preliminary Views (PV)**
- Canada:
  - Supports ITU-R sharing studies toward possible IMT identification.
  - Stresses the critical importance of protecting incumbent FSS, MSS, EESS, MetSat, and SRS in 7.125–8.4 GHz.
  - Also emphasizes protecting fixed and mobile services in 14.8–15.35 GHz.
  - Calls for compatibility studies to protect services in adjacent bands.

WRC-27 Agenda Item 1.7

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- **Preliminary Views (PV)**
- Ecuador:
  - Supports studies under AI 1.7 for potential IMT spectrum identification.
  - Urges compatibility with existing services.
  - Highlights the needs of developing countries when considering future IMT allocations.
- United States:
  - Supports the sharing and compatibility studies mandated by Res. 256 (WRC-23).
  - Seeks to protect all primary services, including those in adjacent bands.
  - Opposes any new regulatory or technical constraints on incumbent services.
  - Will determine appropriate WRC-27 action based on study outcomes.

WRC-27 Agenda Item 1.9

- ***Agenda Item 1.9*** *– to consider appropriate regulatory actions to update Appendix* ***26*** *to the Radio Regulations in support of aeronautical mobile (OR) high frequency modernization, in accordance with Resolution* ***411 (WRC-23)****;*
- **Preliminary Views (PV)**
- The administrations of Colombia, Mexico, and the United States support the studies requested by Resolution 411 (WRC-23) on the introduction of new technologies to improve performance—such as new emission classes and wideband systems—for the AM(OR)S in the frequency bands referenced in Appendix 26 of the Radio Regulations, provided that sharing studies demonstrate the ability of wideband HF systems to ensure compatibility with existing AM(OR)S systems, other primary services, and adjacent-band allocations.

WRC-27 Agenda Item 1.11

- ***Agenda Item 1.11 -*** *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 1 518-1 544 MHz, 1 545-1 559 MHz, 1 610-1 645.5 MHz, 1 646.5-1 660 MHz, 1 670-1 675 MHz and 2 483.5-2 500 MHz allocated to the mobile-satellite service, in accordance with Resolution* ***249 (Rev.WRC 23)****;*

- **Preliminary Views (PV)**

Brazil, Canada, Mexico, and the United States support the development of appropriate technical and regulatory provisions at WRC-27, in line with Resolution 249 (Rev.WRC-23), to enable the operation of space-to-space links within existing mobile-satellite service (MSS) in the referenced frequency bands. These administrations emphasize that such provisions must ensure protection and compatibility with incumbent and adjacent-band services, including passive services, and must not impose any new regulatory or technical constraints on existing operations.

They agree that the studies should be limited to links operating in the same transmission direction as the current MSS allocations—Earth-to-space or space-to-Earth, depending on the band concerned—and that the existing regulatory framework, including Article 21 power-flux-density limits and operational practices, should continue to apply appropriately to space-to-space transmissions.

WRC-27 Agenda Item 1.12

- ***Agenda Item 1.11 -*** *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 252 (WRC-23);*

- **Preliminary Views (PV)**

Several CITEL administrations have expressed broad support for conducting studies under Resolution 252 (WRC-23) toward possible new MSS allocations for low-data-rate non-geostationary systems in the candidate frequency bands between 1.4 GHz and 2.0 GHz.

Canada, the United States, and Colombia strongly support these studies, emphasizing that results should guide appropriate regulatory actions while ensuring protection of incumbent and adjacent services, including aeronautical and maritime operations. Canada and Brazil both stress the need for consistency and coordination among Agenda Items 1.12, 1.13, and 1.14, given overlapping frequency ranges.

The United States adds detailed technical expectations for the studies — such as defining what qualifies as a “low-data-rate” system, identifying specific spectrum requirements, and ensuring compatibility across MSS operations and with incumbent services. Colombia underscores the opportunity to enable new IoT applications and economic benefits, provided that sharing and compatibility studies ensure coexistence with existing services.

Brazil focuses on harmonizing regulatory outcomes across related agenda items and safeguarding IMT (terrestrial mobile) bands, while Dominica proposes a broader approach that would not restrict studies solely to low-data-rate MSS applications and highlights the need to consult the International Maritime Organization (IMO) regarding the 1 645.5–1 646.5 MHz GMDSS distress and safety band.

WRC-27 Agenda Item 1.13

- ***Agenda Item 1.13 -*** *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)****;*

- **Preliminary Views (PV)**

The administrations of Brazil, Canada, Colombia, Ecuador, Mexico, and Uruguay jointly support ITU-R studies under Resolution 253 (WRC-23) to explore a possible new allocation to the mobile-satellite service (MSS) within existing frequency bands used or identified for IMT between 694/698 MHz and 2.7 GHz, with the goal of enabling direct connectivity between satellites and IMT user equipment.

They emphasize that these studies must protect incumbent and adjacent-band services, follow the frequency arrangements and directionality defined in Recommendation ITU-R M.1036, and promote connectivity in underserved areas.

Canada, Dominica, and Mexico consider that any new MSS allocations for DC-MSS-IMT should, in general, be on a secondary basis, given the complementary nature of such systems to terrestrial IMT. However, Mexico prefers a co-primary allocation with a footnote granting priority to IMT, noting that secondary status would leave MSS systems overly vulnerable to interference.

All administrations stress consistency across AIs 1.12, 1.13, and 1.14, alignment with WRC-23 Resolutions, and the need to protect existing IMT deployments. Canada and Mexico highlight the importance of recognizing different national duplex arrangements (FDD/TDD) and cross-border coexistence, suggesting PFD limits, guard bands, beam control, and coordination agreements. They also caution against expanding the already broad list of candidate bands in Table 1 of Res. 253, as this could delay study completion.

WRC-27 Agenda Item 1.14

- ***Agenda Item 1.14 –*** *to consider possible additional allocations to the mobile-satellite service, in accordance with Resolution 254 (WRC-23);**).***

- **Preliminary Views (PV)**

The administrations of Brazil, Canada, Colombia, Mexico, and the United States support conducting studies under Resolution 254 (WRC-23) to evaluate possible new MSS allocations, particularly in the 2 GHz band, with the goal of expanding satellite connectivity in rural, remote, and underserved areas lacking terrestrial networks.

These administrations agree that all studies must include sharing and compatibility analyses to ensure protection of incumbent and adjacent-band services, and that overlapping frequency bands with AIs 1.12 and 1.13 be treated consistently across agenda items.

Canada stresses that any new primary MSS allocations must be well justified, with clear evidence of demand, and should avoid bands already heavily used for terrestrial IMT, such as 2120–2160 MHz, where IMT and DC-MSS-IMT activities are expanding.

Brazil similarly calls for regulatory consistency among overlapping items and emphasizes protecting IMT systems that already operate in the 2 GHz range.

Colombia supports the studies under Resolution 254 to promote access to MSS while ensuring that new measures do not create additional restrictions on existing systems.

Mexico highlights the strategic importance of MSS for emergency communications, transportation safety, and bridging the digital divide. It notes that coexistence between MSS and IMT has already been proven feasible in the 2010–2025 MHz band, which is primary for MSS (Earth-to-space) in Region 2. Mexico therefore proposes extending this allocation to Regions 1 and 3 for global harmonization and economies of scale, while continuing compatibility studies for 2120–2160 MHz and 2160–2170 MHz to ensure protection of incumbents.

WRC-27 Agenda Item 1.15

- ***Agenda Item 1.15*** *– toto 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);*

- **Preliminary Views (PV)**

The administrations of Brazil, Canada, and the United States support ITU-R studies under Resolution 680 (WRC-23) to consider potential new or modified SRS allocations and regulatory provisions enabling communications between systems on the lunar surface and in lunar orbit, while protecting existing services. These studies should examine spectrum needs and sharing conditions for lunar communications, ensure the protection of critical incumbent services (including COSPAS-SARSAT search-and-rescue operations), and preserve the Shielded Zone of the Moon (SZM) for radio-astronomy measurements.

Mexico concurs on the need for such studies and emphasizes the importance of considering all existing SRS and adjacent-band services that could be affected, noting overlaps with other WRC-27 agenda items—particularly AIs 1.7, 1.11, 1.13, and 1.19—to ensure coordination and efficient spectrum use.

The Commonwealth of Dominica recognizes the broader significance of lunar communications not only for scientific and exploratory missions but also as an opportunity for technological capacity-building and international cooperation. Dominica will consider supporting new or modified SRS allocations if ongoing ITU-R studies demonstrate feasibility and compatibility.

WRC-27 Agenda Item 1.16

- ***Agenda Item 1.16 –*** *to 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);*

- **Preliminary Views (PV)**

The administrations of Brazil, Canada, Mexico, and the United States support the sharing and compatibility studies mandated by Resolution 681 (WRC-23), specifically Resolves 1 and 2, focusing on the frequency bands listed in Table 1 where the Radio Astronomy Service (RAS) has a primary allocation.

These administrations emphasize that such studies should identify technical and regulatory measures to manage aggregate interference from non-GSO systems while maintaining balance with the operational needs of satellite services.

Brazil calls for clear understanding that studies under Resolves 3–6 are not intended to alter existing FSS allocations or impose new constraints on non-GSO systems, and highlights that international protection for RAS requires an allocation in Article 5 of the Radio Regulations.

Mexico encourages collaboration between CITEL members and countries with established RQZs to develop practical coexistence measures and interference-mitigation techniques.

The United States agrees that studies should develop voluntary best-practice tools for managing coexistence—without amending the Radio Regulations—and warns against imposing undue restrictions on non-GSO systems critical for global communications.

Canada aligns with this view, confirming that no regulatory changes are expected from Resolves 3–6 and that results from technical studies should be integrated into ITU-R Report RA.2259, rather than into the Radio Regulations themselves.

WRC-27 Agenda Item 1.19

- ***Agenda Item 1.19 –*** *to consider possible primary allocations in all Regions to the Earth exploration-satellite service (passive) in the frequency bands 4 200-4 400 MHz and 8 400-8 500 MHz, in accordance with Resolution* ***674 (WRC-23).***

- **Preliminary Views (PV)**

The administrations of Brazil, Canada, Mexico, and the Commonwealth of Dominica support studies under Resolution 674 (WRC-23) to explore possible primary EESS (passive) allocations in the 4 200–4 400 MHz and 8 400–8 500 MHz bands to ensure the long-term continuity of sea surface temperature (SST) measurements critical for meteorological monitoring and disaster preparedness.

Brazil and Canada underline that SST observations are essential for early detection of tropical cyclones and climate forecasting. They support these studies alongside existing EESS (passive) observations in the 6/7 GHz range under RR No. 5.458. Both administrations emphasize that any new EESS (passive) allocations must not claim protection from incumbent or adjacent services—especially radio altimeters and WAIC in the 4.2–4.4 GHz band—and must consider potential IMT identifications in adjacent frequencies (4.4–4.8 GHz and 7.1–8.4 GHz).

Mexico highlights the importance of continued ITU-R study work to ensure that new allocations do not constrain incumbent services and encourages technical rigor in propagation and sharing analyses.

Dominica recognizes both the importance of SST measurement systems and the need to maintain safety-of-life services in 4.2–4.4 GHz, supporting a new EESS (passive) allocation only if studies confirm compatibility. Dominica also notes that the views of WMO and ICAO should be considered in the final outcomes.

WRC-27 Agenda Item 10

- ***Agenda Item 10 –*** *PRELIMINARY PROPOSAL FOR WRC-27 AGENDA ITEM 10 – POSSIBLE NEW ALLOCATIONS FOR THE FIXED SATELLITE SERVICE (FSS) (EARTH-SPACE) IN THE W BAND*

- **Preliminary Proposal (PP)**

The draft new Resolution proposes that the ITU-R conduct studies to support a potential new uplink (Earth-to-space) allocation for the Fixed-Satellite Service (FSS) in portions of the W-band spectrum between 92 GHz and 114.25 GHz.

The proposed studies would assess sharing and compatibility with incumbent and adjacent passive services (including radio astronomy and Earth-exploration satellite systems) and develop regulatory provisions if compatibility is demonstrated. The results would be considered by the 2031 World Radiocommunication Conference (WRC-31), which could then establish new FSS allocations in these uplink bands.

VHF-AMS(R)S Recommendation

- CITEL's 46th meeting (Sept. 29–Oct. 3, 2025, Salvador, Brazil). Member administrations have formally adopted a Recommendation supporting the use of the 117.975–137 MHz band for Aeronautical Mobile-Satellite (Route) Service (AMS(R)S), consistent with the VHF-AMS(R)S allocation made at WRC-23.
- The key takeaways are:
  - Regulatory Momentum: CITEL is urging administrations to begin regulatory and technical preparations immediately, even as ICAO finalizes SARPs and channel plans. This ensures that the allocation will be ready for rapid deployment once ICAO work concludes.
  - Market Need: The Recommendation highlights VHF congestion in many regions and the lack of coverage in remote/oceanic areas. AMS(R)S is recognized as the practical solution to meet safety-of-life communication needs.
  - Global Alignment: It encourages active participation in ICAO panels (FSMP, Space-Based VHF Correspondence Group) to align technical standards and channel planning globally.
  - Interference Management: Administrations must ensure proper frequency planning so that AMS(R)S, AM(R)S, and adjacent aeronautical radionavigation services operate compatibly.
  - For potential service providers, this is strong regional affirmation that the business and regulatory environment is moving in the right direction.

46th. Meeting of PCC.II
Bahia, Brazil – September 29 - October 03, 2025

Thank You

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