

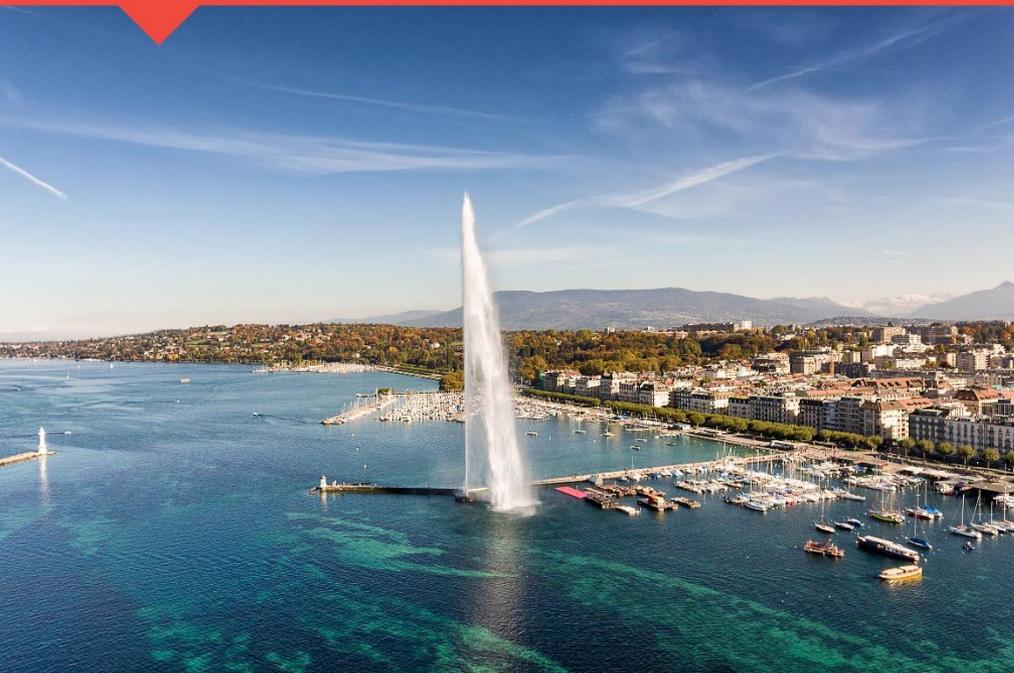
ITUWORKSHOPS

1st ITU Inter-regional Workshop on WRC-19 Preparation

21 - 22 November 2017

Geneva, Switzerland

www.itu.int/go/ITU-R/wrc-19-irwsp-17



1st ITU INTER-REGIONAL WORKSHOP ON WRC-19 PREPARATION (Geneva, 21-22 November 2017)

Status of Preparations for WRC-19

Inter-American Telecommunication Commission (CITEL)



90th Anniversary
CCIR - ITU-R Study Groups
(1927-2017)

Organized by:



Status of Preparations for WRC-19

Inter-American Telecommunication Commission (CITEL)
Permanent Consultative Committee II



OAS | CITEL



Working Group established within PCC.II

Chair: Carmelo Rivera, United States
(carmelo.rivera@noaa.gov)

Vice-Chairs: Victor Martinez, Mexico
(victor.martinezv@ift.org.mx)

Martha Suarez, Colombia
(martha.suarez@ane.gov.co)



WRC Working Group Structure

Sub WG	Title	Agenda items	Coordinator
SGT1	Mobile & Fixed	1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 9.1 (Issues 9.1.1, 9.1.2, 9.1.5, 9.1.6, 9.1.8)	Luciana CAMARGOS (Brazil) lcamargos@gsma.com Jose COSTA (Canada) Jose.costa@ericsson.com
SGT2A	Radiolocation, Amateur, Maritime & Aeronautical	1.1, 1.8, 1.9, 1.10, 9.1 (Issue 9.1.4)	Mike RAZI (Canada) mrazi@storm.ca
SGT2B	Space Science	1.2, 1.3, 1.7	Thomas VonDEAK (USA) Thomas.Vondeak@nasa.gov
SGT3	Satellite Regulatory	1.4, 1.5, 1.6, 9.1 (Issue 9.1.9) 7, 9.1 (Issues 9.1.3, 9.1.7), 9.2 (satellite), 9.3	Brandon MITCHELL (USA) bmitchell@ntia.doc.gov Chantal BEAUMIER Chantal.beaumier@canada.ca
SGT4	General Regulatory, Future Work & Other	2, 4, 8, 9.2 (non-satellite), 10	Victor MARTINEZ (Mexico) victor.martinezv@ift.org.mx Martha SUAREZ Martha.suarez@ane.gov.co



INTER – AMERICAN PROPOSALS : DEFINITIONS

- **PRELIMINARY VIEWS (PV):** an informal statement that a CITEL Member State is considering possible Preliminary Proposals on specific themes.
- **PRELIMINARY PROPOSAL (PP):** a proposal that a CITEL Member State presents to PCC II with the purpose to turning it into an Inter-American Proposal and that has not been supported by another Member State.
- **DRAFT INTER-AMERICAN PROPOSAL (DIAP):** PP that has been supported by at least one other Member State.
- **INTER-AMERICAN PROPOSAL (IAP):** DIAP for which the PCC II has ended its consideration and discussion, has been supported by at least six Members States and is not opposed by more than 50% of the number of supports obtained.



PRELIMINARY VIEWS (PV)

- **PRELIMINARY VIEWS (PV):** an informal statement that a CITEL Member State is considering possible Preliminary Proposals on specific themes.



Agenda Item 1.1: *Consideration of the band 50-54 MHz to the amateur service in Region 1*

Preliminary Views

Canda, United States of America

WRC-19 Agenda Item 1.1 is a Region 1 issue. Any changes made to the Radio Regulations under WRC-19 Agenda Item 1.1 must not impact the existing allocation to the amateur service in 50 – 54 MHz in Region 2, nor subject Region 2 to any changed procedural or regulatory provisions.

Coordinator : Flávio A. B. Archangelo (B)

flavio.archangelo@ties.itu.int

Alt. Coordinator: Jonathan Siverling (USA)

jsiverling@arri.org



Agenda Item 1.2: to consider in-band power limits for earth stations operating in the mobile-satellite service, meteorological-satellite service and Earth exploration-satellite service in the frequency bands 401-403 MHz and 399.9-400.05 MHz

Preliminary Views

Canada, United States of America

To support conducting and completing the necessary technical, operational, and regulatory studies on the possibility of establishing in-band power limits for earth stations in the EESS and MetSat service in the frequency band 401-403 MHz and the MSS in the frequency band 399.9-400.05 MHz.

Issue Coordinator: James Mentzer (USA)

jmentzer@doc.gov



Agenda Item 1.3: *Possible upgrading met satellite service (space-to-Earth) to primary status and a possible primary allocation to the EESS (space-to-Earth) in the band 460-470 MHz*

ISSUES

- An upgrade of the Metsat and EESS allocation to primary status would provide regulatory certainty for data collection systems.
- Measures need to be taken to ensure protection of and that no constraints are put on, fixed and mobile services, including the use of the band for IMT.

Preliminary Views TBD

Issue Coordinator: James Mentzer (USA)

jmentzer@doc.gov



Agenda Item 1.4: *Review, and revise if necessary, the limitations mentioned in Annex 7 to Appendix 30*

Preliminary Views

Canada, United States of America

With respect to Agenda Item 1.4, the United States and Canada support the studies in accordance with Resolution 557 (**WRC-15**). Based upon successful conclusion of these activities, the United States and Canada support the review and revision, as necessary, of the limitations of Annex 7 to Appendix 30 (**Rev.WRC-12**), while ensuring the protection of existing assignments in the Plan and the List and the future development of BSS service within the Plan, and existing and planned fixed-satellite service networks.

Issue Coordinator: TBD



Agenda Item 1.5: *ESIM*

Preliminary Views

Canada

Canada supports studies under the terms of Resolution **158 (WRC-15)**. Studies are necessary to determine compatibility of ESIMs with services allocated in the frequency bands 17.7-19.7 GHz and 27.5-29.5 GHz. Sharing and compatibility studies between ESIM and FSS networks should include consideration of both geostationary and non-geostationary satellite systems, including non-GSO MSS feeder links, to ensure their protection.

Brazil, United States of America

Support studies under the terms of Resolution 158 (WRC-15) on sharing and compatibility between ESIMs and current and planned stations of existing services allocated in the frequency bands 17.7-19.7 GHz and 27.5-29.5 GHz, while ensuring protection and not imposing undue constraints on these allocated services, and to take appropriate action based on the results of these studies.

Before identifying use of the frequency bands, or portions thereof, for ESIM operation, studies should address each operational type of earth stations in motion to include the appropriate technical and regulatory provisions necessary to ensure protection of existing and planned allocated services.

Issue Coordinator: TBD [USA]

Alt. Coordinator: Gustavo Vargas, (CLM) gustavo.vargas@ane.gov.co



Agenda Item 1.6 : to consider regulatory framework for non-GSO FSS satellite systems that may operate in the frequency bands 37.5-39.5 GHz (space-to-Earth), 39.5 42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space),

Preliminary Views

Canada

Canada supports the studies under Resolution 159 (WRC-15) to develop a regulatory framework for new non-GSO FSS satellite systems. For the band 36-37 GHz: Canada is of the view that based on the results of studies, EESS (passive) systems operating in the 36- 37 GHz band and non-GSO FSS systems are compatible and no regulatory measures are required to address the compatibility between these two services. For the band 50.2-50.4 GHz: Canada is of the view that based on the results of studies, mitigation techniques and/or regulatory measures may be required to ensure compatibility between EESS (passive) systems operating in the band 50.2-50.4 GHz and non-GSO FSS systems.

United States of America

The United States supports studies under WRC-19 Agenda Item 1.6 regarding the development of a regulatory framework for non-GSO satellite systems in the existing FSS allocations in the 37.5-39.5 GHz (space-to-Earth), 39.5-42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space) frequency bands under the terms of Resolution 159 (WRC-15) and to take appropriate action based on the results of these studies.

Issue Coordinator: Marcella Ost (Canada) marcella.s.ost@boeing.com

Alt. Coordinator: Carolina Daza (CLM) carolina.daza@ane.gov.co



Agenda Item 1.7: Non-GSO satellites with short duration missions

Preliminary view

Canada

Subject to the outcome of the compatibility studies, Canada will consider supporting new allocations and an upgrade of the existing allocations to the space operation service within the frequency ranges 150.05-174 MHz and 400.15-420 MHz. Canada is of the view that frequency bands subject to **No. 9.21** are not suitable for space operation service for satellites with small duration missions.

Alt Coordinator: Roberto LAFERTTE (USA) rlafertte@acescorp.net



Agenda Item 1.8: *GMDSS additional satellite systems*

Preliminary Views

Canada, United States of America

With respect to Agenda Item 1.8, these Administrations support the activities of IMO related to the introduction of additional satellite systems into the GMDSS, as well as activities underway in the ITU-R. Based upon successful conclusion of these activities, these Administrations support appropriate modification of the Radio Regulations such as **Appendix 15**, to provide for introducing additional satellite systems into the GMDSS.

Issue Coordinator: Donald Jansky (USA) don@jansky-barmat.com

Alt Coordinator: Christopher Casarrubias (Mexico)
christopher.casarrubias@accesspartnership.com



Agenda Item 1.9.1: *Maritime autonomous devices*

Preliminary Views

United States of America

The United States supports the ITU-R studies prescribed in Resolution 362 (WRC-15) and these studies should also take into account the protection of the GMDSS and AIS.

Issue Coordinator: Robert Denny (USA) rdenny@ntia.doc.gov

Alt Coordinator: Waldon Russell (BAH) wrussell@urcabahamas.bs



Agenda Item 1.9.2: *Satellite VDES*

Preliminary Views

Canada

Noting that the proposed alternatives are being discussed, Canada believes that other alternative channel plans must be explored. In order to establish a comprehensive VDES channel plan for all VDES components, Autonomous Maritime Radio Devices (AMRDs) operating within the same frequency band must also be taken into account.

These devices may use AIS technology; digital selective calling (DSC) technology; or transmit synthetic voice messages. Combinations of these technologies can be found in equipment already available on the market. AMRDs are being addressed under Agenda Item 1.9.1. In view of this, VDES channel plans should take into account frequencies for AMRDs.

United States of America

The United States supports the ITU-R studies prescribed in Resolution 360 (Rev. WRC-15) and these studies should also take into account the protection of existing terrestrial services which operate in these and adjacent frequency bands.

Issue Coordinator: Robert Denny (USA) rdenny@ntia.doc.gov

Alt Coordinator: Waldon Russell (BAH) w russell@urcabahamas.bs



Agenda Item 1.10: *GADSS*

Preliminary Views

Brazil, Canada, United States of America

The quantification and characterization of the radiocommunications requirements for both the terrestrial and satellite components of GADSS are the responsibility of ICAO;

Based on those requirements, relevant studies should be conducted in the ITU-R to review existing regulatory provisions and determine if additional regulatory changes are needed;

ITU-R studies should be done in coordination with ICAO.

Issue Coordinator : Luís Fernando (B) ifsouza@embraer.com.br

Alt Coordinator : Sandra Wright (USA) sandra.a.wright@faa.gov



Agenda Item 1.13: *IMT in the frequency range 24.25 GHz to 86 GHz (1 of 4)*

Preliminary Views

Brazil

Agenda Item 1.13 is key to the future development of IMT systems for the delivery of IMT-2020 services. The aim of IMT-2020 is to create a more ‘hyper connected’ society by more comprehensively, and intelligently, integrating LTE, Wi-Fi and cellular IoT technologies, together with at least one new IMT-2020 radio interface. This will allow mobile networks to dynamically allocate resources to support the varying needs of a diverse set of connections – ranging from industrial machinery in factories, to automated vehicles as well as smartphones. A central component in the evolution of all mobile technology generations has been the use of increasingly wide frequency bands to support higher speeds and larger amounts of traffic. IMT-2020 is no different, ultra-fast IMT-2020 services will require large amounts of spectrum including above 24 GHz where wide bandwidths are more readily available. Spectrum above 24 GHz is well recognized worldwide as being the key component for the data intensive IMT-2020 services. Without them, IMT-2020 won’t be able to deliver significantly faster data speeds or support projected extensive mobile traffic growth.

With that in mind, we support appropriate sharing and compatibility studies under Agenda Item 1.13 in the bands 24.25-27.5 GHz, 31.8-33.4 GHz, 37-43.5 GHz, 45.5-50.2 GHz, 50.4-52.6 GHz, 66-76 GHz and 81-86 GHz. Such studies should consider that the significant extra capacity of IMT-2020 systems will need to be perfectly integrated with heterogenous networks, including fibre, satellite and microwave systems, taking into account their specific benefits which are crucial to developing countries.



Agenda Item 1.13: *IMT in the frequency range 24.25 GHz to 86 GHz (Continued 2 of 4)*

Preliminary Views

COLOMBIA

While all bands remain suitable for identification at this stage, Colombia would like to make the following observations regarding the lower portions of the range, from 24.25 GHz to 43.5 GHz:

- Responses received until the previous meeting of CCP.II to the questionnaire show that, except for a few cases, there are either no services licensed in these bands or the services belong to the fixed service category. When they belong to other service categories (such as FSS), most of them occupy a relatively small (500MHz or less) bandwidth with-respect-to the total range being considered for study (e.g. 3.25 GHz for 24.25GHz – 27.5GHz).
- Other regions initiated discussions on suitable bands among the lists of candidate bands. As an example, Europe ([2], [3]) identified the 24.25 GHz – 27.5 GHz as a “pioneer band”, while other bands up to 43.5 GHz have been positively considered. With the view of seeking not only regional but global frequency harmonization to the possible extent, it is positive to take under consideration activities of other regions.
- The lower portions of the range would provide comparatively more suitable propagation characteristics for deployment compared to the upper portions, considering that some installations could cover outdoor and indoor environments with some Non-Line-of-Sight (NLoS) situations.

Based on the considerations above, Colombia is of the initial view that the lower portions of the frequency range (from 24.25 GHz to 43.5 GHz) provide good opportunities in terms of availability, technical performance and potential for global harmonization. Colombia would like to invite other members to consider this initial view for consideration and collaboration towards a regional (and possibly global) harmonization of the frequency bands.



Agenda Item 1.13: *IMT in the frequency range 24.25 GHz to 86 GHz (Continued 3 of 4)*

Preliminary Views

MEXICO.

Regional harmonization for this item on the agenda should consider similar approaches in terms of allocations and plans for the radio spectrum, in order to favor cost reduction and encourage the development of a sustainable ecosystem for the deployment of IMT systems.

A public survey is currently being prepared in Mexico to identify the IMT spectrum requirements from 24.25 GHz to 86 GHz. To this end, we plan to study the discussions and documents issued by the different working groups of both the International Telecommunication Union (ITU) and CITEL regarding regional and global spectral requirements for IMT at the frequencies of 24.25 to 86 GHz. For this reason, we deem it necessary to conduct, in the best terms possible, the planned studies on sharing and compatibility in the bands agreed on through Resolution 238 (WRC-15), i.e., the segments of 24.25-27.5 GHz, 31.8-33.4 GHz, 37-43.5 GHz, 45.5-50.2 GHz, 50.4-52.6 GHz, 66-76 GHz and 81-86 GHz, in order for the CITEL administrations to make better, more fully-grounded decisions to achieve regional or global harmonization for the future development of IMT-2020 systems.

Issue Coordinator: Camilo Zamora (Colombia) camilo.zamora@ane.gov.co

Alt Coordinator: Juan Pablo Rocha (Mexico) juan.rocha@ift.org.mx



Agenda Item 1.13: *IMT in the frequency range 24.25 GHz to 86 GHz (Continued 4 of 4)*

Preliminary Views

United States of America

Support studies under WRC-19 agenda item 1.13 and take appropriate action based on the results of these sharing and compatibility studies in accordance with Resolution 238 in the following bands:

24.25-27.5 GHz, 37-40.5 GHz, 42.5-43.5 GHz, 45.5-47 GHz, 47.2-50.2 GHz, 50.4-52.6 GHz, 66-76 GHz and 81-86 GHz, which have allocations to the mobile service on a primary basis; and 31.8-33.4 GHz, 40.5-42.5 GHz and 47-47.2 GHz, which may require additional allocations to the mobile service on a primary basis.



Agenda Item 1.14: *HAPS*

Preliminary Views

Brazil

Brazil supports studies in accordance to Resolution **160 (WRC-15)**. Provided that these studies demonstrate sharing and compatibility with existing services and candidate applications are feasible, and future development of existing services is considered, Brazil supports appropriate regulatory actions, including addressing additional spectrum needs for HAPS.

United States of America

In order to facilitate the use of HAPS links on a global or regional level, the United States supports studies, in accordance with Resolution **160 (WRC-15)**, and appropriate WRC-19 action based on the results of these studies, including possible modifications to the existing provisions on HAPS identifications in the Radio Regulations and possible new HAPS identifications in the fixed service bands at 21.4-22 GHz and 24.25- 27.5 GHz in Region 2, and 38-39.5 GHz globally.

Issue Coordinator: Ana Valadares (B) avaladares@fb.com

Alt Coordinator: Vassilios Mimis (Canada) vmimis@primus.ca



Agenda Item 1.15: to consider identification of frequency bands for use by administrations for the land-mobile and fixed services applications operating in the frequency range 275 450 GHz

Preliminary Views

United States of America

The United States is of the view that it may be possible to develop a similar footnote to that in No. 5.565 for land-mobile and fixed services, identifying bands for terrestrial active service use. To this end, the United States supports studies in the ITU-R on sharing and compatibility between passive and active services as well as spectrum needs for the land-mobile and fixed services for WRC-19 agenda item 1.15 under the terms of Resolution **767 (WRC-15)**.

Issue Coordinator: TBD



Agenda Item 1.16: *WAS/RLANs in 5 GHz*

Preliminary Views

Brazil

The Brazilian Administration supports the necessity for studies to consider possible additional spectrum allocation to be mobile service, including radio local area networks (WAS/RLAN), while ensuring the protection of the C band uplink and of all existing services in the candidate bands.

Canada

Canada is of the view that only the specific frequency bands 5 150-5 350 MHz, 5 350-5 470 MHz, 5 725-5 850 MHz and 5 850-5 925 MHz listed in the *resolves* and *invites ITU-R* of Resolution **239 (WRC-15)** are to be considered and/or studied under WRC-19 agenda item 1.16 and not the entire 5 GHz frequency range (5 150-5 925 MHz).

Canada is assessing and may contribute to studies listed under *invites ITU-R* of Resolution **239 (WRC-15)**.

Mexico

WAS/RLANs have promoted the development of broadband access and have been deployed license-exempt, pursuant to the provisions of CITEL and ITU-R, in the frequency bands 5150-5250 MHz, 5250-5350 MHz, 5470-5600 MHz, 5650-5725 MHz, and 5725-5850 MHz. However, it is considered that a potential additional allocation to the mobile service should be based on evidence of spectrum saturation in existing bands, growth projections, and the non-affectation/degradation of any existing services that might operate in the potential additional spectrum.

Issue Coordinator: [Jose Francisco Lozano] [CLM] [jose.lozano@ane.gov.co]

Alt Coordinator: Jayne Stancavage (USA) [jayne.stancavage@intel.com]



Agenda Item 2 : ITU-R Recommendations incorporated by reference (Resolutions 27 and 28)

Preliminary Views

TBD

Issue Coordinator: TBD



Agenda Item 4: Review of Resolutions and Recommendations (Resolution 95)

Preliminary Views

TBD

Issue Coordinator: TBD



Agenda Item 7: Changes in response to Resolution 86 – Satellite network regulatory procedures

Preliminary Views

ISSUE A:

Canada

Canada is of the view that the current seven-year period may not be enough to deploy a “mega” non-GSO constellation. In trying to address this issue, it is important to adopt a balanced approach, taking into account the financial, technological and planning challenges posed by the multiple launches required to deploy this type of constellation but also the need to prevent any abuse that may lead to spectrum reservation. In this context, a milestone approach appears to be an appropriate solution.

Issue Coordinator: Michelle Caldeira (B) Michelle.caldeira@ses.com

Alt Coordinator: Angeles Gallego (Mexico) mgallego@satmex.com



Agenda Item 7: Changes in response to Resolution 86 – Satellite network regulatory procedures

Preliminary Views

ISSUE C3

Canada

Canada is of the view that the only procedure applicable for seeking the assistance of the Bureau in the case of requests for the inclusion of the territory of an administration within the service area of the satellite network is provided in No. 13.1. **We also note that an absence of response to correspondences from the Bureau initiated under No. 13.1 for this type of request cannot be considered as an implicit agreement to be included in the service area. In this context, Canada is not convinced of the need to modified Appendix 30B and does not support the modification of § 6.10 in article 6 of Appendix 30B.**

Issue Coordinator: Michelle Caldeira (B) Michelle.caldeira@ses.com

Alt Coordinator: Angeles Gallego (Mexico) mgallego@satmex.com



Agenda Item 7: Changes in response to Resolution 86 – Satellite network regulatory procedures

Preliminary Views

ISSUE C5

Brazil, Canada

Canada supports adding to the relevant provision of Article 11 the obligation for the Bureau to send a reminder to notifying administrations before the end of the six-month period provided in No. 11.46 for the resubmission of notice initially returned by the Bureau without a change to its original date of receipt.

Issue Coordinator: Michelle Caldeira (B) Michelle.caldeira@ses.com

Alt Coordinator: Angeles Gallego (Mexico) mgallego@satmex.com



Agenda Item 7: Changes in response to Resolution 86 – Satellite network regulatory procedures

Preliminary Views

ISSUE C6

Brazil, Canada

Canada supports allowing notifying administrations to submit simultaneously the Appendix 4 data elements for the purposes of entering the frequency assignments in the List (§ 6.17) and recording them (§ 8.1)

Issue Coordinator: Michelle Caldeira (B) Michelle.caldeira@ses.com

Alt Coordinator: Angeles Gallego (Mexico) mgallego@satmex.com



Agenda Item 7: Changes in response to Resolution 86 – Satellite network regulatory procedures

Preliminary Views ISSUE D

Brazil, Canada

These administrations support extending the current Bureau identification and publication of the satellite networks or systems to be considered when effecting coordination under No. 9.7 and 9.7A to other types of coordination, namely coordination under No. 9.12, 9.12A or 9.13 as appropriate.

Issue Coordinator: Michelle Caldeira (B) Michelle.caldeira@ses.com

Alt Coordinator: Angeles Gallego (Mexico) mgallego@satmex.com



Agenda Item 7: Changes in response to Resolution 86 – Satellite network regulatory procedures

Preliminary Views ISSUE E

Canada

These administrations support extending the current Bureau identification and publication of the satellite networks or systems to be considered when effecting coordination under No. 9.7 and 9.7A to other types of coordination, namely coordination under No. 9.12, 9.12A or 9.13 as appropriate.

Issue Coordinator: Michelle Caldeira (B) Michelle.caldeira@ses.com

Alt Coordinator: Angeles Gallego (Mexico) mgallego@satmex.com



Agenda Item 7: Changes in response to Resolution 86 – Satellite network regulatory procedures

Preliminary Views ISSUE G

Brazil, Canada

These administrations are of the view that the specifics of the Region 2 Plan for BSS and its associated feeder links should be maintained, thus, no modification to § 4.2.21A of Appendices 30 and 30A is needed. There are notable differences between the application of the procedures § 4.2.21A for the Region 2 BSS and feeder-link Plans and the application of § 4.1.18 for the Regions 1 and 3 list. Therefore Issue G should be limited to Regions 1 and 3.

Issue Coordinator: Michelle Caldeira (B) Michelle.caldeira@ses.com

Alt Coordinator: Angeles Gallego (Mexico) mgallego@satmex.com



Agenda Item 8: Deletion of country footnotes, deletion of country names from footnotes (Resolution 26)

Preliminary Views

TBD

Issue Coordinator: TBD



Agenda Item 9.1: *on the activities of the Radiocommunication Sector since WRC-15* Issue 9.1.1 Terrestrial and Satellite Components of IMT in 2 GHz

Preliminary Views

Canada

There should not be any impact from the outcome of these studies on the existing use of the frequency bands by the terrestrial component of IMT in 2 170-2 180 MHz (part of the 1 710-1 780 / 2 110-2 180 MHz IMT frequency band) nor on flexible MS/MSS use in 2 000-2 010 & 2 180-2 200 MHz.

Mexico

For the administration of Mexico, it is important to know the outcomes of these studies, since the bands 1710 - 1780/2110 - 2180 MHz and 1850 - 1920/1930 - 2000 MHz are designated for the terrestrial component of IMT in Mexico. The segmentation specified for these bands is based on an FDD scheme in which the 1710-1780 MHz and 1850-1920 MHz segments are used for base-mobile transmission and the 2110-2180 MHz and 1930-2000 MHz segments are used for base-mobile transmission. In addition, Mexico is authorized to exploit the emission and reception rights of signals and frequency bands associated with foreign satellite systems that cover—and can provide services within—its national territory at the 2000-2010/2190-2200 MHz frequency band.

Accordingly, if the 1 980-2 000 MHz and 2 170-2 190 MHz frequency bands were used for the satellite component of IMT in a country with which Mexico shares borders, it would be necessary to set out the technical and operational measures to ensure coexistence and compatibility between the two IMT components.

Issue Coordinator: TBD

Alt Coordinator : Olmo Ramirez (Mexico) olmo.ramirez@ift.org.mx



Issue 9.1.2: Compatibility of IMT and broadcasting-satellite service (sound) in the frequency band 1 452-1 492 MHz in Regions 1 and 3

Preliminary Views

Canada, United States of America and Uruguay

Studies under WRC-19 agenda item 9.1/ issue 9.1.2 are limited to Regions 1 and 3. Any eventual changes made to the Radio Regulations under WRC-19 agenda item 9.1/issue 9.1.2 must not impact Region 2 services (and applications thereof) nor subject Region 2 to any changed procedural or regulatory provisions.

Issue Coordinator: TBD



Issue 9.1.3: technical and operational issues and regulatory provisions for new NGSO systems in the 3 700-4 200 MHz, 4 500-4 800 MHz, 5 925-6 425 MHz and 6 725-7 025 MHz bands allocated to FSS (3 of 3)

Preliminary Views

United States of America

The United States supports the study of a regulatory framework, under the terms of Resolution 157 (WRC-15), to enable circular-orbit non-GSO FSS satellite systems to operate in the 3 700-4 200 MHz, 4 500-4 800 MHz, 5 925-6 425 MHz and 6 725-7 025 MHz frequency bands, while ensuring the protection of existing services and applications, and to take appropriate action based on the results of these studies

Issue Coordinator: Hugo Mario Trivino (CLM) htrivino@mintic.gov.co

Manoel Almeida (B) manoel.almeida@intelsat.com

Alt Coordinator: Marcella Ost (Canada) marcella.s.ost@boeing.com



Issue 9.1.4: *Stations on board sub-orbital vehicles*

Preliminary Views

Canada & United States of America

To support studies called for by Resolution 763 (WRC-15), noting that those studies need to be completed during this study cycle. Based on the outcome of those studies, consider a possible future agenda item for WRC-23.

Canada

Canada is of the view that existing station and service definitions in Article 1 of the Radio Regulations can be applied to sub-orbital vehicles (space planes).

Issue Coordinator: Sandra Wright (USA) sandra.a.wright@faa.gov



Issue 9.1.5: *technical and regulatory impacts of referencing Recommendations M.1638-1 and ITU R M.1849-1 in Nos. 5.447F and 5.450A of the Radio Regulations*

Preliminary Views

TBD

Issue Coordinator: TBD



Issue 9.1.6: *Wireless Power Transfer for Electric Vehicles*

Preliminary Views

TBD

Issue Coordinator: William Zambelli (B) william.ivo@mctic.gov.br



Issue 9.1.8: *Narrowband and broadband machine-type communication infrastructures*

Preliminary Views

Mexico

This administration has analyzed the current and future spectrum use for MTC and IoT, also, are taking in to account the importance to know the development and eventual findings of the studies related to issue 9.1.8 of Agenda Item 9.1 of the WRC-19.

Accordingly, MTC and IoT applications and devices can be used effectively with all the benefits of the existent mobile broadband bands and the new frequency bands being studied for IMT. This approach avoids the necessity of stablish dedicated spectrum exclusively for MTC and IoT applications on identified IMT bands.

Issue Coordinator: Sergio Marquez (Mexico) sergio.marquez@ift.org.mx

Alt. Issue Coordinator: Jayne Stancavage (USA) jayne.stancavage@intel.com



Issue 9.1.9: Studies relating to spectrum needs and possible allocation of the frequency band 51.4-52.4 GHz to the fixed-satellite service (Earth-to-space)

Preliminary Views

United States of America

The United States supports the study of all aspects of spectrum needs for the development of the fixed-satellite service under *Resolves 1* of Resolution **162**. The United States further supports the study as appropriate of possible primary allocation to the FSS of the frequency band 51.4-52.4 GHz (Earth-to-space), limited to GSO FSS feeder links, under the terms of Resolution **162 (WRC-15)** to ensure compatibility with existing services, including adjacent bands as appropriate. Such studies should determine the suitability, including protection of fixed and mobile services, of a new primary allocation to the FSS in the frequency band 51.4-52.4 GHz (Earth-to-space), limited to FSS feeder links for geostationary orbit use, and the possible associated regulatory actions based on the results of these studies.

Issue Coordinator: Jennifer Manner (USA) jennifer.manner@echostar.com

Alt Coordinator: Marc Dupuis (Canada) marc@oneweb.net



Agenda Item 9.2: Difficulties and inconsistencies encountered in the application of the Radio Regulations

Preliminary Views

TBD

Issue Coordinator: Marc Dupuis (Canada) marc@oneweb.net



Agenda Item 9.3: on action in response to Resolution on action in response to Resolution 80 (Rev.WRC-07)

Preliminary Views

TBD

Issue Coordinator: TBD



Agenda Item 10: *Agenda Items for Future Conferences*

TBD

Issue Coordinator: Martha Liliana Suarez (Colombia) Martha.suarez@ane.gov.co

Alt Coordinator: Miguel Munoz (Mexico) Miguel.munoz@sct.gob.mx



PRELIMINARY PROPOSALS (PP)

- **PRELIMINARY PROPOSAL (PP):** a proposal that a CITEL Member State presents to PCC II with the purpose of turning it into an Inter-American Proposal and that has not been supported by another Member State.



Issue 9.1.7: Unauthorized operation of earth station terminals

Preliminary Proposal

United States of America

NOC United States of America/9.1/9.1.7/1

Radio Regulations (WRC-15) Volumes 1 & 2

United States of America

SUP United States of America/9/1/9.1.7/2

ANNEX TO RESOLUTION 958 (WRC-15) No. 2

**Urgent studies required in preparation for the
2019 World Radiocommunication Conference**

Reasons: Earth station licensing and related issues are national matters and no changes to the Radio Regulations are necessary as Article 18 sufficiently addresses the required international regulatory measures. Instead, better training and monitoring capability, along with ITU developed reports and handbooks, can assist administrations in inhibiting the use of unauthorized uplink earth terminals and can enable administrations to locate and terminate the unauthorized transmissions.

Issue Coordinator: Hugo Mario TRIVIÑO (Colombia) htrivino@mintic.gov.co



DRAFT INTER-AMERICAN PROPOSALS (DIAP)

- **DRAFT INTER-AMERICAN PROPOSAL (DIAP):** PP that has been supported by at least one other Member State.



Agenda Item 1.11: *Railway Train and Trackside*

DIAP

Canada, United States of America, Mexico

NOC DIAP/1.11/1

Radio Regulations Volumes 1 & 2

Reason: The United States and Canada believe it is unnecessary to identify spectrum specifically for railway radiocommunication systems. Regional and global harmonization can be satisfied by developing applicable ITU-R Reports and Recommendations. Therefore, no change to the Radio Regulations or regulatory action is required under this agenda item.

Canada, United States of America, Mexico

SUP DIAP/1.11/2

RESOLUTION 236 (WRC-15)

Railway radiocommunication systems between train and trackside

Reasons: The studies towards regional and global harmonization can be satisfied through ITU-R Recommendations and Reports.

Issue Coordinator : David TEJEDA (Mexico) david.tejeda@ift.org.mx



Agenda Item 1.12: *ITS Harmonization*

DIAP

Canada, United States of America

NOC DIAP/1.12/1

Radio Regulations Volumes 1 & 2

Reason: It is unnecessary to identify spectrum specifically for Intelligent Transport Systems. Regional and global harmonization can be satisfied by developing applicable ITU-R Reports and Recommendations. Therefore, no change to the Radio Regulations or regulatory action is required under this agenda item.

Canada, United States of America

SUP DIAP/1.12/2

RESOLUTION 237 (WRC-15)

Intelligent Transport Systems applications

Issue Coordinator: TBD Argentina

Alt Issue Coordinator : Francisco Soares (B) fsoares@qti.qualcomm.com



INTER-AMERICAN PROPOSALS (IAP)

- **INTER-AMERICAN PROPOSAL (IAP):** DIAP for which the PCC II has ended its consideration and discussion, has been supported by at least six Members States and is not opposed by more than 50% of the number of supports obtained.



Issue 9.1.8: *Narrowband and broadband machine-type communication infrastructures (1 of 2)*

IAP

Brazil, Colombia, Dominican Republic, Guatemala, Panama, United States, Uruguay

NOC IAP/9.1 Issue 9.1.8/1

Radio Regulations Volumes 1 & 2

Reasons: Analysis of the current and future spectrum use for narrowband and broadband machine type communications (MTC), also known as machine-to-machine (M2M) or Internet of Things (IoT), concluded that there is no need to identify specific spectrum for those applications. Therefore, no change to the Radio Regulations or regulatory action is required.

Issue Coordinator: Sergio Marquez (Mexico) sergio.marquez@ift.org.mx

Alt. Issue Coordinator: Jayne Stancavage (USA) jayne.stancavage@intel.com



Issue 9.1.8: *Narrowband and broadband machine-type communication infrastructures (2 of 2)*

IAP

Brazil, Colombia, Dominican Republic, Guatemala, Panama, United States, Uruguay

SUP IAP/9.1 Issue 9.1.8/2

ANNEX TO RESOLUTION 958 (WRC-15)

Urgent studies required in preparation for the 2019 World Radiocommunication Conference

3) Studies on the technical and operational aspects of radio networks and systems, as well as spectrum needed, including possible harmonized use of spectrum to support the implementation of narrowband and broadband machine-type communication infrastructures, in order to develop Recommendations, Reports and/or Handbooks, as appropriate, and to take appropriate actions within the ITU Radiocommunication Sector (ITU-R) scope of work.

Reasons: Analysis of the current and future spectrum use for narrowband and broadband machine type communications (MTC), also known as machine-to-machine (M2M) or Internet of Things (IoT), concluded that there is no need to identify specific spectrum for those applications. Therefore, no change to the Radio Regulations or regulatory action is required. No changes also apply to RR Volume 3, apart from the suppression proposed to parts of Resolution **958 (WRC-15)**.

Issue Coordinator: Sergio Marquez (Mexico) sergio.marquez@ift.org.mx

Alt. Issue Coordinator: Jayne Stancavage (USA) jayne.stancavage@intel.com



OAS | CITEL

Next PCCII meeting

Barranquilla, Colombia

November 27- December 1, 2017



OAS | CITEL

Additional PCCII Information at:

<https://www.citel.oas.org/en/Pages/Next-Meetings.aspx>



OAS | CITEL

Thank you very much for your attention

PCC.II/CITEL Representative

<http://www.citel.oas.org>

citel@oas.org