



ASIA-PACIFIC TELECOMMUNITY  
**The 4th Meeting of the APT Conference Preparatory  
Group for WRC-19 (APG19-4)**  
7 – 12 January 2019, Busan, Republic of Korea

**Document No:**  
**APG19-4/INF-22**  
**5 January 2019**

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**STATUS OF CITEL'S PREPARATIONS FOR WRC-19**

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**Contact:** Inter-American Telecommunication  
Commission (CITEL)

# Status of CITEI's Preparations for WRC-19

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



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## Working Group within PCC.II

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## WRC Working Group Structure

### SGT1

- **Mobile & Fixed** (1.11, 1.12, 1.13, 1.14, 1.15, 1.16, 9.1 (9.1.1, 9.1.2, 9.1.5, 9.1.6, 9.1.8)) - **Coordinators:** Luciana CAMARGOS (**Brazil**) and Jose COSTA (**Canada**)

### SGT2

- **2A: Amateur, Maritime & Aeronautical** (1.1, 1.8, 1.9, 1.10, 9.1.4)) - **Coordinator:** Michael RAZI (**Canada**)
- **2B: Space Science** (1.2, 1.3 and 1.7) - **Coordinator:** Corali ROURA VONDEAK (**USA**)

### SGT3

- **Satellite Regulatory** (1.4, 1.5, 1.6, 7, 9.1 (9.1.3, 9.1.7, 9.1.9), 9.2 (satellite), 9.3) - **Coordinators:** Brandon MITCHELL (**USA**) and Chantal BEAUMIER (**Canada**)

### SGT4

- **General Regulatory, Future Work & Other** (2, 4, 8, 9.2 (non-satellite), 10) - **Coordinators:** Victor MARTINEZ (**Mexico**) and Martha SUAREZ (**Colombia**)



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# Inter – American Proposals : Definitions



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**PRELIMINARY VIEWS (PV):** an informal 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 Member State.



**INTER-AMERICAN PROPOSAL (IAP):** DIAP supported by at least six Members States and not opposed by more than 50% of the number of supports obtained.



## Meeting Schedule

Dates/Location	WRC-19 CITEL WG Action Plan
<b>December 3-7, 2018</b> Brasilia, Brazil	<ul style="list-style-type: none"><li>- Convert preliminary views into new proposals taking into account results of studies and draft CPM text</li><li>- Gain additional support on PPs, DIAPs and IAPs</li></ul>
<b>April 8-12, 2019</b> Monterrey, Mexico	<ul style="list-style-type: none"><li>- <b>Limit meeting to submit new proposals</b> (with exception for proposals on future agenda items)</li><li>- DIAPs and IAPs are circulated to all Member States</li></ul>
<b>August 12-16, 2019</b> Ottawa, Canada	<ul style="list-style-type: none"><li>- <b>Final meeting to gain support for preliminary proposals</b></li><li>- Only IAPs are circulated to all Member States</li></ul>



# Overall Status of Preparations

## Six meetings to date

- Discussed virtually all 24 agenda items and 30 sub-issues

## Proposals presented by at least one Member State on all issues except for these items

- **1.8 Issue A – GMDSS modernization**
- **2 - Incorporation by reference**
- **4 - Review of resolutions and recommendations**
- **7 - Review of satellite regulatory procedures for issues C7, F, H, J and M**





# Overall Status of Preparations

(cont'd)

Several IAPs (or DIAP) for **No Change** to the regulations

Identification of spectrum for applications to be addressed via ITU reports and recommendations

- **1.11 - Railway train and trackside**
- **1.12 - Intelligent transportation systems**
- **9.1.6 – Wireless power transmission for electric vehicles (*DIAP*)**
- **9.1.8 - Machine-type communication infrastructures**

Outcome should not impact Region 2 or studies do not support taking action

- **1.1 – Amateur service in the band 50-54 MHz in Region 1**
- **9.1.2 - IMT and BSS sound in the 1452-1492 MHz band**
- **9.1.3 - NGSO systems in the C bands allocated to FSS**

# Mobile and Fixed - 1.13

## IMT identification between 24 and 82 GHz

### Various proposals under consideration

Frequency Band (GHz)	New identification	NOC
<b>Band A: 24.25-27.5</b>	<b>DIAP</b> for entire range; and <b>PP</b> for 24.65-27 GHz only	
<b>Band B: 31.8-33.4</b>		<b>DIAP</b>
<b>Band CDE: 37-40.5/40.5-42.5/42.5-43.5</b>	<b>PP</b> for entire range with new Resolution; and <b>PP</b> excludes 40-42 GHz	<b>PP</b> for 40-42 GHz only
<b>Band FGHI: 45.5-47/47-47.2/47.2-50.2/50.4-52.6</b>	<b>PP</b> for 47.2-48.2/50.4-52.6 GHz only	<b>PP</b> for 45.5-47.2/48.2-50.2 GHz
<b>Band J: 66-71</b>	<b>PP</b> for entire range	
<b>Band KL: 71-76/81-86</b>		<b>PP</b> for entire range

# Mobile and Fixed - 1.14



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## High Altitude Platforms (HAPS)

### Various proposals under consideration

Frequency Band	Identification	NOC
6 440- 6 520 MHz	PP based on 1B1 option 1	PP
6 560- 6 640 MHz		PP
21.4-22 GHz	DIAP based on 3B2 option 1; and PP for 21.5-22 GHz only	
24.25-25.25 GHz	DIAP based on 4B3 option 1	PP
25.25-27.5 GHz	DIAP based on 5B2 option 1 + HAPS UL in the band 25.25-27 GHz; and PP with different conditions	
27.9-28.2 GHz	PP based on 6B1 option 1	
31.0-31.3 GHz	PP based on 7B1 options 1A+1B	
38-39.5 GHz	DIAP based on 8B2 option 1A; and PP with different conditions	
47.2-47.5 GHz / 47.9-48.2 GHz	DIAP based 9B1 Resolution example 2; and PP with different conditions	

# Mobile and Fixed - 1.16

## Review of RLANs in portions of 5 GHz band

### Various proposals under consideration

Frequency Band (MHz)	MOD	NOC
5150-5250	DIAP to modify Res 229 (Method A2)	PP
5250-5350		IAP
5350-5470		IAP
5725-5850	PP for new mobile allocation via footnote ( Method D3)	DIAP
5850-5925		IAP

# Mobile and Fixed (cont'd)



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## Various proposals under consideration

**1.15 – Land-mobile and fixed services identification in the 275-450 GHz range:** Different proposals based on Methods C and D are under consideration.

**9.1.1 – Sharing of terrestrial and satellite IMT around 2 GHz:** IAP for NOC to Volumes 1 and 2 to not limit the flexibility for deployments by individual countries.

DIAP to modify Res **212** since studies will be complete by WRC-19 and will document technical and operational measures to promote compatibility between the terrestrial and satellite components of IMT in different countries.

**9.1.5 – Regulatory Impacts on RLAN/radar operation:** A DIAP modifying footnotes 5.447F and 5.450A to refer to conditions in footnote 5.446A instead of ITU-R Recommendations and a proposal supporting Approach B are under consideration.

## Various proposals under consideration

**1.2 – Power limits for MetSat, EESS and MSS earth stations around 400 MHz:** One proposal supports Method D but focuses only on the 399.9-400.05 MHz band, and another proposal is based on a modified Method D for the lower band with no power limit in the 400.02-400.05 MHz band and a transition period of 10 years for existing systems; and on a modified Method F for the 401-403 MHz band.

**1.3 – Upgrade MetSat and new EESS allocations in 460-470 MHz band:** Proposals support Method B which upgrades the MetSat allocation to primary and adds a new EESS allocation with some preference expressed for Option 1 as the pfd mask to protect terrestrial services.

**1.7 – Spectrum in 150.05-174 MHz and 400.15-420 MHz to control NGSO satellites with short duration missions:** One proposal supports NOC and another supports the identification of frequency bands 137-138 MHz and 148-149.9 MHz for tracking, telemetry and command links for NGSO satellites with short duration missions.



## IAPs, DIAPs and various proposals under consideration

**1.8 Issue B – Additional satellite system:** **IAP** supporting Method B1 to amend Article 5, Table 15-2 of Appendix 15, No. 33.50 and No. 33.53 of Article 33 to enable the introduction of an additional GMDSS satellite system in the band 1616-1626.5 MHz.

**1.9.1 –Maritime Autonomous Radio Devices (AMRDs) in the 156-162.05 MHz band:** **DIAP** for Group A based on the single CPM Method; Proposals for Group B are based on Method B1 with 160.900 MHz identified.

**1.9.2 – Satellite VHF Data Exchange System (VDES):** **DIAP** based on Method C (secondary allocation for VDE-SAT MMSS uplink and downlink frequencies) and a proposal supporting Method F for a primary MMSS allocation.



# Maritime and Aeronautical (cont'd)



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**IAPs, DIAPs and various proposals under consideration**  
**1.10 – Global Aeronautical Distress and Safety System (GADSS):**  
**DIAP** supporting Method A which introduces GADSS in Article **30**, under Chapter **VII**, and establishes a new Article **34A** outlining the applicable regulatory framework.

**9.1.4 – Stations on board sub-orbital vehicles:** Proposals for NOC to Volumes 1 and 2 of the Radio Regulations and suppression of Resolution **763** are under consideration.



# Satellite Regulatory



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## DIAPs and various proposals under consideration

**1.4 – Revision of Annex 7 to Appendix 30 limitations:** **DIAP** based on Method C deleting some of the orbital separation limitations in section A. No changes are proposed to section B. Regions 1 and 2 BSS test points are used instead of the service area definition for the coordination with FSS through a new Resolution. A new Resolution would also protect BSS networks with antenna diameter that are less than 60 cm with a PFD mask.

**1.5 – FSS Earth Stations in Motion:** A proposal based on Method B is under consideration. Pending issues identified in the draft CPM report were not addressed.

**1.6 – Regulatory framework for NGSOs FSS in the 40/50 GHz range:** Proposals based on Methods A, C and D are under consideration.

# Satellite Regulatory (cont'd)



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## 7 – Review of satellite regulatory procedures

**Issue B,** **DIAPs** support Method B2 to extend the coordination arc approach to MSS in Ka bands

**Issues C1, C2, C3, C5, C6, E, K and L,** **DIAPs** support single method shown in the draft CPM report

**Issue D,** **DIAPs** support Method D2 for modifications to Article 9 to have the list of potentially affected satellite networks or systems published in addition to the list of administrations under Nos **9.12, 9.12A and 9.13**

**Issue G,** **DIAP** supporting no change to the Region 2 BSS Plans

**Issue A,** one proposal supports Option A for BIU and Option E for milestones; another proposal supports Option B for BIU and Option D for milestones

**Issue C4,** one proposal supports no change for Region 2

**Issue I,** one proposal supports new data elements, ie the number of configurations and the identification of orbital planes for each configuration

# Satellite Regulatory (cont'd)



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## DIAPs and proposals under consideration

**9.1.7 –Unauthorized operation of earth station terminals, DIAPs supporting no change proposal** as licensing is a national matter and a number of different actions (e.g. collaboration with satellite operators, improved monitoring capability and/or exchange of data under international cooperation arrangements) can be taken under the existing regulatory framework to assist administrations in addressing the issue; Paragraph 2 of the Annex to Resolution **958** would be deleted. Another proposal also supports NOC in response to paragraph 2a but retains paragraph 2b of the same Annex.

**9.1.9 –FSS allocation in the 50.4-51.4 GHz band, DIAPs supporting Example 1** for a new primary allocation limited to GSO FSS gateways with a minimum antenna diameter of 4.5 meters. Limits to protect EESS (passive) are not defined.

# Future Work



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## 10 – Future WRC Agendas

**A: WRC-23 Agenda:** **Proposal** establishing a skeleton Resolution outlining the WRC-23 agenda. Resolution **810** is suppressed and replaced with a new Resolution.

**B: NGSO ESIMs:** **Proposal** to consider the use of the frequency bands 17.7-20.2 GHz and 27.5-29.1 GHz and 29.5-30.0 GHz by earth stations on mobile platforms communicating with non-geostationary space stations in the fixed-satellite service.

**C: Weather Sensors:** **Proposal** to consider studies relating to the technical and operational characteristics, spectrum requirements and appropriate radio service designations and protection for space weather sensors, including possible additional spectrum allocations and regulatory provisions , without placing additional constraints on incumbent services. Resolution **657** is suppressed and replaced with a new Resolution.



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## **Additional Information and Proposal Details at:**

[https://www.citel.oas.org/en/Pages/PCCII/  
WRC.aspx](https://www.citel.oas.org/en/Pages/PCCII/WRC.aspx) (publicly available)

[https://www.citel.oas.org/en/Pages/PCCII/  
default.aspx](https://www.citel.oas.org/en/Pages/PCCII/default.aspx) (requires account)



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**Thank you very much for your attention**

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