

**ITUEvents**

# 3<sup>rd</sup> ITU Inter-regional Workshop on WRC-19 Preparation

4-6 September 2019  
Geneva, Switzerland

[www.itu.int/go/ITU-R/wrc-19-irwsp-19](http://www.itu.int/go/ITU-R/wrc-19-irwsp-19)

**3<sup>rd</sup> ITU INTER-REGIONAL WORKSHOP  
ON WRC-19 PREPARATION  
(Geneva, 4-6 September 2019)**

**Panel Session 3  
WRC-19 Agenda item  
1.14**

*Hugues de Bailliencourt*



Organized by:





# WRC-19 Agenda item 1.14

To consider, on the basis of ITU-R studies in accordance with Resolution **160 (WRC-15)**, appropriate regulatory actions for high-altitude platform stations (HAPS), within existing fixed-service allocations.

- Resolution **160 (WRC-15)**: Facilitating access to broadband applications delivered by high-altitude platform stations.



# Agenda item 1.14 – ITU-R Studies

- HAPS characteristics: Report ITU-R F-2439;
- Spectrum requirement: Report ITU-R F.2438;
- Sharing studies completed in the followings bands:
  - 6 440 – 6 520 MHz: Report ITU-R F.2437;
  - 21.4 – 22 GHz: recently approved (5/163);
  - 24.25 – 27.5 GHz: recently approved (5/161);
  - 27.9 – 28.2 GHz/31-31.3 GHz: recently approved (5/164);
  - 38 – 39.5 GHz: recently approved (5/160);
  - 47.2 – 47.5 GHz/47.9 – 48.2 GHz: recently approved (5/162);
- No sharing studies in the band 6 560 – 6 640 MHz under Agenda Item 1.14.



# Agenda item 1.14 – CPM Methods

The following methods are considered under this agenda item and may be applied to potential candidate frequency bands

- **Method A** – No change.
- **Method B** – Identification of bands, or parts thereof in accordance with Resolution 160 (WRC-15) with options:
  - Method B1 – Revision of the regulatory provisions for HAPS in the FS with a primary status in bands already identified for HAPS.
  - Method B2 – Add new identification(s) for HAPS in bands already allocated to the FS with a primary status.
  - Method B3 – Add a primary allocation to the FS and a new identification for HAPS in the band 24.25-25.25 GHz (Region 2) not already allocated to the FS.
- **Method C** – Suppress the existing HAPS identification, pursuant to resolves 3 of Resolution 160 (WRC-15).



# Agenda item 1.14 – CPM Methods

An overview of methods and relevant options currently considered in this CPM text under the agenda item is provided in the table below:

Bands	Methods and options		
	Method A	Method B	Method C
6 440-6 520 MHz	√	B1	√
6 560-6 640 MHz	√	Not proposed	√
21.4-22 GHz (R2 only)	√	B2	N/A
24.25-25.25 GHz (R2 only)	√	B3	N/A
25.25-27.5 GHz (R2 only)	√	B2	N/A
27.9-28.2 GHz	√	B1	√
31-31.3 GHz	√	B1	√
38-39.5 GHz	√	B2	N/A
47.2-47.5 GHz / 47.9-48.2 GHz	√	B1	√



# Agenda item 1.14 – Regional Position (existing HAPS identifications)



Bands	APT	ASMG	ATU	CEPT	CITEL	RCC
<b>6 440 – 6 520 MHz</b>	Method A No Change	Method A No Change	Method B1 Worldwide downlink	Method B1 Worldwide downlink	No proposal	TBD*
<b>6 560 – 6 640 MHz</b>	Method A No Change	Method A No Change	No proposal	Method A No Change	No proposal	
<b>27.9 – 28.2 GHz</b>	No proposal	Method A No Change	Method B1 Worldwide downlink	Method B1** Worldwide downlink	No proposal	
<b>31 – 31.3 GHz</b>	No proposal	Method A No Change	Method B1 Worldwide downlink & uplink	Method B1 Worldwide downlink & uplink	No proposal	
<b>47.2 – 47.5 GHz 47.9 – 48.2 GHz</b>	No proposal	Method A No Change	Method B1 Improve the existing worldwide identification	Method B1 Improve the existing worldwide identification	Method B1 Improve the existing worldwide identification	

\* To be determined during last RCC WRC/RA meeting (Kazakhstan, Almaty, 9 -11 Sept.2019).

\*\* CEPT proposes additional new provisions including HAPS ground stations cannot claim protection from FSS earth stations in this band



# Agenda item 1.14 –Regional Position (new HAPS identifications)



Bands	APT	ASMG	ATU	CEPT	CITEL	RCC
<b>21.4 – 22 GHz (Region 2 only)</b>	No proposal	Method A No Change	No proposal	No proposal *	Method B2 Downlink	TBD**
<b>24.25 – 25.25 GHz (Region 2 only)</b>	No proposal but should not limit the possibility to identify the band for IMT on a global basis under WRC-19 Agenda item 1.13	Method A No Change	No proposal	No proposal but should not limit the possibility to identify the band for IMT on a global basis under WRC-19 Agenda item 1.13 *	Method B3 Downlink	
<b>25.25 – 27 GHz (Region 2 only)</b>		Method A No Change			Method B2 Uplink	
<b>27 – 27.5 GHz (Region 2 only)</b>		Method A No Change			Method B2 Downlink	
<b>38 – 39.5 GHz</b>	No proposal	Method A No Change	Method B2 Uplink	Method B2 Downlink & Uplink	Method B2 Uplink	

\* CEPT is of the view that any consideration of the frequency bands 21.4-22 GHz and 24.25-27.5 GHz in Region 2 under this Agenda item shall be accompanied by appropriate protection of: ISS in the band 24.45-24.75 GHz, ISS in the band 25.25-27.5 GHz, EESS (passive) in the bands 21.2-21.4 GHz, 22.21-22.5 GHz and 23.6-24 GHz, EESS and SRS (space-to-Earth) in the band 25.5-27 GHz and FSS in the bands 24.75-25.25 GHz and 27-27.5 GHz.

\*\* To be determined during last RCC WRC/RA meeting (Kazakhstan, Almaty, 9 -11 Sept.2019).

ITUEvents

# 3<sup>rd</sup> ITU Inter-regional Workshop on WRC-19 Preparation

4-6 September 2019  
Geneva, Switzerland

[www.itu.int/go/ITU-R/wrc-19-irwsp-19](http://www.itu.int/go/ITU-R/wrc-19-irwsp-19)

**3<sup>rd</sup> ITU INTER-REGIONAL WORKSHOP  
ON WRC-19 PREPARATION  
(Geneva, 4-6 September 2019)**

**Thank you for your  
attention**

***Hugues de Bailliencourt***

*[hugues.debailliencourt@airbus.com](mailto:hugues.debailliencourt@airbus.com)*



Organized by:

