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| **World Radiocommunication Conference (WRC-15) Geneva, 2–27 November 2015** |  |
| **INTERNATIONAL TELECOMMUNICATION UNION** |  |
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| PLENARY MEETING | **Addendum 17 to Document xx-E** |
|  | **31 July 2015** |
|  | **Original: English** |
|  | |
| Asia-Pacific Telecommunity Common Proposals | |
| Proposals for the work of the conference | |
|  | |
| Agenda item 1.17 | |

1.17 to consider possible spectrum requirements and regulatory actions, including appropriate aeronautical allocations, to support wireless avionics intra-communications (WAIC), in accordance withResolution **423 (WRC‑12)**;

**Introduction:**

APT Members support the single Method in the CPM 15-2 Report with new primary allocation of the aeronautical mobile (R) service in the band 4 200‑4 400 MHz for use by WAIC systems only and an accompanying new Resolution, maintaining the status of the Earth exploration-satellite service (EESS) and space research service (SRS) as passive services and protecting the operation of aeronautical radionavigation services (ARNS).

**Proposals:**

ARTICLE 5

Frequency allocations

Section IV – Table of Frequency Allocations  
(See No. 2.1)

MOD ASP/xxA17/1

2 700-4 800 MHz

|  |  |  |
| --- | --- | --- |
| Allocation to services | | |
| Region 1 | Region 2 | Region 3 |
| 2 700-2 900 AERONAUTICAL RADIONAVIGATION 5.337  Radiolocation  5.423 5.424 | | |
| 2 900-3 100 RADIOLOCATION 5.424A  RADIONAVIGATION 5.426  5.425 5.427 | | |
| 3 100-3 300 RADIOLOCATION  Earth exploration-satellite (active)  Space research (active)  5.149 5.428 | | |
| 3 300-3 400  RADIOLOCATION | 3 300-3 400  RADIOLOCATION  Amateur  Fixed  Mobile | 3 300-3 400  RADIOLOCATION  Amateur |
| 5.149 5.429 5.430 | 5.149 | 5.149 5.429 |
| 3 400-3 600  FIXED  FIXED-SATELLITE (space-to-Earth)  Mobile 5.430A  Radiolocation  5.431 | 3 400-3 500  FIXED  FIXED-SATELLITE (space-to-Earth)  Amateur  Mobile 5.431A  Radiolocation 5.433  5.282 | 3 400-3 500  FIXED  FIXED-SATELLITE (space-to-Earth)  Amateur  Mobile 5.432B  Radiolocation 5.433  5.282 5.432 5.432A |
| 3 500-3 700  FIXED  FIXED-SATELLITE (space-to-Earth)  MOBILE except aeronautical mobile  Radiolocation 5.433 | 3 500-3 600  FIXED  FIXED-SATELLITE (space-to-Earth)  MOBILE except aeronautical mobile 5.433A  Radiolocation 5.433 |
| 3 600-4 200  FIXED  FIXED-SATELLITE (space-to-Earth)  Mobile | 3 600-3 700  FIXED  FIXED-SATELLITE (space-to-Earth)  MOBILE except aeronautical mobile  Radiolocation  5.435 |
|  | 3 700-4 200  FIXED  FIXED-SATELLITE (space to-Earth)  MOBILE except aeronautical mobile | |
| 4 200-4 400 AERONAUTICAL MOBILE (R) ADD 5.A117  AERONAUTICAL RADIONAVIGATION MOD 5.438  5.439 5.440 ADD 5.B117 | | |
| 4 400-4 500FIXED  MOBILE 5.440A | | |
| 4 500-4 800 FIXED  FIXED-SATELLITE (space-to-Earth) 5.441  MOBILE 5.440A | | |

MOD ASP/xxA17/2

5.438 Use of the band 4 200-4 400 MHz by the aeronautical radionavigation service is reserved exclusively for radio altimeters installed on board aircraft and for the associated transponders on the ground.

ADD ASP/xxA17/3

5.A117 Use of the frequency band 4 200-4 400 MHz by stations in the aeronautical mobile (R)service is reserved exclusively for wireless avionics intra-communication systems that operate in accordance with recognized international aeronautical standards. Such use shall be in accordance with Resolution **[A117-WAIC] (WRC-15)**.

**Reasons:** This footnote makes reference to the following Resolution **[A117-WAIC] (WRC-15)**.

ADD ASP/4623A17/4

5.B117 Passive sensing in the Earth exploration-satellite and space research services may be authorized in the frequency band 4 200-4 400 MHz on a secondary basis.

SUP ASP/xxA17/5

RESOLUTION 423 (WRC‑12)

Consideration of regulatory actions, including allocations, to support   
Wireless Avionics Intra-Communications

The World Radiocommunication Conference (Geneva, 2012),

ADD ASP/xxA17/6

RESOLUTION [A117-WAIC] (WRC-15)

Use of Wireless Avionics Intra-Communications in the  
frequency band 4 200-4 400 MHz

The World Radiocommunication Conference (Geneva, 2015),

considering

*a)* that aircraft are designed to enhance efficiency, reliability and safety, as well as to be more environmentally friendly;

*b)* that Wireless Avionics Intra-Communications (WAIC) systems provide radiocommunications between two or more aircraft stations integrated into or installed on a single aircraft, supporting the safe operation of the aircraft;

*c)* that WAIC systems do not provide radiocommunications between an aircraft and the ground, another aircraft or a satellite;

*d)* that WAIC systems operate in a manner that ensures the safe operation of an aircraft;

*e)* that WAIC systems operate during all phases of flight, including on the ground;

*f)* that aircraft equipped with WAIC systems operate globally;

*g)* that WAIC systems operating inside an aircraft receive the benefits of fuselage attenuation to facilitate sharing with other services;

*h)* that Recommendation ITU‑R M.2067 provides technical characteristics and operational objectives for WAIC systems,

recognizing

that Annex 10 to the Convention on International Civil Aviation contains Standards and Recommended Practices (SARPs) for safety aeronautical radionavigation and radiocommunication systems used by international civil aviation,

resolves

1 that WAIC is defined as radiocommunication between two or more aircraft stations located on a single aircraft, supporting the safe operation of the aircraft;

2 that the WAIC systems operating in the frequency band 4 200-4 400 MHz shall not cause harmful interference to, nor claim protection from systems of the aeronautical radionavigation service operating in this frequency band;

3 that the WAIC systems operating in the frequency band 4 200-4 400 MHz shall comply with Standards and Recommended Practices published in Annex 10 to the Convention on International Civil Aviation;

4 that No. **43.1** shall not apply for WAIC systems,

instructs the Secretary-General

to bring this Resolution to the attention of ICAO,

invites ICAO

to take into account Recommendation ITU-R M.[WAIC-CONDITIONS] in the course of development of SARPs for WAIC systems.

**Reasons:** This Resolution provides relevant regulatory provisions to satisfy the agenda item.