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| **World Radiocommunication Conference (WRC-19) Sharm el-Sheikh, Egypt, 28 October – 22 November 2019** |  |
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| PLENARY MEETING | **Addendum 6 to Document 24(Add.24)-E** |
|  | **20 September 2019** |
|  | **Original: English** |
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| Asia-Pacific Telecommunity Common Proposals | |
| Proposals for the work of the conference | |
|  | |
| Agenda item 10 | |

10 to recommend to the Council items for inclusion in the agenda for the next WRC, and to give its views on the preliminary agenda for the subsequent conference and on possible agenda items for future conferences, in accordance with Article 7 of the Convention.

Introduction

APT Members support the inclusion of the following item in the agenda of WRC-23:

– to consider an AMS(R)S allocation for both the uplink and downlink of aeronautical VHF applications in the frequency band 117.975-137 MHz, while ensuring that any harmful interference is not caused or any additional constraints are not placed on incumbent services in the same and adjacent bands, especially the AM(R)S (117.975-137 MHz) and the ARNS (108-117.975 MHz).

Proposals

ADD ACP/24A24A6/1

Draft New Resolution [ACP-A10-WRC23] (WRC-19)

Agenda for the 2023 World Radiocommunication Conference

The World Radiocommunication Conference (Sharm el-Sheikh, 2019),

…

1.x to consider an aeronautical mobile-satellite (R) service (AMS(R)S) allocation in accordance with Resolution **[ACP-F10-SPACE BASED VHF]** **(WRC-19)** for both the uplink and downlink of aeronautical VHF applications in the frequency band 117.975-137 MHz, while ensuring that any harmful interference is not caused or any additional constraints are not placed on incumbent services in the same and adjacent bands, especially the aeronautical mobile (R) service (AM(R)S) (117.975-137 MHz) and the aeronautical radionavigation service (ARNS) (108-117.975 MHz);

…

**Reasons:** Proposal for a new WRC-23 agenda item to consider an AMS(R)S allocation for both uplink and downlink in the frequency band 117.975-137 MHz.

ADD ACP/24A24A6/2

Draft New Resolution [ACP-F10-SPACE BASED VHF] (WRC-19)

Space-based Very High Frequency (VHF) applications in the frequency band 117.975-137 MHz

The World Radiocommunication Conference (Sharm el-Sheikh, 2019),

considering

*a)* that space-based aeronautical VHF voice service will enable Direct Controller-Pilot Communication (DCPC) in airspace where it is geographically remote or cost-prohibitive to provide and maintain terrestrial VHF voice services;

*b)* that when used in combination with global flight tracking systems, the space-based aeronautical VHF technology can be used to support radar-like separation minima and has the potential to improve airspace capacity and efficiency, particularly for remote and oceanic airspace;

*c)* that the technology could also be helpful as a contingency communication infrastructure for airspace impacted by natural disasters, such as flooding and earthquake;

*d)* that the frequency band for satellite reception of aircraft surveillance and position information has been allocated at WRC-15 to enable global flight tracking services;

*e)* currently, the aeronautical mobile (R) service (AM(R)S) VHF frequency band (117.975-137 MHz) is used by air traffic communication and airline operational communication in terrestrial airspace, VHF channels became saturated in some air traffic congested areas of the world,

recognizing

that the VHF band of interest is allocated in the Radio Regulations for aeronautical applications,

noting

*a)* that the aeronautical VHF band is the main radio communications band utilized by aircraft and air traffic control centres for air-ground voice communications during en-route, approach and landing;

*b)* that there are Standards and Recommended Practices (SARPs) developed by ICAO detailing frequency assignment planning criteria for VHF air-ground communication systems,

resolves to invite ITU‑R

1 to conduct, in time for WRC-23, any necessary sharing studies for incumbent systems operating in the same and adjacent frequency bands, with the objective of determining any necessary regulatory protection that can be provided while not placing any undue constraints on existing incumbent services;

2 to develop ITU‑R recommendations and reports, as appropriate, taking into account *resolves to invite ITU‑R* 1 above,

further resolves to invite WRC‑23

while taking into account the results of the above studies and without placing additional constraints on incumbent services, to consider regulatory provisions necessary, as appropriate.

**Reasons:** Please refer to the following table.

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| ***Subject:*** Proposal of WRC-19 agenda item 10 to consider the identification ofVHFfrequency bands forspace-based aeronautical applications in WRC-23 | |
| ***Origin:*** Asia-Pacific Telecommunity (APT) | |
| ***Proposal:***  To consider an AMS(R)S allocation for both the uplink and downlink of aeronautical VHF applications in the frequency band 117.975-137 MHz, while ensuring that any harmful interference is not caused or any additional constraints are not placed on incumbent services in the same and adjacent bands, especially the AM(R)S (117.975-137 MHz) and the ARNS (108‑117.975 MHz). The frequency assignment coordination will be performed by ICAO as per current practice. | |
| ***Background/reason:***  Space-based aeronautical VHF Voice service will enable Direct Controller Pilot Communication (“DCPC”) in airspace where it is geographically remote or cost-prohibitive to provide and maintain terrestrial VHF voice services. When used in combination with air traffic service surveillance systems, the technology can be used to support radar-like separation minima and has the potential to improve airspace capacity and efficiency, particularly for remote and oceanic airspace. The technology can also be helpful as a contingency communication infrastructure for airspace impacted by natural disasters, such as flooding and earthquake.  The frequency band 117.975 MHz-137 MHz is allocated for Aeronautical Mobile (R) Service. For VHF transceivers to both transmit and receive aeronautical communications onboard satellites, an AMS(R)S allocation will be required in some or all of the frequency band. | |
| ***Radiocommunication Services concerned:***  Aeronautical Mobile (R) Service, Aeronautical Mobile (OR) Service, Aeronautical Radionavigation Services (ARNS), Maritime Mobile service and other services. | |
| ***Indication of possible difficulties:***  Sharing studies with existing AM(R)S, ARNS and other services in the adjacent bands | |
| ***Previous/ongoing studies on the issue:***  Not Applicable | |
| ***Studies to be carried out by:***  ITU-R Working Party | ***with participation of:***  Administrations, ITU-R Sector members, ICAO and Aviation Authorities |
| ***ITU-R Study Groups concerned:***  ITU-R SG 4 and 5 | |
| ***ITU resource implications, including financial implications (refer to CV 126):***  This proposed agenda item will be studied as part of the regular ITU-R procedures and planned budget. | |
| ***Common regional proposal:***  [Yes] | ***Multicountry Proposal:*** [No]  ***Number of countries:*** |
| ***Remarks*** | |

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