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| U.S. Radiocommunications Sector  Fact Sheet | | |
| **Working Party:** ITU-R WP 5C | **Document No:** USWP5C-01-FAA/AFSMO | |
| **Ref:** WRC-27 AI 1.7 | **Date:** March 6, 2024 | |
| **Document Title:** Proposed draft liaison statement to Working Party 5D | | |
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| **Purpose/Objective:** This contribution proposes a draft liaison statement to WP 5D regarding AI 1.7, which will allow WP 5D to proceed with its planning for sharing and compatibility studies. | | |
| **Abstract:** Pursuant to Resolution **256 (WRC-23)**, in preparation for Agenda Item 1.7 (**WRC-27**), this contribution proposes a draft reply liaison statement to WP 5D with relevant technical information of systems operating in the FS frequency bands 4 400-4 800, 7 125-8 400 MHz and 14.8-15.35 GHz. | | |

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| **Radiocommunication Study Groups** |  |
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| United States of America | |
| proposed draft reply liaison statement to Working party 5D  **Relevant technical information for sharing studies under WRC-27 Agenda Item 1.7** | |
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**Introduction**

WRC-27 Agenda Item 1.7 considers studies on sharing and compatibility and develop technical conditions for the use of International Mobile Telecommunications (IMT) in the frequency bands 4 400-4 800 MHz, 7 125-8 400 MHz (or parts thereof), and 14.8-15.35 GHz taking into account existing primary services operating in these, and adjacent, frequency bands, in accordance with Resolution **256 (WRC-23)**. This contribution proposes a draft reply liaison statement to WP 5D with relevant technical information of fixed systems operating in the fixed service frequency bands 4 400-4 800 MHz, 7 125-8 400 MHz and 14.8-15.35 GHz.

Attachment: 1

ATTACHMENT

# Working Party 5C

PROPOSAL DRAFT REPLY LIAISON STATEMENT TO WORKING PARTY 5D

**Fixed service characteristics for use in sharing  
 studies under WRC-27 agenda item 1.7**

Working Party (WP) 5C thanks WP 5D for its liaison statement (Document 5C/5), requesting the characteristics and protection criteria of the fixed service (FS) systems operating in the frequency bands, 4 400-4 800 MHz, 7 125-8 400 MHz, and 14.8-15.35 GHz, for sharing/compatibility studies between the FS and international mobile telecommunications (IMT) under WRC-27 agenda item 1.7.

In response to a request from WP 5D for FS characteristics, WP 5C highlights the following ITU-R recommendations and revised recommendations that provide relevant technical information about FS systems, which may be further revised:

**Recommendation ITU-R F.758-7** System parameters and considerations in the development of criteria for sharing or compatibility between digital fixed wireless systems in the fixed service and systems in other services and other sources of interference (11/2019)

**Document 5C/384 Annex 7** Preliminary Draft Revision of Recommendation (PDRR) ITU-R F.758-7 where technical characteristics of FS systems in Tables 6 to 11 are updated/added. Amendments were made throughout the document to improve the clarity of the text.

This recommendation and its proposed revision contain the principles for the development of sharing criteria of digital systems in the FS. Representative technical characteristics of digital fixed wireless systems (FWS) are in Annex 2 Table 8 for 4 400-4 800 MHz band, Table 9 for 7 125-8 400 MHz band, and Table 10 for 14.8-15.35 MHz band of the document 5C/384 Annex 7. Table 5 of Annex 2 provides guidance in the choice of I/N values for long-term sharing criteria/interference.

**Recommendation ITU-R F.699-8** Reference radiation patterns for fixed wireless system antennas for use in coordination studies and interference assessment in the frequency range from 100 MHz to 86 GHz (01/2018)

**Document 5C/384 Annex 2** Preliminary Draft Revision of Recommendation (PDRR) ITU-R F.699-8 provides updated antenna patterns and extends the upper frequency from 86 to 174.8 GHz.

This recommendation and its proposed revision provide reference radiation patterns for, and information on, FWS antennas in the frequency range from 100 MHz to 174.8 GHz. This information may be used in coordination studies and interference assessments when particular information concerning the FWS antenna is not available. It is proposed that FWS antenna patterns in PDRR ITU-R F.699 are used in sharing studies under this agenda item.

WP 5C requests to be kept informed on the progress of the studies under WRC-27 agenda item 1.7 and will provide to WP 5D updated relevant information, before the 31 December 2024 deadline, for studies under this WRC-27 agenda item.

Status: For information and action, as appropriate

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