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| U.S. Radiocommunications Sector  Fact Sheet | | |
| **Working Party:** ITU-R WP 5C | **Document No:** USWP5C-01-final-draft | |
| **Ref:** WRC-27 AI 1.7 | **Date:** March 18, 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 fixed systems operating in-bands or adjacent bands, as appropriate, to the proposed frequency bands under WRC-27 AI 1.7. | | |

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| **Radiocommunication Study Groups** |  |
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| **English only** |
| 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-bands or adjacent bands, as appropriate, to the proposed frequency bands under WRC-27 AI 1.7.

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-bands or adjacent bands, as appropriate, to the proposed frequency bands 4 400-4 800 MHz, 7 125-8 400 MHz (or parts thereof), 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. WP5C requests WP5D take into account the FS use in the following frequency bands during the course of the agenda item 1.7 studies: 4 400-4 800 MHz, 7 125-8 400 MHz, and 14.8-15.35 GHz.

In response to a request from WP 5D for FS characteristics, WP 5C highlights the following ITU-R 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)

This recommendation contains the principles for the development of sharing criteria of digital systems in the FS. Relevant representative technical characteristics of digital fixed wireless systems (FWS) are in Annex 2 Tables 7, 8, and 9. Table 5 of Annex 2 provides guidance in the choice of I/N values for long-term sharing criteria/interference.

WP 5C is currently revising Recommendation ITU-R F.758-7 with additional FS parameters operating in the 14.8-15.35 GHz band (see Table 10 of document 5C/384 Annex 7). WP 5C will keep WP 5D informed on further relevant updated information before the 31 December 2024 deadline.

**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)

This recommendation provides reference radiation patterns for, and information on, FWS antennas in the frequency range from 100 MHz to 86 GHz. This information may be used in single-entry analyses and interference assessments when information concerning the FWS antenna is not available.

WP 5C is currently revising Recommendation ITU-R F.699. WP 5C will keep WP 5D informed on relevant updated information before the 31 December 2024 deadline.

**Recommendation ITU-R F.1245-3** Mathematical model of average and related radiation patterns for point-to-point fixed wireless system antennas for use in interference assessment in the frequency range from 1 GHz to 86 GHz (01/2019)

This recommendation provides average sidelobes and related reference radiation patterns for point-to-point FWS antennas in the frequency range from 1 GHz to 86 GHz. This information may be used for aggregate coordination and interference assessments when information concerning the FWS antenna is not available.

[Note: Placeholder for FS deployment information which should be developed in WP5C, possibly using F.2086.]

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 action.

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