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| U.S. Radiocommunications Sector  Fact Sheet | | |
| **Working Party:** ITU-R WP 5C | **Document No:** USWP5C-03-NC | |
| **Ref:** WRC-27 AI 1.15 | **Date:** April 2, 2024 | |
| **Document Title:** Proposed draft liaison statement to Working Party 7B | | |
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| **Purpose/Objective:** This contribution proposes a draft liaison statement to WP 7B regarding AI 1.15, which will allow WP 7B to proceed with its planning for sharing and compatibility studies. | | |
| **Abstract:** Pursuant to Resolution **680 (WRC-23)**, in preparation for Agenda Item 1.15 (**WRC-27**), this contribution proposes a draft reply liaison statement to WP 7B with relevant technical information of fixed systems operating in-bands or adjacent bands, as appropriate, to the proposed frequency bands under WRC-27 AI 1.15. | | |

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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 7B  **Relevant technical information for sharing studies under WRC-27 Agenda Item 1.15** | |
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**Introduction**

WRC-27 Agenda Item 1.15 considers possible new or modified space research service (space-to-space) allocations, for future development of communications on the lunar surface and between lunar orbit and the lunar surface, in accordance with Resolution **680 (WRC 23)**. This contribution proposes a draft reply liaison statement to WP 7B with relevant technical information of fixed systems operating in-bands or adjacent bands, as appropriate, to the proposed frequency bands under WRC-27 AI 1.15.

Attachment: 1

ATTACHMENT

# Working Party 5C

PROPOSAL DRAFT REPLY LIAISON STATEMENT TO WORKING PARTY 7B

**Fixed service characteristics for use in sharing  
 studies under WRC-27 agenda item 1.15**

Working Party (WP) 5C thanks WP 7B for its liaison statement (Document 5C/27), 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 under WRC-27 AI 1.15, for sharing/compatibility studies between the FS and space research service (space-to-space).

WP5C notes that there are Fixed Service allocations in the following bands which should be taken into account in the sharing and compatibility studies performed by WP7B: 390 – 399.9 MHz, 401 – 406 MHz, 420 – 430 MHz, 440 – 450 MHz, 2400 – 2690 MHz, 3500 – 3800 MHz, 5850 – 5925 MHz, 7190 – 7235 MHz, 8450 – 8500 MHz and 25.25 – 28.35 GHz.

In response to a request from WP 7B for FS characteristics, WP 5C highlights the following ITU-R recommendations and report 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. Representative technical characteristics of digital fixed wireless systems (FWS) for FS allocations listed above are in Annex 2 Tables 6-9. 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. WP 5C will keep WP 7B informed on relevant updated information before the 31 December 2024 deadline.

**Report ITU-R F.2108** Fixed service system parameters for different frequency bands.

This report contains additional FS system parameters for FS below 2.7 GHz (see Tables 1-6 for digital P-P FS systems and Tables 7-8 for digital P-MP FS systems).

**Report ITU-R F.2439-0** Deployment and technical characteristics of broadband high altitude platform stations in the fixed service in the frequency bands 6 440-6 520 MHz, 21.4-22.0 GHz, 24.25-27.5 GHz, 27.9-28.2 GHz, 31.0-31.3 GHz, 38.0-39.5 GHz, 47.2-47.5 GHz and 47.9-48.2 GHz used in sharing and compatibility studies.

**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 7B informed on relevant updated information before the 31 December 2024 deadline.

**Recommendation ITU-R F.1336-5**  Reference radiation patterns of omnidirectional, sectoral and other antennas for the fixed and mobile service for use in sharing studies in the frequency range from 400 MHz to about 70 GHz (01/2019)

This Recommendation gives reference models of antennas used in the FS and in the mobile service. It gives peak and average sidelobes of omnidirectional and sectoral antennas in the frequency range 400 MHz to about 70 GHz, as well as of low gain directional antennas in the frequency range 1 GHz to about 3 GHz, to be used in sharing studies in the relevant frequency range.

WP 5C requests to be kept informed on the progress of the studies under WRC-27 agenda item 1.15 and will provide to WP 7B updated relevant information, before the 31 December 2024 deadline, for studies under this WRC-27 agenda item.

Status: For action.

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