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| U.S. Radiocommunications Sector  Fact Sheet | | |
| **Working Party:** ITU-R WP 5B | **Document No:** USWP5B32-05-NC | |
| **Ref:** WRC-27 AI 1.15 | **Date:** March 25, 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 to assist WP 7B 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 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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| Source: None  Subject: WRC-27 Agenda Item 1.15 | **Document 5B/** |
| **14 May 2024** |
| **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 systems operating in-bands and adjacent bands, as appropriate, to the proposed frequency bands under WRC-27 AI 1.15.

Attachment: 1

ATTACHMENT

# Working Party 5B

PROPOSAL DRAFT REPLY LIAISON STATEMENT TO WORKING PARTY 7B

**Relevant technical information for sharing studies under WRC-27 Agenda Item 1.15**

Working Party (WP) 5B thanks WP 7B for its liaison statement (Document 5B/23), requesting the characteristics and protection criteria of the systems operating in-bands and adjacent bands, as appropriate, to the proposed frequency bands under WRC-27 AI 1.15, for sharing/compatibility studies.

WP 5B notes that the frequency bands 5 150-5 250 MHz and 5 350-5 460 MHz are allocated to the primary aeronautical radionavigation service (ARNS) and the frequency band 5 250-5 850 MHz is allocated to the primary radiolocation service. The near adjacent frequency band 2 700-2 900 MHz is allocated to the primary ARNS.

WP 5B highlights the following ITU-R Recommendations that provide relevant technical information of systems operating in the frequency bands 5 150-5 850 MHz and 2 700-2 900 MHz, respectively:

**Recommendation ITU-R M.1638-1** Characteristics of and protection criteria for sharing studies for radiolocation (except ground based meteorological radars) and aeronautical radionavigation radars operating in the frequency bands between 5 250 and 5 850 MHz (01/2015)

Representative technical characteristics of radars are in Annex 1 Table 2 for radiolocation radars with radar 16 for ARNS airborne weather radar. Annex 1 section 3.1 has a description of the operational characteristics of ARNS radars. Annex 1 section 4 provides the I/N protection criteria for radiolocation radars and ARNS radars.

**Recommendation ITU-R M.1464-2** Characteristics of non-meteorological radiolocation radars, and characteristics and protection criteria for sharing studies for aeronautical radionavigation and radars in the radiodetermination service operating in the frequency band 2 700-2 900 MHz (02/2015)

Representative technical characteristics of RDS radars and ARNS radars in 2 700-2 900 MHz are in Annex 1 Table 1. Operational characteristics of ARNS radars are in Annex 1 section 4.1. The I/N protection criteria of RDS and ARNS radars can be found in Annex 2.

**Recommendation ITU-R M.1465-4** Characteristics of and protection criteria for radars operating in the radiodetermination service in the frequency range 3 100-3 700 MHz

**Recommendation ITU-R M.1849-3 Technical and operational aspects of ground-based meteorological radars (02/2023)**

**Recommendation ITU-R M.2007-0 Characteristics of and protection criteria for radars operating in the aeronautical radionavigation service in the frequency band 5 150-5 250 MHz (03/2012)**

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

Status: For action

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