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| U.S. Radiocommunication SectorFact Sheet |
| **Working Party:** ITU-R WP 7D | **Document No:** 24USWP7D\_03\_NC |
| **Ref:**  | **Date:** January 29, 2024 |
| **Document Title:** Draft Liaison Statement to Working Parties 3J and 3M (Copied to 1B, 4A, 4C, 5A, 5B, and 5D for information): Agenda Item 1.16 |
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| **Purpose/Objective:** To liaise with ITU-R Working Parties 3J and 3M regarding propagation factors relevant to Agenda Item 1.16 |
| **Abstract:** The outcome of CPM 27-1 indicates Working Parties (WP) 3J and 3M are among the contributing groups for agenda item 1.16, and this liaison statement is intended to request information relevant to the studies under this agenda item. |
| **Fact Sheet Preparer:** J. Williams |

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| **Radiocommunication Study Groups** |  |
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| Received:  | **Document 7D/USA-E** |
| **XX March 2024** |
| **English only** |
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| United States of America |
| DRAFT liaison statement to Working parties 3J and 3M (Copied to 1B, 4A, 4C, 5A, 5B, and 5D for information) on wrc-27 Agenda item 1.16 |
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**Introduction**

CPM 27-1 identified Working Parties (WP) 3J and 3M as among the contributing groups for WRC-27 agenda item 1.16. The attached draft liaison statement is proposed to request propagation considerations relevant to these studies regarding the frequency bands and other inquires and studies detailed in Resolution **COM6/11 (WRC-23)**.

**Attachment**

ATTACHMENT

Working Party 7D

LIAISON STATEMENT TO WORKING PARTIES 3J and 3M (Copied to 1B, 4A, 4C, 5A, 5B, and 5D for information)

WRC-27 Agenda Item 1.16

Working Party (WP) 7D was identified as the responsible group for WRC-27 agenda item 1.16: “to consider studies on the technical and regulatory provisions necessary to protect radio astronomy operating in specific Radio Quiet Zones and, in frequency bands allocated to the radio astronomy service on a primary basis globally, from aggregate radio-frequency interference caused by non-geostationary orbit (non-GSO) satellite systems, in accordance with Resolution **681 (WRC‑23)**”.

Resolution **681 (WRC-23)** calls for studies of impacts to radio astronomy service (RAS) systems as follows:

1 studies on how the interference from unwanted emissions from a single non-GSO satellite system operating in the adjacent and nearby frequency bands in Table 1 affects the operation of RAS stations in frequency bands allocated to the RAS on a primary basis in Table 1;

2 studies on how the aggregate interference from unwanted emissions from multiple non-GSO satellite systems operating in the adjacent and nearby frequency bands in Table 1 affect the operation of RAS stations in frequency bands allocated to the RAS on a primary basis in Table 1;

where Table 1 from Resolution **681 (WRC-23)** detailing relevant RAS frequency bands and adjacent and nearby frequency bands is the following:

| Radio astronomy frequency band | Active space service operating in adjacent or nearby frequency band | Active space service (space-to-Earth) | Scope |
| --- | --- | --- | --- |
| 10.6-10.7 GHz | 10.7-10.95 GHz | FSS | *Resolves* *etc.* 1 and 2 |
| 42.5-43.5 GHz | 42-42.5 GHz | FSS | *Resolves* *etc.* 2 |
| 76-77.5 GHz | 74-76 GHz | FSS, MSS | *Resolves* *etc.* 2 |
| 94.1-95 GHz | 95-100 GHz | RNSS, MSS | *Resolves* *etc.* 2 |
| 100-102 GHz | 95-100 GHz | RNSS, MSS | *Resolves* *etc.* 1 and 2 |
| 114.25-116 GHz | 116-119.98 GHz | ISS | *Resolves* *etc.* 1 and 2 |
| 130-134 GHz | 123-130 GHz | FSS, MSS, RNSS | *Resolves* *etc.* 2 |

As the responsible group for WRC-27 Agenda Item 1.16, WP 7D invites WP 3J and WP 3M to provide propagation references and information relevant to the conduct of these studies.

WP 7D also notes that Resolution **681 (WRC-23)** calls for studies of methods to calculate separation distances between gateways of non-GSO systems and RAS systems operating in the facilities defined in *considering k)* of Resolution **681 (WRC-23)** where such operation is adjacent to or nearby RAS allocations and invites WP 3J and WP 3M to provide relevant propagation references and considerations toward development of these methods.

**Deadline**: 21 December 2024

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| **Status:** Working Parties 3J and 3M , for actionWorking Parties 1B, 4A, 4C, 5A, 5B, and 5D, for information |  |
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