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| A close up of a sign  Description automatically generated | **World Radiocommunication Conference (WRC-23)Dubai, 20 November - 15 December 2023** |  |
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| PLENARY MEETING | **Document 112-E** |
|  | **27 October 2023** |
|  | **Original: English** |
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| Angola (Republic of)/Botswana (Republic of)/Burundi (Republic of)/Cameroon (Republic of)/Central African Republic/Comoros (Union of the)/Congo (Republic of the)/Eswatini (Kingdom of)/Gabonese Republic/Equatorial Guinea (Republic of)/Lesotho (Kingdom of)/Madagascar (Republic of)/Malawi/Mozambique (Republic of)/Namibia (Republic of)/Democratic Republic of the Congo/Rwanda (Republic of)/Sao Tome and Principe (Democratic Republic of)/South Africa (Republic of)/Tanzania (United Republic of)/Chad (Republic of)/Zimbabwe (Republic of) |
| Proposals for the work of the conference |
|  |
| Agenda item 7(B) |

7 to consider possible changes, in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, on advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks, in accordance with Resolution **86** **(Rev.WRC‑07)**, in order to facilitate the rational, efficient and economical use of radio frequencies and any associated orbits, including the geostationary-satellite orbit;

7(B) Topic B - Non-GSO bringing into use post-milestone procedure

Introduction

The signatories to this document have considered WRC-23 agenda item 7, Topic B, and have developed proposals in support of Method B2 (Option b) Alternative 4 to satisfy this agenda item. Furthermore, the signatories to this document are in support of the following:

• The adoption of a new Resolution to replace *resolves* 19 of Resolution **35** **(WRC-19)** at WRC-23, suppressing *resolves* 19 of Resolution **35** **(WRC‑19)** and leaving the rest of the Resolution **35** **(WRC-19)** as is otherwise.

• The development of the post-milestone procedures for non-GSO satellite systems in FSS, BSS and MSS subject to Resolution **35 (WRC-19)**.

• The consideration of the operational characteristics of non-GSO satellite systems with a small number of satellites.

ARTICLE 11

Notification and recording of frequency
assignments1, 2, 3, 4, 5, 6, 7    (WRC‑19)

Section III – Maintenance of the recording of frequency assignments to non-geostationary-satellite systems in the Master Register     (WRC‑19)

MOD AGL/BOT/BDI/CME/CAF/COM/COG/SWZ/GAB/GNE/LSO/MDG/MWI/MOZ/NMB/COD/RRW/STP/AFS/TZA/TCD/ZWE/112/1#1994

11.51 For frequency assignments to some non-geostationary-satellite systems in specific frequency bands and services, Resolution**35** **(Rev.WRC‑23)** andResolution **[A7(B)] (WRC‑23)** shall apply.     (WRC‑23)

MOD AGL/BOT/BDI/CME/CAF/COM/COG/SWZ/GAB/GNE/LSO/MDG/MWI/MOZ/NMB/COD/RRW/STP/AFS/TZA/TCD/ZWE/112/2#1993

RESOLUTION 35 (REV.WRC‑23)

A milestone-based approach for the implementation of frequency assignments
to space stations in a non-geostationary-satellite system
in specific frequency bands and services[[1]](#footnote-1)1

The World Radiocommunication Conference (Dubai, 2023),

…

resolves

…

18 that the suspension of the use of frequency assignments in accordance with No. **11.49** at any point prior to the end of a milestone period as specified in *resolves* 7*a)*, *b)* or *c)* or 8*a)*, *b)* or *c)* of this Resolution, as applicable, shall not alter or reduce the requirements associated with any of the remaining milestones as derived from *resolves* 7*a)*, *b)* or *c)* or 8*a)*, *b)* or *c)*, as appropriate,

ADD AGL/BOT/BDI/CME/CAF/COM/COG/SWZ/GAB/GNE/LSO/MDG/MWI/MOZ/NMB/COD/RRW/STP/AFS/TZA/TCD/ZWE/112/3#1995

draft new RESOLUTION [A7(B)] (WRC‑23)

Enhanced suspension procedure for frequency assignments to space stations in a non-geostationary-satellite system in the fixed-satellite, mobile-satellite and broadcasting-satellite services subject to Resolution 35 (Rev.WRC‑23)

The World Radiocommunication Conference (Dubai, 2023),

considering

*a)* that one of the main motivations for developing Resolution **35 (WRC‑19)** was to find a way to ensure that the content of the Master International Frequency Register (MIFR) for non-geostationary orbit (non-GSO) systems closely aligns with what is actually deployed in space;

*b)* that any regulatory mechanism for the post-milestone procedure to non-GSO systems should not impose an unnecessary burden on the administrations and the Radiocommunication Bureau,

recognizing

*a)* that Resolution **35** **(Rev.WRC‑23)** applies to frequency assignments to non-GSO systems brought into use in accordance with Nos. **11.44** and **11.44C**, in the frequency bands and for the services listed in its *resolves* 1;

*b)* thatthe magnitude of the typical variation of the number of satellites deployed and capable of transmitting or receiving the recorded frequency assignments needs to be carefully considered to avoid a requirement to report variations that have inconsiderable consequence, as is the case for very small constellations,

resolves

1 that this Resolution applies to non-GSO satellite systems with space stations with an apogee altitude lower than 15 000 km having completed the milestone period for those subject to Resolution **35 (Rev.WRC‑23)** withat least one satellite deployed on a notified orbital plane and capable of transmitting or receiving according to the recorded frequency assignments;

2 that the notifying administration shall inform the Radiocommunication Bureau of the date of commencement of any continuous period exceeding 6 months during which the number of satellites deployed on notified orbital planes (as that term is used in Resolution **35 (Rev.WRC‑23)**) and capable of transmitting or receiving the recorded frequency assignments is below [*Option B2a:* 95/P% or *Option B2b:* X] (rounded down to the lower integer) of the total number of satellites indicated in the Master Register entry minus one satellite;

Alternative 1

 For 3 ≤ *N* < 50 *X*= *N* \* 70% – 1 satellite

 For *N* ≥ 50 *X*= *N* \* 95% – 1 satellite,

Alternative 2

 For *N* < 550 *X* = *N* \* 90% – 1 satellite

 For 550 ≤ *N* < 5 000 *X* = N \* 93% – 1 satellite

 For *N* ≥ 5 000 *X* = N \* 95% – 1 satellite,

Alternative 3

 For *N* < 100 *X* = *N* \* 50% – 1 satellite

 For 100 ≤ *N* < 1 000 *X* = *N* \* 65% – 1 satellite

 For 1 000 ≤ *N* < 5 000 *X* = *N* \* 85% – 1 satellite

 For *N* ≥ 5 000 *X* = *N* \* 95% – 1 satellite,

Alternative 4

 For 2 ≤ *N* < 50 *X* = *N* \* 50%

 For 50 ≤ *N* < 100 *X* = *N* \* 65%

 For 100 ≤ *N* < 550 *X* = *N* \* 80%

 For 550 ≤ *N* < 5 000 *X* = *N* \* 93%

 For *N* ≥ 5 000 *X* = *N* \* 95%,

3 that, upon receipt of the information submitted under *resolves* 2, the Bureau shall promptly make it available on the ITU website;

4 that the notifying administrations shall inform the Bureau as soon as possible when the number of satellites deployed on notified orbital planes and capable of transmitting or receiving the recorded assignments has reached again [*Option B2a:* 95/P% or *Option B2b:* X] (rounded down to the lower integer) of the total number of satellites indicated in the Master Register minus one satellite;

5 that, in any case, the date at which the number of satellites deployed on notified orbital planes and capable of transmitting or receiving the recorded assignments reaches again [*Option B2a:* 95/P% or *Option B2b:* X] (rounded down to the lower integer) of the total number of satellites indicated in the Master Register minus one satellite shall not be later than three years from the date of commencement of the continuous period referred to in *resolves* 2 provided that the notifying administration informs the Bureau pursuant to *resolves*2within 6 months of the start of that continuous period;

6 that, if the notifying administration informs the Bureau under *resolves*2 more than 6 months after the date of commencement of the continuous period referred to in *resolves* 2, the number of years referred to in *resolves* 5 shall be reduced by the amount of time that has elapsed between the end of the 6‑month period and the date at which the Bureau is informed under *resolves*2;

7 that, if the notifying administration informs the Bureau more than 21 months after the date of commencement of the continuous period referred to in *resolves*2, the notifying administration shall submit to BR, within 90 days:

*a)* the number of satellites capable of transmitting or receiving the frequency assignments actually deployed in that system, and

*b)* the modifications to the characteristics of the notified or recorded frequency assignments to reduce the total number of satellites indicated in the Master Register to a number of satellites not exceeding (1 + (1 – [*Option B2a:* 95/P% or *Option B2b:* X])) times the number of satellites indicated in *resolves*7*a)* (rounded down to the lower integer);

8 that, ninety days before the end of the period referred to in *resolves* 5 or 6, as appropriate, the Bureau shall send a reminder to the notifying administration;

9 that the notifying administration shall submit to BR, no later than 30 days after the end of the period referred to in *resolves* 5 or 6, as appropriate, the number of satellites capable of transmitting or receiving the frequency assignments actually deployed in that system;

10 that, if the number of satellites indicated in *resolves*9 still falls below [*Option B2a:* 95/P% or *Option B2b:* X] (rounded down to the lower integer) of the total number of satellites indicated in the Master Register entry minus one satellite, the notifying administration shall submit to BR, no later than 90 days after the end of the period referred to in *resolves* 5 or 6, as appropriate, the modifications to the characteristics of the notified or recorded frequency assignments to reduce the total number of satellites indicated in the Master Register to a number of satellites not exceeding [1 + (1 – [*Option B2a:* 95/P% or *Option B2b:* X])] times the number of satellites indicated in *resolves*9 (rounded down to the lower integer);

11 that, upon receipt of the modifications to the characteristics of the notified or recorded frequency assignments as referred to in *resolves* 7 or 9, as appropriate:

*a)* BR shall promptly make this information available “as received” on the ITU website;

*b)* BR shall conduct an examination for compliance with Nos. **11.43A**/**11.43B**, as appropriate;

*c)* BR, for the purpose of No. **11.43B**, shall retain the original dates of entry of the frequency assignments in the Master Register if:

i) BR reaches a favourable finding under No**. 11.31**; and

ii) the modifications are limited to a reduction of the number of orbital planes (Appendix **4** data item A.4.b.1) and modifications to the right ascension of the ascending node of each plane (Appendix **4** data item A.4.b.5.a/A.4.b.4.g), the longitude of the ascending node (Appendix **4** data item A.4.b.6.g) and its date and time (Appendix **4** data items A.4.b.6.h and A.4.b.6.i.a) associated with the remaining orbital planes, or reduction of the number of space stations per plane (Appendix **4** data item A.4.b.4.b) and modifications of the initial phase angle of the space stations (Appendix **4** data item A.4.b.5.b/h) within planes; and

iii) the notifying administration provides a commitment stating that the characteristics as modified will not cause more interference or require more protection than the characteristics provided in the latest notification information published in Part I‑S of the BR IFIC for the frequency assignments (see Appendix **4** data item A.23.a);

*d)* BR shall publish the information provided and its findings in the BR IFIC;

12 that, if a notifying administration fails to communicate the information required under *resolves* 7 or 9, as appropriate, the BR shall promptly send to the notifying administration a reminder asking the administration to provide the required information within 30 days from the date of this reminder from BR;

13 that, if a notifying administration fails to provide information after the reminder sent under *resolves* 12, the BR shall send to the notifying administration a second reminder asking it to provide the required information within 15 days from the date of the second reminder;

14 that, if a notifying administration fails to provide the required information under *resolves*7 or 9, as appropriate, following the reminders under *resolves* 12 and 13, the BR shall no longer consider the frequency assignments under subsequent examinations under Nos. **9.36**, **11.32** or **11.32A**, and inform administrations having frequency assignments subject to Sub-Section IA of Article **9** that those assignments shall not cause harmful interference to, nor claim protection from, other frequency assignments recorded in the Master Register with a favourable finding under No. **11.31**,

instructs the Radiocommunication Bureau

1 to take the necessary actions to implement this Resolution;

2 to report any difficulties encountered in the implementation of this Resolution to WRC‑27;

3 to publish the list of non-GSO satellite systems whose assignments shall not cause harmful interference to, nor claim protection from, other frequency assignments recorded in the Master Register with a favourable finding under No. **11.31** in accordance with *resolves* 14 above.

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1. 1 See also Resolution **[A7(B)] (WRC‑23)**. [↑](#footnote-ref-1)