

**UNITED STATES DEPARTMENT OF COMMERCE**

**National Telecommunications and Information Administration**

Washington, D.C. 20230

Mr. Tom Sullivan

Chief, International Bureau

Federal Communications Commission

445 12th Street, SW

Washington, DC 20554

Dear Mr. Sullivan:

The National Telecommunications and Information Administration (NTIA), on behalf of the Executive Branch agencies, approves the release of the enclosed proposals for the 2019 World Radiocommunication Conference (WRC-19) which address:

1. Agenda Item 1.2– Power Limits for MSS/MetSat/EESS Earth Stations around 400 MHz
2. Agenda Item 1.3– Revision of NTIA proposal on MetSat upgrade / EESS allocation (space-to-Earth) at 460-470 MHz
3. Agenda Item 1.6– Regulatory Framework for non-GSO FSS at 37.5-39.5 GHz (🡫) & 47.2-50.2 GHz (🡩)
4. Agenda Item 1.13 (24.25-27.5 GHz) – International Mobile Telecommunications (IMT) studies between 24.25-86 GHz
5. Agenda Item 1.13 (37-40.5 GHz) – International Mobile Telecommunications (IMT) studies between 24.25-86 GHz
6. Agenda Item 1.13 (47.2-50.2 GHz) – International Mobile Telecommunications (IMT) studies between 24.25-86 GHz
7. Agenda Item 1.13 50.4-52.6 GHz) – International Mobile Telecommunications (IMT) studies between 24.25-86 GHz
8. Agenda Item 1.13 (81-86 GHz) – International Mobile Telecommunications (IMT) studies between 24.25-86 GHz
9. Agenda Item 1.14– High Altitude Platform Systems (HAPS)
10. Agenda Item 4– Resolutions and Recommendations Review
11. Agenda Item 7 (Issue A) – Resolution 86 – Satellite Regulatory Procedures
12. Agenda Item 7 (Issue H) – Resolution 86 – Satellite Regulatory Procedures
13. Agenda Item 7 (Issue I) – Resolution 86 – Satellite Regulatory Procedures
14. Agenda Item 9.1, Issue 9.1.4– Stations on board sub-orbital vehicles
15. Agenda Item 9.1, Issue 9.1.9– FSS (🡩) studies at 51.4-52.4 GHz
16. Agenda Item 10 (RFI Sensors) – Future Conference Agenda Items
17. Agenda Item 10 (Sub-orbital Vehicles) – Future Conference Agenda Items

NTIA considered the federal agencies’ input toward the development of these U.S. proposals for WRC-19. NTIA forwards this package for your consideration and review. If you have any questions, please contact Mr. Charles Glass, our WRC Coordinator, who can be reached at (202) 482-1896 or [cglass@ntia.doc.gov](mailto:cglass@ntia.doc.gov).

Sincerely,

Peter A. Tenhula

Acting Associate Administrator

Office of Spectrum Management

Enclosures (17)

**United States**

PROPOSALS FOR THE WORK OF THE CONFERENCE

# Agenda item 4

**Agenda Item 4:** To review the resolutions and recommendations of previous conferences with a view to their possible revision, replacement or abrogation in accordance with Resolution **95 (Rev.WRC-07).**

**Issue**: To review the resolutions and recommendations in the Radio Regulations and to identify potential modifications or suppressions.

**Background Information**:This is a standing agenda item for every WRC agenda. The purpose of this agenda item is to examine the WRC resolutions and recommendations for editorial corrections as well as suppressions due to completion of work or material superseded by other work. This includes consequential suppression or modification of resolutions associated with WRC-19 agenda items.

Resolution 95 (Rev.WRC-07) resolves to invite future competent world radiocommunication conferences

1. to review the Resolutions and Recommendations of previous conferences that are related to the agenda of the Conference with a view to their possible revision, replacement or abrogation and to take appropriate action;
2. to review the Resolutions and Recommendations of previous conferences that are not related to any agenda item of the Conference with a view to:

* abrogating those Resolutions and Recommendations that have served their purpose or have become no longer necessary;
* reviewing the need for those Resolutions and Recommendations, or parts thereof, requesting ITU-R studies on which no progress has been made during the last two periods between conferences;
* updating and modifying Resolutions and Recommendations, or parts thereof that have become out of date, and to correct obvious omissions, inconsistencies, ambiguities or editorial errors and effect any necessary alignment;

**Proposal**: Draft positions for review of ITU-R Resolutions and Recommendations in the attachment to identify any modifications or suppression required.



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**United States**

PROPOSALS FOR THE WORK OF THE CONFERENCE

# Agenda item 10

**Agenda Item 10** to recommend to the Council items for inclusion in the agenda for the next WRC, and to give its views on the preliminary agenda for the subsequent conference and on possible agenda items for future conferences, in accordance with Article 7 of the Convention.

Background

The 2007 World Radiocommunication Conference (WRC-07) modified Appendix **4** Annex 2 of the Radio Regulations to allow the characteristics of active and passive sensors to be filed in the ITU-R under the provisions of Articles **9** and **11** so they may be recorded in the Master International Frequency Register.

Any frequency assignment recorded in the Master Register with a favourable finding under No. **11.31** shall have the right to international recognition. For such an assignment, this right means that other administrations shall take it into account when making their own assignments, in order to avoid harmful interference. (RR No. **8.3**) Nevertheless, Nos. **5.28** to **5.31** place the conditions imposed on secondary services with regard to causing or claiming protection from harmful interference from other services.

It is noted that passive remote sensors are detecting an increasing number of instances of interference events and the interference is distributed worldwide.

Procedures are contained in Section VI of Article **15** to address the actions to be taken when harmful interference occurs between networks authorized by different Administrations. In particular, No. **15.27** states full particulars relating to harmful interference shall, whenever possible, be given in the form indicated in Appendix **10**. As Appendix **10** was designed with terrestrial radiocommunication services in mind, its applicability related to harmful interference detected by EESS (passive) sensors is very limited. Passive sensors have unique characteristics to detect the particulars of the interference using different parameters from those of stations used for radiocommunication. Administrations have approved Recommendation ITU-R RS.2106-0 which provides data fields which should be used for reporting, detection and resolution of radio frequency interference to Earth exploration-satellite service (passive) sensors.

Proposals

ADD TBD/XXX/1

Draft New Resolution [xxx] (WRC-19)

Agenda for the 2023 World Radiocommunication Conference

The World Radiocommunication Conference (Sharm el-Sheikh, 2019),

...

**X.X1** to consider implementing a mechanism in RR Appendix **10** to improve the reporting and resolution of interference to Earth exploration-satellite service passive sensors in accordance with Resolution **YYY (WRC-19)**.

Reasons: To establish a process suitable for the reporting of cases of harmful interference to Earth exploration-satellite service passive sensors which is not currently available through the existing provisions of the Radio Regulations

ADD TBD/XXX/2

Draft New Resolution [yyy] (WRC-19)

Reporting of harmful interference to passive sensors in the Earth exploration-satellite service

The World Radiocommunication Conference (Sharm el-Sheikh, 2019),

*considering*

*a)* that passive sensors provide information critical to maintaining and improving the accuracy of weather forecasts and climate models, which contribute to the protection of life and preservation of property throughout the world;

*b)* that, in many cases, the frequencies used by Earth exploration-satellite service (passive) sensors are chosen to study natural phenomena producing radio emissions at frequencies determined by the laws of nature, and therefore shifting frequency to avoid or mitigate interference problems is not possible;

*c)* that passive remote sensor operations are impaired by an increasing number of cases of interference,

*recognizing*

*a)* that Section VI of Article **15** of the Radio Regulations describes the procedure for the resolution of cases of harmful interference;

*b)* that data fields to be provided under the procedure of Article **15** shall, whenever possible, be given in the form indicated in RR Appendix **10**;

*c)* that as Appendix **10** was designed with terrestrial services in mind, its applicability related to harmful interference detected by EESS (passive) sensors is very limited,

*further recognizing*

Recommendation ITU-R RS.2106-0 “Detection and resolution of radio frequency interference to Earth exploration-satellite service (passive) sensors” provides a reporting form for recording and reporting the radio frequency interference to Earth exploration-satellite service (passive) sensors,

*noting*

*a)* that under RR No. **4.7** for the purpose of resolving cases of harmful interference, the earth exploration-satellite (passive) service shall be afforded protection from different services in other bands only to the extent that these different services are protected from each other;

*b)* that RR Nos. **5.28** to **5.31** define the conditions imposed on secondary services with regard to causing or claiming protection from harmful interference from other services,

*resolves to invite the 2023 World Radiocommunication Conference*

to take into account the results of ITU-R studies, and consider the possibility of developing processes within Appendix **10** suitable for reporting cases of harmful interference to passive sensors

*invites ITU-R*

to conduct and complete, in time for WRC-23, the necessary technical and regulatory studies,

*invites administrations*

to participate actively in the studies by submitting contributions to ITU-R,

*instructs the Secretary-General*

to bring this Resolution to the attention of the World Meteorological Organization (WMO) and other international and regional organizations concerned.

**Reasons:** A resolution will support the ITU-R studies needed under the relevant WRC-23 agenda item.

SUP TBD/XXX/3

RESOLUTION 810 (WRC‑15)

Preliminary agenda for the 2023 World Radiocommunication Conference

**Reasons:** This Resolution must be suppressed, as WRC-19 will create a new Resolution that will include the agenda for WRC-23.

ATTACHMENT

**PROPOSAL FOR ADDITIONAL AGENDA ITEM TO CONSIDER IMPLEMENTING A MECHANISM IN RR APPENDIX 10 TO IMPROVE THE REPORTING AND RESOLUTION OF INTERFERENCE TO EARTH EXPLORATION-SATELLITE SERVICE PASSIVE SENSORS**

***Subject:*** Proposed future WRC agenda item for WRC-23 to consider the processes for reporting and resolving harmful interference to passive sensors

***Origin:*** [TBD]

***Proposal:***To consider implementing a mechanism in RR Appendix **10** to improve the reporting and resolution of interference to Earth exploration-satellite service passive sensors in accordance with Resolution **YYY (WRC-19)**.

***Background/reason:***

Procedures are contained in Section VI of Article **15** to address the actions to be taken when harmful interference occurs between networks authorized by different Administrations. In particular, RR No. **15.27** states full particulars relating to harmful interference shall, whenever possible, be given in the form indicated in Appendix **10**. As Appendix **10** was designed with terrestrial radiocommunication services in mind, its applicability related to harmful interference detected by EESS (passive) sensors is very limited. Passive sensors have unique characteristics to detect the particulars of the interference using different parameters from those of stations used for radiocommunication. The ITU-R has approved Recommendation ITU-R RS.2106 which provides data fields which should be used for the detection and resolution of radio frequency interference to Earth exploration-satellite service (passive) sensors.

***Radiocommunication services concerned:*** Earth exploration-satellite service, fixed service, mobile service

***Indication of possible difficulties:*** None foreseen

***Previous/ongoing studies on the issue:*** ITU-R WP 7C has already developed Recommendation ITU-R RS.2106-0, Detection and resolution of radio frequency interference to Earth exploration-satellite service (passive) sensors

|  |  |
| --- | --- |
| ***Studies to be carried out by:*** WP 7C | ***with the participation of:*** |

***ITU-R Study Groups concerned:*** SG 1, SG 5

***ITU resource implications, including financial implications (refer to CV126):*** Minimal

***Common regional proposal:*** Yes/No ***Multicountry proposal:*** Yes/No

***Number of countries:***

***Remarks***

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