**Comments of IWG-4 on NTIA Agenda Item 10 Proposal in Doc. IWG-4/056**

**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 modifying 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)**, and without modification to the procedure for cases of harmful interference in Section VI of Article **15** of the Radio Regulations;

Reasons: To establish a form 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 some passive remote sensor operations in some frequency bands 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 under No. **15.27,** full particulars relating to harmful interference shall, whenever possible, be given in the form indicated in Appendix **10** to the Radio Regulations;

*c)* that the applicability of the form in Appendix **10** to harmful interference detected by EESS (passive) sensors is very limited,

*further recognizing*

that 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 ITU-R*

to conduct and complete, in time for WRC-23, ITU-R technical and regulatory studies appropriate to developing a form suitable for reporting cases of harmful interference to passive sensors that can be used in the procedure for the resolution of cases of harmful interference in Section VI of Article **15** of the Radio Regulations, without modification to Article **15**,

*invites the 2023 World Radiocommunication Conference*

to take into account the results of ITU-R studies in *resolves to invite the ITU-R*, and consider the possibility of including within Appendix **10** a form or forms suitable for reporting cases of harmful interference to passive sensors

*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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