QUESTION ITU-R 255/7[[1]](#footnote-1)

Detection and resolution of radio frequency interference to
Earth exploration-satellite service (passive) sensors

(2014)

The ITU Radiocommunication Assembly,

considering

*a)* that Resolution **673 (Rev.WRC-12)** on “*The importance of Earth observation radiocommunication applications”* urges administrations to take into account Earth observation radio-frequency requirements and in particular protection of the Earth observation systems in the related frequency bands;

*b)* that recent microwave images derived from the operation of EESS (passive) sensors have shown an increasing number of events where the retrieved data are corrupted by interference;

*c)* that, in particular, extremely high levels of interference are experienced in frequency bands identified under RR No. **5.340** which prohibits any emissions in the bands identified in that footnote;

*d)* that passive sensor operators have experienced difficulties in resolving these interference cases, in particular the need to address numerous interference instances occurring globally which imposes costly efforts on passive sensor operators in interacting with all relevant Administrations;

*e)* that this interference resolution process typically may last for many years,

recognizing

*a)* that, according to the Constitution, one purpose of the ITU is to coordinate efforts to eliminate harmful interference;

*b)* RR Article **15** and in particular its provisions **15.21** (section on Reports on Infringements) and **15.22**-**15.46** (section on Procedure in case of harmful interference) are applicable in cases of harmful interference;

*c)* Appendix **10** of the Radio Regulations indicates the form to be used, whenever possible,
in documenting the particulars relating to an instance of harmful interference;

*d)* Report ITU-R SM.2181 provides information on how, in addition to the particulars indicated in Appendix **10**,other information can be documented in the Report of harmful interference,

decides that the following Questions should be studied

1 What are the methods for communicating to relevant Administrations the radio frequency interference (RFI) events experienced by EESS (passive) sensors for the purpose of efficiently addressing those interference instances?

2 What are the challenges and possible solutions, relevant to EESS (passive) sensors, to:

– identify RFI sources; and

– resolve those RFI sources by the relevant Administrations,

further decides

1 that the results of the above studies should be included in ITU-R Reports or Recommendations, as appropriate;

2 that the above studies should be completed by 2027.

Category: S1

1. This Question should be brought to the attention of ITU-R Study Group 1. [↑](#footnote-ref-1)