



ITU Workshop on  
Preventing Harmful Interference to  
Satellite Systems

# Addressing Harmful Interference to Satellite Systems: Perspectives from a Member of the Radio Regulations Board

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# Radio Regulations Board (RRB)



- ❑ Twelve members elected at PP-10
- ❑ Perform duties independently, on a part-time, voluntary basis
  - ✓ 3-4 meetings per year
  - ✓ Most are one week in duration

- ❑ Approve Rules of Procedure
- ❑ Consider appeals from administrations
  - ✓ Harmful interference
  - ✓ Review a finding or decision of the Radiocommunication Bureau
- ❑ Advise Radiocommunication Conferences, Radio Assemblies, and Plenipotentiary Conferences
- ❑ Address instructions from conferences or Council

# Harmful Interference

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- ❑ Definition (CS 1003, RR 1.169): “Interference which endangers the functioning of a radionavigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a radiocommunication service operating in accordance with the Radio Regulations.”
  - ❑ Responsibility (CS 197, RR 0.4): “All stations, whatever their purpose, must be established and operated in such a manner as not to cause harmful interference to the radio services or communications of other Member States or of recognized operating agencies, or of other duly authorized operating agencies which carry on a radio service, and which operate in accordance with the provisions of the Radio Regulations.”
  - ❑ International recognition (RR 8.3): “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. In addition, frequency assignments in frequency bands subject to coordination or to a plan shall have a status derived from the application of the procedures relating to the coordination or associated with the plan.”
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# Assistance and Reporting

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- ❑ Assistance (RR 13.2): “When an administration has difficulty in resolving a case of harmful interference and seeks the assistance of the Bureau, the latter shall, as appropriate, help in identifying the source of the interference and seek the cooperation of the responsible administration in order to resolve the matter, and prepare a report for consideration by the Board, including draft recommendations to the administrations concerned.”
  
  - ❑ The procedures are in Article 15 and the reporting form is in Appendix 10 of the Radio Regulations.
    - ✓ See Report ITU-R SM.2181 on the use of Appendix 10
  
  - ❑ The Bureau reports harmful interference cases to the RRB every meeting
    - ✓ Most are related to terrestrial services
    - ✓ Few are for RRB consideration, but this number is increasing
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- ❑ The Board reported to WRC-12 in accordance with its instructions in Resolution 80 (Rev. WRC-07)  
<http://www.itu.int/md/R12-WRC12-C-0011/en>, including considerations regarding
  - ✓ Harmful interference
  - ✓ Notification under RR 11.41 (coordination incomplete)
  - ✓ Use of monitoring
- ❑ WRC-12 took positive action, adopting changes to the Radio Regulations (e.g., 15.21, 11.41)



# Addressing Interference

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- ❑ The RRB applies the relevant provisions of the Constitution, Convention, Radio Regulations, and the Rules of Procedure
  - ❑ Some pertinent questions:
    - ✓ Is the station receiving interference operating under a frequency assignment recorded in the Master Register with a favourable finding under No. 11.31?
    - ✓ What are the particulars of the station reported to be causing the interference?
    - ✓ Is the situation affected by the application of the procedures relating to the coordination?
    - ✓ What is the nature of the reported harmful interference?
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# Recent Board Decisions

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- ❑ 61st Meeting: “The Board noted from the Director’s Report that the interfering signals appeared to be of a nature that is prohibited under RR No. 15.1... The Board a) was extremely concerned to witness a continuing situation in which satellite assignments operating in accordance with the Radio Regulations and duly recorded in the ITU Master International Frequency Register (MIFR) are the targets of harmful interference, noting a similar situation was addressed at its 53rd meeting....b) Appealed to the [administrations] to exercise the utmost goodwill and mutual assistance in the application of the provisions of Article 45 of the ITU Constitution and Section VI of Article 15 and No. 0.4 of the Radio Regulations with a view to settling these issues of harmful interference.”
  
  - ❑ 62nd Meeting: “As indicated in the Board’s report to WRC-12 under Resolution 80 (Rev. WRC-07), overcoming any difficulties in achieving coordination requires the good will of the administrations involved and the identification of technical solution(s) to mitigate any predicted interference. Notification under RR No. 11.41 where few of the required coordination agreements have been completed increases the possibility of interference. The Board instructed the Bureau to consider actions to raise awareness of Administrations’ rights and responsibilities when notifying under No.11.41 and to encourage administrations to complete coordination.”
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# Recent Board Decisions

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- ❑ 62nd Meeting: “...the RRB considered that monitoring results obtained by recognized international monitoring stations using measurement techniques and technologies documented in the ITU-R Handbook on Spectrum Monitoring to be a valuable resource for addressing harmful interference and noted with satisfaction the Bureau’s activities in this area. The Board deemed that the procedures for the use of recognized monitoring stations to assist the Bureau to perform measurements related to cases of harmful interference for which an administration is seeking the assistance of the Bureau would require careful consideration and that measurements from more than one source would be desirable. The Board also noted the need for Council to assess the possible implications (e.g., financial) of entering into memoranda of cooperation with administrations having such monitoring capabilities.”
  
  - ❑ 62nd Meeting: “The Board also noted the suggestions for the Bureau to conduct, in accordance with No. 16.5 of the Radio Regulations, independent monitoring observations to confirm the origin of interfering signals as well as to create a database of events of harmful interference, including intentional ones. The Board instructed the Bureau to study the above proposals and also instructed the Director to consider raising the issue before the Council in the event that their implementation would require the allocation of additional resources beyond those available to the BR.”
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# Summary

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- ❑ The Radio Regulations Board plays an important role in addressing harmful interference
  - ❑ The board regularly receives appeals from administrations concerning harmful interference to their satellite systems
  - ❑ The RRB applies the relevant regulatory provisions
    - ✓ Appeals to administrations to exercise the utmost good will and mutual assistance
    - ✓ Raises awareness of the issues
    - ✓ Considers that international cooperation for monitoring and localization of the sources of interference is desirable
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