

RECOMMENDATION ITU-R S.1672

Guidelines to be used in the event of non-compliance with single-entry operational and/or additional operational limits in Section II of Article 22 of the Radio Regulations

(Question ITU-R 231/4)

(2003)

The ITU Radiocommunication Assembly,

considering

- a) that WRC-2000 adopted in Article 22 of the Radio Regulations (RR) single-entry operational limits (see RR Tables 22-4A through 22-4C) and single-entry additional operational $\text{epfd}_{\downarrow}$ limits (see RR Table 22-4A1) applicable to non-GSO FSS systems (space-to-Earth) in certain parts of the frequency range 10.7-20.2 GHz to protect GSO systems operating in the same frequency bands;
- b) that, taking into account RR Nos. 22.5H and 22.5I, wherever the limits referred to in *considering a)* are exceeded by a non-GSO FSS system to which the limits apply, this constitutes a violation of RR No. 22.2;
- c) that WRC-2000 identified the need to conduct, as a matter of urgency, the appropriate regulatory studies to develop procedures for application in cases where the power limits referred to in *considering a)* are exceeded at an operational earth station;
- d) that the existing provisions in the RR (including the provisions of Section V of RR Article 15) apply to the resolution of interference, including cases where non-GSO systems exceed the limits referred to in *considering a)*;
- e) that the RR Article 15 Section VI procedures, which also apply, are general and provide no time lines or specific guidance on the steps to be taken by administrations or the Radiocommunication Bureau (Bureau);
- f) that an ITU-R Recommendation containing a set of guidelines in an Annex to it could provide more structure, if need be, for cases where non-GSO systems exceed the limits referred to in *considering a)*;
- g) that Recommendation ITU-R S.1527 contains a methodology for the identification of non-GSO satellites causing interference into an operating GSO earth station;
- h) that Recommendation ITU-R S.1558 contains methodologies for measuring $\text{epfd}_{\downarrow}$ caused by a non-GSO space station to verify compliance with operational $\text{epfd}_{\downarrow}$ limits;
- j) that Recommendation ITU-R S.1592 contains a methodology to assess compliance of non-GSO FSS satellite systems with the additional operational limits on $\text{epfd}_{\downarrow}$ in RR Article 22;
- k) that Recommendation ITU-R S.1554 contains a methodology for determining the overall accuracy of $\text{epfd}_{\downarrow}$ measurements,

noting

a) that under the RR a non-GSO system in the FSS that is subject to the limits in RR Nos. 22.5C, 22.5D and 22.5F and which radiates $\text{epfd}_{\downarrow}$ into any operating GSO FSS earth station at levels in excess of the operational or additional operational limits given in RR Tables 22-4A, 22-4A1, 22-4B and 22-4C is, unless otherwise agreed between concerned administrations, considered to be in violation of its obligations under RR No. 22.2,

recommends

1 that the relevant ITU-R Recommendations referred to in *considering* g), h), j) and k) should be used by administrations in determining whether non-GSO systems exceed the limits referred to in *considering* a);

2 that in addition to applying the relevant provisions of RR Article 15 the set of guidelines given in Annex 1 could be used by administrations, with assistance from the Bureau if necessary, to resolve cases where non-GSO systems exceed the limits referred to in *considering* a).

Annex 1

Guidelines for use in the event of non-compliance with single-entry operational and/or additional operational limits in Section II of RR Article 22

1 In securing the expeditious elimination of $\text{epfd}_{\downarrow}$ interference from non-GSO systems in the FSS at levels above the operational $\text{epfd}_{\downarrow}$ limits given in RR Tables 22-4A, 22-4B and 22-4C and/or the additional operational $\text{epfd}_{\downarrow}$ limits given in RR Table 22-4A1 (excess $\text{epfd}_{\downarrow}$ interference), due consideration should be given to all factors involved, including the relevant technical and operational factors.

2 Administrations should cooperate in the detection and elimination of excess $\text{epfd}_{\downarrow}$ interference.

3 Where practicable, and subject to agreement between the administrations concerned, the case of excess $\text{epfd}_{\downarrow}$ interference may be dealt with directly between their operating organizations.

4 When a case of interference exceeding an operational $\text{epfd}_{\downarrow}$ limit to an assignment in a GSO satellite network is established (for example using Recommendation ITU-R S.1558) by the operator of an earth station associated with the GSO satellite network and such excess $\text{epfd}_{\downarrow}$ interference cannot be accepted by the affected administration, the affected administration should first attempt to identify the source of the excess $\text{epfd}_{\downarrow}$ interference. Recommendation ITU-R S.1527 may be employed for this purpose.

When a case of interference exceeding an additional operational limit mask to a frequency assignment in a GSO satellite network is identified and such excess $\text{epfd}_{\downarrow}$ interference cannot be accepted by the affected administration, the affected administration should take steps to compute the excess interference using the published parameters of the non-GSO system concerned. Software as specified in Recommendation ITU-R S.1592 may be employed to this end.