



Radiocommunication Bureau (BR)

Circular Letter
CCRR/49

17 September 2013

To Administrations of Member States of the ITU

Subject: **Draft Rules of Procedure to reflect the decisions of WRC-12 and existing rules that may require updates**

At its 59th meeting (14-18 May 2012), the Radio Regulations Board considered the impact of WRC-12 decisions on the current Rules of Procedure and agreed on the schedule for considering draft new and modified existing Rules of Procedure on the basis of the document presented by BR (see Document RRB12-1/4) and other inputs by Board members. The Board instructed the Bureau to proceed accordingly, under the understanding that the schedule may be eventually adjusted on the basis of additional studies (see Revision 7 to Document RRB12-1/4).

The Bureau therefore prepared a fourth set of draft new or modified Rules of Procedure as a consequence of the decisions of WRC-12.

In accordance with No. **13.17** of the Radio Regulations, these draft Rules of Procedure are made available to administrations for comment before being submitted to the RRB pursuant to No. **13.14**. As indicated in No. **13.12A d)** of the Radio Regulations, any comments that you may wish to submit should reach the Bureau not later than **29 October 2013**, in order to be considered at the 64th meeting of the RRB, scheduled for 27 November – 3 December 2013. All e-mail comments should be sent to: brmail@itu.int.

François Rancy
Director

Annexe: 1

Distribution:

- Administration of Member States of the ITU
- Members of the Radio Regulations Board

ANNEX

Rules concerning

ARTICLE 5 of the RR

ADD

5.132A

This provision limits the application of the radiolocation service to oceanographic radars operating in accordance with Resolution **612 (Rev.WRC-12)**. The *resolves* part of this Resolution enters into the category “the other provisions” referred to in Nos. 11.31 and is subject to examinations by the Bureau.

Resolves 6 of Resolution **612 (Rev.WRC-12)** specifies the separation distances to be respected for oceanographic radars for “rural” and “quiet rural” areas for the land, sea or mixed propagation paths, unless prior explicit agreements from affected administrations are obtained. Concerning “rural” and “quiet rural” areas, the Bureau has no means to identify whether emissions from oceanographic radars reach a “rural” or “quiet rural” area at the border of another country since the Bureau does not have the relevant topographical data to determine these areas.

As the Bureau has no means for the identification of rural or quiet rural areas, the Board decided that for examination of the notified frequency assignment to a station in the radiolocation service from the view point of its conformity with *resolves* 6 of Resolution **612 (Rev.WRC-12)** the Bureau shall use the separation distances for quiet rural paths listed in Columns 3 and 5, as appropriate, of the Table of *resolves* 6.

Reason: *As can be seen from the Table of resolves 6 of Resolution 612 (Rev.WRC-12), the separation distances corresponding to quiet rural areas are longer than the ones for rural areas. The utilization of such longer separation distances represents a worst-case approach that is normally used by the BR and RRB in the absence of information required for calculations in the ITU-R documents. Such approach would ensure a necessary protection from potential interference originated by oceanographic radars by triggering detailed coordination between administrations concerned.*

Effective date of application of this Rule: immediately after approval.

ADD

5.145A

The comments and decision made under the Rule of Procedure concerning No. **5.132A** apply.

Reason: *the same as for the RoP on No. 5.132A.*

Effective date of application of this Rule: immediately after approval.

ADD

5.161A

The comments and decision made under the Rule of Procedure concerning No. **5.132A** apply.

Reason: *the same as for the RoP on No. 5.132A.*

Effective date of application of this Rule: immediately after approval.

MOD

5.399

The decision specified in the last paragraph of the Rules of Procedure concerning No. **5.164** applies.

Reason: *to clarify that only the concluding part of the Rule of Procedure on No. 5.164 is applied for processing assignments to stations of the radiodetermination-satellite service notified under No. 5.399.*

Effective date of application of this Rule: immediately after approval.

**Rules concerning
ARTICLE 11 of the RR**

ADD

**11.41 and
11.41.2**

1 The provisions of No. **11.41.2** require the notifying administration, when submitting notices in application of No. **11.41**, to indicate to the Bureau that efforts have been made to effect coordination with those administrations whose assignments were the basis of the unfavourable findings under No. **11.38**, without success. In the absence of such an indication, a resubmission under No. **11.41** after a notice is returned under No. **11.38** shall be considered as not receivable and returned to the administration.

2 The Board concluded that in the case of a challenge being submitted by an administration indicating that no effort has been made by the notifying administration to effect coordination with it, the Bureau shall investigate further and act in accordance with provision No. **13.3**.

Reason: *Follow-up to RRB-63 decision in Document RRB13-2/11.*

Effective date of application of this Rule: 1st January 2014

MOD

11.44

NOC 1

ADD 2 The Board considered possible means to ensure that information regarding the bringing into use of frequency assignments to a satellite network under Nos. **11.44/11.44B** corresponds to the real occupancy of the geostationary satellite orbit, including the real transmitting or receiving capability of the satellite under consideration. The Board concluded that whenever it appears from reliable information available that an assignment has not been brought into use in accordance with Nos. **11.44/11.44B**, the provisions of No. **13.6** shall apply.

Reasons: Follow-up to RRB-63 decision in Document RRB13-2/11.

Effective date of application of this Rule: 1st January 2014

MOD

11.44B

NOC 1

NOC 2

NOC 3

NOC

4

ADD 5 Where the notification of a frequency assignment under Nos. **11.15/11.25**, § 5.1.3 of Appendix **30**, § 5.1.7 of Appendix **30A** or § 8.1 of Appendix **30B**, as appropriate includes a date of bringing into use before the date of receipt of the notice, this date shall not be earlier than 120 days (ninety-day space station deployment plus thirty-day confirmation) before the date of receipt of the notification information with the confirmation of bringing into use under No. **11.44B** to be provided to the Bureau within thirty days from the end of the ninety-day period, in order for the assignment to be entitled to the rights and obligation derived from its recording in the MIFR particularly regarding the right to international recognition and the application of provisions relating to elimination of harmful interference and suspension of use (Nos **11.42** and **11.49**).

ADD 6 If a complete notice for recording of a frequency assignment in the MIFR is received by the Bureau with the information that the assignment has already been brought into use for more than 120 days before the date of receipt of the notice by the Bureau, the notice will be considered receivable and further processed by the Bureau. However the notified date of bringing into use of the assignment shall be considered not in conformity with the requirement of No. **11.44B** and provisions relating to elimination of harmful interference and suspension of use shall not be applicable for the period between the notified date of bringing into use and 120 days before the date of receipt of the notice. The confirmed date of bringing into use, 120 days before the date of receipt of the complete notification information, shall be recorded in the MIFR instead of the notified date submitted in the Appendix 4 form, with a note by the Bureau attached to the assignment indicating that "satellite "AAA" (Name of the satellite, item A h) of Annex 2 to Resolution 49) has been first deployed and operated at the nominal geographical longitude "XXX" (longitude, item A.4.a.1 of Appendix 4) on the geostationary-satellite orbit since the date "DD.MM.YYYY" (Date, Item A.2.a of Appendix 4) indicated in the original Appendix 4 submission under the frequency assignments of the relevant satellite network "BBB" (Identity of the satellite network, Item A.1.a of Appendix 4)".

Reasons: Follow-up to RRB-63 decision in Document RRB13-2/11.

No. **11.44B** introduces a time limit for providing confirmation of the bringing into use of frequency assignments (i.e. a maximum of thirty days from the end of the satellite deployment ninety-day period). No. **11.44.2** defines that the notified date of bringing into use shall be the date of the commencement of the ninety-day period. Item A.2.a of Appendix 4 which also applies to notifications under Appendices **30**, **30A**, and **30B** requires the information concerning the date of bringing into use to be provided in AP4 notice forms for notification. Furthermore, the Rule of Procedure on No. **11.44** states that the information concerning the date of bringing into use is to be provided in AP4 notice forms when submitted under No. **11.15** except for its confirmation for which the information may be submitted to the Bureau by any means available for transmission of correspondence (mail, e-mail or telefax). The same rule also indicates that the date of bringing into use shall be provided for each assignment or group of assignments. To meet all of the above requirements, the date of commencement of the ninety-day period (i.e. the date of bringing into use) cannot be therefore earlier than 120 days before the date of receipt of notification information under Nos. **11.15/11.25**, § 5.1.3 of Appendix **30**, § 5.1.7 of Appendix **30A** or § 8.1 of Appendix **30B**. In addition, the international rights and obligations of administrations in respect of their own and other administrations' frequency assignments, such as rights to international recognition, to claim protection from harmful interference and suspension of use are derived from the recording of those assignments in the Master International Frequency Register (i.e. after notification of the assignment) in accordance with No. **8.1** of Article 8 (see also provisions of Nos **11.42** and **11.49**, § 4.1.20, 4.2.21D, 5.2.10 of Appendices **30** and **30A**, §8.7 of Appendix **30B**). A question was remaining about the timing for providing the confirmation information for a notification with a date of bringing into use more than 120 days earlier than the date of receipt of the notice, as a consequence of the application of No. **11.44.1**. In this case the new proposed paragraph 6 of the Rules of procedure provides a regulatory approach.

Effective date of application of this Rule: 1st January 2014

Rules concerning ARTICLE 21 of the RR

ADD

Table 21-2

Table **21-2** specifies the frequency bands that are shared with equal rights between space services, on the one hand, and the fixed and mobile service, on the other hand, where the terrestrial station is subject to power limits specified in provision Nos. **21.2** to **21.5A**. These power limits are verified during processing frequency assignments by the Bureau under "other provisions" mentioned in No.**11.31** that are mandatory for verification during regulatory examination.

WRC-12 allocated the frequency band 24.75-25.25 GHz to the fixed-satellite service in the Earth-to-space direction in Region 1. As a result, this band is shared with equal rights between the fixed-satellite service (Earth-to-space) and the fixed service; however, this situation is not reflected in Table **21-2**. Recognizing the need for a consistent approach in protection of the fixed-satellite service in Regions 1 and 3, the Board decided that the power limits specified in Nos. **21.3** and **21.5** shall apply to the frequency assignments of the fixed service in the band 24.75-25.25 GHz in Region 1.

Consequently, in Column 1 of the Table **21-2** of Article **21**, against the frequency band 24.75-25.25 GHz, Region 1 is also to be included along with Region 3 to enable the Bureau to conduct the No.**11.31** examination as specified above.

Reason: Self-explanatory.

Effective date of application of this Rule: immediately after approval.

**Rules concerning
PART A1**

Rules concerning APPENDIX 30 to the RR

Art. 5

Notification, examination and recording

ADD

5.1.3

See Rules of Procedure relating to No. **11.44B**.

Rules concerning APPENDIX 30A to the RR

Art. 5

Notification, examination and recording

ADD

5.1.7

See Rules of Procedure relating to No. **11.44B**.

Rules concerning APPENDIX 30B to the RR

ADD

8.1

See Rules of Procedure relating to No. **11.44B**.

**An. 3 and
An. 4**

ADD

§ 2.2 of An. 4

1 In order to adequately protect the existing networks in their entire service area, WRC-07 introduced the examination over the service area under § 2.2 of Annex 4 of Appendix **30B**.

2 As indicated in footnote 19 to § 2.2 of Annex 4 of Appendix **30B**, the reference values within the service area are interpolated from the reference values on the test points. The following interpolation formula and condition shall be used to calculate the interpolated values at grid points¹ within the service area:

$$V_{Eg} = \frac{\sum_{h=1}^{Nt} R_{Th} \times (d_{Th})^{-2}}{\sum_{h=1}^{Nt} (d_{Th})^{-2}} \tag{1}$$

where:

- Th*: test point number h of the wanted downlink service area;
- Eg*: point number g of the grid of examination points on the wanted downlink service area;
- Nt*: total number of test points;
- d_{Th}*: distance between the test point *Th* and the grid point *Eg*;
- R_{Th}*: single entry C/I reference value (dB) at the test point *Th*;
- V_{Eg}*: interpolated single entry C/I reference value (dB) at the grid point *Eg*.

If the value $(R_{Th} - ((C/N)_{d,Th} - (C/N)_{d,Eg}))$ is lower than R_{Th} , then $(R_{Th} - ((C/N)_{d,Th} - (C/N)_{d,Eg}))$ shall be used in (1) instead of R_{Th} ,

where:

- $(C/N)_{d,Th}$: the downlink C/N value at test point *Th*;
- $(C/N)_{d,Eg}$: the downlink C/N value at grid point *Eg*.

3 If the interpolated value V_{Eg} is higher than $(C/N)_{d,Eg} + 11.65$ dB, $(C/N)_{d,Eg} + 11.65$ dB shall be used as the reference value for grid point *Eg*. Otherwise, the interpolated value is the reference value.

Reason: The method to calculate the reference value within the service area as mentioned in footnote 19 to § 2.2 of Annex 4 of Appendix **30B** was communicated to the Membership in the Annex to Circular Letter CR/302 of 19 May 2009. This method included the formula (1) in paragraph 2 and the rule in paragraph 3 above. The method has been used in the examinations of Appendix **30B** submissions since the first examination in accordance with the revised Appendix **30B** (WRC-07).

¹ The service area is regularly covered by a grid of points so that the average distance between points is set to a value proportional to the area size, with a maximum of 600 km and a minimum of 100 km. To ensure good coverage of irregularly shaped areas, points are also added on the border of the service area.

In applying the method, the Bureau noted that the examination over the service area may lead to over-protection of networks which have areas with low gain of the satellite antenna inside the service area without any closely located test point. The Bureau reported this problem to WRC-12 which instructed the Bureau to draft a Rule of Procedure to solve the problem (see Documents 526 and 554 of WRC-12).

Following instruction from WRC-12, the Bureau requested the advice of Working Party 4A on the possible solution to the problem. Working Party 4A deliberated on this issue and developed the new additional condition to the formula as follows:

If the value $(R_{Th} - ((C/N)_{d,Th} - (C/N)_{d,Eg}))$ is lower than R_{Th} , then $(R_{Th} - ((C/N)_{d,Th} - (C/N)_{d,Eg}))$ shall be used in (1) instead of R_{Th} .

to solve the over-protection problem in areas with low gain of the satellite antenna in the examination under § 2.2 of Annex 4 of Appendix 30B.

Effective date of application of this Rule: 1st January 2014

**Rules concerning
PART A10**

**Rules concerning the Regional Agreement relating to the planning of the
digital terrestrial broadcasting service in parts of Regions 1 and 3,
in the frequency bands 174-230 MHz and 470-862 MHz
(Geneva, 2006) (GE06)**

Annex 2

**Technical elements and criteria used in the development of the Plan
and the implementation of the Agreement**

**Appendix 2.1
Section A2.1.8.1**

ADD

This Section deals with the mixed path interpolation factor A used for calculating the field strength for path crossing multiple propagation zones. The interpolation factor A is a function of basic interpolation factor A_0 whose value is determined by reading from the curve in Figure A.2.1-2. This may result in different interpretations of A_0 values. Such situation could lead to different field strength values calculated for path crossing multiple propagation zones and therefore different list of administrations potentially affected by proposed modifications to the Plans. Therefore, the Board concluded that the basic interpolation factor A_0 (F_s) as shown in Fig. A.2.1-2 shall be calculated using the following formula:

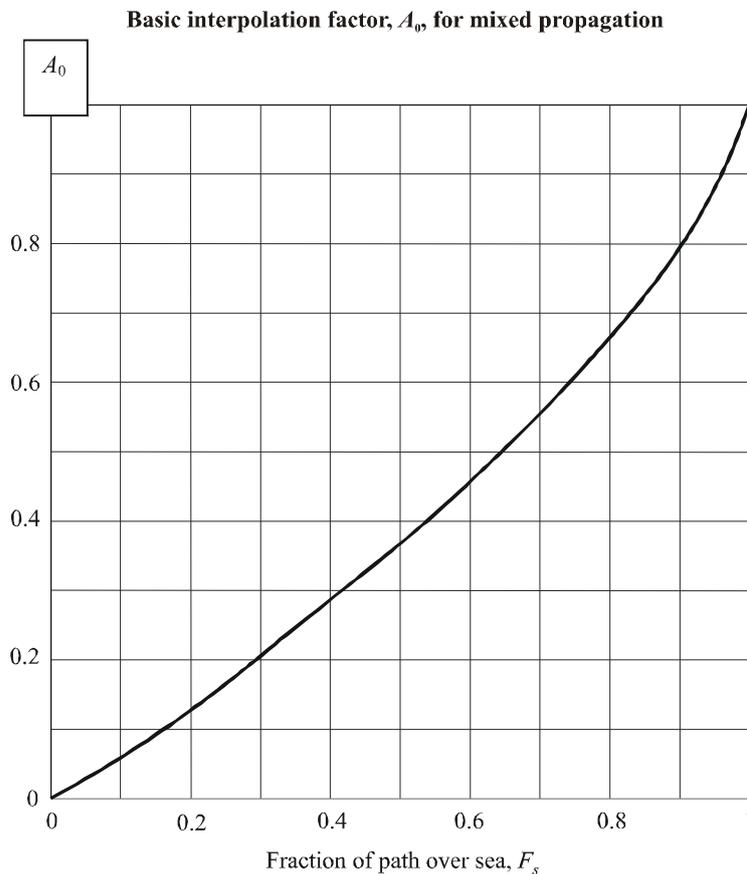
$$A_0(F_s) = 1 - (1 - F_s)^{2/3}$$

The application of this formula is consistent with the method adopted by RRC-06 Conference, recommended in Recommendation ITU-R P.1546 and currently used by the Bureau in implementing the GE06 Agreement.

Reasons: to clarify how the basic interpolation factor $A_0(F_s)$ was calculated during RRC-06 conference and is now implemented in the application of the GE06 Agreement.

A.2.1.8.1 specifies how to evaluate the mixed path interpolation factor A used for calculating the field strength for path crossing multiple propagation zones. The method is based on the determination of the basic interpolation factor $A_0(F_s)$ which is a function of the fraction of path over sea F_s . Such basic interpolation factor is not given as an equation or as tabulated values to be interpolated but requires the user to estimate it using Figure A.2.1-2. This may result in different interpretations of $A_0(F_s)$ values.

FIGURE A.2.1-2



RRC06-A2-C2-A2-1-2

The proposed change is consistent with the latest versions of Recommendation ITU-R P.1546.

Effective date of application of this Rule: immediately after approval