



Radiocommunication Bureau (BR)

Circular Letter CCRR/58

5 December 2016

To Administrations of Member States of ITU

Subject: Draft Rules of Procedure to reflect the decisions of WRC-15 and existing rules that may require updates

At its 73^{rd} meeting (17 – 21 October 2016), the Radio Regulations Board adopted a first set of Rules of Procedure related, in particular, to WRC-15 decisions and agreed on the schedule for considering additional draft new or modified Rules of Procedure on the basis of the document presented by the Radiocommunication Bureau (BR) and other inputs by Board members and administrations. The Board instructed the Bureau to develop these new or modified Rules of Procedure, on the basis of this document (see <u>Revision 4 to Document RRB16-2/3</u>).

Accordingly, the Bureau prepared a new set of draft new or modified Rules of Procedure relating, in particular, to the decisions of WRC-15 (see Annex 1).

In Annex 2 of CCRR/57, the Bureau had included decisions of WRC-15 which do not appear in the Conference's Final Acts, but are reflected in the minutes of WRC-15 plenary meetings. At its 73rd meeting, the Board decided that such decisions will be included in the relevant Rules of Procedures, for information, in the form of notes.

Accordingly, the Bureau has included in Annex 2 to this Circular Letter, for information, the remaining decisions of WRC-15 Plenary which do not appear in the Conference Final Acts.

In accordance with No. **13.17** of the Radio Regulations, the draft Rules of Procedure contained in Annex 1 are made available to administrations for comments 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 on these draft Rules of Procedure should reach the Bureau not later than **23 January 2017**, in order to be considered at the 74th meeting of the RRB, scheduled for 20 – 24 February 2017. Comments should be sent either by telefax to +41 22 730 5785 or by email to brmail@itu.int.

Francois Ranc

Director

Annexes: 2 Distribution: - Administrations of Member States of ITU - Members of the Radio Regulations Board

ANNEX 1

Rules concerning ARTICLE 1 of the RR

MOD

1.112	

According to this definition, when a satellite system is composed of only one satellite it is at the same time a satellite network and when it is composed of more than one satellite each of its parts containing one satellite is a satellite network. The title of Annex 2 of Appendix **4** (as well as the sub-titles of § A and A1 of this Annex) indicate that the information contained in that Appendix shall be provided for each satellite network. Consequently the advance publication or coordination procedure, as appropriate, is to be applied for each satellite network. According to A.4.b.4 of Appendix **4** one notice can cover more than one <u>orbital plane and more than one</u> satellite <u>per orbital plane</u> in a non-geostationary network if their characteristics are identical.

On the basis of the above the following parts of a space system are considered as satellite networks:

- a) a geostationary-satellite system using one satellite and two or more earth stations;
- b) in the case of a geostationary-satellite system in which the radio link between two earth stations use two or more satellites communicating through intersatellite-links, each satellite with its associated earth stations is considered as a separate network. The intersatellite links connecting these satellites are to be notified for each of the satellites of the system;
- c) a non-geostationary-satellite system composed of more <u>than one set of orbital planes</u>, <u>with</u> <u>more</u> than one satellite <u>per orbital plane</u> having identical characteristics and for which A.4.b.4 of Appendix **4** requires the indication of the number of satellites;
- d) in the case of a combined satellite system consisting of one geostationary satellite and a number of non-geostationary satellites communicating through non-GSO/GSO intersatellite-links, the geostationary satellite and the non-geostationary satellites with their respective associated earth stations, as appropriate, are considered as separate satellite networks.

(See also comments under footnote (*) and §4.2 of the Rules of Procedure concerning the Receivability of forms of notice)

Reasons: WRC-15 decision. Clarification of the notion of non-GSO satellite systems.

Effective date of application of the Rule: Immediately after the approval of the Rule

Rules concerning ARTICLE 5 of the RR

ADD

5.312A

1 This provision stipulates through Resolution **760 (WRC-15)**, that in Region 1, the use of frequency band 694-790 MHz by the mobile, except aeronautical mobile, service is subject to agreement obtained under No. **9.21** with respect to the aeronautical radionavigation service in countries mentioned in No. **5.312**.

2 The criteria for identifying potentially affected administrations under No. **9.21** in this band are given in the Annex to Resolution **760 (WRC-15)** in the form of coordination distances with the most stringent value of a 450 km distance between a base station in the mobile service and a potentially affected station in the aeronautical radionavigation service.

3. Taking into account that No. **5.312** contains only a few countries while a large number of other countries of Region 1 are located at distances that are sufficiently large to exclude a potential for interference to the aeronautical radionavigation service, the Board decided that those administrations whose territories are beyond the distance of 450 km from the countries mentioned in No. **5.312** do not need to apply the No. **9.21** procedure to their mobile service assignments operating under No. **5.312A**.

4. Administrations having territories within a distance of 450 km from the countries listed in No. **5.312** are the following: Albania, Armenia, Austria, Azerbaijan, Bosnia and Herzegovina, Belarus, Bulgaria, Czech Rep., Germany, Denmark, Estonia, Finland, Georgia, Greece, Hungary, Croatia, Italy, Iraq, Kazakhstan, Kyrgyzstan, Lithuania, Latvia, Moldova, the Former Yugoslav Rep. of Macedonia, Montenegro, Mongolia, Norway, Poland, Romania, the Russian Federation, Sweden, Serbia, Slovakia, Slovenia, the Syrian Arab Republic, Tajikistan, Turkmenistan, Turkey, Ukraine and Uzbekistan.

Reasons: to avoid unnecessary application of the No. **9.21** procedure for the administrations, which are located at sufficiently large distances from the countries mentioned in No. **5.312**. The maximum coordination distance of Resolution **760 (WRC-15)** derived from the worst-case assumptions relating to the relevant propagation characteristics and technical parameters is 450 km. Currently, the territories of only 40 countries out of 123 Region 1 administrations are located closer than 450 km from countries listed in No. **5.312**.

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

Rules concerning ARTICLE 9 of the RR

MOD

9.19

This provision relates to the requirements of coordination of transmitting terrestrial stations and transmitting earth stations in the FSS (Earth-to-space) with respect to typical BSS earth stations. To date, there is no ITU-R Recommendation defining the power flux-density level produced by the terrestrial stations and transmitting earth stations in the FSS at the edge of the service area of non-planned BSS to be used for triggering the coordination. Until such time that a calculation method and technical criteria are included in the relevant ITU-R Recommendations, in applying this provision, for the establishing coordination requirements identification of affected administrations, the Bureau uses the following criteria:

- For transmitting terrestrial stations: frequency overlap and the distance from the location of the terrestrial station to the national border of any country included in the service area of the BSS assignment less than 1 200 km;
- <u>For transmitting earth stations in the FSS (Earth-to-space)</u>: , in addition to the frequency overlap examination, also uses<u>and</u>, the power flux-density limits in the nearest frequency band(s), where available.

Reasons: To bring this Rule of Procedure in conformity with the decision of WRC-15 on coordination of terrestrial stations under No. **9.19** reflected in the Minutes of the 6th Plenary meeting and stating that "... in examination of frequency notices for terrestrial stations under No. **9.19** the Bureau currently establishes coordination requirements using only frequency overlap as the coordination threshold...".

At 73rd meeting of RRB, the Board instructed the Bureau to develop a modification to the RoP on No. **9.19** which would ensure its consistency with the above-mentioned WRC-15 decision and which might contain additional elements aimed at the reduction of unnecessary coordination under No. **9.19**.

In order to reduce unnecessary coordination under No. **9.19**, it is proposed to introduce a coordination distance beyond which the application of No. **9.19** is not required. To this end it is suggested that this distance should be set equal to 1200 km as per Table 3 of Appendix **7** containing the maximum coordination distances for propagation mode (1) for frequencies below 60 GHz.

Effective date of application of the Rule: immediately after approval

MOD	
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9.36

1 Under this provision, the Bureau "shall identify any administrations with which coordination may need to be effected". In applying Appendix **5** with respect to No. **9.21**, the Bureau uses the following calculation methods and criteria⁵:

- space network vs. space network: Appendix 8;
- earth station vs. terrestrial stations and vice versa, and earth station vs. other earth stations operating in the opposite direction of transmission: Appendix 7;
- transmitting terrestrial stations vs. receiving space stations: criteria of Article **21**;
- transmitting space stations vs. terrestrial services⁶;
 - power flux-density (pfd) limits defined in Article 21 (where such limits are not applicable as hard limits to the service which is subject to No. 9.21); or
 - coordination threshold pfd values applicable to other services in the same frequency band (e.g. pfd values in Table 5-2 of Annex 1 to Appendix 5); or
 - <u>frequency overlap with recorded terrestrial stations when no applicable pfd value</u> <u>mentioned above is available;</u>
- receiving space stations vs. transmitting terrestrial stations: frequency overlap within the visibility area of the satellite network;
- between stations of terrestrial services in some specific frequency bands: Rules of
 Procedure B4, B5 and B6 as appropriate.

Reasons: To clarify the criteria applied by Bureau.

Effective date of application of the Rule: Immediately after the approval of the Rule

Rules concerning ARTICLE 11 of the RR

MOD

11.43A

With respect to applicable procedures for cases of modifications to assignments to satellite networks which are recorded in the Master Register, WARC Orb-88 decided that, in the case of geostationary satellite networks, any modification to the basic characteristics of an assignment, in the application of No. **11.43A** (former RR No. **1548**), should be subject only to the coordination procedure (Section II of Article **9**). On the basis of this decision, the Bureau does not require an administration to recommence the advance publication procedure, for a modification of a frequency assignment recorded in the Master Register, unless the modification concerns a change of orbital location by more than ±6° (see also the Rule under No. **9.2**). If the modification concerns the notification of assignment(s) in frequency band(s) not covered by other assignment(s) already recorded in the Master Register, No. **11.43A** does not apply and it will be processed under No. **11.2** or **11.9**, as appropriate.

The purpose of the examination under No. **11.43A** is to determine whether the coordination requirements remained unchanged or, where appropriate, whether the probability of harmful interference has not increased (see also the Rules of Procedure concerning Nos. **11.28** and **11.32**). In these cases, the provisions of No. **11.43B** apply with the effect of maintaining unchanged the status (Findings) and the date of receipt of the assignment. If, due to the modifications, new coordination requirements are identified by comparing the level of interference (such as $\Delta T/T$) resulted from consideration of the initial characteristics and that of modified characteristics, then an unfavourable Finding shall be given and the Form of Notice shall be returned to the notifying administration. The notifying administration should be requested to apply Section II of Article **9**. Findings with respect to No. **11.32** are determined on the basis of the coordination agreements effected to meet the new coordination requirements. In the case, where the provisions of Nos. **11.32A** and **11.33** are applicable and the examinations show an increase in the probability of harmful interference compared with that which resulted from the initial examination, then the Finding is unfavourable and the notice shall be returned in accordance with provision No. **11.38**. See also the Rules of Procedure under No. **11.43B**.

Reasons: WRC-15 decision - suppression of API procedure for satellite systems that are subject to coordination procedure under Article **9**. Effective date of application of the Rule: 1st January 2017

Rules concerning APPENDIX 30A to the RR

MOD

An. 3

Technical data used in establishing the provisions and associated Plans and Regions 1 and 3 feeder-link Lists, which should be used for their application

MOD

3

Power-control

Paragraph 3.11.4 of Annex 3 to Appendix **30A** states that "In the event of modifications to the Plan, the Bureau shall recalculate the value of power control for the assignment subject to modification and insert the appropriate value for assignment in the Plan. A modification to the Plan shall not require the adjustment of the values of permissible power increase of other assignments in the Plan". Therefore, the Board decided that, the Bureau, immediately after the Regions 1 and 3 feeder-link Plan (14 GHz or 17 GHz) is updated and before Part B publication is effected, shall recalculate the power control values and inform about its findings the responsible administration, as appropriate. If the values referred to in the above paragraph need to be adjusted, the responsible administration shall seek all the possible means to solve the matter with the affected administrations.

Paragraph 3.11 of Annex 3 to Appendix **30A** describes the method, propagation model and procedures for determination of the power control value of an assignment in the Plan of Regions 1 and 3. WRC-15 clarified that the use of power control should be extended to assignments in the Regions 1 and 3 List. Therefore, the Board decided that, whenever an assignment is included in the Regions 1 and 3 feeder-link List with a request to use power control with a power control value included in the Part B filing submitted in accordance with § 4.1.12 of Article 4 of Appendix **30A**, the Bureau shall apply the procedure described below in respect of the request.

1. The Bureau shall apply the method and procedures contained in § 3.11 of Annex 3 to Appendix **30A** to calculate the power control value for the relevant assignment at the time of that assignment entering into the List. At the same time, the Bureau shall identify any other administrations whose feeder-link Equivalent Protection Margin is reduced due to the use of power control by the subject assignment.

2. The Bureau shall consult the notifying administration of the subject assignment as to which value of power control should be used if the submitted value is less than the calculated one.

3. The Bureau shall then include the final value of power control for the subject assignment in a Part B Special Section published in accordance with § 4.1.15 of Article 4 of Appendix **30A**.

4. When the above-mentioned Part B Special Section is published, the Bureau shall inform the other administrations identified under 1 above of the reduction of their feeder-link Equivalent Protection Margin.

Reasons: WRC-15 decided that the use of power control should be extended to frequency assignments in the Regions 1 and 3 List and the corresponding Rule of Procedure should be modified accordingly.

Effective date of the Rule: immediately after approval

Rules concerning APPENDIX 30B to the RR

ADD



Agreement of an administration whose territory is partially or wholly included in the service area of an assignment

The Board decided that the administrative agreements of the administrations whose territories are partially or wholly included in the intended service area of an assignment under examination are explicitly required and shall be obtained when entering the assignment in the List, irrespective of whether or not their allotments in the Plan or their assignments are identified as affected under § 6.5. If an identified administration does not make comment nor reply to the notifying administration's request for seeking agreement under § 6.6, it shall be considered that the former administration disagrees to the inclusion of its territory in the intended service area of the assignment.

In the examination of a satellite network submitted under § 6.17, if the Bureau finds that the territory of an administration is wholly or partially included in the service area of the network without obtaining an explicit agreement from that administration, it shall request the notifying administration to exclude the territory and the associated test points from the service area. If the notifying administration insists on keeping the service area unchanged, the finding of the examination under § 6.19 a) shall be unfavourable.

An administration who agreed to include its territory in the service area of an assignment may at any time withdraws its agreement in accordance with § 6.16.

Reasons: The Board instructed the Bureau at its 73rd meeting to prepare a new draft Rule of Procedure clarifying the understanding of the type of agreement required under §6.6 of Appendix 30B on the basis that no response received on request under § 6.6 would mean disagreement

Effective date of the Rule: immediately after approval

Rules concerning

PART B

SECTION B6

MOD

Rules concerning criteria for applying the provisions of No. 9.36 to a frequency assignment in the terrestrial services whose allocation or identification is governed by Nos. 5.292, 5.293, 5.295, 5.296A, 5.297, 5.308, 5.308A, 5.309, 5.323, 5.325, 5.326, 5.341A, 5.341C, 5.346, 5.346A, 5.429D, and 5.429F, 5.430A, 5.431A, 5.431B, 5.432B and 5.434¹

Table 1

Applicability of No. 9.21

Footnote	Frequency band (MHz)	Allocated service (No. 9.21)	Protected service	
Editor's note: No changes in the other frequency bands				
<u>5.430A</u>	<u>3 400-3 600</u>	<u>LMS, MMS</u>	<u>FS, FSS</u>	
5.431A and 5.432B	<u>3 400-3 500</u>	LMS, MMS	<u>FS, FSS</u>	
<u>5.431B</u>	<u>3 400-3 600</u>	LMS (IMT)	<u>FS, FSS</u>	
<u>5.434</u>	<u>3 600-3 700</u>	LMS (IMT)	<u>FS, FSS</u>	

3.8 For the protection of the fixed and fixed-satellite services in the frequency bands between 3 400 MHz and 3 700 MHz from the mobile, except aeronautical mobile, service in the context of the provisions of Nos. **5.430A**, **5.431A** and **5.432B**, and from IMT in the context of the provisions of Nos. **5.431B** and **5.434**, the power flux density of -154.5 dB(W/m²·4 kHz) produced at the height of 3 m above ground level is used.

Based on the above pfd value the coordination distances are calculated using Recommendation ITU-R P.452-16 for 20% of time with smooth Earth terrain profile.

¹ See also Rules of Procedure to Nos. <u>5.312A</u>, **5.316B**, **5.341A** and **5.346**.

Reasons: WRC-15 adopted new or modified footnotes Nos. **5.430A, 5.431A, 5.431B, 5.432B** and **5.434** dealing with the allocations or identification of certain bands for administrations wishing to use IMT systems. These allocations or identification are subject to obtaining agreement of other administrations concerned under No. **9.21** and therefore require determining protection criteria for the co-primary fixed and fixed-satellite services to identify potentially affected administrations.

Taking into account that the power flux density of -154.5 dB($W/m^2 \cdot 4 \text{ kHz}$) given in Nos. **5.430A**, **5.431B**, **5.432B** and **5.434** would ensure the protection of both fixed and fixed-satellite services, this pfd value is used as a single criterion in the application of No. **9.21**.

Effective date of application of the Rule: Immediately after approval

ANNEX 2

Rules concerning

APPENDIX 30 to the RR

Art. 4

Procedure for modifications to the Region 2 Plan or for additional uses in regions 1 and 3

MOD

4.1.11

See also comments under § 4.1.3 and 4.2.6 and Rules relating to the Receivability of the Forms of Notice.

Note: WRC-15 took the decision related to the RoP on paragraph 4.1.11 of RR Appendices **30** and **30A** during the 8th Plenary, Par. 1.39 to 1.42 of Doc. CMR15/505, approval of Doc. CMR15/416 in relation to Section 3.2.6.4 of Doc. 4 (Add2) (Rev1), as follows:

"In Section 3.2.6.2 of Doc. 4 (Add2) (Rev1), the Director described the current practice of the Bureau in examining Part B submissions received under § 4.1.12 of Appendices **30** *and* **30A***:*

The Bureau identifies a list of administrations whose assignments are considered as being affected and receiving more interference as a result of the modification than that produced by the initial proposal in accordance with § 4.1.11. The Bureau then requests the notifying administration to modify the submitted characteristics in order to eliminate the above-mentioned identification or to apply again the provisions of § 4.1 of Appendices **30** and **30A**.

In reply to the Bureau's request, some administrations have provided the Bureau with the agreement of the administration identified under § 4.1.11.

<u>As the agreement to accept more interference has been provided and § 4.1.11 does not explicitly prevent this possibility, the Bureau has not rejected such agreements.</u>

WRC-15 endorsed the current BR practice outlined in this section."

Rules concerning

APPENDIX 30A to the RR

ADD

Art. 2A

Use of the guardbands

2A.1.2

Note: WRC-15 took the decision related to Coordination criteria under § 9.7 for an incoming satellite network under Article 2A (Space Operation Function) of RR Appendices **30A** in the 14.5-14.8 GHz frequency band during the 8th Plenary, Par. 1.39 to 1.42 of Doc. CMR15/505, approval of Doc. CMR15/416 in relation to Section 3.2.6.10 of Doc. 4 (Add2) (Rev1), as follows:

"WRC-15 considered that a coordination arc of \pm 7° be applied for 14.5-14.8 GHz (to be aligned with Ku-band from agenda item 9.1.2)."

Note from the Secretariat: since WRC-15 decided to modify Appendix 5 of the Radio Regulations to apply a \pm 6° coordination arc for "FSS not subject to a plan and any associated space operation functions" in this band, the alignment requested by the Plenary will be implemented by applying the value of \pm 6° also in this case.

Art. 4

Procedure for modifications to the Region 2 feeder-link Plan or for additional uses in regions 1 and 3

MOD

4.1.11

See also comments under § 4.1.3 and 4.2.6 and Rules of Procedure relating to the Receivability of the Forms of Notice.

Note: WRC-15 took the decision related to the RoP on paragraph 4.1.11 of RR Appendices **30** and **30A** during the 8th Plenary, Par. 1.39 to 1.42 of Doc. CMR15/505, approval of Doc. CMR15/416 in relation to Section 3.2.6.4 of Doc. 4 (Add2) (Rev1), as follows:

"In Section 3.2.6.2 of Doc. 4 (Add2) (Rev1), the Director described the current practice of the Bureau in examining Part B submissions received under § 4.1.12 of Appendices **30** *and* **30A***:*

The Bureau identifies a list of administrations whose assignments are considered as being affected and receiving more interference as a result of the modification than that produced by the initial proposal in accordance with § 4.1.11. The Bureau then requests the notifying administration to modify the submitted characteristics in order to eliminate the above-mentioned identification or to apply again the provisions of § 4.1 of Appendices **30** and **30A**.

In reply to the Bureau's request, some administrations have provided the Bureau with the agreement of the administration identified under § 4.1.11.

As the agreement to accept more interference has been provided and § 4.1.11 does not explicitly prevent this possibility, the Bureau has not rejected such agreements.

WRC-15 endorsed the current BR practice outlined in this section."

ADD

An. 4

Criteria for sharing between services

Note: WRC-15 took the decision related to the power density used for the calculation of $\Delta T/T$ under § 2 of Annex 4 to RR Appendix **30A** during the 8th Plenary, Par. 1.39 to 1.42 of Doc. CMR15/505, approval of Doc. CMR15/416 in relation to Section 3.2.6.11 of Doc. 4 (Add2) (Rev1), as follows:

"In Section 3.2.6.11 of Doc. 4 (Add2) (Rev1), the Director sought confirmation by the conference to use the maximum power density per hertz averaged over the worst 1 MHz in the $\Delta T/T$ calculation specified in Section 2 of Annex 4 to Appendix **30A**.

WRC-15 considered and confirmed the approach presented in this section."

Rules concerning APPENDIX 30B to the RR

Art. 6

Procedures for the conversion of an allotment into an assignment for the introduction of an additional system or for the modification of an assignment in the List

ADD

6.25 to 6.29

Note: WRC-15 took the decision related to the provisional entry of converted assignment in RR Appendix **30B** List during the 8th Plenary, Par. 1.39 to 1.42 of Doc. CMR15/505, approval of Doc. CMR15/416 in relation to Section 3.2.7.1 of Doc. 4 (Add2) (Rev1), as follows:

"In Section 3.2.7.1 of Doc. 4 (Add2) (Rev1), the Director sought confirmation by the conference of the following course of action:

When an assignment converted from an allotment of Appendix **30B** Plan enters in the List provisionally, the initial allotment will not be suppressed from the Plan until the entry in the List of the assignment becomes definitive. When the converted assignment is reinstated, the notifying administration should choose either to keep its initial allotment in the Plan or reinstate with characteristics in the List to replace the initial allotment. In the latter case, the conditions described in § 6.26 to § 6.29 of Article 6 of Appendix **30B** shall continue to be applied to the reinstated allotment (i.e. has the same status of the cancelled assignment).

WRC-15 considered and confirmed the course of action presented in this section."
