



Radiocommunication Bureau (BR)

Circular Letter CCRR/57

28 July 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 72<sup>nd</sup> meeting (16 - 20 May 2016), the Radio Regulations Board considered the impact of WRC-15 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 the Radiocommunication Bureau (BR) (see Document RRB16-2/3) and other inputs by Board members and administrations. 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 2 to Document RRB16-2/3).

The Bureau therefore prepared a set of draft new or modified Rules of Procedure as a consequence of the decisions of WRC-15, including draft Rules of Procedure requiring updates (see Annex 1). The Bureau also compiled the 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 and may, as decisions with the status of an authentic interpretation of the Radio Regulations, be candidates for Rules of Procedure. The Board has endorsed the list of such above plenary meeting decisions for which appropriate draft Rules of procedure have been prepared by the Bureau (see Annex 2). Regarding these draft Rules of Procedure, the Board indicated that these decisions have been adopted by the legislator and, as such, have a higher status than Rules of Procedure. For this reason, and keeping in mind the principle of the hierarchy of norms, the Rules of Procedure relating to these decisions cannot be in contradiction with, or diverge from, these decisions.

In accordance with No. **13.17** of the Radio Regulations, these draft Rules of Procedure 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 should reach the Bureau not later than **19 September 2016**, in order to be considered at the  $73^{rd}$  meeting of the RRB, scheduled for 17 - 21 October 2016. Comments should be sent either by telefax to +41.22 730 5785 or by email to <u>brmail@itu.int</u>.

François Rancy Director

Annexes: 2 Distribution: - Administrations of Member States of ITU

- Members of the Radio Regulations Board

International Telecommunication Union • Place des Nations, CH-1211 Geneva 20, Switzerland Tel: +41 22 730 5111 • Fax: +41 22 733 7256 • E-mail: itumail@itu.int • www.itu.int • www.itu.int/go/RR110

## 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 2A 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 procedures is are to be applied for each satellite network. Also, Aaccording to items A.4.b.4 and A.4.b.4.b.4 of in Appendix 4 one notice can cover more than one orbital plane and more than one satellite per orbital plane 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 than one satellite having identical characteristics <u>per orbital plane</u> and for which <u>item A.4.b.4.b § A.4 b) 4) of in Appendix 4</u> requires the indication of the number of satellites;
- *d*) a combined system consisting of one geostationary satellite and a number of non-geostationary satellites.

(See also comments under §3.11 and §4.3 the Rules of Procedure concerning the Receivability of forms of notice)

**Reasons**: WRC-15 decision - suppression of API procedure for satellite systems that are subject to coordination procedure under Article 9. Clarification of the notion of non-GSO satellite systems.

Effective date of application of the Rule: 1<sup>st</sup> January 2017

### RULES CONCERNING

### **ARTICLE 5 of the RR**

ADD

5.509D	and
5.509E	

When an administration submits a notification or a request for coordination of a space station satellite network that includes a frequency assignment which is subject to Resolutions **163 (WRC-15)** or **164 (WRC-15)**, the notice should include a commitment by the administration, as required under § A.16 *c*) of Annex 2 to Appendix **4**, indicating that the earth station associated with the filed satellite network will meet the separation distance as specified in No. **5.509E** and the power flux-density limits as specified in No. **5.509D**.

The Board decided to instruct the Bureau to use the commitment under § A.16 *c*) in its examination under No.**9.35/11.31** of a frequency assignment of a satellite network with respect to its conformity with No. **5.509D** and No. **5.509E**.

However, the Bureau's regulatory examination under No. **11.31** of a frequency assignment to an earth station notified under Article **11** will include the conformity with the limits of power-flux density produced by this earth station under No. **5.509D** and the distance indicated in No. **5.509E**.

For the examination under No.**5.509D**, the Bureau shall calculate the power flux-density under freespace propagation condition for all altitudes within line-of-sight up to 19 000 m above sea level at 22 km seaward from all coasts based on the IDWM (ITU's Digitized World Map).

**Reasons**: WRC-15 introduced the separation distance as specified in No. **5.509E** and the power fluxdensity limits that are specified in No. **5.509D** for the use of the frequency bands 14.50-14.75 GHz in countries listed in Resolution **163 (WRC-15)** and 14.50-14.8 GHz in countries listed in Resolution **164** (WRC-15) by the fixed-satellite service (Earth-to-space). In accordance with § A.16 c) of Annex 2 to Appendix **4** administrations have to submit a commitment to meet these limits only for a space networks submitted for coordination and notification. The method to be used by the Bureau to calculate power flux density specified in No. **5.509D** until the time ITU-R develops more appropriate one is clarified.

*Effective date of application of the Rule:* 1<sup>st</sup> January 2017

ADD

### 5.316B

1 This provision stipulates, *inter alia*, that in Region 1, the allocation to the mobile, except aeronautical mobile, service in the frequency band 790-862 MHz 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 Annex I to Resolution **749 (Rev. WRC-12)** 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. **5.316B**.

**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**. Currently, the territories of 83 out of 123 Region 1 administrations are located at the distances exceeding 450 km from the closest country contained in No. **5.312** that represents the maximum coordination distance of Resolution **749 (Rev. WRC-12)** derived from the worst-case assumptions relating to the relevant propagation characteristics and technical parameters.

The 40 countries that are located closer than 450 km from the countries listed in No. **5.312** are as follows: 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.

Effective date of application of the Rule: immediately after approval

### ADD

### 5.328AA

1 Appendix **4** does not contain data elements which would enable examination as to whether a notified frequency assignment in the aeronautical mobile-satellite (R) service (AMS(R)S) is associated to the space station reception of Automatic Dependent Surveillance-Broadcast (ADS-B) emissions from aircraft transmitters that operate in accordance with recognized international aeronautical standards or reception of emissions from aircraft transmitters that operates under other standards. As the Bureau has no means to make such differentiation, the Board decided that the Bureau shall make no examination of the notified frequency assignment in the AMS(R)S from the viewpoint of its conformity with this provision

2 With respect to the requirements contained in *resolves* 1, 2 and 3 of Resolution **425** (WRC-15) and in the absence of relevant data elements in Appendix 4, the Board also decided that the Bureau shall make no examination on the conformity with the above *resolves* of Resolution **425** (WRC-15).

**Reasons**: WRC-15 adopted No.**5.328AA** to limit the use of the frequency band 1087.7-1092.3MHz in the AMS(R)S to ADS-B emissions without adding data elements in Appendix **4** that would have allowed the Bureau to undertake such examination.

*Effective date of application of the Rule:* 1<sup>st</sup> January 2017

5.341A

1 This provision stipulates, *inter alia*, that in Region 1 the use of IMT stations in the frequency bands 1 427-1 452 MHz and 1 492-1 518 MHz is subject to agreement obtained under No. **9.21** with respect to the aeronautical mobile service used for aeronautical telemetry in accordance with No. **5.342**.

2 Taking into account that No. **5.342** 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 mobile service, the Board decided that those administrations whose territories are beyond the distance of 670 km from the countries mentioned in No. **5.342** do not need to apply the No. **9.21** procedure to their IMT stations operating under No. **5.341A**. For those administrations whose territories are closer than the distance of 670 km Section B6 applies.

**Reasons:** to avoid unnecessary application of the No. **9.21** procedure for the administrations wishing to implement IMT, which are located at sufficiently large distances from the countries mentioned in No. **5.342**.

According to the calculations made by the Bureau, the maximum distance at which an IMT station may cause interference to aeronautical mobile service stations used for aeronautical telemetry is 670 km. This distance has been calculated based on the available characteristics of IMT stations and the worst-case assumptions related to the propagation characteristics and other technical parameters using Recommendation ITU-R M.1549 and Report ITU-R M. 2292.

In particular, the coordination trigger power flux density of -181 dB(W/m<sup>2</sup>) within 4 kHz of the reference bandwidth was used as given in Recommendation ITU-R M.1459 and a reference IMT Advanced base station was assumed as having radiated power of 31 dBW (e.i.r.p.), a bandwidth of 10 MHz, and an antenna height of 30 m as defined in Report ITU-R M.2292. The propagation curves of Recommendation ITU-R P.1546-5 for warm sea path with 10% of time and 50% of locations for the frequency 1 427 MHz have been used.

Currently, the territories of 83 out of 123 Region 1 administrations are located at the distances beyond 670 km from the countries mentioned in No. **5.342**. The 40 countries that are located closer than the distance of 670 km from the countries listed in No. **5.342** are as follows: Albania, Armenia, Austria, Azerbaijan, Bosnia and Herzegovina, Belarus, Bulgaria, Czech Rep., Germany, Denmark, Estonia, Finland, Georgia, Greece, Hungary, Croatia, Iraq, Italy, Kazakhstan, Kyrgyzstan, Lithuania, Latvia, Moldova, the former Yugoslav Republic of Macedonia, Montenegro, Mongolia, Norway, Poland, Romania, the Russian Federation, Sweden, Serbia, Slovakia, Slovenia, the Syrian Arab Republic, Tajikistan, Turkmenistan, Turkey, Ukraine and Uzbekistan.

Effective date of application of the Rule: 1<sup>st</sup> January 2017

### ADD

# 5.346

1 This provision stipulates, *inter alia*, that the implementation of IMT in the frequency band 1 452-1 492 MHz in a number of Region 1 countries, which are listed in this footnote, is subject to agreement obtained under No. **9.21** with respect to the aeronautical mobile service used for aeronautical telemetry in accordance with No. **5.342**. Taking into account that No. **5.342** contains only a few countries while a large number of the countries listed in No. **5.346** are located at the distances that are sufficiently large to exclude a potential for interference to the aeronautical mobile service, the Board decided that those administrations whose territories are beyond the distance of 670 km from the countries mentioned in No. **5.342** do not need to apply the No. **9.21** procedure to their IMT stations operating under No. **5.346**. For those administrations whose territories are closer than the distance of 670 km Section B6 applies.

**Reasons:** to avoid unnecessary application of the No. **9.21** procedure for the administrations wishing to implement IMT, which are located at sufficiently large distances from the countries mentioned in No. **5.342**. The distance of 670 km has been derived as explained in "Reasons" for No.**5.341A**. Only one country, notably Iraq, out of 53 countries listed in the footnote No. **5.346** is within 670 km from the countries listed in No. **5.342**.

Effective date of application of the Rule: 1<sup>st</sup> January 2017

### MOD

### Band 2 605-2 655 MHz

1 Provisions Nos. **5.416**, **5.417A**, **5.417B**, **5.417C**, **5.417D**, **5.418**, **5.418A**, **5.418B** and **5.418C** provide information on the different constraints and procedures applying to the broadcasting-satellite service (BSS) and fixed-satellite service (FSS) in the frequency range 2 6<u>30</u>05-2 655 MHz.

The Board undertook an in-depth examination of the different provisions and the applicability of the different coordination procedures (space network-to-space network (Nos. 9.7, 9.12, 9.12A and 9.13)) that apply to satellite systems in the band 2 63005-2 655 MHz and noted the possible difficulty in assessing the service (BSS (sound), BSS (television), FSS) and the nature of the satellite network (GSO or non-GSO) to which Nos. 5.417B, 5.417C, 5.417D, 5.418A, 5.418B and 5.418C, should apply, taking due account of the dates of reception of the complete Appendix 4 coordination or notification information, as appropriate. Indeed, in the band 2 630-2 655 MHz, No. 5.418A refers to the application of the provisions of No. 9.12A for non-GSO systems in the BSS (sound) in certain countries listed in No. 5.418, in respect of GSO systems; without further details on the involved services; No. 5.418B refers to the application of the provisions of No. 9.12 for non-GSO systems in the BSS under No. 5.418, in respect of other non-GSO systems; and No. 5.418C refers to the application of No. 9.13 by GSO networks in respect of non-GSO systems in the BSS (sound), allocated under No. 5.418. The same wording is also used in Nos. 5.417B, 5.417C, and 5.417D relating to BSS systems in the band 2 605-2 630 MHz.

3 Taking the above into account and in the light of WRC-03 discussions and decisions, in particular the addition of an explicit reference to No. **5.418** in Nos. **5.418B**, **5.418C**, and the explicit reference to No. **5.417A** in Nos. **5.417B**, **5.417C** and **5.417D**, the Board understands Nos. **5.418A**, **5.418B** and **5.418C**, and Nos. **5.417B**, **5.417C**, **5.417D** to only address cases of coordination as follows: non-GSO BSS (sound) (Nos. **5.418** and **5.417A**) systems vis-à-vis any GSO systems under No. **9.12A**, and vis-à-vis any non-GSO systems under No. **9.12**, and vice versa, i.e. any GSO systems visà-vis non-GSO BSS (sound) (Nos. **5.418** and **5.417A**) systems under No. **9.13**, and any non-GSO systems vis-à-vis non-GSO BSS (sound) (Nos. **5.418** and **5.417A**) systems under No. **9.12**, as described in the Table below. This Table applies to coordination requirements between GSO and non-GSO satellite systems for which the API has been received following 1 January 1999 and complete coordination/notification information was received after 2 June 2000 in the band 2 630-2 655 MHz and after 4 July 2003 in the band 2 605-2 630 MHz.

Coordination request (CR): Column vis-à-vis Row (∠) (2 6 <u>30<del>05</del>-</u> 2 655 MHz)	Non-GSO BSS (sound) ↓ ( <del>5.417A, </del> <b>5.418</b> )	GSO BSS↓ ( <b>5.416, <del>5.417A,</del> 5.418</b> ) or FSS↓ (Region 2)	Non-GSO BSS↓ ( <b>5.416</b> ) or FSS↓ (Region 2)
Non-GSO BSS (sound) ↓	9.12	9.13	9.12
( <del>5.417A, </del> <b>5.418</b> )	( <del>5.417C,</del> 5.418B)	( <del>5.417D</del> , 5.418C)	( <del>5.417C,</del> 5.418B)
GSO BSS (sound) ↓ ( <b>5.416</b> , <del><b>5.417A, 5.418</b>) or FSS ↓ (Region 2)</del>	9.12A ( <del>5.417B,</del> 5.418A)	9.7	No CR <b>22.2</b>
Non-GSO BSS ↓ ( <b>5.416</b> ) or	9.12	No CR	No CR
FSS ↓ (Region 2)	( <del>5.417C, </del> 5.418B)	<b>22.2</b>	

### Reasons: WRC-15 suppressed No. 5.417A, 5.417B, 5.417C and 5.417D.

Effective date of application of the Rule: 1<sup>st</sup> January 2017

### MOD

# 5.510

Provision No. **5.510** limits the use of the band 14.5-14.8 GHz by the fixed-satellite service (FSS) (Earth to-space) to feeder-links for the broadcasting-satellite service (BSS) <u>except in the countries and under the technical and operational limitations included in Resolution 163 (WRC-15) and Resolution 164 (WRC-15) and reserves this use for countries outside Europe<sub>17</sub> It which means that such use (feeder-link for the BSS) is authorized in Region 2. This allocation was made at WARC-79 with the view to provide feeder-links to the 12 GHz broadcasting-satellite service for the three Regions. Article 2 of Appendix **30A** indicates that the provisions of this Appendix applies to FSS feeder links in the band 14.5-14.8 GHz in Region 2. Articles 4 and 7 of Appendix **30A** do not include the regulatory procedures to deal with the possible sharing situation between FSS feeder-link networks for the BSS in Region 2 and the Regions 1 and 3 BSS feeder-link Plan and List (outside Europe) in the 14.5-14.8 GHz band.</u>

2 Taking account of the above context, where the utilisation of spectrum is not covered by specific procedures, and that similar existing procedures should be applicable to services having allocations with equal rights, the Board concluded that:

*a)* the use of the band 14.5-14.8 GHz for BSS feeder-links in the FSS (Earth to-space) in Region 2 is in accordance with the Table of Frequency Allocation;

- b) coordination of a BSS feeder-link frequency assignment in the FSS (Earth-to-space) in Region
   2 in the band 14.5-14.8 GHz with frequency assignments of the BSS feeder-link subject to a plan shall be effected using the provision of Section I of Article 7 of Appendix **30A**; and,
- c) coordination of a frequency assignment to be included in the Regions 1 and 3 feeder-link list with BSS feeder-link frequency assignments in the FSS (Earth-to-space) in Region 2 in the band 14.5-14.8 GHz shall be effected using Appendix **30A** § 4.1.1d).

Reasons: WRC-15 modified No.5.510.

*Effective date of application of the Rule:* 1<sup>st</sup> *January 2017* 

# Rules concerning the Receivability of forms of notice generally applicable to all notified assignments submitted to the Radiocommunication Bureau in application of the Radio Regulatory Procedures

### 1 Submission of information in electronic format

### MOD 1.1 Space services (ADD RRB12/60)

The Board noted the requirement for mandatory electronic filing and submission of comments/objections and requests for inclusion or exclusion specified in the *resolves* of Resolutions **55** (**Rev.WRC-152**). and **908** (**WRC-12**). It also noted that capture and validation software had been made available to administrations by the Bureau, including software to submit information required in Annex 2 of Resolution **552** (**WRC-152**). and in the *instructs the Director of the Radiocommunication Bureau* of Resolution **908** (**WRC-12**). Accordingly, all information indicated in the *resolves* of Resolution **55** (**Rev.WRC-152**)<sup>1</sup> and in Annex 2 of Resolution **552** (**WRC-152**)<sup>1</sup> and in Annex 2 of Resolution **552** (**WRC-152**) and in the Attachment to Resolution **553** (**Rev.WRC-152**)<sup>1</sup> under § 8 and § 9, shall be submitted to the Bureau in electronic format (except graphical data which can still be submitted in paper form) which is compatible with the BR electronic notice form capture software (SpaceCap) and comments/objections software (SpaceCom) or Capture API Online function of SpaceWISC (Space Web-based Interface for Secure Communication). In case of Advance publication of information on satellite networks or satellite systems that are subject to coordination procedure under Section II of Article **9**, submission shall be made exclusively via the ITU web interface SpaceWISC available at https://extranet.itu.int/itu-r/spacewisc, instead of e-mail or surface mail.

••••

### 2 Receipt of notices (MOD RRB12/60)

•••

MOD *b*) E-mail, telefax documents, SpaceWISC or WISFAT submissions shall be recorded as received on the actual date of receipt, irrespective of whether or not that is a working day at the ITU/BR's offices in Geneva.

••••

# 3 Establishment of a formal date of receipt of information in accordance with Annex 2 to Appendix 4

•••

MOD 3.2 In order to establish a formal date of receipt for the purpose of treatment of the submissions (notices for advance publication <u>, under Sub-Section IA of Article 9</u>, request for coordination, modification to the Region 2 Plan or proposed new or modified assignments in the Regions 1 and 3 Lists under Article 4 of Appendices **30** or **30A**, proposed new or modified assignments in the guardbands to provide space operation functions under Article 2A of Appendices

<sup>&</sup>lt;sup>1</sup> Except comments submitted in accordance with §§4.1.7, 4.1.9, 4.1.10 of Article 4 of Appendix **30** and **30A** and Article 2A of Appendix **30** and **30A** in Region 1 and Region 3.

**30** or **30A**, or request for application of Articles 6 or 7 of Appendix **30B**, and notifications for recording in the Master International Frequency Register (Master Register)), the Bureau shall examine *inter alia* the completeness and correctness of the information submitted by administrations. It shall also take account of the requirements of Nos. **9.1** or **9.2** when establishing the formal date of receipt of coordination information and notification information with respect to the date of receipt (when the coordination procedure of Section II of Article **9** is applicable) and the date of publication (when coordination is not required by Section II of Article **9**) of advance information, respectively.

...

### 4 Other non-receivable submissions

••••

MOD 4.1 An advance publication notice sent to the Bureau earlier than 7 years before the planned date of bringing into use of the satellite network is not receivable and shall be returned to the administration responsible for the network. (No $\underline{s}$ . 9.1, 9.1A or 9.2 refers.)

...

MOD 4.3 One coordination request of satellite network and possible subsequent modifications can only correspond to one API, including its possible modifications and vice-versa. In accordance with the Rule of Procedure concerning the definition of a satellite network contained in No. **1.112**, this coordination request would thus have only one set of orbital characteristics, i.e. those specified in Section A4 of Appendix **4**.-A <u>modificationfurther to a</u> coordination request making reference to the same API will only be receivable if the set of orbital characteristics included in that submission are unchanged relative to those in the earlier coordination request submission or are intended to replace that earlier set of orbital characteristics- In all other cases a new <u>coordination request API</u> is required as the submission then pertains to a new satellite network (No. **9.2C** refers). (in case of non-GSO satellite system with more than one satellite, see also §3.11)

MOD 4.4 The Radio Regulations prescribe, in some cases, the application of multiple procedures, which have to be applied, for the same stations or satellite network, one after another. A typical example of such a case of multiple procedures is a geostationary satellite network in the frequency bands or services to which the application of the advance publication, the coordination procedure under Section II of Article **9** (in some cases more than one form of coordination) and the notification procedures, in this order, are mandatory. In such cases, a notice for a particular procedure is receivable only if the previously applicable procedure has been effected. A notice for a request for coordination is not receivable if the advance publication information was not submitted to the Bureau (see also the Rule of Procedure on No. **9.5D**).

4.4.1 A notification under Article **11** is not receivable if the advance publication information and\_coordination request, where applicable, were was not received for the satellite network (No. <u>9.6 refers</u>) and shall be returned to the notifying administration.

4.4.2 A notification under Article **11** is not receivable if the advance publication information under Sub-Section IA of Article **9**, where applicable, was not received for the satellite network and shall be returned to the notifying administration. <u>4.4.3</u> The same shall also apply for the notification of an earth station whose associated space station is not yet notified. A notification of an earth station under Article 11 is not receivable if the advance publication information or coordination request, as appropriate, was not received for the associated space station.

**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: 1<sup>st</sup> January 2017

# Rules concerning ARTICLE 9 of the RR

SUP

9.2

**Reasons:** WRC-15 decision - suppression of submission of API for satellite systems that are subject to coordination procedure. Effective date of suppression of the Rule: 1<sup>st</sup> January 2017

SUP

9.2B

**Reasons:** WRC-15 decision - suppression of submission of API for satellite systems that are subject to coordination procedure. Effective date of suppression of the Rule: 1<sup>st</sup> January 2017

SUP

9.5B

**Reasons:** WRC-15 decision - suppression of submission of API for satellite systems that are subject to coordination procedure.

Effective date of suppression of the Rule: 1<sup>st</sup> January 2017

SUP

9.5D	

**Reasons:** WRC-15 decision - suppression of submission of API for satellite systems that are subject to coordination procedure. Paragraph 3 of the rule of procedure has been transferred in the rule on Nos. **9.23** 

### Effective date of suppression of the Rule: 1<sup>st</sup> January 2017

### MOD

9.23

### See comments under the Rules of Procedure concerning No.9.5D.

1 When the information under Nos. **9.30** and **9.32**, as the case may be, relating to only one form of coordination (e.g. No. **9.7**) has been received by the Bureau, in the case where there is a need to effect more than one form of coordination in accordance with Nos. **9.30** and **9.32**, as the case may be, it is in the interest of administrations that the Bureau establishes those other forms of coordination requirement immediately, rather than to proceed with them after receiving the request at a later date. Moreover, it will be more efficient, expeditious and easy to proceed with the publication required under Nos. **9.34/9.38** at one time (same date of receipt) on the same information.

In view of the above the Board decided to take the following practical approach. The Bureau, as far as possible, identifies any administrations with which coordination may need to be effected under Nos. **9.7** to **9.14** and **9.21** where applicable and includes their names in the publication even if the requests for specific coordination form is not received by the Bureau at that time. If no comment is received from the administration responsible within the four months from the date of publication, it shall be considered that this publication is implemented according to the request of the administration and the corresponding coordination requirement has been established.

**Reasons:** WRC-15 decision – consequential changes following suppression of No. 9.5D Effective date of application of the Rule: 1<sup>st</sup> January 2017

#### TABLE 9.11A-1

### Applicability of the provisions of Nos. 9.11A-9.15 to stations of space services

MOD

1	2	3		4	5	6	7
Frequency band (MHz)	Footnote No. in Article <b>5</b>	Space services mentioned in a footno referring to Nos. <b>9.11A</b> , <b>9.12</b> , <b>9.12A</b> , 9 or <b>9.14</b> , as appropriate		Other space services or systems to which Nos. <b>9.12</b> to <b>9.14</b> provisions(s) apply equally, as appropriate	Applicable Nos. <b>9.12</b> to <b>9.14</b> provision(s), as appropriate	Terrestrial services in respect of which No. <b>9.14</b> apply equally	Notes
149.9-150.05	5.220	MOBILE-SATELLITE (non-GSO) <sup>*</sup> * Limited to LMSS system until 1.1.2015 (see No. <b>5.224</b> A)	Ŷ	<del>(See No. <b>5.220</b>)</del>	9.12		1

399.9-400.05	5.220	MOBILE-SATELLITE (non-GSO)*	$\uparrow$	<del>(See No. <b>5.220</b>)</del>	9.12	
		* Limited to LMSS system until				
		<del>1.1.2015</del>				
		<del>(see No. <b>5.224A</b>)</del>				

**Reasons**: WRC-15 deleted the primary allocation to the radionavigation-satellite service already expired on 1 January 2015 and suppressed footnotes Nos.5.224A and 5.224B. Footnote No.5.520 was further modified remove the higher status of the radionavigation-satellite with respect to the mobile-satellite service.

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

### TABLE 9.11A-1 (continued)

1	2	3	4	5	6	7
Frequency band (MHz)	Footnote No. in Article <b>5</b>	Space services mentioned in a footnote referring to Nos. 9.11A, 9.12, 9.12A, 9.13 or 9.14, as appropriate	Other space services or systems to which Nos. <b>9.12</b> to <b>9.14</b> provisions(s) apply equally, as appropriate	Applicable Nos. <b>9.12</b> to <b>9.14</b> provision(s), as appropriate	Terrestrial services in respect of which No. <b>9.14</b> apply equally	Notes

1 610-1 626.5 <b>5.364</b>	MOBILE-SATELLITE <del>(except S</del> (5.363)) RADIODETERMINATION-SATELLITE (Region 2 (except country in No. 5.370), countries in No. 5.369)	Ŷ	AERONAUTICAL MOBILE-SATELLITE (R) ( <b>5.367</b> )	$\downarrow\uparrow\\\leftrightarrow$	9.12, 9.12A, 9.13		
----------------------------	--	---	---	---------------------------------------	-------------------	--	--

**Reasons**: WRC-07 suppressed footnote No.5.363 (alternative allocation for S).

*Effective date of application of the Rule:* 1<sup>st</sup> *January* 2017

MOD

### TABLE 9.11A-1 (continued)

1	2	3		3 4		5	6	7
Frequency band (MHz)	Footnote No. in Article <b>5</b>	Space services mentioned in a footnote referring to Nos. <b>9.11A</b> , <b>9.12</b> , <b>9.12A</b> , <b>9.13</b> or <b>9.14</b> , as appropriate		Nos. 9.12 to 9.14 provisions(s) apply equally,		Applicable Nos. <b>9.12</b> to <b>9.14</b> provision(s), as appropriate	Terrestrial services in respect of which No. <b>9.14</b> apply equally	Notes
<del>2 605 2 630</del>	<del>5.4178</del> 5.417C 5.417D	BROADCASTING SATELLITE (sound) (5.417A)	+	BROADCASTING SATELLITE (5.416) FIXED SATELLITE (Region 2)	+	<del>9.12, 9.12A, 9.13</del>	_	4 <del>, 5</del>

Reasons: WRC-15 suppressed footnotes Nos.5.417A, 5.417B, 5.417C and 5.417D.

*Effective date of application of the Rule:* 1<sup>st</sup> *January* 2017

MOD

1	2	3		4		5	6	7
Frequency band (MHz)	Footnote No. in Article <b>5</b>	Space services mentioned in a footno referring to Nos. <b>9.11A</b> , <b>9.12</b> , <b>9.12A</b> , <b>9</b> or <b>9.14</b> , as appropriate		Other space services or systems to which Nos. <b>9.12</b> to <b>9.14</b> provisions(s) apply equally, as appropriate		Applicable Nos. <b>9.12</b> to <b>9.14</b> provision(s), as appropriate	Terrestrial services in respect of which No. <b>9.14</b> apply equally	Notes
6 700-7 075	5.458B	FIXED-SATELLITE (limited to non- GSO MOBILE-SATELLITE SERVICE feeder links)	$\downarrow$	FIXED-SATELLITE ( <del>non-</del> GSO) in bands 6 700- 6 725 MHz and 7 025-7 075 MHz <del>(see also <u>No. 5.458C)</u> FIXED-SATELLITE (non-GSO)</del>	↑	9.12 <u>, 9.12A, 9.13</u>	<u>FIXED</u> <u>MOBILE</u>	

*Reasons*: WRC-15 suppressed footnote Nos.5.458C. Necessary corrections of the rule.

*Effective date of application of the Rule:* 1<sup>st</sup> *January* 2017

MOD

### TABLE 9.11A-1 (continued)

1	2	3		4		5	6	7
Frequency band (GHz)	Footnote No. in Article <b>5</b>	Space services mentioned in a footnot referring to Nos. 9.11A, 9.12, 9.12A, 9 or 9.14, as appropriate		Nos. 9.12 to 9.14 provisions(s) apply equally,		Applicable Nos. <b>9.12</b> to <b>9.14</b> provision(s), as appropriate	Terrestrial services in respect of which No. <b>9.14</b> apply equally	Notes
15.43-15.63	5.511A	FIXED-SATELLITE (limited to non- GSO MOBILE-SATELLITE SERVICE feeder links)	<b>↓</b> ↑			9.12		
<del>15.63-15.65</del>	5.511D	FIXED SATELLITE (non GSO)	÷	F <del>IXED-SATELLITE</del>	4	<del>9.12, 9.12A, 9.13, 9.1</del> 4	AERONAUTICAL RADIONAVIGATION (see also No. <b>5.511D</b> )	

Reasons: WRC-15 suppressed footnote Nos.5.511D.

*Effective date of application of the Rule:* 1<sup>st</sup> *January* 2017

### MOD

#### TABLE 9.11A-2

# Applicability of the provisions of No. 9.15 to earth stations of a non-geostationary satellite network and No. 9.16 to stations of terrestrial services

1	2	3	4	5	6	7
Frequency band (MHz/GHz)	Footnote No. in Article <b>5</b>	Terrestrial services to which No. <b>9.16</b> applies and in respect of which No. <b>9.15</b> applies	Space services mentioned in a footnote referring to No. <b>9.11A</b> to which No. <b>9.15</b> applies and in respect of which No. <b>9.16</b> applies		Applicable Nos. <b>9.15, 9.16</b> provision(s)	Notes
15.43-15.63	5.511A	AERONAUTICAL RADIONAVIGATION	FIXED-SATELLITE (limited to non-GSO MOBILE-SATELLITE SERVICE feeder links ( <b>5.511A</b> ))	<b>†</b>	9.15	1, <del>6</del> 5
<del>15.43-15.63</del>	<del>5.511A</del>	AERONAUTICAL RADIONAVIGATION	FIXED-SATELLITE (limited to non GSO MOBILE SATELLITE SERVICE feeder links (5.511A))	+	9 <u>.15, 9.16</u>	<del>1, 5</del>
<del>15.63-15.65</del>	5.511D	AERONAUTICAL RADIONAVIGATION	FIXED SATELLITE (limited to non GSO (5.511D))	+	<del>9.15, 9.16</del>	1

<sup>5</sup> Stations in the aeronautical radionavigation service in this band are subject to power limits indicated in Recommendation ITU-R S.1340 (see No. **5.511C**).

**Reasons**: WRC-15 deleted the primary footnote allocation to the fixed-satellite service downlink in No.5.511A. Further, footnote No.5.511D was deleted. A typographic error in a reference to a note number was corrected (6 instead of 5).

Effective date of application of the Rule: 1<sup>st</sup> January 2017

MOD

9.47

The Board concluded that when the Bureau acts under No. **9.47** following a request for assistance from an administration under No. **9.46** and in the absence of an acknowledgement from the concerned administration within thirty days of the Bureau's telefax under No. **9.46**, the Bureau shall immediately send a reminder providing an additional fifteen day period for the acknowledgement.

2 <u>Following In the absence of such an acknowledgement within fifteen days after the</u> reminder, the provisions the application of Nos. **9.48** - **9.49** and -in accordance with No.**9.47** shall apply. Subsequently, the Bureau shall communicate to the concerned administration the application of Nos. **9.48** and **9.49** and provide a copy of that communication to the requesting administration. MOD

# 9.62

1 The Board concluded that when the Bureau acts under No. **9.62** following a request for assistance from an administration under No. **9.60** and in the absence of a response from the concerned administration within thirty days of the Bureau's telefax under No. **9.61**, the Bureau shall immediately send a reminder providing an additional fifteen day period for the response.

21—If the administration fails to inform the Bureau of its agreement or its disagreement together with information concerning its own assignments on which its disagreement is based within fifteen days after the reminder, the provisions of Following application of Nos. 9.48 and 9.49 and in accordance with No. 9.62 shall apply. Subsequently, the Bureau shall communicate to the concerned administration the application of Nos. 9.48 and 9.49 and provide a copy of that communication to the administration requesting for assistance.

23 Consequently, with respect to the administration not responding, the administration having applied the procedure shall be regarded as having successfully completed the procedure of this Article with respect to the assignments for which there was no response.

34 The Bureau shall apply No. **9.61** only if an administration with which coordination is sought fails to give its agreement or its disagreement together with information concerning its own assignments on which its disagreement is based. This information may be the reference to the previous publications including concerned assignments. In case of requests for assistance due to other difficulties in coordination, No. **13.1** shall apply.

**Reasons**: WRC-15 modified Nos.**9.47** and **9.62** to incorporate the requirement of the reminder mentioned in the Rules of Procedure.

Effective date of application of the Rule: 1<sup>st</sup> January 2017

# Rules concerning ARTICLE 11 of the RR

MOD

11.28

### Comparison of data with those submitted under Article 9

Number **11.28** does not refer to the need to compare the notified characteristics with those published in the Special Sections for advance publication, for coordination, and for results/status of the coordination. A frequency notice submitted under No. **11.2** or **11.9** whose characteristics differ from those published in a Special Section necessarily requires consideration by the Bureau for appropriate actions. The following actions shall be taken:

1) The date of bringing into use of a space station shall be compared with the date of receipt of the <u>relevant complete information under supporting advance publication\_referred to</u> <u>in No. 9.1 or 9.2 in the case of satellite networks or systems not subject to Section II of Article 9</u> <u>or inunder No. 9.1A in the case of satellite networks or systems subject to Section II of Article 9</u>. In the case that this period exceeds seven years, the notice is returned to the notifying administration with a recommendation to restart the Article 9 procedure.

- 2) When the notified characteristics are within the limits of those published in the Special Section relating to advance publication but are different from those published in the <u>modifications to the</u> Special Section relating to coordination, this difference is assumed to have resulted from the coordination.
- 3) For practical reasons, the Bureau could not systematically undertake the comparison of coordination information contained in the notice form submitted under No. **11.2** or **11.9** and that from the voluminous correspondence from the coordination phase. The Board thus decided that the No. **11.32** examinations of the Bureau shall be based on the coordination information available from the notice forms (Boxes A5/A6). This information being the most up to date for the case under examination, the Bureau shall consider the notified data of the network submitted in the notice form as coordinated with those countries mentioned in Boxes A5/A6.
- 4) In accordance with No.9.2, wWhen the notified characteristics are not within the limits of those published in the Special Section relating to the advance publication the comments made under the Rules of Procedure concerning No. 9.2 apply. the notice is returned to the notifying administration with a recommendation to restart the Article 9 procedure.

**Reasons:** WRC-15 decision – consequential changes to the suppression of submission of API for satellite systems that are subject to coordination procedure

Effective date of application of the Rule: 1st January 2017

MOD

11.32

6 Examination of frequency assignments to an inter-satellite link of a geostationary space station communicating with a non-geostationary space station

### **SUP** 6.3

**Reasons:** WRC-15 decision - suppression of API procedure for satellite systems that are subject to coordination procedure under Article 9. Regulatory period for described cases already expired.

Effective date of suppression of the Rule: 1<sup>st</sup> January 2017

### MOD



The calculation method to assess the probability of harmful interference and the criteria for the formulation of the Findings of the Bureau for the coordination under No. **9.7** are contained in the Rules of Procedure B3<u>except for the cases mentioned in No.11.32A.2</u> and Resolution **762 (WRC-**<u>15)</u>.

**Reasons**: WRC-15 introduced power flux-density criteria described in Resolution **762 (WRC-15)** to assess the potential for harmful interference under No.11.32A for the cases mentioned in No.11.32A.2 and that Resolution.

Effective date of application of the Rule: 1<sup>st</sup> January 2017

### MOD

11.44	
NOC 1	

SUP 2

ADD 2The Board considered the information to be provided for the bringing into use of any frequency assignment to space stations onboard a non-geostationary network or constellation and concluded as follows.

In order to consider any frequency assignment to a non-geostationary network or constellation as having been brought into use, the notifying administration has to inform the Bureau that at least one operational space station with the capability of transmitting or receiving that frequency assignment has been deployed for a continuous period of ninety days on at least one of the notified orbital planes of the non-geostationary network or constellation, irrespective of the notified number of orbital planes and satellites per orbital planes. The notifying administration shall so inform the Bureau within thirty days from the end of the ninety-day period. The date of deployment of the first satellite at its intended orbit shall be within the seven-year time limit for bringing frequency assignments to a space station into use under No. **11.44**.

When only part of a non-geostationary constellation is brought into use or planned to be brought into use within the time limit under No. **11.44**, the notifying administration shall also provide by the end of the same time limit the deployment plan of all the notified satellites in the non-geostationary satellite constellation, as a number of projected deployed satellites per each time

period (preferably per year) from the date of deployment of the first satellite until the completion of the total deployment of all satellites of the notified constellation.

The notifying Administration shall also provide the minimum number of satellites required to deliver the proposed satellite service.

The information on the above deployment plan and the minimum number of satellites required will be published in Part II-S of the BR IFIC and/or posted on the BR web page maintained for that purpose, as appropriate.

**Reasons**: WRC-15 discussed the bringing into use of frequency assignments for non-GSO FSS/MSS systems. While recognizing a lack of specific provisions in the Radio Regulations, WRC-15 was not able to conclude on the issue and invited ITU-R to examine further the matter.

Taking into account of the numerous non-GSO systems received so far by the Bureau, some of them to be brought into use prior to WRC-19, the purpose of this draft rule of procedure is to clarify the treatment by the Bureau of information on the bringing into use of non-GSO satellite networks received between WRC-15 and WRC-19.

The substance of paragraph 2 has been included in Nos.**11.44.3** and **11.44B.1** adopted by WRC-15.

*Effective date of application of the Rules: Par. ADD 3, immediately after the approval of the Rules; SUP par.3, 1st January 2017* 

### MOD

# 11.44B

# NOC 1

MOD 2 The Board carefully studied the relationship between the various provisions related to bringing into use of frequency assignments for a GSO satellite network under Nos.**11.43A**, **11.44**, **11.44**.**2**, <u>11.44</u>.**3**, **11.44B**, <u>11.44B</u>.**1**, <u>11.44B</u>.**2** and **11.47** and concluded that the Bureau will apply the following procedure.

MOD 3 No. 11.44<sup>2</sup> establishes the <u>regulatory seven-year</u> time limit for bringing frequency assignments to a space station into use and states that the Bureau shall cancel those frequency assignments which are not brought into use within the required <del>seven year</del> regulatory period. A frequency assignment to a space station in the geostationary-satellite orbit shall be considered as having been brought into use under No.**11.44B** and No.**11.44B.2** only when the notifying administration informs the Bureau within thirty day from the end of the ninety day period specified in that provision. The Bureau will record the date of the commencement of the ninety-day period defined in No. **11.44B** as the notified date of bringing into use (see No. 11.44.2). The confirm date of ation of the bringing into use of an assignment not yet recorded in the MIFR will be made available on the BR web with indication of status of confirmation and subsequently

<sup>&</sup>lt;sup>2</sup> Similarly applicable to §§4.1.3 or 4.1.3bis or 4.2.6 or 4.2.6bis of Article 4 of Appendices **30** and **30A** and §§6.1 or 6.31bis, and 6.33 of Article 6 of Appendix **30B**.

be published in PART II-S of the BR IFIC if the assignment is to be recorded in MIFR and/or posted on the BR web page maintained for that purpose, as appropriate. In the absence of the confirmation information under No.11.44B and No.11.44B.2 at the end of the one hundred and twenty day period after the end of the period provided under No.11.44 (i.e., ninety days after the seven-year time limit plus thirty days), the Bureau shall cancel the assignments provisionally recorded in the MIFR under No.11.44<sup>3</sup> and/or delete the relevant special sections under No.11.48<sup>4</sup>, as appropriate.

NOC 4

### Reasons: WRC-15 decision - consequential changes

Effective date of application of the Rule: 1st January 2017

MOD

11.49 and 11.49.1<sup>5</sup>

### **1** Suspended assignments

MOD 1.1 Under the provisions of No. **11.49**, as revised by WRC-12, the Board understands that an administration may inform the Bureau of the suspension of the use of a frequency assignment to a space station for a period not exceeding three years and that during this period the frequency assignment shall still continue to enjoy the protection acquired by virtue of the coordination agreements already obtained. The suspension period of up to three years shall apply to requests for suspension of frequency assignments of a space station received by the Bureau on or after 01.01.2013.

1.2 The Board decided that the procedure described below shall apply. The procedure will only be valid for suspended assignments which are not modified before being brought back into use.

### 2 Recording of a suspension of use

MOD 2.1 When the Bureau is informed, either under No. 11.49 or in response to an inquiry under No. **13.6**, that the use of a frequency assignment to a space station recorded in the Master Register is suspended, this information is published in the relevant Part of the BR IFIC and posted on the BR web page maintained for that purpose (in order to inform all administrations) and the entry in the Master Register will be amended to include the expected date of resumption of use indicated by the notifying administration. Whenever the use of a recorded frequency assignment to a space station is suspended for more than six months, the notifying Administration has the responsibility to inform the Bureau, as soon as possible, but no later than six months from the start date of the suspension. When it is determined, via an inquiry from the Bureau under No. **13.6**, that an assignment has not been in use for more than 6 months, the issue shall be addressed under the procedures for No. **13.6** with the

<sup>&</sup>lt;sup>3</sup> Similarly applicable to §5.3.1 of Article 5 of Appendices **30** and **30A** and §8.16 of Article 8 of Appendix **30B**.

<sup>&</sup>lt;sup>4</sup> Similarly applicable to §§4.1.3 or 4.1.3bis or 4.2.6 or 4.2.6bis of Article 4 of Appendices **30** and **30A** and §6.33 of Article 6 of Appendix **30B**.

<sup>5</sup> Similarly applicable to §§5.2.10 and 5.2.11 of Article 5 of Appendices 30 and 30A and §8.17 of Article 8 of Appendix 30B.

understanding that an untimely notice may not be relied upon to extend the suspension period beyond the period provided for in No. **11.49**, and without prejudice to whatever actions the Board may otherwise deem appropriate under No. **13.6**.

NOC 2.2

NOC 2.3

### 2.4 Consultation concerning resumption of use of an assignment

At the expiry of the period of suspension of the use of a frequency assignment, the notifying administration is consulted as to the date of resumption of use. According to the results of the consultation, the Bureau will apply the following procedures:

MOD 2.4.1 When the administration informs that the use has been resumed at the originally indicated date\_(not later than three years after the date of suspension or before, provided that the notifying administration has informed the Bureau of the suspension within six months from the date on which the use was suspended), this information is published in PART II-S of the BR IFIC and/or posted on the webpage as appropriate. Where the resumption of frequency assignments pertains to a GSO satellite network, the Bureau will publish the resumption in PART II-S of the BR IFIC only when the notifying administration confirms the deployment and maintenance of the GSO satellite network in accordance with the provision No.11.49.1. See also Resolution 40 (WRC-15).-shall apply.

MOD 2.4.2 When the administration notifies that the use will be resumed at a date later than three years after the date of suspension, these assignments shall be cancelled according to the provision No. 11.49. For those assignments for which the use would be resumed later than the 3-year period, provided that the notifying administration has informed the Bureau of the suspension within six months from the date on which the use was suspended, the administration responsible for the assignment shall apply again the relevant procedure of Article 9. (MOD RRB12/61) If the notifying administration informs the Bureau of the suspension more than six months after the date on which the use of the frequency assignment was suspended, this three-year time period shall be reduced. In this case, the amount by which the three-year period shall be reduced shall be equal to the amount of time that has elapsed between the end of the six month-period and the date that the Bureau is informed of the suspension. If the notifying administration more than 21 months after the date on which the use of the suspension more than 21 months after the date on which the use of the suspension more than 21 months after the date on which the use of the suspension more than 21 months after the date on which the use of the frequency assignment was suspended, the frequency assignment shall be cancelled.

**Reasons:** WRC-15 decision – consequential changes Effective date of application of the Rule: 1<sup>st</sup> January 2017

11.50

MOD

NOC 1 NOC 2 NOC 3

NOC 4

MOD 5 When a change to Article 5 results in the allocation to a new service or upgrade of the category of an existing service, the Bureau shall draw the notifying administration's attention to the recorded assignment concerned, which previously had a lower status or was recorded under the conditions of No. 4.4, and propose to the administration that it submit a new assignment to replace the previous one. The relevant coordination procedures shall apply to the newly submitted assignment and no particular priority shall be given to it in this process. The status of the assignment should be upgraded only if all relevant provisions of the Radio Regulations have been applied. If concurrently with the above new or upgrade allocation to a service (S2), the change to Article 5 also results in the upgrade of the category of another existing service (S1) in the same frequency band, the Bureau shall draw the attention of the administration to its assignments to service S1 recorded in the MIFR or received for coordination prior to the decision of the conference and propose to the administration that it submit a new assignment to replace the previous one within a time limit for the submission of up to four months. The Bureau shall then consider that any such new S1 assignment submission received within the time limit do not have to apply the relevant coordination procedure with the assignments of the new or upgrade service S2.

**Reasons**: When discussing the draft rule of procedure concerning the treatment of requests for coordination or notification notices received prior to the entry into force of a WRC decision (Item 10 of RRB-72 agenda), The Board instructed the Bureau to develop a draft amendment to the existing Rules of Procedure on RR No. **11.50** in order to clarify the coordination requirement in case where the conference decided on a new allocation and the upgrade of the category of service of an existing allocation. The draft proposed Rule of procedure is based on the principles indicated under item 6.2 of the Summary of Decisions of the 72<sup>nd</sup> meeting of the RRB (Document RRB16-2/14)

Effective date of application of the Rules: immediately after the approval of the Rules

### Rules concerning Appendix 4 to the RR

An.2

ADD

### Commitment regarding the implementation or resolves 1.4 of Resolution 156 (WRC-15)

The Board noted that *resolves* 1.5 of Resolution **156** (WRC-15) requests administrations to submit to the Bureau a commitment for implementation of *resolves* 1.4 of the same resolution. The Board further noted that this data element is mandatory in the case of submission of notification or coordination of a geostationary satellite network using the frequency bands 19.7-20.2 GHz and 29.5-30.0 GHz for earth stations in motion communicating in the fixed-satellite service.

However this data element is missing in Appendix **4.** To correct this inconsistency, the Board decided that the Administrations will be requested to provide, in addition to the relevant characteristics listed in Appendix **4**, and in accordance of *resolves* **1.5** of Resolution **156** (WRC-**15**) a commitment for implementation of *resolves* **1.4** of the same Resolution. The Bureau will then subsequently take account of this data element in its completeness check of the submitted data and in the examination under Nos. **9.35** and **11.31** of the Radio Regulations.

**Reasons**: WRC-15 introduced Resolution **156 (WRC-15)** requiring administrations to submit to the Bureau under resolves 1.5 a commitment for implementation of resolves 1.4 of this Resolution.

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

### ADD

A.17.0
--------

WRC-15 modified item A.17.d to submit the mean power flux-density (pfd) produced at the Earth's surface by any space borne sensor for the frequency band 9900 – 10400 MHz for satellite system operating in the Earth exploration-satellite service (active) as defined in Table 21-4. As the limits are dependent on the angles of arrival, the mean pfd has to be provided for each angle of arrival. The formula defining the mean pfd defined in Table 21-4 is given in No. **21.16.8**. The Bureau may calculate the mean power flux-density based on the angles of arrival if the information on the necessary bandwidth (item C.7a), which is not currently required for active or passive sensors, is submitted. The necessary bandwidth information is also required for the Bureau to examine the conformity of the submitted frequency assignments with respect to No.**5.474A**.

In view of the above the Board decided that the Administrations shall provide, in addition to the relevant characteristics listed in Appendix 4, the SAR emission bandwidth information under C.7.a (necessary bandwidth) for active sensors operating in the Earth exploration-satellite service (active) in the frequency band 9900-10400MHz instead of submitting the mean pfd. The Bureau will then subsequently take account of this data element in the examination under No. **11.31** of the Radio Regulations.

**Reasons**: WRC-15 modified item A.17.d in Appendix 4 requiring submission of the mean power flux-density as defined in Table 21-4 for the frequency band 9900-10400 MHz for satellite systems operating in the Earth exploration-satellite service (active).

*Effective date of application of the Rule:* 1<sup>st</sup> *January* 2017

# Rules concerning APPENDIX 30 to the RR

# Technical data used in establishing the provisions and associated Plans and the Regions 1 and 3 List, which should be used for their application

MOD

3.5.1
and 3.8

These sections govern the channel spacing between the assigned frequencies of two adjacent channels and the necessary bandwidth values for systems in the Plans for Regions 1, 2 and 3. They also state that <u>"if different bandwidths and/or frequency channel</u> spacing and/or bandwidths are submitted, they will be treated in accordance with applicable ITU-R Recommendations for protection masks when available<u>"</u>. <u>"In the absence of such Recommendations, the Bureau will use the worst-case approach as adopted by the Radio Regulations Board.</u>"

Noting that Recommendation ITU-R BO.1293-2 provides a method for calculation of interference only between assignments using different channeling and bandwidth in the case of a digital interferer, the Board therefore decided that, as an interim measure, until the applicable ITU-R Recommendations for protection masks/calculation method are available the calculation methods shown in the Table 1 shall be applied when calculating interference between two assignments in the Plans and/or modifications to Plans.

Wanted assignment	Interfering assignment	Method to be applied
"Standard" <sup>1</sup> analogue	"Standard" analogue	As defined in Annex 5 to Appendix <b>30</b>
"Non-standard" analogue	"Standard" analogue	As described in the Bureau's MSPACE Manual
"Standard" analogue	"Non-standard" analogue	As described in the Bureau's MSPACE Manual
"Non-standard" analogue	"Non-standard" analogue	As described in the Bureau's MSPACE Manual
Digital	"Standard" or "non- standard" analogue	As described in the Bureau's MSPACE Manual
"Standard" or "non- standard" analogue	Digital	As defined in Recommendation ITU-R BO.1293-2 <sup>2</sup>
Digital	Digital	As defined in Recommendation ITU-R BO.1293-2 <sup>2</sup>

### TABLE 1

<sup>1</sup>–<u>The s</u>Standard analogue assignments <u>mentioned in the Table 1 above</u> are those assignments in Region 2 Plan which use the following parameters:

*For Regions 1 and 3*: 27 MHz bandwidth, 19.18 MHz channel spacing and the assigned frequencies as specified in Article 11 of Appendix **30**.

*For Region 2*: with 24 MHz bandwidth, 14.58 MHz channel spacing and the assigned frequencies as specified in Article 10 of Appendix **30**.

2 Recommendation ITU-R BO.1293-2 (Annexes 1 and 2) is applied instead of Recommendation ITU-R BO.1293-1, which is referred to in § 3.4 of Annex 5 to Appendix **30** and § 3.3 of Annex 3 to Appendix **30A**.

**Reasons**: WRC-15 has decided to convert all the analogue assignments in Regions 1 and 3 Plan and List to digital as of 1<sup>st</sup> January 2017 and that the worst-case approach as described in the Bureau's MSPACE Manual is applicable only to Region 2 Plan.

*Effective date of application of the Rule:* 1<sup>st</sup> *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

1.7

The footnote to this provision states that "in certain cases (e.g. when <u>the</u> channel spacing and/or bandwidth are different from the values given in § 3.5 and 3.8 of Annex 5 to Appendix **30**), equivalent protection margins for the second adjacent channels may be used. Appropriate protection masks included in ITU R Recommendations should be used if available. Until a relevant ITU-R Recommendation is incorporated in this Annex by reference, the Bureau will use the worstcase approach <u>until a relevant ITU-R Recommendation is incorporated in this Annex by reference</u>" as adopted by the Radio Regulations Board".

Noting that Recommendation ITU-R BO.1293-2 provides a method for calculation of interference only between assignments using different channelling and bandwidth in the case of a digital interferer, the Board therefore decided that, as an interim measure, until the applicable ITU-R Recommendations for protection masks/calculation method are available the calculation methods shown in Table 1 shall be applied when calculating interference between two assignments in the Plans and/or modifications to Plans.

Wanted assignment	Interfering assignment	Method to be applied
"Standard" <sup>1</sup> analogue	"Standard" analogue	As defined in Annex 3 to Appendix <b>30A</b>
"Non-standard" analogue	"Standard" analogue	As described in the Bureau's MSPACE Manual
"Standard" analogue	"Non-standard" analogue	As described in the Bureau's MSPACE Manual
"Non-standard" analogue	"Non-standard" analogue	As described in the Bureau's MSPACE Manual
Digital	"Standard" or "non- standard" analogue	As described in the Bureau's MSPACE Manual
"Standard" or "non- standard" analogue	Digital	As defined in Recommendation ITU-R BO.1293-2 <sup>2</sup>
Digital	Digital	As defined in Recommendation ITU-R BO.1293-2 <sup>2</sup>

TABLE 1

<sup>1</sup> <u>The Standard analogue assignments mentioned in the Table 1 above are those assignments in Region 2 Plan which use the following parameters:</u>

*For Regions 1 and 3*: 27 MHz bandwidth, 19.18 MHz channel spacing and the assigned frequencies as specified in Article 9A of Appendix **30A**;

*For Region 2*: with 24 MHz bandwidth, 14.58 MHz channel spacing and the assigned frequencies as specified in Article 9 of Appendix **30A**.

<sup>2</sup> Recommendation ITU-R BO.1293-2 (Annexes 1 and 2) is applied instead of Recommendation ITU-R BO.1293-1, which is referred to in § 3.4 of Annex 5 to Appendix **30** and § 3.3 of Annex 3 to Appendix **30A**.

**Reasons**: WRC-15 has decided to convert all the analogue assignments in Regions 1 and 3 Plan and List to digital as of 1<sup>st</sup> January 2017 and that the worst-case approach as described in the Bureau's MSPACE Manual is applicable only to Region 2 Plan.

*Effective date of application of the Rule:* 1<sup>st</sup> January 2017.

### **Rules concerning**

### **APPENDIX 30B to the RR**

8.17

**Reasons:** WRC-15 decisions concerning the suspension of a recorded assignment has been included in this provision. The Rules of Procedure is no longer required.

Effective date of suppression of the Rule: 1<sup>st</sup> January 2017

# Rules concerning RESOLUTION 49 (Rev.WRC-15)

ADD

### **RESOLUTION 49 (Rev.WRC-15)**

# Administrative due diligence applicable to some satellite radiocommunication services

In accordance with *resolves* 1 of this Resolution, the administrative due diligence procedure contained in Annex 1 to this Resolution shall be applied as from 22 November 1997 for a satellite network or satellite system of the fixed-satellite service, mobile-satellite service or broadcasting-satellite service for which the advance publication information was published under No. **9.2B**.

WRC-15 suppressed the submission of API for satellite systems that are subject to coordination procedure in Section II of Article **9** and modified the provisions Nos. **9.1** and **9.2** accordingly, with provision No. **9.2B** applicable now only to API for satellite systems that are not subject to coordination procedure in Section II of Article **9**.

In conformity with footnote 4 (No. A.9.4) to the title of Article 9 and §1 to Annex 1 to Resolution 49 (Rev.WRC-15), Resolution 49 shall continue to be applied with respect to those satellite networks and satellite systems that are subject to coordination under Nos. 9.7, 9.11, 9.12, 9.12A and 9.13. The Board understands that *resolves 1* of Resolution 49 (Rev.WRC-15) is also applicable for a satellite network or satellite system of the fixed-satellite service, mobile-satellite service or broadcasting-satellite service for which the advance publication information was published under No. 9.1A.

Reasons: WRC-15 decision - consequential changes

*Effective date of application of the Rule:* 1<sup>st</sup> *January* 2017.

### PART B

### **SECTION B6**

MOD

# Rules concerning criteria for applying the provisions of No. 9.36 to a frequency assignment in the <u>terrestrial</u> services whose allocation <u>or identification</u> is governed by Nos. 5.292, 5.293, <u>5.295, 5.296A, 5.297, 5.308, 5.308A, 5.309, 5.316A, 5.316B,</u> 5.323, 5.325, <u>and</u>-5.326, <u>5.341A, 5.341C, 5.346, 5.346A, 5.429D and 5.429F<sup>6</sup></u>

1 The identification of the administrations with which coordination may need to be effected is based on the characteristics of the assignment that is subject to the procedure of No. **9.21** and the worst-case assumptions relating to the propagation characteristics and other technical parameters. These worst-case assumptions were developed on the basis of the information contained in various sources (GEO6 Regional Agreement<del>s</del>, ITU-R Recommendations and Reports), since the Radiocommunication Bureau has no Technical Standards for application in the-several frequency bands above 28 MHz.

2 For identification of the administrations whose agreement may need to be obtained, in the context of the provisions of Nos. **5.292, 5.293,** <u>5.295, 5.296A,</u> <u>5.297, 5.308, 5.308A,</u> <u>5.308A,</u> <u>5.309,</u> <u>5.316B,</u> <u>5.323, 5.325, and 5.326, 5.341A, 5.341C, 5.346, 5.346A, 5.429D and 5.429F</u>, the following criteria <u>is</u> applied:

2.1 the *coordination distance concept* is applied with respect to the services that are allocated according to Article **5** (these services are indicated in the Table below under the heading "Protected service");

# <u>Table 1</u>

### Applicability of No. 9.21

<u>Footnote</u>	Frequency band (MHz)	Allocated service (No. 9.21)	Protected service
5.292 <sup>1</sup>	470-512	<del>FX<u>FS</u>, MO</del> MS	BT <u>BS</u>
5.293 <sup>1</sup>	470-512 and 614- 806	<del>FX</del> FS, <del>MO</del> MS	<del>BT<u>BS</u></del>
<u>5.295</u>	<u>470-512</u>	<u>lms (IMT)</u>	<u>BS</u> , <u>fs</u>
	<u>512-608</u>	<u>LMS (IMT)</u>	<u>BS</u>
<u>5.296A</u>	<u>470-698</u>	<u>LMS (IMT)</u>	<u>BS, FS</u>
	<u>585-610</u>	<u>LMS (IMT)</u>	<u>RNS</u>
5.297	512-608	<del>FX</del> FS, <del>MO</del> MS	<del>BT<u>BS</u></del>
<u>5.308</u>	<u>614-698</u>	MS	BS

<sup>6</sup> See also Rules of Procedure to Nos. **5.316B**, **5.341A** and **5.346**.

<u>Footnote</u>	Frequency band (MHz)	Allocated service (No. 9.21)	Protected service
<u>5.308A</u>	<u>614-698</u>	<u>MS (IMT)</u>	BS
5.309 <sup>1</sup>	614-806	<del>FX</del> FS	<del>BT<u>BS, MS</u></del>
<del>5.316A</del>	<del>790-862</del>	MO(-AER)	<del>FX, MO(-AER), AL</del>
<del>5.316B</del>	<del>790-862</del>	<del>MO(-AER)</del>	AL
5.323	862-960	ALARNS	<del>FX<u>FS</u>, M<u>S</u>O</del>
5.325 <sup>1</sup>	890-942	<u>LR</u> RLS	<del>FX<u>FS</u>, M<u>S</u>O</del>
5.326 <sup>1</sup>	903-905	MO( AER)LMS,MMS	<del>FX</del> FS
<u>5.341A<sup>2</sup></u>	<u>1 429-1 452</u> <u>1 492-1 518</u>	<u>LMS (IMT)</u>	<u>AMS</u>
<u>5.341C</u>	<u>1 429-1 452</u> <u>1 492-1 518</u>	<u>LMS (IMT)</u>	<u>AMS</u>
<u>5.346<sup>2</sup></u>	<u>1 452-1 492</u>	<u>LMS (IMT)</u>	<u>AMS</u>
<u>5.346A</u>	<u>1 452-1 492</u>	<u>LMS (IMT)</u>	AMS
<u>5.429D</u>	<u>3 300-3 400</u>	<u>LMS (IMT)</u>	<u>RLS</u>
<u>5.429F</u>	<u>3 300-3 400</u>	<u>LMS (IMT)</u>	<u>RLS</u>

<sup>1</sup> Different category of service.

2 For frequency assignments subject to this provision the No. **9.21** procedure does not apply to those administrations whose territories are outside of the distances specified in the corresponding Rules of Procedure on No. **5.341A** and No. **5.346**.

2.2 **t**<u>The case-by-case verification examination</u> is performed with respect to <u>for</u> the assignments <u>submitted under for which</u> the procedure of No. **9.21**. This verification consists in <u>determining the distance from the location of a station subject to No. **9.21** to the border of a <u>neighbouring country</u>. In case this distance is shorter than the respective coordination distance, the administration of this neighbouring country is identified as affected. was completed or initiated.</u>

3 In the calculation of the coordination distances the following approach was is used:

3.1 For the protection of the broadcasting (television) service in the frequency band 470-806 MHz, from the radio services indicated in Column 3 of Table 1, in the context of the provisions of Nos. 5.292, 5.293, 5.295, 5.296A, 5.297, 5.308, 5.308A and 5.309, the relevant criteria and methodology contained in the GE06 Agreement were used, notably the data relating to propagation zones 1 and 4. The calculated coordination distances over land paths and sea paths, respectively, are contained in Table 1. the coordination distances are calculated using propagation curves of Recommendation ITU-R P.1546-5 for 1% of time and 50% of locations with the coordination trigger field strengths produced at a height of 10 m above ground level as provided in the GE06 Agreement and given in Table 2.

# <u>TABLE 2</u> <u>Coordination trigger field strengths for protection of BS</u>

Service	Trigg	er field strength (dB(u\	<u>//m))</u>
to be protected	<u>470-582 MHz</u>	<u>582-718 MHz</u>	<u>718-806 MHz</u>
BS	<u>18</u>	<u>20</u>	22

### TABLE 1

### Coordination distances for protection of the BT service (from the FX/MO service, effective antenna height 37.5 m)

	Frequency band 470-582 MHz		Frequency ban	d 582-862 MHz
Power (of the interferer) (dBW)	<del>Land path</del> <del>(km)</del>	<del>Sea path</del> <del>(km)</del>	<del>Land path</del> <del>(km)</del>	<del>Sea path</del> <del>(km)</del>
<del>30</del>	<del>140.7</del>	<del>917.1</del>	<del>114.1</del>	<del>864.9</del>
<del>25</del>	<del>101.4</del>	<del>794.7</del>	<del>84.9</del>	<del>755</del>
<del>20</del>	74	<del>683.9</del>	<del>63</del>	<del>647.7</del>
<del>15</del>	<del>54.8</del>	<del>585</del>	<del>47</del>	<del>543</del>
<del>10</del>	<del>41</del>	<del>489.6</del>	<del>35.9</del>	<del>446.5</del>
5	<del>31.3</del>	<del>395.5</del>	<del>27.1</del>	<del>360.7</del>
-0	<del>23.6</del>	<del>303.7</del>	<del>20.9</del>	<del>272</del>

NOTE – The coordination distances were calculated using propagation curves of the GE06 Agreement for 1% of time, 50% of locations, the coordination trigger of 18 (IV/m) for the band 470-582 MHz and of 20 (IV/m) for the band 582-862 MHz, calculations were made for the lowest frequencies of the band concerned.

For the protection of the fixed service in the frequency band 470-698 MHz from IMT, in the context of the provision of Nos. **5.295** and **5.296A**, the coordination trigger field strength of 13 dB ( $\mathbb{P}V/m$ ) produced at a height of 10 m above ground level is used.

3.2 For the protection of the radionavigation services in the frequency band 585-610 MHz from IMT, in the context of the provision of No. **5.296A**, the coordination distances are calculated using propagation curves of the Recommendation ITU-R P.1546-5 for 10% of time and 50% of locations with the trigger field strength 13 dB ( $\mathbb{P}V/m$ ), as given in the GE06 Agreement, produced at height of 10 m above ground level.

**3.23** For the protection of the fixed and mobile services, from the radionavigation and radiolocation services, in the context of the provisions of Nos. **5.323** and **5.325**, propagation curves from Recommendation ITU-R  $\underline{P.528}$ - $\underline{23}$  are used in connection with the following data:

Minimum field strength to be protected (FX): 30 dB(2V/m), PR 2 8 dB.

3.3 For the protection of the fixed and mobile services, in the context of the provisions of Nos. **5.316A** and **5.326**, the relevant criteria and methodology contained in the GE06 Agreement were used, notably the data relating to propagation zones 1 and 4. The calculated coordination distances over land paths and sea paths, respectively, are contained in Table 2.

### TABLE 2

Coordination distances for protection of the FX/MO services (from the FX/MO service, effective antenna height 37.5 m) in the frequency band between 790 and 960 MHz

Power (of the interferer) (dBW)	<del>Land path</del> <del>(km)</del>	<del>Sea path</del> <del>(km)</del>
<del>30</del>	<del></del>	4 <del>63.8</del>
25	<u> </u>	<del>397.4</del>
<del>20</del>	<u> </u>	<del>335.4</del>
<del>15</del>	<u> </u>	<del>276.8</del>
<del>10</del>	<del>30.6</del>	<del>219.9</del>
-5	23.9	<del>168.1</del>
-0	<del>19</del>	<del>125.7</del>

NOTE – The coordination distances were calculated using propagation curves of the GE06 Agreement for 10% of time, 50% of locations, the coordination trigger of 18 (⊡V/m), calculations were made for the frequency 790 MHz.

3.4 For the protection of the fixed service in the frequency band 903-905 MHz, from the land mobile and maritime mobile services, in the context of the provisions of No. **5.326**, the coordination distances are calculated using propagation curves of the Recommendation ITU-R P.1546-5 for 10% of time and 50% of locations with the coordination trigger of 17 dB ( $\mathbb{P}V/m$ ) produced at the height of 10 m above ground level.

3.5 For protection of ground-based stations in the aeronautical mobile service in the frequency band 1 429-1 518 MHz from IMT, in the context of the provisions of Nos. **5.341A**, **5.341C**, **5.346** and **5.346A**, the coordination distances are calculated using the propagation curves given in Recommendation ITU-R P.1546-5 for 10% of time and 50% of locations with the coordination trigger power flux density of -181 dB(W/m<sup>2</sup>) within 4 kHz of reference bandwidth produced at the height of 10 m above ground level as given in Recommendation ITU-R M.1459-0. For protection of stations on-board aircraft in the aeronautical mobile service, the coordination distance of 450 km is used.

3.6 For protection of the radiolocation service in the frequency band 3 300-3 400 MHz from IMT in the context of the provisions of Nos. **5.429D** and **5.429F**, the coordination distance is contained in Table 3.

### TABLE 3

<u>Coordination distance for protection of the RLS</u> (from the IMT system, effective antenna height 30 m) in the frequency band between 3 300-3 400 MHz

<u>Footnote</u>	<u>Frequency</u> range (MHz)	Allocated service (application) (No. 9.21)	Protected service	<u>Coordination</u> <u>distance</u> <u>(km)</u>
<u>5.429D</u> <u>5.429F</u>	<u>3 300-3 400</u>	<u>LMS (IMT)</u>	<u>RLS</u>	<u>616</u>

NOTE – The coordination distance was calculated using the propagation curves of Recommendation ITU-R P.528-3 for 1% of time and 50% of locations with the interference level of -107 dBm for protection of the airborne radar at the height of 10 000 m derived from Recommendation ITU-R M.1465-2. A reference IMT Advanced station was assumed as having radiated power of 31 dBW (e.i.r.p.) and a bandwidth of 10 MHz as used in Report ITU-R M.2292-0.

4 For the identification of potentially affected administrations with respect to their aeronautical radionavigation service, in the context of the provisions of Nos. **5.316A** and **5.316B** see the Rule of Procedure on No. **5.316A**.

**Reasons:** WRC-15 adopted new footnotes Nos. **5.295, 5.296A, 5.308A, 5.308A, 5.341A, 5.341C, 5.346, 5.346A, 5.429D** and **5.429F** dealing with allocation or identification of certain bands for administrations wishing to use IMT systems and suppressed No. **5.316A**. The allocation or identification are subject to obtain agreement of other administrations concerned under No. **9.21** of the RR with respect to one or more terrestrial services and need a guideline to identify the administrations considered as potentially affected.

With respect to No.**5.316B**, this provision is not reproduced in part B6 of the RoPs since the criteria for identifying potentially affected administrations under the **9.21** for this case are given in Annex I of Resolution **749 (Rev. WRC-12)**.

*Effective date of application of the Rule: 1 January 2017* 

## ANNEX 2

**Comments**: The Board at its 72<sup>nd</sup> meeting (16-20 May 2016) instructed the Bureau to prepare draft Rules of Procedure on the basis of the approved report from the Board Working Group on draft Rules of Procedure (Revision 2 to Document RRB16-2/3-E). Attachment 4 to this document compiled the 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 and may as decisions with the status of an authentic interpretation of the Radio Regulations be candidates for rules of procedure.

These decisions have been adopted by the legislator and, as such, have a higher status than Rules of Procedure. For this reason, and keeping in mind the principle of the hierarchy of norms, the Rules of Procedure relating to these decisions cannot be in contradiction with, or diverge from, these decisions.

*Effective date of application of the Rules: immediately after the approval of the Rules* 

# **Rules concerning**

### the Receivability of forms of notice generally applicable to all notified assignments submitted to the Radiocommunication Bureau in application of the Radio Regulatory Procedures

**ADD** 3.11 For the submission of a request for coordination under No. **9.30** related to a non-GSO satellite network or system, the notice will be receivable only in the cases described below:

i) satellite systems with one (or more than one) set(s) of orbital characteristics and inclination value(s) with all frequency assignments to be operated simultaneously; and,
ii) satellite systems with more than one set of orbital characteristics and inclination values with, however, a clear indication that the different sub-sets of orbital characteristics would be mutually exclusive; in other terms, frequency assignments to the satellite system would be operated on one of the sub-sets of orbital parameters to be determined at the notification and recording stage of the satellite system at the latest.

(WRC-15, 8<sup>th</sup> Plenary, Par. 1.39 to 1.42 of Doc. 505, Approval of Document 416 in relation to Section 3.2.2.4.1 of Doc. 4 (Add2) (Rev1))

# **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 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 service area of the BSS assignment less than 1000 km;
- For transmitting earth stations in the FSS (Earth-to-space): , in addition to the frequency overlap examination, also uses and, the power flux-density limits in the nearest frequency band(s), where available.

(WRC-15, 6<sup>th</sup> Plenary, Par. 2.9 to 2.13 of Doc. 430, Approval of Document 308)

# **Rules concerning**

# **ARTICLE 11 of the RR**

### MOD

11.32

### ADD 7 Objection to a coordination agreement after publication of Part I-S

Taking into account the fact that affected administrations can submit information on a different coordination status at any time before or after Part II-S publications, and in order not to unduly delay the processing of notification submissions, the Bureau is examining the notification information under No. **11.32** as follows:

i) If the enquiry process is completed before the Bureau's Weekly Approval Meeting, then the coordination status based on the results of the enquiry will be taken into account in the formulation of findings;

ii) If the enquiry process is not yet completed before the Bureau's Weekly Approval Meeting, the findings with respect to the affected administration will be based on the coordination status submitted by the notifying administration at the time of notification. The Bureau will then take appropriate action, whether to review or not the findings, after the conclusion of the Bureau's enquiry process.

(WRC-15, 8<sup>th</sup> Plenary, Par. 1.39 to 1.42 of Doc. 505, Approval of Document 416 in relation to Section 3.2.3.2 of Doc. 4 (Add2) (Rev1))

### ADD

11.48	

WRC-15 noted the inconsistency between RR No. **11.48** and § 8 of Annex 1 to Resolution **552 (WRC 12)** and confirmed its understanding that frequency assignments of satellite networks operating in the 21.4-22 GHz band shall be cancelled by the Bureau 30 days after the end of the seven-year period following the date of receipt by the Bureau of the relevant complete information under RR No. **9.1** or **9.2**, as appropriate, and after the end of the three-year period following the date of RR No. **11.49**.

(WRC-15, 8<sup>th</sup> Plenary, Par. 1.39 to 1.42 of Doc. 505, Approval of Document 416 in relation to Section 2.2.2)

MOD

and

•••

**ADD 3** WRC-15 decided to invite the Radio Regulations Board, in its application of No. **11.49** as revised by WRC -15, to consider any legitimate mitigating circumstances that could result in a notifying administration's inability to meet the six-month deadline. If the Bureau has reliable information that the use of a frequency assignment has been suspended, but it still is within the six-month period, the Bureau is encouraged, as a courtesy, to remind the notifying administration of its obligation to inform the Bureau of the suspension under No. **11.49**. (*WRC-12, 12<sup>th</sup> Plenary, Par. 3.1 to 3.8 of Doc. 509 Approval of Document 453*)

### **Rules concerning**

### **ARTICLE 13 of the RR**

ADD

With regards to the issue of whether partial evidence provided by an administration to support the use of frequency assignments across a frequency band may be considered as sufficient, in a reply to a RR No. **13.6** query, to demonstrate the use, or continuation of use, of frequency assignments in accordance with the notified characteristics recorded in the MIFR, WRC-15 was of the view that administrations need to respond as completely as practicable to queries under RR No. **13.6**. If the Bureau receives what it considers to be a partial reply to a query, it is expected that the Bureau would further clarify the scope of its query for the administration or request additional or alternative information. In addition, it was recognized that WRC-15 agreed some revisions to RR No. **13.6** that are intended to ensure greater transparency in the application of this provision. These revisions should have the consequence of helping to address such issues.

(WRC-15, 8<sup>th</sup> Plenary, Par. 1.39 to 1.42 of Doc. 505Approval of Document 416 in relation to Section 6 of Doc. 4 (Add2) (Rev1) (Add1))

# **Rules concerning**

### **ARTICLE 21 of the RR**

MOD

21.14

Elevation angles lower than 3° would create a high value of the e.i.r.p. towards the horizon. The Board concluded that this provision is to be used together with Section III of Article **21**. This means the following:

Irrespective of the e.i.r.p. of the earth station, an elevation angle lower than 3° is subject to the agreement of the administrations concerned. In the case of receiving earth stations, to identify the administrations concerned, a nominal coordination contour is drawn at a 3° elevation angle and compared with the contour for the notified elevation angle. In any azimuth where the second contour exceeds the first one, an agreement under this provision is required with any administration having a territory which lies within the coordination area. The Bureau shall formulate a favourable Finding under No. **11.31** only when it is informed of the formal agreement of these administrations.

WRC-15 considered whether existing practice of limiting grid-points to 3° elevation should be maintained when identifying affected administrations and networks under Nos. **9.36** and **9.36.2** and, possibly, extended to No. **9.41** requests from administration, or to remove this limitation from GIBC/AP8/PXT software.

<u>The conference decided to request BR to remove the 3 degree limitation.</u> (WRC-15 8<sup>th</sup> Plenary, Par. 1.39 to 1.42 of Doc. 505Approval of Document 416 in relation to <u>Section 3.2.5.2.6 of Doc. 4 (Add2) (Rev1))</u>

### **Rules concerning**

# **ARTICLE 23 of the RR**

MOD

23.13B	and
23.13C	

### NOC 1 NOC 2

**ADD 3** According to **No.23.13B** of the Radio Regulations, if an administration, within the fourmonth period following the publication of a special section for a broadcasting-satellite service (BSS) network submitted under Appendix **30**, informs the Bureau that all technical means have not been used to reduce the radiation over its territory, the Bureau shall draw the attention of the responsible administration to the comment received.

Although there is no time-limit for the Bureau to take action, the Bureau has so far sent a telefax immediately to the objecting and the responsible administrations when the comment is received, requesting both administrations to make every effort possible to resolve the issue. Due to the everincreasing number of comments received under No. **23.13B**, the current approach is affecting the workload for the Bureau.

In order to perform this task in a more efficient manner and optimize the resources of the Bureau, the Bureau shall send a multi-countries communication to all those administrations who have made comments under No. **23.13B**, and to the responsible administration for the satellite network in the broadcasting-satellite service at the expiry date of the four-month regulatory period for comments on the BSS satellite network submitted under Appendix **30**.

(WRC-15, 8<sup>th</sup> Plenary, Par. 1.39 to 1.42 of Doc. 505, Approval of Document 416 in relation to Section 3.2.4.2 of Doc. 4 (Add2) (Rev1))

### **Rules concerning**

### **APPENDIX 30A to the RR**

(Rules are arranged by paragraph numbers of Appendix 30A)

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.

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 (i.e a power control value was included in a 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 procedure contained in § 3.11 of Annex 3 to Appendix **30A** (**Rev.WRC-12**) to calculate power control value for the assignment in question 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 value.

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 above of the reduction of their feeder-link Equivalent Protection Margin.

(WRC-15, 8<sup>th</sup> Plenary, Par. 1.39 to 1.42 of Doc. 505 Approval of Document 416 in relation to Section 3.2.6.2 of Doc. 4 (Add2) (Rev1))