## **UPDATES** to the

### **Rules of Procedure**

(Edition of 1998)

## approved by the Radio Regulations Board

| Revision <sup>(1)</sup><br>(Circular No.) | Date         | Part                 | ARS           | Pages to be<br>removed | Pages to be<br>inserted                 |
|---|--------------|----------------------|---------------|------------------------|---|
| 1<br>See CR/127 Corr.1                    | June 1999    | A1<br>C              | ARS5          | 15-18<br>1-3           | 15-18 (rev.1)<br>1-3 (rev.1)            |
| 2<br>See CR/129                           | October 1999 | Table of<br>Contents |               | 1-2                    | 1-2 (rev.2)                             |
|   |              | A1                   | ARS5          | 7-20                   | 7-20 (rev.2)                            |
|   |              | A1                   | Receivability | 3-4                    | 3-4 (rev.2)                             |
|   |              | A1                   | ARS9          | 5-6<br>13-14           | 5-6 <i>bis</i> (rev.2)<br>13-14 (rev.2) |
|   |              | A1                   | ARS13         | _                      | 1 (rev.2)                               |
|   |              | A1                   | APS30B        | 7-8<br>11-12           | 7-8 <i>ter</i> (rev.2)<br>11-12 (rev.2) |
| 3<br>See CR/140                           | March 2000   | A1                   | ARS11         | 11-12                  | 11-12 (rev.3)                           |
| 4<br>See CR/151                           | October 2000 | A1                   | ARS5          | 17-18                  | 17-18 (rev.4)                           |
|   |              | A1                   | APS30B        | 13-14                  | 13-14 <i>bis</i> (rev.4)                |
|   |              | A3                   | GE75          | 1-3                    | 1-2 (rev.4)                             |

<sup>(1)</sup> Refer to the relevant Circular Letter noted in column 1 regarding dates of application of new or modified Rules of Procedure included in these update pages.

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service which are also used for fixed satellite service purposes will be treated in accordance with Article 5 of Appendix **S30**. When recorded they will bear a symbol to indicate such a use. No established methodology exists to-date to carry out the compatibility analysis between the assignments that may be used in broadcasting-satellite transponders for fixed satellite service transmissions and the assignments in the Plan.

2 Earth stations receiving fixed-satellite service transmissions from the Broadcasting Satellite transponders will be treated as earth stations of the broadcasting-satellite service and are not to be notified as individual earth stations.

S5.496

1 The fixed and mobile (except aeronautical mobile) services in the countries listed in this provision:

- have equal rights with the fixed-satellite service in the countries of the footnote and in the relations between them, and the coordination under No. **S9.17** and No. **S9.18** shall be applied;
- shall be operated under No. S5.43 with respect to the fixed-satellite service in the other countries of Region 1, and coordination under No. S9.17 cannot be imposed on earth stations. The fixed and mobile stations shall apply coordination under No. S9.18;
- have equal rights with the services to which the band is allocated in Regions 2 and 3.
- 2 The comments made under the Rules of Procedure concerning No. **S5.164** apply.

### S5.523A

Footnote **S5.523A** obliges administrations which have communicated their GSO satellite systems in the bands 18.8-19.3 GHz and 28.6-29.1 GHz to the Bureau, prior to 18 November 1995, to "*cooperate to the maximum extent possible* to coordinate pursuant to No. **S9.11A**/ Resolution **46** (**Rev.WRC-97**) with non-geostationary-satellite networks for which

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notification information has been received by the Bureau prior to that date, with a view to reaching results acceptable to all the parties concerned." Since there is no basis on which the Bureau could formulate a regulatory finding in this respect, the Board decided on the following course of action:

Administration(s) responsible for the GSO satellite network, when notifying the assignments to the Bureau, shall include a statement indicating that the obligation "shall cooperate to the maximum extent possible" referred to in this provision has been fulfilled and the Bureau shall publish this information in its Weekly Circular accordingly.

The above Rule of Procedure was to be applied by administrations and the Radiocommunication Bureau as of 14 July 1998.

### S5.538

For up-link power control beacons, this provision sets an e.i.r.p. limit "in the direction of adjacent satellites on the GSO". The Board concluded that this direction is "tangential to the GSO at the position of the network under examination".

The Board is of the opinion that the intention of this provision is to protect parts of the GSO arc adjacent to the satellite under examination in the direction "laterally tangential to the GSO at the position of the network under examination."

### S5.543

The Board concluded that this provision is an additional allocation to the earth explorationsatellite service for inter-satellite links. The use of the words "telemetry, tracking, and control purposes" leads the Board to understand that the use is limited to space operation.

| S5.551B,            |
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| S5.551B,<br>S5.551E |

1 Footnote **S5.551B** states that "The use of the band 41.5-42.5 GHz by the fixedsatellite service (space-to-Earth) is subject to Resolution **128** (WRC-97)". Resolution **128** (WRC-97) indicates in its *resolves* "that administrations shall not implement fixed-satellite systems in the band 41.5-42.5 GHz until technical and operational measures have been identified and agreed within ITU-R to protect the radio astronomy service from harmful interference in the band 42.5-43.5 GHz.

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Appendix **S30B** List and the assignments with respect to which the Bureau previously received information in accordance with Article 6;

3.3 if the result of the exercise for all three selected positions is not satisfactory (affected administrations are identified) send the results to the requesting administration recommending that it may seek the agreement(s) of affected administration(s) and upon reaching the agreement may formally submit the request for the allotment on any of the proposed position to the Bureau;

3.4 enter the new allotment in Part A of the Plan and inform administrations in its circular telegram, indicating the characteristics of the allotment concerned if no administration was identified as affected in the above mentioned exercises or if agreement is reached and the request is resubmitted.



### Procedure for notification and recording

8.1

### Examination of the frequency assignments under Article S11 of the Radio Regulations

1 It was noted that in examining the notices of frequency assignments to earth/space transmitting/receiving station(s) notified under Article S11 in the frequency bands which are subject to No. S5.441 (the use of these bands shall be in accordance with the provisions of Appendix S30B) the technical characteristics of the notified assignment (as prescribed by Appendix S4) shall be checked whether they are conform with those recorded in the Appendix S30B List (frequency assignment having successfully applied the provisions of Article 6 of Appendix S30B).

2 For the existing systems recorded in the MIFR and for those notified under Article 13 of the RR between 29 August 1988 (end of WARC Orb-88) and 16 March 1990 (the date of entry into force of the Final acts of that Conference) the Bureau shall calculate the missing parameter and enter it in the Appendix **S30B** List.

3 To derive the power density averaged over the necessary bandwidth of the modulated carrier for the frequency assignments of existing systems the following formula shall be applied:

$$P_d = P_t - 10 \log_{10} B$$

where:

- $P_d$ : value of power density averaged over the necessary bandwidth of the modulated carrier (dB(W/Hz))
- $P_t$ : value of total peak envelope power (dBW)

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*B*: the necessary bandwidth of the modulated carrier (Hz). In case that the notified assigned frequency band exceeds the necessary bandwidth as defined in No. **S1.147**, the necessary bandwidth used in calculations shall be that specified in the designation of emission (col. C7a of APS4 Form of Notice refers).

By analogy with columns 10 and 11 of Article 10 of Appendix **S30B** the e.i.r.p. density using power density averaged over the necessary bandwidth of the modulated carrier either provided by the administration or derived from the formula referred to in § 3 above shall be applied to determine whether values such as the isotropic gain of the antenna in the direction of maximum radiation, the antenna pattern, the total peak envelope power and the necessary bandwidth of the modulated carrier of the frequency assignments to earth/satellite transmitting stations of existing systems notified by the administrations under Article **S11** conform to the Appendix **S30B** List.

#### An. 1

### Parameters used in characterizing the FSS Plan

The antenna characteristics referred to in the footnote under the title of Annex 1 (Fast roll-off antenna pattern for the allotment Plan) are reproduced in the Attachment 1 to the present Rules of Procedure.

### An. 2

## Basic data to be furnished in notices relating to stations in the fixed-satellite service entering the design stage using frequency bands of the Plan

In order to establish a formal date of receipt for submission received by the Bureau, information relating to the modification of orbital position(s), in application of "PDA concept" should be sent together with Annex 2 data. See also Rules of procedure relating to § 6.16.

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# Use of Appendix S4 in lieu of Annex 2 to Appendix S30B for submission of notices in application of Appendix S30B

1 In order to streamline the procedures both in administrations and in the Radiocommunication Bureau it was proposed during WRC-2000 that Appendix S4 should be used for the submission of notices in application of Appendix S30B Plan. This proposal was contained in the Draft Resolution [COM 4/9] included in Document CMR2000/484. Whilst the draft Resolution was not adopted, the Summary Record of the Conference notes that the principle was agreed and that the Radiocommunication Bureau and the RRB be asked to establish a Rule of Procedure on the issue.

2 The Board has examined the content of the Draft Resolution [COM 4/9] and considered that:

- WRC-2000 decided to definitively transfer in Appendix S4 (WRC-2000) the data elements which were contained in former Annex 2 to Appendices S30 and S30A, and to use Appendix S4 (WRC-2000) for the submission of notices relating to stations in the broadcasting-satellite service subject to Appendices S30 (WRC-2000) and S30A (WRC-2000).
- It is essential to harmonize the data structure related to all space services and to integrate the space plans data in the existing Space Network Systems database (SNS).

The Board therefore concluded that this approach would require that all satellite filings should use the format of Appendix S4 (WRC-2000), which would facilitate the development of software and databases in the Radiocommunication Bureau.

3 In view of the above and in the interest of streamlining the procedures both for administrations and for the Radiocommunication Bureau, the Board decided that, when furnishing the basic data relating to stations in the fixed-satellite service subject to Appendix **S30B**, administrations are required to use the Appendix **S4 (WRC-2000)** of the Radio Regulations in lieu of Annex 2 to Appendix **S30B**.

In any cases where the mandatory data elements to be provided in application of Articles 6 and 8 of Appendix **S30B** as contained in the applicable columns of the Tables of Annex 2B of Appendix **S4** are inconsistent (e.g. power characteristics of transmission), the data elements from Annex 2 of Appendix **S30B** shall be used.

## PART A3

## Rules concerning the Regional Agreement concerning the use by the broadcasting service of frequencies in the medium frequency bands in Regions 1 and 3 and in the low frequency bands in Region 1 (Geneva, 1975) (GE75)

Art. 4

### **Procedure for modifications to the Plan**

## 3.2.12

If the delay between publication in Part A and publication in Part B is too long, other modifications to the Plan are likely to be introduced in the meantime, which could not be taken into account at the time of examination.

When an Administration, in application of § 3.2.12 of the Agreement, communicates to the Radiocommunication Bureau the final characteristics of the assignment, after a period of one year from its publication in part A of a Special Section GE75, the modification shall follow again the full procedure of Article 4. The date at which the communication has been received by the Bureau will be considered as the new date of receipt of the proposed modification. A reminder is sent to the notifying administration two months before the end of the one-year period.

### 3.3.1

In the application of § 3.3 of Article 4, the agreement of another country is not necessary when the modification of the characteristics of an assignment would not increase the probability of interference at any point on the border of this country, within the coordination distance.

## **An. 1**

### Plan for the assignment of frequencies to broadcasting stations in the medium frequency band (other than to stations using low-power channels) in Regions 1 and 3 and in the low frequency bands in Region 1

### Explanation of symbols 24 and 33 used in the "Remarks" column

The Board noted that symbols 24 and 33 apply only to assignments in the Plan, but concluded that their texts define relations between Israel on one hand and the countries listed in

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symbol 33 on the other hand and should therefore apply not only to modifications of the assignments of these countries appearing in the Plan, but also to any new assignments which may be subject to the modification procedure.

The Board therefore decided that any new assignment or any modification to an existing assignment in the Plan communicated to the Bureau by the administration of Israel or an Administration of one of the following countries:

Algeria, Saudi Arabia, Egypt, United Arab Emirates, Jordan, Kuwait, Lebanon, Libya, Morocco, Qatar, Sudan, Tunisia, Yemen shall be treated as follows:

- For an assignment of Israel, if the country (countries) objecting to the modification is (are) one (or more) of the countries listed above, and it is (they are) the only country (countries) whose objection prevents the completion of the procedure for modification, the comments are communicated to the Administration of Israel and are not taken into account for updating the Plan. The same procedure applies to an assignment of one of the countries listed, if the only objecting Administration is that of Israel.
- In such a case, when the notification is received, the provisions of Article **S11** are applied.

An. 2

### Technical data used in the preparation of the Plan and to be used in the application of the Agreement

4.8.3

Paragraph 4.8.3 of Annex 2 of the Agreement specifies the limiting distance for a broadcasting station in a low-power channel. When the equivalent monopole radiated power of the station is 0.25 kW or less, two values are given: one for land and one for sea paths. In the case of a mixed path (partially land and partially sea), the limiting distance shall be calculated in the following way:

Limiting distance = 
$$\frac{(V_l \times D_l) + (V_s \times D_s)}{D_l + D_s}$$

in which

 $D_l$ : total path length over land (km)

 $D_s$ : total path length over sea (km)

- $V_l$ : limiting distance (km) path over land obtained from the Table in § 4.8.3 of Annex 2 to the Agreement
- $V_s$ : limiting distance (km) path over sea obtained from the Table in § 4.8.3 of Annex 2 to the Agreement.