

# INTERNATIONAL TELECOMMUNICATION UNION



## *Radiocommunication Bureau*

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Circular Letter  
CCRR/30

20 September 2006

### **To Administrations of Member States of the ITU**

**Subject:** Draft Rules of Procedure concerning the Regional Agreement GE06

#### **To the Director General**

Dear Madam/Sir,

Please find enclosed draft Rules of Procedure dealing with the Regional Agreement GE06, which are intended to support the application of the Regional Agreement GE06. It is recalled that the provisions of this Agreement are provisionally applicable as from 17 June 2006, as decided by RRC-06.

In accordance with No. **13.17** of the Radio Regulations, these draft Rules of Procedure are made available to administrations for comment before being submitted to the RRB pursuant to No. **13.14**. As indicated in No. **13.12A d)** of the Radio Regulations, any comments that you may wish to submit should reach the Bureau not later than **10 November 2006**, in order to be considered at the 42nd Meeting of the RRB, scheduled for 11-15 December 2006. All e-mail comments should be sent to: [brmail@itu.int](mailto:brmail@itu.int).

Yours faithfully,

V. Timofeev  
Director, Radiocommunication Bureau

#### **Annex: 1**

##### Distribution:

- Administrations of Member States of the ITU
- Members of the Radio Regulations Board
- Director and Heads of Department of the Radiocommunication Bureau

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## PART A10

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

#### **1 Receivability of notices**

In the application of the Regional Agreement relating to the planning of the digital terrestrial broadcasting service in Region 1 (parts of Region 1 situated to the west of meridian 170°E and to north of parallel 40°N, except the territory of Mongolia) and in the Islamic Republic of Iran, in the frequency bands 174-230 MHz and 470-862 MHz (Geneva, 2006), the Bureau will apply the procedures contained in Articles 4 and 5 of the Agreement and associated technical criteria with respect to the notices from all administrations having territories in the planning area, provided that the station concerned (or the allotment area concerned) is situated within the planning area.

*Reason: This is a standard paragraph included in each Rule of Procedure dealing with regional agreements, consistent with the practices agreed for the implementation of regional agreements until the Contracting Members ratify the Final Acts.*

#### **Art. 5**

#### **Notification of frequency assignments**

##### **5.1.2**

1) This provision deals with the examination by the Bureau of the assignment with respect to No 11.34 of the Radio Regulations, i.e., its conformity with the Plans and the associated provisions. For the case of an analogue television assignment, sub-paragraph (a) applies and it requires that the conditions of Section II of Annex 4 be met. However, Section II of Annex 4 deals only with the examination of conformity with the digital Plan entry. The Board concluded that, by analogy with § 4.2 of Section II of Annex 4 (dealing with digital plan entry comprising one assignment only), the notified frequency assignment to an analogue television assignment will be considered as compliant with the analogue television Plan if it fulfils the conditions specified in § 4.2 of Section II of Annex 4, as adapted to the case of analogue television assignment.

*Reason: To clarify the situation concerning the examination of an analogue assignment with respect to No 11.34 of the Radio Regulations.*

2) In addition, the Board concluded that the analogue television assignments in the bands 174-230 MHz (for Morocco 170-230 MHz) and 470-862 MHz, which were recorded in the MIFR at the time of the establishment of the GE06 analogue Plan with favourable findings under No. 11.34 of the Radio Regulations, shall retain such favourable findings as long as their characteristics and the characteristics of the equivalent entry in the analogue television plan of the GE06 Agreement remain unchanged.

*Reason: To ensure unchanged status to those analogue television assignments recorded in the Master Register, in the bands previously governed by the ST61 and GE89 Agreements, whose plan equivalents were transferred from the ST61 and/or GE89 Plan to the GE06 Plan, bearing in mind the differences in some of the criteria in the ST61, GE89 and GE06 Agreements, such as allowed tolerances for the actual transmitter site as compared with the nominal location of the transmitter indicated in the Plan (25 km for band III in the ST61 Agreement, 20 km in the GE06 Agreement).*

### 5.1.3

1) This provision deals with notification of a digital broadcasting entry in the Plan with characteristics different from those appearing in the Plan. The definition of the “digital Plan entry”, as contained in No. 1.3.18 of the GE06 Agreement, includes both assignments and allotments. However, and in view of the formulation of No. 5.1 of the GE06 Agreement, the Board concluded that, in the application of No. 5.1.3 of the GE06 Agreement, administrations can notify only frequency assignments.

*Reason: To clarify the situation that no frequency allotment could be notified under Article 5 of the Agreement.*

2) For the examination of the conformity of the frequency assignment in other primary services, notified under No. 5.1.3 of the GE06 Agreement, with the corresponding “digital entry in the Plan”, the Bureau would need to ascertain that the notified frequency assignment does not exceed the interference potential of the corresponding digital broadcasting entry in the Plan. Provision No. 5.1.3 indicates only the condition that the peak power density of the notified frequency assignment, in any 4 kHz, shall not exceed the spectral power density in the same 4 kHz of the digital broadcasting entry in the Plan. Item 5.6 of Table A.3 of Annex 3 to the GE06 Agreement indicates that this is the spectral power density delivered to the antenna transmission line. The Board understands that this is only the first examination that the Bureau would need to carry out under No. 5.1.3 of the GE06 Agreement. If the examination of the peak power density is within the specified limits, then the Bureau would need to make other examinations so as to ascertain that the field strength value produced by the notified frequency assignment in other primary services, in any direction, does not create more interference than the equivalent digital broadcasting plan entry. To this end, the Bureau would need complete characteristics of the notified frequency assignment, such as geographical information (effective antenna heights in 36 azimuths) and transmission information (polarization, erp, including antenna attenuation in the horizontal and vertical planes if, for example, the digital broadcasting Plan entry has a directional antenna pattern). Therefore, when notifying frequency assignments under No. 5.1.3 of the GE06 Agreement, administrations need to supply all the relevant characteristics that are necessary, for the Bureau, to ascertain that the notified frequency assignment is within the envelope of the digital broadcasting plan entry.

*Reason: To clarify the situation regarding the data elements that would need to be submitted, when notifying frequency assignments, within the envelope of a digital broadcasting Plan entry.*

**Annex 2**

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

**Appendix 3.1<sup>1</sup>**  
**Table A3.1-3**

This Table also applies to the geographical areas XGZ and XWB.

*Reason: To reflect the situation applied at RRC-06, for development of the Plan.*

**Appendix 3.1**  
**Table A3.1-8**

This Table also applies to the geographical area AOE, except channels 4 and 5.

*Reason: To reflect the situation applied at RRC-06, for development of the Plan.*

**Appendix 3.3<sup>2</sup>**

1) Section 3.3.3 of this Appendix provides information on the protection ratios for T-DAB. However, this section does not provide any information on the protection ratios for the case when T-DAB is interfered by T-DAB. Calculations requested in application of § 4.1.4.12 and 4.1.4.13 of the Agreement shall be made using the protection ratio of 15 dB.

*Reason: The Plan adopted by RRC-06 was based on the use of the protection ratio of 15 dB, for T-DAB vs. T-DAB, as recommended by RRC-04 (see § 3.4.2 of the Report from RRC-04 to RRC-06).*

2) Section 3.3.4 of this Appendix provides information on the protection ratios for analogue television. However, this section does not provide any information on the protection ratios for the case when the analogue television is interfered with by assignments in other primary terrestrial services. Calculations requested in application of § 4.2.4.11 and 4.2.4.12 of the Agreement shall, where possible, be made using the most recent ITU-R Recommendations.

*Reason: The analogue television Plan adopted by RRC-06 was compiled from several sources (ST61 Plan, GE89 Plan, MIFR, RCC List), without any compatibility assessment. The RRC-06 did not use any specific criteria for compatibility assessment between the analogue television plan and the assignments in other primary services. No compatibility assessment was carried out, in the intersessional period, between assignments in analogue television and assignments in other primary services. Therefore, in the absence of any specified criteria, the most recent ITU-R Recommendations are to be used in this respect.*

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<sup>1</sup> Note by the BR: In the provisional version of the Final Acts of RRC-06, this Appendix was numbered as Annex 3.1.

<sup>2</sup> Note by the BR: In the provisional version of the Final Acts of RRC-06, this Appendix was numbered as Annex 3.3.

**Annex 3**  
**Table A.3**

**Data for assignments to stations of other primary terrestrial services**

No. 7.1 of this Table specifies that, for the application of Article 4 of the Agreement, the regular hours (UTC) of operation of the frequency assignment (cross-referenced as item 10B in Appendix 4 of the Radio Regulations) are mandatory if used as a basis to effect coordination with another administration (character “C”). On the other hand, this data item is indicated as mandatory for the application of Article 5 of the Agreement (character “X”). Therefore, for the examinations under § 5.2.2 of the Agreement, where the regular hours of operation are mandatory, the Bureau needs to ascertain that the notified hours of operation are compliant with those resulting from the successful application of the procedure contained in § 4.2 of the Agreement. In view of the above, the Board concluded that the item “regular hours (UTC) of operation of the frequency assignment” would need to be considered as mandatory for all submissions under Article 4 of the Agreement for assignments to stations of other primary terrestrial services.

*Reason: To clarify the situation and to create conditions for proper application of Article 5 of the Agreement.*

**Annex 4**

**Section I: Limits and methodology for determining when agreement with another administration is required**

**2.1**

Step 3 of this Section specifies that any assignment in the other primary service is selected for consideration, if it belongs to an administration within the 1000 km contour, provided that the assignment is contained in the List or the coordination procedure under Article 4 of the GE06 Agreement for its inclusion into the List has already been initiated. The Board concluded that Bureau shall take into account only those eligible frequency assignments in other primary services that have frequency overlap with relevant broadcasting assignment/allotment (i.e., the proposed modification to the Plan).

*Reason: To reflect the situation applied at RRC-06, for development of the Plan.*

**2.2**

This Section specifies the general methodology for constructing the coordination contours for the application of the coordination procedure referred to in § 4.2 of the Agreement. Given the fact that the frequency assignments in the other primary service (OPS) include transmitting and receiving stations, the methodology takes account of the impact of the transmitting station in the OPS to the broadcasting service, as well as the likely impact of the broadcasting service to the receiving stations in the OPS. Therefore, this section specifies the need for constructing separate coordination contours for the same assignment: for the transmitting stations and for the receiving stations. This section further specifies that, for identification of affected administrations, the larger of the two contours is to be taken into account.

Given the variety of situations which could be covered by assignments in OPS, there may be situations where the constructed coordination contours for the transmitting stations and for receiving stations of the same assignment are not overlapped or partially overlapped. Therefore, the Board decided that for the cases where the coordination contours for the transmitting stations and for receiving stations of the same assignment are not overlapped or partially overlapped, the amalgamation of the two coordination contours is to be taken into account for the identification of affected administrations.

*Reason: To clarify the methodology for the case where the coordination contours for the transmitting stations and for receiving stations of the same assignment are not overlapped or partially overlapped.*

### 5.1.2

This Section indicates Tables AP1.2 to AP1.8 of Appendix 1 to this Section as tables that contain the coordination trigger field-strength values for protection of other primary terrestrial services, applying the procedure of Article 4 of the GE06 Agreement (construction of coordination contours). However, §§ A.2 to A4 of Appendix 1 to Section I, which include Tables AP1.2 to AP1.8, do not provide information on the trigger values to be used for protection of other primary terrestrial services from analogue television assignments. Such values are necessary for the application of the procedure of Article 4 of the GE06 Agreement (see § 4.1.2.8a) and 4.1.2.3). Calculations requested in application of § 4.1.2.8a) of the Agreement shall be made using the most recent ITU-R Recommendations and the indications therein. Recommendations ITU-R F.758-4, ITU-R F.759, and ITU-R SM.851-1 are to be used in this regard. As Recommendation ITU-R F.758-4 does not contain information relating to analogue systems in the fixed service, and given the indications therein, the Board concluded that version ITU-R F.758-2 shall be used in the case of analogue systems in the fixed service. For cases not covered by any ITU-R Recommendation, the Board concluded that the calculations shall be made using the trigger values for DVB-T in combination with the approach of relative protection ratios for analogue television as described in Recommendation ITU-R SM.851-1.

Therefore, trigger values to be used for protection of other primary terrestrial services from analogue television assignments for cases not covered by any ITU-R Recommendation shall be calculated using the following formula:

$$F_{trigger\ ATV} = F_{trigger\ DVB-T} - RPR$$

where

$F_{trigger\ ATV}$  = trigger value for analogue television

$F_{trigger\ DVB-T}$  = trigger value for digital television

$RPR$  = relative protection ratio in accordance with Recommendation ITU-R SM.851-1.

*Reason: RRC-06 did not specify any trigger values for the application of § 4.1.2.8a). Therefore, in the absence of any specified criteria, the relevant ITU-R Recommendations and the information for digital broadcasting are to be used in this respect.*