

INTERNATIONAL TELECOMMUNICATION UNION



Radiocommunication Bureau

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Circular Letter
CCRR/39

27 April 2009

To Administrations of Member States of ITU

Subject: Draft Rules of Procedure

To the Director-General

Dear Sir/Madam

Please find enclosed proposals for modification of some current Rules of Procedure (2009 edition) related to the Regional Agreement GE06 and the technical standards used in the application of the coordination procedure (provision **9.21** of the Radio Regulations). These proposals reflect related developments since their approval and are presented in the attached annexes.

In accordance with No. **13.17** of the Radio Regulations, these proposals 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 **7 June 2009**, in order to be considered at the 51st Meeting of the RRB, scheduled for 6-10 July 2009. All e-mail comments should be sent to: brmail@itu.int.

Yours faithfully,

Valery Timofeev
Director, Radiocommunication Bureau

Annexes: 3

Distribution:

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Annex 1

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)

Art. 5

Notification of frequency assignments

MOD

5.1.2 e)

1) ____ If the digital Plan entry bears a remark with respect to assignments in the analogue Plan or to existing assignments to other primary terrestrial services, the finding of the notified frequency assignment referring to this digital Plan entry and being within the scope of provision No. 5.1.2 e) shall be favourable if all the necessary agreements have been obtained and if the conditions specified in Section II of Annex 4 are met.

2) ____ If the digital Plan entry bears a remark with respect to entries in the digital Plan, the finding of the notified frequency assignment referring to this digital Plan entry and being within the scope of provision No. 5.1.2 e) shall be favourable if the notifying administration states that all conditions associated with the remark are fully met, and the conditions of Section II of Annex 4 are met.

Reason: editorial changes

ADD

3) ____ For the case of a T-DAB frequency assignment, notified under No. 5.1.2 e) of the GE06 Agreement, using a DVB-T single assignment Plan entry in the digital Plan, the Bureau would need to ascertain that the notified frequency assignment does not implement the same spectrum of the DVB-T Plan assignment more than once.

Reason: to be consistent with treatment of a notification of a frequency assignment under No 5.1.2 a) and b) of the GE06 Agreement where no more than one frequency assignment is allowed to be notified against a single assignment entry in the Plan.

ADD

4) ____ For the case of a T-DAB frequency assignment, notified under No. 5.1.2 e) of the GE06 Agreement, using a DVB-T Plan (assignment or allotment) entry, when examining if the conditions in Section II of Annex 4 of the GE06 Agreement are met, the Bureau would need to augment the notified e.r.p. of the T-DAB assignment by a corresponding correction factor to take into account the difference in spectral power densities as a result of the different bandwidths of the T-DAB assignment and the DVB-T Plan entry. It is first necessary to adjust the effective radiated power of

the notified assignment by adding the relevant correction factor indicated in the table below. The values of the correction factor are calculated as the ratio of the digital television broadcasting Plan entry bandwidth and the necessary bandwidth of the notified assignment.

Correction factor to be applied to the e.r.p. of notified T-DAB assignments

	<u>DVB-T Plan entry channel arrangement</u>	
	<u>7 MHz</u>	<u>8 MHz</u>
<u>Correction factor</u>	<u>6.371 dB</u>	<u>6.950 dB</u>

Reason: to ensure that the notified T-DAB frequency assignment does not exceed the interference potential of the corresponding DVB-T digital broadcasting entry in the Plan.

5.1.3

1) (NOC)

MOD

2) For the examination of the conformity of the frequency assignment in the broadcasting service or 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 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 the maximum spectral power-density (dB(W/Hz)) (Item 8AC, Appendix 4, WRC-07) averaged over the worst 4 kHz band is based on the maximum effective radiated power. The Bureau would take into account the spectral power-density of the notified assignment by first calculating the equivalent maximum effective radiated power (e.r.p.) of the notified frequency assignment to which is applied a correction factor that takes into account the difference in spectral power-densities as a result of the different necessary bandwidths of the frequency assignment and the corresponding Plan entry. The equivalent effective radiated power is derived from the necessary bandwidth and the peak spectral power-density of the notified assignment and the bandwidth of the digital broadcasting Plan entry, as given in the equation below:

$$e.r.p_{eq,max} = SPD_{max} + 10 \log_{10}(BW_{NA}) + 10 \log \left[\frac{BW_{PE}}{BW_{NA}} \right] \text{ in dBW}$$

where:

- SPD_{max} is the maximum spectral power density (dB(W/Hz)) (Item 8AC, Appendix 4, WRC-07) averaged over the worst 4 kHz band and based on the maximum effective radiated power;
- BW_{NA} is the notified necessary bandwidth (Item 7AB, Appendix 4, WRC-07) in Hz;
- BW_{PE} is the bandwidth in Hz for the relevant system of the digital broadcasting Plan entry. For DVB-T Plan entries the bandwidth is 7.61×10^6 Hz in the case of 8 MHz systems and 6.66×10^6 Hz for 7 MHz systems, and for T-DAB Plan entries, 1.536×10^6 Hz.

In order to ascertain that the field strength produced by the notified frequency assignment(s), in any direction, does not create more interference than the corresponding digital broadcasting Plan entry, 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, e.r.p., 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 pPlan entry.

Reason: to include frequency assignments of the Broadcasting service, and to take into consideration Item 8AC of Appendix 4 (WRC-07) of the Radio Regulations in order to ensure that the field strength produced by the notified frequency assignment, in any direction, does not create more interference than the equivalent digital broadcasting Plan entry.

3) NOC

Annex 2

PART B

SECTION B4

Rules concerning calculation methodology and technical standards for determining the affected administrations and for assessing the probability of harmful interference in the bands between 9 kHz and 28 000 kHz

MOD

Introduction

This Section contains elements of the calculation methodology which is to be used:

- for identification of administrations whose agreement has to be sought in the application of No. **9.21**, in the context of the relevant frequency allocation footnotes, i.e. Nos. **5.61**, **5.87A**, **5.92**¹, **5.93** and **5.123**, ~~referred to in Article 5 of the Radio Regulations,~~ in the bands between 9 kHz and 28 000 kHz;
- for assessing the probability of harmful interference, in the bands between 9 kHz and 28 000 kHz, as may be required in the application of the provisions of No. **7.6**, or in any other Radiocommunication Bureau's study as may be requested.

1 Technical Standard A-1: Signal/interference protection ratio

MOD

1.2 These protection ratio values are based on results of the studies within Radio-communication Study Groups (see Recommendations ITU-R F.240-~~76~~, ITU-R SM.326-6, ITU-R-F.339-~~76~~ and former Recommendation ITU-R SM.669-1).

¹ For cases under No. **5.92** the Rules of Procedure of Section B5 also apply.

MOD

TABLE 1
RF signal-to-interference protection ratios (dB)

Transmission type		Frequency band (kHz)		
		9-1 606.5	1 606.5-4 000	4 000-28 000
Telegraphy, aural reception		8 (3-7)	11 (5-10)	15 (7-14)
Telegraphy, aural reception; Meteo, Press		9 (3-8)	13 (5-12)	17 (7-16)
Telegraphy, automatic reception, without error correction		11 (6-10)	17 (10-16)	26 (13-25)
Telegraphy, automatic reception, with error correction		8 (6-7)	12 (7-11)	14 (8-13)
Photo telegraphy, facsimile		19 (14-18)	24 (16-23)	28 (18-27)
Telephony, <i>not</i> for connection to public network (CO)	DSB and SSB full carrier	18 (15-17)	21 (17-20)	24 (19-23)
	SSB, reduced or suppressed carrier, ISB	12 (9-11)	15 (11-14)	18 (13-17)
Telephony, for connection to public network (CP)	DSB and SSB full carrier	31 (26-30)	34 (28-33)	38 (30-37)
	SSB, reduced or suppressed carrier, ISB	25 (20-24)	28 (22-27)	32 (24-31)
Broadcasting (except for HFBC in exclusive bands and MFBC in the band 526.5-1 705 kHz)		38 (33-37)	38 (32-37)	38 (32-37)
Aeronautical mobile service (telegraphy or telephony)		15	15	15
Radiobeacons		15	15	–
<u>Digital transmissions, SSB, suppressed carrier (J2D class of emission)</u>		<u>9</u>	<u>9</u>	<u>9</u>

2 Technical Standard A-2: Minimum field strength to be protected

MOD

2.2 The values contained in this Standard are based on the ITU-R Recommendations and Reports, namely on Recommendation ITU-R F.339-76 and ~~ex-CCIR Report 322~~ ITU-R P.372-8².

MOD

2.4 Technical Standard A-2 contains values for the minimum field strength to be protected (dB relative to 1 μ V/m) for the main types of transmissions (from telegraphy, aural reception, to telephony, for connection to the public network and to digital transmissions) in the frequency bands from 9 kHz to 28 000 kHz. These values of the minimum field strength have been determined from the median values (exceeded 50% of time) of the noise level (atmospheric, man-made or galactic) and the steady state ratio, S/N by adding appropriate allowances for 90% of time to take into account the noise level variation, D_u , and the intensity fluctuation of the wanted signal, IF.

² This Recommendation replaced ex-CCIR Report 322.

Minimum field strength to be protected (dB relative to 1 µV/m)

Type of transmission: Telegraphy, aural reception

(B > 0.5 kHz)

5A

NOISE GRADE	(kHz)																		(MHz)																	
	10			20			50			100			200			500			1			1.5			2			3			4					
	N2	T1	J1	N2	T1	J1	N2	T1	J1	N2	T1	J1	N2	T1	J1	N2	T1	J1	N2	T1	J1	N2	T1	J1	N2	T1	J1	N2	T1	J1						
	N1	T2	J2	N1	T2	J2	N1	T2	J2	N1	T2	J2	N1	T2	J2	N1	T2	J2	N1	T2	J2	N1	T2	J2	N1	T2	J2	N1	T2	J2						
100	72	72	74	70	72	81	68	70	85	65	68	83	62	65	78	57	59	67	52	54	52	47	50	41	44	47	34	38	42	23	34	38	16			
	72	74	77	71	75	81	68	74	83	65	73	84	62	70	80	56	63	68	51	55	54	47	49	43	42	45	36	36	39	27	32	35	22			
90	69	69	72	67	69	77	63	65	78	59	61	75	54	57	69	48	50	57	42	44	42	38	40	32	35	38	26	31	34	17	28	31	11			
	70	71	74	67	71	77	62	68	77	58	65	75	53	60	70	47	53	57	41	45	44	37	40	33	34	36	28	30	31	20	27	28	15			
80	66	66	69	63	65	73	58	59	72	52	54	67	46	49	60	38	40	46	32	34	32	28	31	23	27	18	24	27	10	22	25	5				
	67	68	71	63	66	72	57	61	71	51	57	67	45	51	60	37	43	46	31	35	34	28	30	25	26	28	20	23	24	13	21	22	9			
70	64	63	66	60	61	68	53	54	66	46	48	59	38	40	50	28	30	35	22	24	22	19	22	14	18	20	10	17	19	3	16	18	1			
	64	65	68	59	61	68	52	55	63	45	49	58	37	42	50	26	32	36	21	25	24	19	22	16	18	20	12	16	18	6	15	16	4			
60	61	60	64	57	57	64	49	49	59	40	42	51	30	32	42	18	21	25	12	14	12	10	12	6	10	12	2	10	12	-1	10	12	-1			
	61	61	66	56	56	63	47	48	57	39	40	49	29	32	40	18	22	26	11	15	14	9	12	7	9	11	4	9	11	0	9	10	-1			
50	58	57	61	53	53	60	44	44	52	33	35	43	22	24	32	8	11	15	4	4	4	3	3	3	2	3	2	3	4	-1	4	5	-1			
	58	58	63	52	52	59	43	41	50	32	32	41	21	23	30	8	12	16	4	5	4	3	3	3	2	3	2	2	3	-1	4	4	-1			
40	55	55	58	49	50	56	38	39	46	26	28	35	14	16	22	7			4			3			2			-1			-1					
	55	55	60	49	47	55	38	35	43	26	24	32	14	14	20	7			4			3			2			-1			-1					
30	52	52	56	46	47	52	33	34	40	19	22	27	11	11	13	7			4			3			2			-1			-1					
	52	51	58	45	42	50	32	28	36	20	16	24	11	11	11	7			4			3			2			-1			-1					
20	50	49	54	43	42	48	28	28	33	15	15	20	11	11	11	7			4			3			2			-1			-1					
	49	48	55	40	37	46	27	20	30	15	15	15	11	11	11	7			4			3			2			-1			-1					
10	48	46	51	40	39	44	22	23	28	15	15	15	11	11	11	7			4			3			2			-1			-1					
	47	45	53	35	32	42	21	18	21	15	15	15	11	11	11	7			4			3			2			-1			-1					
0	45	43	48	36	35	40	18	18	22	15	15	15	11	11	11	7			4			3			2			-1			-1					
	44	41	50	31	27	37	18	18	18	15	15	15	11	11	11	7			4			3			2			-1			-1					

Constants to be added to obtain other types of emissions			
Digital transmissions, J2D			-8
Narrow-band TG (B < 0.5 kHz)			-5
Telegraphy aut. (B > 0.5 kHz)			4
Phototelegraphy			16
T e l e p h o n y	CO	J3E	14
		R3E	
		B8E	
	CP	H3E	20
		A3E	23
		J3E R3E B8E	25
Broad- cast	LF/MF		49
	BC Trop.		46

Minimum field strength to be protected (dB relative to 1 µV/m)

Type of transmission: Telegraphy, aural reception

(B > 0.5 kHz)

5B

NOISE GRADE	(MHz)																														
	4			5			6			7			8			10				12			15			20			30		
	N2 N1	T1 T2	J1 J2	N2 N1	T1 T2	J1 J2	N2 N1	T1 T2	J1 J2	N2 N1	T1 T2	J1 J2	N2 N1	T1 T2	J1 J2	N2 N1	T1 T2	J1 J2	J1 J2	N2 N1	T1 T2	J1 J2	N2 N1	T1 T2	J1 J2	N2 N1	T1 T2	J1 J2	N2 N1	T1 T2	J1 J2
100	34	38	16	31	34	12	28	31	11	25	28	11	23	25	11	18	21	12	14	17	13	7	11	13	-3	4	10	-7	-7	-3	
	32	35	22	30	32	17	28	30	15	26	29	14	24	28	13	21	26	14	19	25	15	14	22	15	7	17	14	-7	0	2	
90	28	31	11	26	28	8	23	25	8	21	23	9	18	21	9	14	16	10	9	12	11	2	6	11	-7	-2	8	-7	-7		
	27	28	15	25	26	12	23	25	11	21	24	11	20	23	11	17	22	12	14	21	13	9	18	13	0	11	12			-5	
80	22	25	5	20	23	4	18	21	5	16	18	6	14	16	7	9	13	8	4	8	9	-4	1	9	-7	-7	5	-7			
	21	22	9	19	21	8	18	20	8	16	19	9	15	19	9	12	18	10	9	17	11	3	13	11	-7	5	9				
70	16	18	1	15	17	1	13	16	2	11	14	3	9	13	4	4	9	6	-1	4	7	-5	-3	7	-7	-7	2	-7			
	15	16	4	14	15	3	13	15	4	12	14	6	11	14	7	8	14	8	4	13	9	-3	9	9	-7	-1	6				
60	10	12	-1	9	12	-3	9	11	-1	7	10	1	5	9	2	0	5	4	-5	0	5	-5	-5	5	-7	-7	-2	-7			
	9	10	-1	9	10	-1	9	10	1	8	10	3	7	10	4	3	10	6	-1	9	7	-5	4	7	-7	-6	2				
50	4	5	-1	4	6	-3	4	6	-3	2	6	-2	8	5	0	-5	1	2	-5	-4	3	-5	-5	2	-7	-5	-7				
	4	4	-1	5	5	-3	5	5	-2	4	5	-1	3	6	1	-1	6	4	-5	5	5	-5	0	5		-2					
40	-1			-1	0	-3	-3			-3	1	-3	-3	0	-3	-5	-3	0	-5	-5	1	-5		0	-7	-7	-7				
				-1	-1	-3				-3	1	-3	-3	2	-3	-5	2	2	-5	1	3			2		-6					
30	-1			-3			-3			-3			-3			-5	-5	-2	-5		0	-5		-2	-7			-7			
																-5	-2	0			1			-1							
20	-1			-3			-3			-3			-3			-5			-4	-5		-2	-5		-4	-7			-7		
																			-2			-1			-4						
10	-1			-3			-3			-3			-3			-5			-5	-5		-4	-5		-7			-7			
																			-4			-3									
0	-1			-3			-3			-3			-3			-5				-5		-5		-7			-7				

Constants to be added to obtain other types of emissions			
Digital transmissions, J2D			-8
Narrow-band TG (B < 0.5 kHz)			-5
Telegraphy aut. (B > 0.5 kHz)			4
Phototelegraphy			16
T e l e p h o n y	CO	J3E R3E B8E	14
		H3E	20
		A3E	23
	CP	J3E R3E B8E	25
		H3E	31
		A3E	34
Broad- cast	LF/MF		49
	BC Trop.		46

4 Technical Standard A-5: Propagation and field strength calculations

MOD

4.3.4 The tables of field strength values for the sky-wave propagation mode in the frequency bands between 9 kHz and 3 900 kHz contain only the value that corresponds to the strongest mode of propagation. These values have been consolidated from different sources (Recommendations ITU-R P.533-5, ITU-R P.684-1, ITU-R P.1147, ~~ex-CCIR Report 264-1~~ ITU-R P. 435-7³, etc.).

MOD

4.4 Concerning the calculation of the sky-wave in the bands between 3 900 kHz and 28 000 kHz, the Board noted that the ITU-R recommends the propagation method referred to in Annex 1 to Recommendation ITU-R P.533-5 as it has comparable accuracy to the other more complex methods. The Board also noted that the implementation of that method in the Bureau's calculation methodology for determining the affected administrations in the application of No. **9.21** may require considerable resources, which may not be justifiable having in mind the expected low volume of application of this methodology. Therefore, the Board decided that the following methodology is to be applied, ~~which is already incorporated in the Bureau's application software:~~

4.4.1 The monthly median values of the standard MUF (EJF) are calculated in accordance with the ~~ex-CCIR Recommendation 434 (New Delhi, 1970)⁴ and the ex-CCIR Report 340 (New Delhi, 1970)⁵~~, for two reference values (5 and 125) of the relative sunspot number R_{12} and for two selected months of the year (June and December). ~~These pre-calculated values are stored in a form of tables and are incorporated in the appropriate application software.~~

4.4.2 The field-strength values are calculated in accordance with the methodology explained in the NBS Circular No. 462. ~~The same concept of pre-calculated values is applied and the pre-calculated values are stored in a form of tables that are incorporated in the appropriate application software.~~

Reasons:

- 1) to update the Tables containing the values of protection ratio and minimum field strength to be protected by including the data for J2D class of emission in order to take into account the systems using digital technologies;
- 2) to update the references to those ITU-R Recommendations and Reports, which were used for deriving these values for J2D class of emission and to make an editorial update of some other reference documents listed in these Rules;
- 3) to remove the references in Section 4.4 to the Bureau's application software, which is no longer available pursuant to the WRC-95 decision to abandon technical examinations in the frequency bands below 28 MHz.

³ This Recommendation replaced ex-CCIR Report 264-1.

⁴ This ex-CCIR Recommendation has been converted into Recommendation ITU-R P. 434-5.

⁵ This ex-CCIR Report has been converted into Report ITU-R P.2011-1.

Annex 3

PART B

SECTION B6

MOD

Rules concerning criteria for applying the provisions of No. 9.36 to a frequency assignment in the services whose allocation is governed by Nos. 5.292, 5.293, 5.297, 5.309, 5.316A, 5.316B, 5.323, 5.325 and 5.326

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 (Regional Agreements, ITU-R Recommendations), since the Radiocommunication Bureau has no Technical Standards for application in the frequency bands above 28 MHz.

MOD

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, 5.297, 5.309, 5.316A, 5.316B, 5.323, 5.325 and 5.326**, the following criteria are 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”);

MOD

	Frequency band (MHz)	Allocated service (No. 9.21)	Protected service
5.292 ¹	470-512	FX, MO	BT
5.293 ¹	470-512 and 614-806	FX, MO	BT
5.297	512-608	FX, MO	BT
5.309 ¹	614-806	FX	BT
5.316A	<u>790-862</u>	<u>MO(-AER)</u>	<u>FX, MO(-AER), AL</u>
5.316B	<u>790-862</u>	<u>MO(-AER)</u>	<u>AL</u>
5.323	862-960	AL	FX, MO
5.325 ¹	890-942	LR	FX, MO
5.326 ¹	903-905	MO(-AER)	FX

¹ Different category of service.

2.2 the *case-by-case examination* is performed with respect to the assignments for which the procedure of No. 9.21 was completed or initiated.

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

MOD

3.1 For the protection of the broadcasting (television) service, in the context of the provisions of Nos. 5.292, 5.293, 5.297 and 5.309, the relevant criteria and methodology contained in established by the GE89 Conference-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.

TABLE 1
Coordination distances for protection of the BT service
(from the FX/MO service, effective antenna height 37.5 m)

Power (of the interferer) (dBW)	Frequency band 470-582 MHz		Frequency band 582-862 MHz	
	Land path (km)	Sea path (km)	Land path (km)	Sea path (km)
30	<u>140.7</u> 136.8	<u>917.1</u> 938.1	<u>114.1</u> 185.0	<u>864.9</u> 756.8
25	<u>101.4</u> 102.1	<u>794.7</u> 826.2	<u>84.9</u> 63.0	<u>755.6</u> 52.1
20	<u>74</u> 75.2	<u>683.9</u> 714.6	<u>63</u> 46.9	<u>647.7</u> 550.0
15	<u>54.8</u> 56.1	<u>585</u> 610.4	<u>47</u> 36.1	<u>543</u> 458.3
10	<u>41</u> 41.1	<u>489.6</u> 510.0	<u>35.9</u> 29.1	<u>446.5</u> 371.0
5	<u>31.3</u> 33.2	<u>395.5</u> 422.2	<u>27.1</u> 23.8	<u>360.7</u> 300.0
0	<u>23.6</u> 27.0	<u>303.7</u> 340.5	<u>20.9</u> 18.8	<u>272</u> 228.6

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

3.2 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 P.528-2 are used in connection with the following data:

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

MOD

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 established by the GE89 Conference-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 ~~around 900~~ MHz

Power (of the interferer) (dBW)	Land path (km)	Sea path (km)
30	86 <u>50.9</u>	463.8 <u>254.1</u>
25	65.2 <u>38.1</u>	397.4 <u>182.1</u>
20	50.1 <u>29.4</u>	335.4 <u>130.8</u>
15	39.2 <u>24.2</u>	276.8 <u>90.0</u>
10	30.6 <u>19.2</u>	219.9 <u>63.7</u>
5	23.9 <u>15.2</u>	168.1 <u>41.3</u>
0	19 <u>12.4</u>	125.7 <u>26.1</u>

NOTE to Table 2: the coordination distances were calculated using propagation curves of the GE06 Agreement for 10% of time, 50% of locations, the coordination trigger of 18 (µV/m), calculations were made for the frequency 790 MHz.

ADD

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:

- 1) to take into account new footnotes Nos. 5.316A and 5.316B introduced by WRC-07, which allocate some bands between 790-862 MHz to the mobile, except aeronautical mobile, service subject to No. 9.21 coordination procedure;
- 2) to adjust the values of the coordination distances using the updated propagation prediction methods and the methodology and criteria of the GE06 Agreement.