World Radiocommunication Conference (WRC-15) Geneva, 2–27 November 2015



PLENARY MEETING Style = Committe

Document XX-E [Day Month Year] Original: English

(Source, always in full and in French alphabetical order)

Source Administration(s)

Title 1 INTER-AMERICAN PROPOSALS FOR THE WORK OF THE CONFERENCE

> *Title 2* TITLE 2

Agenda_item Agenda item 2

Normal

2 to examine the revised ITU-R Recommendations incorporated by reference in the Radio Regulations communicated by the Radiocommunication Assembly, in accordance with Resolution **28** (**Rev.WRC-03**), and to decide whether or not to update the corresponding references in the Radio Regulations, in accordance with the principles contained in Annex 1 to Resolution **27** (**Rev.WRC-12**);

heading_b

Introduction

Normal (No bold in general text)

In this document the Respective Member State or Regional Group makes proposals under a number of WRC-12 agenda topics. It is anticipated that the Respective Member State or Regional Group will submit at a later date some additional proposals including proposals for future conferences.

Furthermore, since the introduction of digital modulation for operational use is two years or so from 2005, the proposed modifications to existing articles, resolutions and recommendations treat all HF broadcasting bands on an equal footing.

GUIDELINES ON WRC-15 PROPOSALS

1) PLEASE NOTE THIS GUIDE INDICATES HOW TO PREPARE PROPOSALS WITH FEW ILLUSTRATIVE EXAMPLES

2) PLEASE NOTE ALSO THAT TEXTS IN PURPLE SUCH AS "heading_b" GIVE INDICATION ON THE APPLICABLE MS-WORD-STYPE AND SHOULD NOT BE KEPT IN THE FINAL DOCUMENT

Art_No ARTICLE 1

Art_title Terms and definitions

Section_1 Section III – Radio services

Proposal NOC IAP/XX/1

Art_def Normal + 2 tabs (as per RR)

1.56 *amateur service:* A *radiocommunication service* for the purpose of selftraining, intercommunication and technical investigations carried out by amateurs, that is, by duly authorized persons interested in radio technique solely with a personal aim and without pecuniary interest.

Reasons (No bold in text of reasons)

Reasons: We are not proposing any changes that would require consequential changes in the terms and definitions in Article 1.

Proposal NOC IAP/XX/2

Art def Normal

1.57 *amateur-satellite service:* A *radiocommunication service* using *space stations* on earth *satellites* for the same purposes as those of the *amateur service*.



Art_No ARTICLE 5

Art_title Frequency allocations

Section_1 Section I – Regions and areas

<i>Proposal</i> MOD	IAP/XX/6	
Art_def 5.16	<i>Normal</i> 1) The "Trop	pical-Zone <u>Area</u> " (see map in No. 5.2) is defined as:
<i>Reasons</i> Reasons:	No bold in text of Rea	asons.
Proposal NOC Art_def 5.17	←	<i>No Proposal number with a NOC, contrary to a <u>NOC</u></i>
Proposal NOC	IAP/XX/7	
Art_def 5.18	<i>Normal</i> b) the whole of the	hat area in Regions 1 and 3 contained between the parallels 30°

North and 35° South with the addition of:

Reasons

1

Section_1 Section IV – Table of Frequency Allocations (See No. 2.1)

Proposal MOD IAP/XX/8

Table_title

Table_head Allocation to services				
Region 1	Region 2	Region 3		
Table_freq 255-283.5 Table_TextS5 BROADCASTING AERONAUTICAL PADIONAVICATION	Table_freq 200-275 Table_TextS5 AERONAUTICAL RADIONAVIGATION Aeronautical mobile Table_freq	Table_freq 200-285 Table_TextS5 AERONAUTICAL RADIONAVIGATION Aeronautical mobile Aeronautical radionavigation		
Art_def 5.70 5.71 Table_freq 283.5-315 Table_TextS5 AERONAUTICAL RADIONAVIGATION MARITIME	275-285 Table_TextS5 AERONAUTICAL RADIONAVIGATION Aeronautical mobile Maritime radionavigation (radiobeacons)			
RADIONAVIGATION (radiobeacons) <i>Art_def</i> 5.73 5.72 5.74	Table_freq 285-315 Table_TextS5 AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons) 5.73			
Table_freq 315-325 Table_TextS5 AERONAUTICAL RADIONAVIGATION Maritime radionavigation (radiobeacons) Art_def 5.73 5.72 5.75	Table_freq 315-325 Table_TextS5 MARITIME RADIONAVIGATION (radiobeacons) Art_def 5.73 Aeronautical radionavigation	Table_freq 315-325 Table_TextS5 AERONAUTICAL RADIONAVIGATION MARITIME RADIONAVIGATION (radiobeacons) 5.73		

Table_title 200-495 kHz

Reasons

Proposal MOD IAP/XX/9

Table_title 4 800-5 570 MHz

Table_head Allocation to services				
Region 1	Region 2	Region 3		
Table_freq	Table_TextS5			
4 800-4 990	FIXED			
	MOBILE Art_def 5.440A 5.442			
	Radio astronomy			
	RADIO ASTRONOMY			
	Art_def			
	5.149 5.339 5.443			
Table_freq	Table_TextS5			
4 990-5 000	FIXED			
	MOBILE except aeronautical mobile			
	RADIO ASTRONOMY			
	Space research (passive)			
	Art_def			
	5.149			

Reasons

Reasons: No bold in text of Reasons.

Proposal

MOD IAP/XX/10

Table_title 4 800-5 570 MHz

Table_head Allocation to services					
Region 1	Region 2 Region 3				
Table_freq 5 150- 5 250 5 200	Table_TextS5 FIXED-SATELLITE (Earth-to-space) MOBILE except aeronautical mobile	5.447A <u>ADD 5.A2</u> MOD_5.446A_5.446B HON			
Table_freq 5 1505 200-5 250	Table_TextS5 FIXED-SATELLITE (Earth-to-space) MOBILE except aeronautical mobile 5 AERONAUTICAL RADIONAVIGAT 5.446 5.446C 5.447 5.447B 5.447C	5.447A 5.446A 5.446B FION			
roposal	Split of the I	RR band 5 150-5250 MHz in			

<i>Proposal</i> ADD	IAP/XX/11	Split of the RR band 5 150-5250 MHz in 5 150-5 200 and 5 200-5250 MHz:
Art_def 5.A2	<i>Normal</i> This is a new footnote	<i>i - Create a new row without revision marks by copying exactly the same information as in the existing RR row;</i>
Reasons Reasons:	No bold in text of Reasons.	2- Switch on the track changes;3- Make modifications in the existing row and the newly created row, as appropriate.

Art_No ARTICLE 21

Art_title

Terrestrial and space services sharing frequency bands above 1 GHz

Section_1 Section V – Limits of power flux-density from space stations

Proposal MOD IAP/XX/12

Table_head	Service*	Limit in $dB(W/m^2)$ for angles of arrival (δ) above the horizontal plane			Reference	
Frequency band		0°-5°	5°-25°	25°-90°	- bandwidtl	
<i>Table_text</i> 4 500-4 800 MHz	Table_text Fixed-satellite	Table_text -152	$\frac{Table_text}{-152 + 0.5(\delta - 5)}$	Table_text -142	<i>Table_text</i> 4 kHz	
5 670-5 725 MHz (Nos. 5.453 and 5.455)	(space-to-Earth) Meteorological-satellite (space-to-Earth)					
7 250- 7 900<u>7 901</u> MHz	Mobile-satellite					

Table_NoTABLE**21-4** (REV.WRC-1215)

Reasons

7 СMR15/..-Е

Art_No ARTICLE 52

Art_title Special rules relating to the use of frequencies

Section_1 Section VI – Use of frequencies for radiotelephony

 Art_def
 Section_2

 52.216
 C - Bands between 4 000 kHz and 27 500 kHz

Section_3

C2 – Call and reply

Proposal IAP/XX/13 MOD Art_def Normal 52.221 § 97 1) Ship stations may use the following carrier frequencies for calling in radiotelephony^{IA}: 4 125kHz 6 215 kHz^{3, 4} 8 255 kHz 12 290 kHz⁴ (see also No. 52.221A) 16 420 kHz⁴ (see also No. 52.221A) 18 795 kHz 22 060 kHz 25 097 kHz (WRC-2000) When a footnote is modified/added, it directly Proposal **IAP/XX/14** follows the text after this ADD line Art def Footnote Text

^{1A}**52.221.1A** These frequencies may also be used by coast stations with class H2B emission, when using the selective calling system defined in Recommendation ITU-R M.257-3.

Reasons

Appendix_No APPENDIX 30 (REV.WRC-12)*

Appendix_title

Provisions for all services and associated Plans and List¹ for the broadcasting-satellite service in the frequency bands 11.7-12.2 GHz (in Region 3), 11.7-12.5 GHz (in Region 1) and 12.2-12.7 GHz (in Region 2) (WRC-03)

> Annex_No ANNEX 1 (REV.WRC-03)

> > Annex_title

Limits for determining whether a service of an administration is affected by a proposed modification to the Region 2 Plan or by a proposed new or modified assignment in the Regions 1 and 3 List or when it is necessary under this Appendix to seek the agreement of any other administration²⁵

Proposal MOD I

D IAP/XX/15

Heading 1

1

Limits for the interference into frequency assignments in conformity with the Regions 1 and 3 Plan or with the Regions 1 and 3 List or into new or modified assignments in the Regions 1 and 3 List

Normal

Under assumed free-space propagation conditions, the power flux-density of a proposed new or modified assignment in the List shall not exceed the value of $-103.6 \text{ dB}(W/(m^2 \cdot 27 \text{ MHz}))$.

With respect to § 4.1.1 *a*) or *b*) of Article 4, an administration in Region 1 or 3 is considered by the Bureau as being affected if the minimum orbital spacing between the wanted and interfering space stations, under worst-case station-keeping conditions, is less than 9° .

However, an administration in Region 1 or 3 is considered as not being affected if either of the following two conditions is met:

When footnotes are not modified they remain at the bottom of the page

With respect to Section 2 of this Annex, the limit specified relates to the overall equivalent protection margin calculated in accordance with § 2.2.4 of Annex 5.

^{*} The expression "frequency assignment to a space station", wherever it appears in this Appendix, shall be understood to refer to a frequency assignment associated with a given orbital position. See also Annex 7 for the orbital limitations. (WRC-2000)

¹ The Regions 1 and 3 List of additional uses is annexed to the Master International Frequency Register (see Resolution **542** (WRC-2000)**). (WRC-03)

^{**} Note by the Secretariat: This Resolution was abrogated by WRC-03.

²⁵ With respect to this Annex, except for Section 2, the limits relate to the power flux-density which would be obtained assuming free-space propagation conditions.

enumlev1

a)

under assumed free-space propagation conditions, the power flux-density at any test point within the service area associated with any of its frequency assignments in the Plan or in the List or for which the procedure of Article 4 has been initiated, does not exceed the following values²⁶:

$-147 dB(W/(m^2 \cdot 27 \text{ MHz}))$	for	0°	$\leq \theta < 0.23^{\circ}$
$-135.78 + 17.74 \log \theta dB(W/(m^2 \cdot 27 \text{ MHz}))$	for	0.23°	$\leq \theta < 2.0^{\circ}$
$-136.7 + 1.667 \theta^2 dB(W/(m^2 \cdot 27 \text{ MHz}))$	for 2	2.0°	$\leq \theta < 3.59^{\circ}$
$-129.2 + 25 \log \theta dB(W/(m^2 \cdot 27 \text{ MHz}))$	for a	3.59°	$\leq \theta < 9^{\circ}$

where θ is the minimum geocentric orbital separation in degrees between the wanted and interfering space stations, taking into account the respective East-West station-keeping accuracies;

Reasons

Reasons: The reasons that this

Proposal SUP IAP/XX/16

RESOLUTION 81 (WRC-2000)

Res_title

Evaluation of the administrative due diligence procedure for satellite networks

Reasons

Reasons: The reasons that this

²⁶ For the protection of analogue assignments brought in service before 17 October 1997, the following values shall be used until 1 January 2015:

$-147 \text{ dB}(\text{W}/(\text{m}^2))$	² ·27 MHz))	for 0°	\leq	θ	<	0.44°
$-138 + 25 \log \theta$	$dB(W/(m^2 \cdot 27 \text{ MHz}))$	for 0.44°	\leq	θ	<	9°.

Proposal MOD IAP/XX/17

RESOLUTION 125 (REV.WRC-1215)

Res_title

Frequency sharing in the bands 1 610.6-1 613.8 MHz and 1 660-1 660.5 MHz between the mobile-satellite service and the radio astronomy service

Normal after title

The World Radiocommunication Conference (Geneva, 20122015),

Call with a view

Normal

to enabling the mobile-satellite service (MSS) and the radio astronomy service to make the most efficient use of frequency bands allocated to them, having due regard to the other services to which those bands are also allocated,

Call

considering

Normal

a) that the bands 1 610.6-1 613.8 MHz and 1 660-1 660.5 MHz are allocated to the radio astronomy service and the MSS (Earth-to-space) on a co-primary basis;

b) that No. **5.372** states that "Harmful interference shall not be caused to stations of the radio astronomy service using the band 1 610.6-1 613.8 MHz by stations of the radiodetermination-satellite and mobile-satellite services (No. **29.13** applies)"; and that Article **29** also points out that emissions from space or airborne stations can be particularly serious sources of interference to the radio astronomy service;

c) that the nature of objects studied by the radio astronomy service in the bands 1 610.6-1 613.8 MHz and 1 660-1 660.5 MHz demands maximum flexibility in the planning of observation frequencies;

d) that, in the bands 1 610.6-1 613.8 MHz and 1 660-1 660.5 MHz, which are shared between the radio astronomy service and the MSS, operational constraints are necessary for MSS mobile earth stations;

e) that a former ITU-R Recommendation relating to sharing between the MSS and the radio astronomy service in the band 1 660-1 660.5 MHz noted that further studies were required, particularly in the areas of propagation models and assumptions used for the determination of separation distances;

f) that Recommendation ITU-R M.1316 may be used in order to facilitate coordination between mobile earth stations and radio astronomy stations in the bands 1 610.6-1 613.8 MHz and 1 660-1 660.5 MHz;

g) that no experience has been gained up to now with the use of the Recommendation mentioned in *considering f*);

h) that the threshold levels of interference detrimental to the radio astronomy service are given in Recommendation ITU-R RA.769,

Call resolves

Normal

that a future competent conference should evaluate frequency sharing in the bands 1 610.6-1 613.8 MHz and 1 660-1 660.5 MHz between the MSS and the radio astronomy service, based upon the experience gained with the use of <u>Recommendation</u> ITU-R M.1316 and other relevant ITU-R Recommendations,

> Call invites ITU-R

Normal

to continue studies to evaluate the effectiveness of Recommendations aiming to facilitate sharing between the MSS and the radio astronomy service,

Call

instructs the Director of the Radiocommunication Bureau

Normal

to provide the results of the studies in the Report of the Director to a future competent conference,

Call

urges administrations

Normal

to participate actively in this evaluation.

Reasons

Reasons: The changes to this resolution

Proposal

ADD IAP/XX/18

Res_No DRAFT NEW RESOLUTION [IAP/....] (WRC-15)

Res_title

Use of modern electronic means of communication for administrative correspondence related to advance publication, coordination and notification of satellite networks including that related to Appendices 30, 30A and 30B, earth stations and radio astronomy stations

Normal after title

The World Radiocommunication Conference (Geneva, 2015),

Call considering

Normal

that the use of electronic means of communication for administrative correspondence related to advance publication, coordination and notification of satellite networks, earth stations and radio astronomy stations would facilitate the tasks of the Radiocommunication Bureau and of administrations and has the potential to improve the coordination and notification process by reducing the amount of duplicated correspondence,

Call noting

Normal

that Decision 5 (Rev. Guadalajara, 2010) includes, in its Annex 2, paragraph 20, which proposes to "move, to the extent practicable, from present communications by fax between the Union and Member States to modern electronic communication methods",

Call recognizing

Normal

that administrations could use the time freed by a reduction of administrative correspondence to effect coordination,

Call resolves

Normal

1 that modern electronic means of communication shall be used whenever possible in the administrative correspondence between administrations and the Radiocommunication Bureau related to advance publication, coordination and notification, including correspondence related to Appendices **30**, **30A** and **30B** and, where applicable, to due diligence for satellite networks, earth stations and radio astronomy stations;

2 that other, traditional means of communication can continue to be used if modern electronic means are not available,

Call

instructs the Radiocommunication Bureau

Normal

1 to provide administrations with the necessary technical means to ensure that the modern electronic correspondence between administrations and the Radiocommunication Bureau is secure;

2 to inform administrations of the availability of such means and of the associated schedule of implementation;

3 to automatically acknowledge receipt of all electronic correspondence;

4 to report to the next world radiocommunication conference on the experience gained in the application of this Resolution, with a view to making any necessary consequential amendments to the Radio Regulations.

Reasons

Reasons: This new resolution is proposed to