ORGANIZACION DE LOS ESTADOS AMERICANOS
ORGANIZATION OF AMERICAN STATES

Comisión Interamericana de Telecomunicaciones
Inter-American Telecommunication Commission

XXV MEETING OF PERMANENT CONSULTATIVE COMMITTEE II: RADIOCOMMUNICATIONS
February 23 to 27, 2015
Medellin, Colombia

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1 April 2015
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FINAL REPORT

(Item on the Agenda: 7)

(Document submitted by the Drafting Group)

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FINAL REPORT

XXV MEETING OF PERMANENT CONSULTATIVE COMMITTEE II: RADIOCOMMUNICATIONS (PCC.II)

The XXV Meeting of Permanent Consultative Committee II: Radiocommunications (PCC.II), was held in Medellín, Colombia, from February 23 to 27, 2015.

I. AGENDA [1]

1. Approval of the agenda and calendar.

2. Appointment of the Drafting Group for the Final Report.

3. Meeting of the Working Groups on:

   3.1 Working Group on Preparation for Regional and World Radiocommunication Conferences.
   3.2 Working Group on Terrestrial Fixed and Mobile Radiocommunication Services.
   3.2.1. Sub-working group on Spectrum Management
   3.3 Working Group on Satellite Systems to Provide Fixed and Mobile Services.
   3.4 Working Group on Broadcasting.

4. PCC.II Strategic Plan.

5. Agenda, Venue and Date of the XXVI Meeting of PCC.II.

6. Other matters.

7. Approval of the Final Report of the XXV Meeting.

[1] CCP.II-RADIO/doc. 3719/15 rev.3

II. MEETING OFFICERS

Alternate Chair of PCC.II - Mr. Franklin Merchán (Colombia)
Vice Chair of PCC.II - Mr. Juan Carlos Morales (Nicaragua)
Vice Chair of PCC.II - Mr. Fernando Carrillo (Mexico)
Alternate Vice Chair of PCC.II - Mr. Héctor Budé (Uruguay)
Executive Secretary of CITEL - Mr. Clovis Baptista

Drafting Group:

Chair:	Mr. Jorge Guillermo Barrera Medina (Colombia)
Members:	Mr. Marc Girouard (Canada)
	Mrs. Paola Herrera (Colombia)
	Mr. José Francisco Lozano (Colombia)
	Mr. Alexander Tejada (El Salvador)
	Mr. Dante G. Ibarra (United States of America)

III. RESOLUTIONS

PCC.II/RES. 104 (XXV-15) [2]

INTER-AMERICAN PROPOSALS FOR WRC-2015

The XXV Meeting of Permanent Consultative Committee II: Radiocommunications (PCC.II),

CONSIDERING:

a) That the procedure for submitting Inter-American Proposals (IAP) to World Radiocommunications Conferences (WRC) was approved by Resolution PCC.II/RES. 90 (XXI-13);

b) That during the XXV Meeting of PCC.II, the LIMIT MEETING to prepare for WRC-15, the examination and discussion of the proposals submitted regarding agenda item 1.10 for this Conference were concluded,

RECOGNIZING:

That those Administrations wishing to support Draft Inter-American Proposals (DIAPs) and IAPs before the XXVI meeting of PCC.II, scheduled for the week of August 17-21, 2015, in the city of Ottawa (Canada), may do so by means of written communications (letter, fax or e-mail) through the Secretariat of CITEL,

[2] CCP.II-RADIO/doc. 3860/15

RESOLVES:

1. To indicate that, to date, the list of Inter-American Proposals (IAPs) that have been developed are located in Annex I of this Resolution.

2. To indicate that, to date, the list of Draft Inter-American Proposals (IAPs) that have been developed are located in Annex II of this Resolution.

3. To invite the Administrations, especially those that did not participate at the XXV Meeting of PCC.II and, in accordance with the existing procedure, to examine these DIAPs and IAPs and to submit their position, and communicate with the Coordinators of the if any clarifications are needed regarding these documents;

4 To request the Secretariat of CITEL to submit to the International Telecommunication Union (ITU), immediately after April 20, 2015, the IAPs developed for agenda item 1.10 of WRC-15.

ANNEX 1 TO RESOLUTION PCC.II/RES. 104 (XXV-15)

Agenda Item	IAP N°	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
470-698 MHz																																				
1.1	**1 NOC**		**X**					**X**		**X**			**X**		**X**	**X**			**X**						**X**	**X**	**X**	**X**						**X**	**X**	**13**
1427-1518 MHz																																				
1.1	**2 MOD**		**X**					**X**	**X**	**X**	**X**	**X**	**X**			**X**	**X**		**X**					**X**	**X**			**X**						**X**	**X**	**15**
1.1	**3 ADD**		**X**					**X**	**X**	**X**	**X**	**X**	**X**			**X**	**X**		**X**					**X**	**X**			**X**						**X**	**X**	**15**
1.1	**4 MOD**		**X**					**X**	**X**	**X**	**X**	**X**	**X**			**X**	**X**		**X**					**X**	**X**			**X**						**X**	**X**	**15**
1.1	**5 MOD**		**X**					**X**	**X**	**X**	**X**	**X**	**X**			**X**			**X**					**X**	**X**			**[X]**						**X**	**[X]**	**[15]**
1.1	**6 MOD**		**X**					**X**	**X**	**X**	**X**	**X**	**X**			**X**			**X**					**X**	**X**			**[X]**						**X**	**[X]**	**[15]**
1435-1535 MHz																																				
1.1	**7 NOC**							**X**	**X**		**X**	**X**					**X**							**X**												**6**
3400-4200 MHz																																				
1.1	**8 NOC**					**X**	**X**									**X**								**X**	**X**	**X**										**6**

Agenda Item	IAP N°	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
4500-4800 MHz																																				
1.1	**9 NOC**		X				X	X		X						X			X					X	X	X								X	X	**10**
5850-6425 MHz																																				
1.1	**10** NOC					X		X				X				X			X					X	X	X										**8**

Agenda Item	N°	IAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
1.3	**1**	MOD RESOLUTION 646 (REV.WRC-12) Public Protection and Disaster Relief							[X]		X						X			X					X	X	X							X	X	[9]
1.4	**1**	MOD ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations 5 060 - 5 680 kHz		X					X		X		X	X			X									X	X								X	X	10
1.4	**2**	ADD 5.XXX		X					X		X		X	X			X									X	X								X	X	10
1.6.2	**1**	MOD ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations (See No. 2.1) 14-15.4 GHz							X	X							X								X	X								X		6
1.6.2	**2**	MOD 5.510							X	X							X								X	X								X		6
1.6.2	**3**	ADD 5.FSSA							X	X							X								X	X								X		6
1.6.2	**4**	MOD APPENDIX 5 (Rev.WRC-12) Identification of administrations with which coordination is to be effected or agreement sought under the provisions of Article 9 TABLE 5-1 (Rev.WRC-12) Technical conditions for coordination (see Article 9)							X	X							X								X	X								X		6
1.6.2	**5**	MOD APPENDIX 30A (Rev.WRC-12) Provisions and associated Plans and List for feeder links for the broadcasting-satellite service (11.7-12.5 GHz in Region 1, 12.2-12.7 GHz in Region 2 and 11.7-12.2 GHz in Region 3) in the frequency bands 14.5-14.8 GHz and 17.3-18.1 GHz in Regions 1 and 3, and 17.3-17.8 GHz in Region 2 (WRC-03) (See Articles 9 and 11) (WRC-03) ARTICLE 4 (Rev.WRC-03) Procedures for modifications to the Region 2 feeder-link Plan or for additional uses in Regions 1 and 3							X	X							X								X	X								X		6
1.6.2	**6**	MOD 4.1 Provisions applicable to Regions 1 and 3							X	X							X								X	X								X		6

Agenda Item	N°	IAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
1.6.2	**7**	MOD ARTICLE 7 (Rev.WRC-12) Coordination, notification and recording in the Master International Frequency Register of frequency assignments to stations in the fixed-satellite service (space-to-Earth) in Region 1 in the band 17.3-18.1 GHz and in Regions 2 and 3 in the band 17.7-18.1 GHz, to stations in the fixed-satellite service (Earth-to-space) in Region 2 in the band 17.8-18.1 GHzand to stations in the broadcasting-satellite service in Region 2 in the band 17.3-17.8 GHz when frequency assignments to feeder links for broadcasting-satellite stations in the 17.3-18.1 GHz band in Regions 1 and 3 or in the band 17.3-17.8 GHz in Region 2 are involved							X	X						X									X	X								X		6
1.6.2	**8**	MOD 7.2bis 7.2ter							X	X						X								X	X								X		6
1.6.2	**9**	MOD ANNEX 1 Limits for determining whether a service of an administration is considered to be affected by a proposed modification to the Region 2 feeder-link Plan or by a proposed new or modified assignment in the Regions 1 and 3 feeder-link List or when it is necessary under this Appendix to seek the agreement of any other administration (Rev.WRC-03)							X	X						X									X	X								X		6
1.6.2	**10**	MOD ANNEX 4 (Rev.WRC-03) Criteria for sharing between services							X	X						X								X	X								X		6
1.6.2	**11**	ADD 3 Threshold values for determining…							X	X						X								X	X								X		6
1.7	**1**	MOD ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations (See No. 2.1) 4 800-5 570 MHz		X					X	X		X					X								X								X		7
1.7	**2**	MOD 5.444A		X					X	X		X					X								X								X		7
1.7	**3**	MOD APPENDIX 7 TABLE 10 (WRC-15) Predetermined coordination distances		X					X	X		X					X								X								X		7
1.7	**4**	MOD RESOLUTION 114 (Rev.WRC-12) Studies on compatibility between new systems of the aeronautical radionavigation service and the fixed-satellite service (Earth-to-space) (limited to feeder links of the non-geostationary mobile-satellite systems in the mobile-satellite service) in the frequency band 5 091-5 150 MHz		X					X	X		X					X								X								X		7

Agenda Item	N°	IAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
1.7	**5**	MOD RESOLUTION 748 (REV.WRC-12) Compatibility between the aeronautical mobile (R) service and the fixed-satellite service (Earth-to-space) in the band 5 091-5 150 MHz		X					X	X		X						X							X										X		7
1.10	**1**	NOC ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations (See No. 2.1) 22-24.75 GHz 24.75-29.9 GHz							X	X			X					X		X						X										X		7
1.10	**2**	SUP RESOLUTION 234 (WRC-12) Additional primary allocations to the mobile-satellite service within the bands from 22 GHz to 26 GHz							X	X			X					X		X						X										X		7
1.11	**1**	MOD ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations (See No. 2.1) 7145 a 7235 MHz		X					X	X								X								X										X		6
1.11	**2**	MOD 5.460		X					X	X								X								X										X		6
1.11	**3**	MOD APPENDIX 7 (Rev.WRC-12) Methods for the determination of the coordination area around an earth station in frequency bands between 100 MHz and 105 GHz TABLE 7b (Rev.WRC-12)		X					X	X								X								X										X		6
1.11	**4**	MOD ARTICLE 21 Terrestrial and space services sharing frequency bands above 1 GHz Section II – Power limits for terrestrial stations TABLE 21-2 (Rev.WRC-12)		X					X	X								X								X										X		6
1.11	**5**	MOD ARTICLE 21 Terrestrial and space services sharing frequency bands above 1 GHz Section III – Power limits for earth stations TABLE 21-3 (Rev.WRC-12)		X					X	X								X								X										X		6
1.11	**6**	SUP RESOLUTION 650 (WRC-12) Allocation for the Earth exploration-satellite service (Earth-to-space) in the 7-8 GHz range		X					X	X								X								X										X		6

Agenda Item	N°	IAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
1.12	**1**	NOC ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations (See No. 2.1) 8 650-9 300 MHz								X	X	X						X		X				X										X		7
1.12	**2**	MOD ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations (See No. 2.1) 9 500-10 000 MHz								X	X	X						X		X				X										X		7
1.12	**3**	MOD ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations (See No. 2.1) 10-10.5 GHz								X	X	X						X		X				X										X		7
1.12	**4**	ADD 5.A112								X	X	X						X		X				X										X		7
1.12	**5**	ADD 5.B112								X	X	X						X		X				X										X		7
1.12	**6**	ADD 5.C112								X	X	X						X		X				X										X		7
1.12	**7**	ADD 5.D112								X	X	X						X		X				X										X		7
1.12	**8**	SUP RESOLUTION 651 (WRC-12) Possible extension of the current worldwide allocation to the Earth exploration-satellite (active) service in the frequency band 9 300-9 900 MHz by up to 600 MHz within the frequency bands 8 700-9 300 MHz and/or 9 900-10 500 MHz								X	X	X						X		X				X										X		7
1.13	**1**	MOD 5.268							X	X								X		X				X										X		6
1.13	**2**	SUP RESOLUTION 652 (WRC-12) Use of the band 410-420 MHz by the space research service (space-to-space)							X	X								X		X				X										X		6
1.17	**1**	MOD ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations 4 200-4 400 MHz		X			X		X	X		X	X	X		X	X	X		X				X	X	X								X		15
1.17	**2**	MOD 5.438		X			X		X	X		X	X	X		X	X	X		X				X	X	X								X		15
1.17	**3**	ADD 5.XXX		X			X		X	X		X	X	X		X	X	X		X				X	X	X								X		15

Agenda Item	N°	IAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
1.17	**4**	ADD 5.YYY		X			X		X	X		X	X	X		X	X	X		X					X	X	X								X		15
1.17	**5**	SUP RESOLUTION 423 (WRC-12) Consideration of regulatory actions, including allocations, to support Wireless Avionics Intra-Communications		X			X		X	X		X	X	X		X	X	X		X					X	X	X								X		15
7 **Issue A**	**1**	NOC ARTICLE 11 Notification and recording of frequency assignments1, 2, 3, 4, 5, 6, 7, 7bis (WRC-12) Section II – Examination of notices and recording of frequency assignments in the Master Register 11.49		X							X	X				X	X									X		X							X	X	9
7 **Issue F**	**1**	MOD APPENDIX 30B (Rev.WRC-12) Provisions and associated Plan for the fixed-satellite service in the frequency bands 4 500-4 800 MHz, 6 725-7 025 MHz, 10.70-10.95 GHz, 11.2-11.45 GHz and 12.75-13.25 GHz ARTICLE 6 (REV.WRC-12) Procedures for the conversion of an allotment into an assignment, forthe introduction of an additional system or for the modification of an assignment in the List (WRC-07)		X						X							X								X										X	X	6
7 **Issue F**	**2**	MOD ARTICLE 8 (REV.WRC-12) Procedure for notification and recording in the Master Register of assignments in the planned bands for the fixed-satellite service[11, 12] (WRC-07) 8.17		X						X							X								X										X	X	6
7 **Issue F**	**3**	ADD ARTICLE 8 (REV.WRC-12) Procedure for notification and recording in the Master Register of assignments in the planned bands for the fixed-satellite service (WRC-07) [14] bis		X						X							X								X										X	X	6

Agenda Item	N°	IAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
9.1.1	**1**	MOD ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations (See No. 2.1) 403-410 MHz		X					X	X			X					X								X									X		7
9.1.1	**2**	ADD 5.XXX		X					X	X			X					X								X									X		7
9.1.1	**3**	MOD RESOLUTION 205 (Rev.WRC-12) Protection of the systems operating in the mobile-satellite service in the band 406-406.1 MHz		X					X	X			X					X								X									X		7
9.1.6	**1**	SUP RESOLUTION 957 (WRC-12) Studies towards review of the definitions of fixed service, fixed station and mobile station		X					X	X		X		X											X		X								X		8
GFT	**1**	MOD ARTICLE 5 Frequency allocations Section IV Table of Frequency Allocations (See No. 2.1) 890-1 300 MHz		X			X			X	X	X	X	X		[X]	X								X	X	X	X									12
GFT	**2**	ADD 5.XXX		X			X			X	X	X	X	X		[X]	X								X	X	X	X									12
GFT	**3**	MOD RESOLUTION 417 (Rev.WRC-12) Use of the frequency band 960-1 164 MHz by the aeronautical mobile (R) service		X			X			X	X	X	X	X		[X]	X								X	X	X	X									12

ANNEX 2 TO RESOLUTION PCC.II/RES. 104 (XXV-15)

Agenda Item	DIAP N°	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	PNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
Band 410-450 MHz																																				
1.1	1 NOC					X				X		X					X							X												5
Band 470-698 MHz																																				
1.1	2 MOD								X								X							X												3
1.1	3 MOD								X		X						X							X												4
1.1	4 ADD								X								X							X												3
1.1	5 MOD								X		X						X							X												4
1.1	6 MOD								X								X							X												3
1.1	7 MOD								X								X							X												3
1.1	8 ADD								X		X						X							X												4
1.1	9 MOD								X								X							X												3
Bands 1164-1215 MHz, 1215-1300 MHz and 1559-1610 MHz																																				
1.1	10 NOC								X								X		X					X												4
1.1	11 NOC								X								X		X					X												4
Band 1300-1400 MHz																																				
1.1	12 NOC									X							X																			2
Band 2025-2110 MHz and 2200-2290 MHz																																				
1.1	13 NOC					X			X								X							X												4
1.1	14 NOC					X			X								X							X												4

Agenda Item	DIAP N°	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	PNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
Band 2700-2900 MHz																																				
1.1	**15 NOC**									X							X		X																	**3**
Band 3400-3600 MHz																																				
1.1	**16 MOD**							X			X	X			X																					**4**
1.1	**17 ADD**							X			X	X			X																					**4**
Band 3400-4200 MHz																																				
1.1	**18 MOD**								X								X																			**2**
1.1	**19 NOC**								X								X																			**2**
1.1	**20 MOD**								X								X																			**2**
1.1	**21 ADD**								X								X																			**2**
Band 3600-4200 MHz																																				
1.1	**22 NOC**							X				X			X																				X	**4**
Band 5000-5010 MHz and 5010-5030 MHz																																				
1.1	**23 NOC**																X							X												**2**
Band 5350-5470 MHz																																				
1.1	**24 NOC**								X															X												**2**

Agenda Item	N°	DIAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
1.5	**1**	MOD ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations (See No. 2.1) 10-11.7 GHz 11.7-14 GHz 14-14.5 GHz 17.3-18.4 GHz 18.4-20.2 GHz 27.5-29.9 GHz 29.9-30 GHz																**X**							**X**													**2**
1.5	**2**	ADD 5.XXX																**X**							**X**												**2**
1.5	**3**	ADD RESOLUTION [FSS-UA-CNPC] (WRC-15) Regulatory provisions related to Earth stations on board unmanned aircraft which operate with geostationary satellites in the fixed-satellite service for the control and non-payload communications of unmanned aircraft systems																**X**							**X**													**2**
1.6.1	**1**	MOD ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations (See No. 2.1) 14-15.4 GHz							**X**	**X**															**X**											**X**		**4**
1.6.1	**2**	MOD 5.510							**X**	**X**															**X**											**X**		**4**
1.6.1	**3**	ADD 5.FSSA							**X**	**X**															**X**											**X**		**4**
1.6.1	**4**	MOD APPENDIX 5 (Rev.WRC-12) Identification of administrations with which coordination is to be effected or agreement sought under the provisions of Article 9 TABLE 5-1 (Rev.WRC-12) Technical conditions for coordination (see Article 9)							**X**	**X**															**X**											**X**		**4**

Agenda Item	N°	DIAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
1.6.1	**5**	MOD APPENDIX 30A (Rev.WRC-12) Provisions and associated Plans and List for feeder links for the broadcasting-satellite service (11.7-12.5 GHz in Region 1, 12.2-12.7 GHz in Region 2 and 11.7-12.2 GHz in Region 3) in the frequency bands 14.5-14.8 GHz and 17.3-18.1 GHz in Regions 1 and 3, and 17.3-17.8 GHz in Region 2 (WRC-03) (See Articles 9 and 11) (WRC-03) ARTICLE 4 (Rev.WRC-03) Procedures for modifications to the Region 2 feeder-link Plan or for additional uses in Regions 1 and 3							**X**	**X**														**X**										**X**		**4**
1.6.1	**6**	MOD 4.1 Provisions applicable to Regions 1 and 3							**X**	**X**														**X**										**X**		**4**
1.6.1	**7**	MOD ARTICLE 7 (Rev.WRC-12) Coordination, notification and recording in the Master International Frequency Register of frequency assignments to stations in the fixed-satellite service (space-to-Earth) in Region 1 in the band 17.3-18.1 GHz and in Regions 2 and 3 in the band 17.7-18.1 GHz, to stations in the fixed-satellite service (Earth-to-space) in Region 2 in the band 17.8-18.1 GHzand to stations in the broadcasting-satellite service in Region 2 in the band 17.3-17.8 GHz when frequency assignments to feeder links for broadcasting-satellite stations in the 17.3-18.1 GHz band in Regions 1 and 3 or in the band 17.3-17.8 GHz in Region 2 are involved							**X**	**X**														**X**										**X**		**4**
1.6.1	**8**	MOD 7.2bis 7.2ter							**X**	**X**														**X**										**X**		**4**
1.6.1	**9**	MOD ANNEX 1 Limits for determining whether a service of an administration is considered to be affected by a proposed modification to the Region 2 feeder-link Plan or by a proposed new or modified assignment in the Regions 1 and 3 feeder-link List or when it is necessary under this Appendix to seek the agreement of any other administration (Rev.WRC-03)							**X**	**X**														**X**										**X**		**4**
1.6.1	**10**	MOD ANNEX 4 (Rev.WRC-03) Criteria for sharing between services							**X**	**X**														**X**										**X**		**4**
1.6.1	**11**	ADD 3 Threshold values for determining…							**X**	**X**														**X**										**X**		**4**

Agenda Item	N°	DIAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
1.9.1	**1**	NOC ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations (See No. 2.1) 7150-7250 MHz and 8400-8500 MHz bands								**X**								**X**																			**2**
1.9.1	**2**	SUP RESOLUTION 758 (WRC-12) Allocation to the fixed-satellite service and the maritime-mobile satellite service in the 7/8 GHz range								**X**								**X**																			**2**
1.9.2	**1**	NOC ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations (See No. 2.1)		**X**						**X**			**X**					**X**																			**4**
1.9.2	**2**	SUP RESOLUTION 758 (WRC-12) Allocation to the fixed-satellite service and the maritime-mobile satellite service in the 7/8 GHz range		**X**						**X**			**X**					**X**																			**4**
1.14	**1**	MOD ARTÍCULO 1 Términos y definiciones Sección I – Términos generales 1.14																**X**																		**[X]**		**[2]**
1.14	**2**	MOD ARTÍCULO 2 Nomenclatura Sección II – Fechas y horas 2.5																**X**																		**[X]**		**[2]**
1.14	**3**	MOD CHAPTER X Provisions for entry into force of the Radio Regulations (WRC-12)																**X**																		**[X]**		**[2]**
1.14	**4**	MOD ARTICLE 59 Entry into force and provisional application of the Radio Regulations (WRC-12																**X**																		**[X]**		**[2]**
1.14	**5**	MOD ARTICLE 59 Entry into force and provisional application of the Radio Regulations (WRC-12) 59.1																**X**																		**[X]**		**[2]**
1.14	**6**	ADD ARTICLE 59 Entry into force and provisional application of the Radio Regulations (WRC-12 59.AA																**X**																		**[X]**		**[2]**

Agenda Item	N°	DIAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
1.14	**7**	ADD ARTICLE 59 Entry into force and provisional application of the Radio Regulations (WRC-12) 59.BB																**X**																	**[X]**		**[2]**
1.14	**8**	ADD RESOLUTION [AAA (WRC-15)] Provisional application of certain provisions of the Radio Regulations as revised by WRC-15 and abrogation of certain Resolutions and Recommendations																**X**																	**[X]**		**[2]**
1.14	**9**	SUP RESOLUTION 653 (WRC-12) Future of the Coordinated Universal Time time-scale																**X**																	**[X]**		**[2]**
1.15	**1**	MOD 5.287		**X**										**[X]**											**[X]**			**X**							**X**		**3**
1.15	**2**	SUP RESOLUTION 358 (WRC-12) Consideration of improvement and expansion of on-board communication stations in the maritime mobile service in the UHF bands		**X**										**[X]**											**[X]**			**X**							**X**		**3**
2	**1**	MOD ARTICLE 19 Identification of stations 19.83								**X**																									**[X]**		**[2]**
2	**2**	MOD ARTICLE 51 Conditions to be observed in the maritime services 51.41								**X**																									**[X]**		**[2]**
2	**3**	MOD ARTICLE 52 Special rules relating to the use of frequencies 52.181								**X**																									**[X]**		**[2]**
2	**4**	MOD ARTICLE 52 Special rules relating to the use of frequencies 52.229								**X**																									**[X]**		**[2]**
2	**5**	MOD APPENDIX 15 (Rev.WRC-12) Frequencies for distress and safety communications for the Global Maritime Distress and Safety System (GMDSS) TABLE 15-2 (WRC-12) Frequencies above 30 MHz (VHF/UHF)								**X**																									**[X]**		**[2]**

Agenda Item	N°	DIAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
2	**6**	MOD APPENDIX 17 (Rev.WRC-12) Frequencies and channelling arrangements in the high-frequency bands for the maritime mobile service ANNEX 2 (WRC-12) Frequency and channeling arrangements in the high-frequency bands for the maritime mobile service, which enter into force on 1 January 2017 (WRC-12) PART B – Channelling arrangements (WRC-12) Section I – Radiotelephony 2								**X**																										**[X]**		**[2]**
2	**7**	MOD APPENDIX 17 (Rev.WRC-12) Frequencies and channelling arrangements in the high-frequency bands for the maritime mobile service ANNEX 2 (WRC-12) Frequency and channelling arrangements in the high-frequency bands for the maritime mobile service, which enter into force on 1 January 2017 (WRC-12) PART B – Channelling arrangements (WRC-12) Section I – Radiotelephony 6 a)								**X**																										**[X]**		**[2]**
2	**8**	MOD APPENDIX 17 (Rev.WRC-12) Frequencies and channelling arrangements in the high-frequency bands for the maritime mobile service ANNEX 2 (WRC-12) Frequency and channelling arrangements in the high-frequency bands for the maritime mobile service, which enter into force on 1 January 2017 (WRC-12) PART B – Channelling arrangements (WRC-12) Section I – Radiotelephony b)								**X**																										**[X]**		**[2]**
2	**9**	MOD APPENDIX 18 (Rev.WRC-12) Table of transmitting frequencies in the VHF maritime mobile band NOTE B								**X**																										**[X]**		**[2]**
2	**10**	MOD RESOLUTION 748 (Rev.WRC-12) Compatibility between the aeronautical mobile (R) service and the fixed-satellite service (Earth-to-space) in the band 5 091-5 150 MHz								**X**																										**[X]**		**[2]**

Agenda Item	N°	DIAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
2	**11**	MOD ATTACHMENT 2 Provisions or footnotes containing references to ITU-R Recommendations which require revision to clarify or remove any ambiguity as to their status of reference ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations **5.530A**								**X**																									**[X]**		**[2]**
2	**12**	MOD ATTACHMENT 2 Provisions or footnotes containing references to ITU-R Recommendations which require revision to clarify or remove any ambiguity as to their status of reference ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations 5.543A								**X**																									**[X]**		**[2]**
2	**13**	MOD ARTICLE 16 International monitoring 16.2								**X**																									**[X]**		**[2]**
2	**14**	MOD ARTICLE 19 Identification of stations 19.108A								**X**																									**[X]**		**[2]**
2	**15**	MOD ARTICLE 52 Special rules relating to the use of frequencies 52.264								**X**																									**[X]**		**[2]**
2	**16**	MOD APPENDIX 5 (Rev.WRC-12) Identification of administrations with which coordination is to be effected or agreement sought under the provisions of Article 9 ANNEX 1								**X**																									**[X]**		**[2]**
2	**17**	MOD APPENDIX 7 (Rev.WRC-12) Methods for the determination of the coordination area around an earth station in frequency bands between 100 MHz and 105 GHz ANNEX 4								**X**																									**[X]**		**[2]**
2	**18**	MOD APPENDIX 7 (Rev.WRC-12) Methods for the determination of the coordination area around an earth station in frequency bands between 100 MHz and 105 GHz ANNEX 5								**X**																									**[X]**		**[2]**

Agenda Item	N°	DIAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
2	19	MOD APPENDIX 7 (Rev.WRC-12) Methods for the determination of the coordination area around an earth station in frequency bands between 100 MHz and 105 GHz ANNEX 6								X																										[X]		[2]
2	20	MOD APPENDIX 17 (Rev.WRC-12) Frequencies and channelling arrangements in the high-frequency bands for the maritime mobile service ANNEX 2 (WRC-12) Frequency and channelling arrangements in the high-frequency bands for the maritime mobile service, which enter into force on 1 January 2017 (WRC-12) PART A – Table of subdivided bands (WRC-12)								X																										[X]		[2]
2	21	MOD APPENDIX 17 (Rev.WRC-12) Frequencies and channelling arrangements in the high-frequency bands for the maritime mobile service ANNEX 2 (WRC-12) Frequency and channelling arrangements in the high-frequency bands for the maritime mobile service, which enter into force on 1 January 2017 (WRC-12) p)								X																										[X]		[2]
2	22	MOD APPENDIX 17 (Rev.WRC-12) Frequencies and channelling arrangements in the high-frequency bands for the maritime mobile service ANNEX 2 (WRC-12) Frequency and channelling arrangements in the high-frequency bands for the maritime mobile service, which enter into force on 1 January 2017 (WRC-12) t)								X																										[X]		[2]
2	23	MOD APPENDIX 17 (Rev.WRC-12) Frequencies and channelling arrangements in the high-frequency bands for the maritime mobile service ANNEX 2 (WRC-12) Frequency and channelling arrangements in the high-frequency bands for the maritime mobile service, which enter into force on 1 January 2017 (WRC-12) v)								X																										[X]		[2]

Agenda Item	N°	DIAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
4	**1**	NOC RESOLUTION 1 (Rev.WRC-97) Notification of frequency assignments								**X**																									**[X]**		**[2]**
4	**2**	NOC RESOLUTION 5 (Rev.WRC-03) Technical cooperation with the developing countries in the study of propagation in tropical and similar areas								**X**																									**[X]**		**[2]**
4	**3**	NOC RESOLUTION 7 (Rev.WRC-03) Development of national radio-frequency management								**X**																									**[X]**		**[2]**
4	**4**	NOC RESOLUTION 10 (Rev.WRC-2000) Use of two-way wireless communications by the International Red Cross and Red Crescent Movement								**X**																									**[X]**		**[2]**
4	**5**	NOC RESOLUTION 13 (Rev.WRC-97) Formation of call signs and allocation of new international series								**X**																									**[X]**		**[2]**
4	**6**	NOC RESOLUTION 18 (Rev.WRC-12) Relating to the procedure for identifying and announcing the position of ships and aircraft of States not parties to an armed conflict								**X**																									**[X]**		**[2]**
4	**7**	NOC RESOLUTION 63 (Rev.WRC-12) Protection of radiocommunication services against interference caused by radiation from industrial, scientific and medical (ISM) equipment								**X**																									**[X]**		**[2]**
4	**8**	NOC RESOLUTION 72 (Rev.WRC-07) World and regional preparations for world radiocommunication conferences								**X**																									**[X]**		**[2]**
4	**9**	NOC RESOLUTION 98 (WRC-12) Provisional application of certain provisions of the Radio Regulations as revised by WRC-12 and abrogation of certain Resolutions and Recommendations								**X**																									**[X]**		**[2]**
4	**10**	NOC RESOLUTION 122 (Rev.WRC-07) Use of the bands 47.2-47.5 GHz and 47.9-48.2 GHz by high altitude platform stations in the fixed service and by other services								**X**																									**[X]**		**[2]**
4	**11**	NOC RESOLUTION 145 (Rev.WRC-12) Use of the bands 27.9-28.2 GHz and 31-31.3 GHz by HAPS in the fixed service								**X**																									**[X]**		**[2]**

Agenda Item	N°	DIAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
4	12	NOC RESOLUTION 150 (WRC-12) Use of bands 6 440-6 520 MHz and 6 560-6 640 MHz by gateway links for high altitude platform stations in the fixed service								X																									[X]		[2]
4	13	NOC RESOLUTION 212 (Rev.WRC-07) Implementation of International Mobile Telecommunications in the bands 1 885-2 025 MHz and 2 110- 2 200 MHz								X																									[X]		[2]
4	14	NOC RESOLUTION 217 (WRC-97) Implementation of wind profiler radars								X																									[X]		[2]
4	15	NOC RESOLUTION 221 (Rev.WRC-07) Use of International Mobile Telecommunications providing IMT in the bands 1885-1980 MHz, 2010-2025 MHz and 2 110-2 170 MHz in Region 1 and Region 3 and 1 885-1980 MHz and 2 110-2 160 MHz in Region 2								X																									[X]		[2]
4	16	NOC RESOLUTION 223 (Rev.WRC-12) Additional frequency bands identified for IMT								X																									[X]		[2]
4	17	NOC RESOLUTION 224 (Rev.WRC-12) Frequency bands for the terrestrial component of International Mobile Telecommunications below 1 GHz								X																									[X]		[2]
4	18	NOC RESOLUTION 225 (Rev.WRC-12) Use of additional frequency bands for the satellite component of IMT								X																									[X]		[2]
4	19	NOC RESOLUTION 229 (Rev.WRC-12) Use of 5 GHz range by the mobile service for implementation of wireless access systems including radio local area networks								X																									[X]		[2]
4	20	NOC RESOLUTION 517 (Rev.WRC-07) Introduction of digitally modulated emissions in the high-frequency bands between 3200 kHz and 26100 kHz allocated to the broadcasting service								X																									[X]		[2]
4	21	NOC RESOLUTION 535 (Rev.WRC-03) Information needed for the application of Article 12 of the Radio Regulations								X																									[X]		[2]

Agenda Item	N°	DIAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
4	**22**	NOC RESOLUTION 543 (WRC-03) Provisional RF protection ratios for analogue and digital emissions in the HF broadcasting service								**X**																									**[X]**		**[2]**
4	**23**	NOC RESOLUTION 550 (WRC-07) Information relating to the high-frequency broadcasting service								**X**																									**[X]**		**[2]**
4	**24**	NOC RESOLUTION 612 (Rev.WRC-12) Use of the radiolocation service between 3 and 50 MHz to support oceanographic radar operations								**X**																									**[X]**		**[2]**
4	**25**	NOC RESOLUTION 641 (Rev.HFBC-87) Use of the frequency band 7 000-7 100 kHz								**X**																									**[X]**		**[2]**
4	**26**	MOD RESOLUTION 705 (MOB-87) Mutual protection of radio services operating in the band 70-130 kHz								**X**																									**[X]**		**[2]**
4	**27**	NOC RESOLUTION 729 (Rev.WRC-07) Use of frequency adaptive systems in the MF and HF bands								**X**																									**[X]**		**[2]**
4	**28**	SUP RESOLUTION 807 (WRC-12) Agenda for the 2015 World Radiocommunication Conference								**X**																									**[X]**		**[2]**
4	**29**	SUP RESOLUTION 808 (WRC-12) Preliminary agenda for the 2018 World Radiocommunication Conference								**X**																									**[X]**		**[2]**
4	**30**	NOC RESOLUTION 906 (Rev.WRC-12) Electronic submission of notice forms for terrestrial services to the Radiocommunication Bureau and exchange of data between administrations								**X**																									**[X]**		**[2]**
4	**31**	NOC RECOMMENDATION 34 (REV.WRC-12) Principles for the allocation of frequency bands								**X**																									**[X]**		**[2]**
4	**32**	NOC RECOMMENDATION 63 (WARC-79) Relating to the provision of formulae and examples for the calculation of necessary bandwidth								**X**																									**[X]**		**[2]**
4	**33**	NOC RECOMMENDATION 71 (WARC-79) Standardization of the technical and operational characteristics of radio equipment								**X**																									**[X]**		**[2]**

Agenda Item	N°	DIAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
4	**34**	MOD RECOMMENDATION 75 (.WRC-03) Study of the boundary between out-of-band and spurious domains of primary radars using magnetrons								**X**																										**[X]**		**[2]**
4	**35**	NOC RECOMMENDATION 76 (WRC-12) Deployment and use of cognitive radio systems								**X**																										**[X]**		**[2]**
4	**36**	NOC RECOMMENDATION 100 (Rev.WRC-03) Preferred bands for tropospheric scatter systems								**X**																										**[X]**		**[2]**
4	**37**	NOC RECOMMENDATION 207 (WRC-07) Future IMT systems								**X**																										**[X]**		**[2]**
4	**38**	NOC RECOMMENDATION 503 (Rev.WRC-2000) High-frequency broadcasting								**X**																										**[X]**		**[2]**
4	**39**	NOC RECOMMENDATION 520 (WARC-92) Elimination of HF broadcasting on frequencies outside the HF bands allocated to the broadcasting service								**X**																										**[X]**		**[2]**
4	**40**	NOC RECOMMENDATION 522 (WRC-97) Coordination of high-frequency broadcasting schedules in the bands allocated to the broadcasting service between 5 900 kHz and 26 100 kHz								**X**																										**[X]**		**[2]**
7 Issue A	**1**	MOD ARTICLE 11 Notification and recording of frequency assignments1, 2, 3, 4, 5, 6, 7 (WRC-07) Section II – Examination of notices and recording of frequency assignments in the Master Register								**X**			**X**					**X**							**X**													**4**
7 Issue A	**2**	NOC 11.49.1								**X**			**X**					**X**							**X**													**4**
7 Issue C	**1**	MOD ARTICLE 9 Procedure for effecting coordination with or obtaining agreement of other administrations1, 2, 3, 4, 5, 6, 7, 8, 8bis (WRC-12) Section I − Advance publication of information on satellite networks or satellite systems 9.1								**X**								**X**																				**2**

Agenda Item	N°	DIAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
7 Issue C	**2**	MOD ARTICLE 9 Procedure for effecting coordination with or obtaining agreement of other administrations1, 2, 3, 4, 5, 6, 7, 8, 8bis (WRC-12) Section I − Advance publication of information on satellite networks or satellite systems 9.5B								**X**								**X**																				**2**
7 Issue C	**3**	MOD ARTICLE 9 Procedure for effecting coordination with or obtaining agreement of other administrations1, 2, 3, 4, 5, 6, 7, 8, 8bis (WRC-12) Section I − Advance publication of information on satellite networks or satellite systems 9.1		**X**							**X**																										**X**		**3**
7 Issue C	**4**	MOD ARTICLE 9 Procedure for effecting coordination with or obtaining agreement of other administrations1, 2, 3, 4, 5, 6, 7, 8, 8bis (WRC-12) Section I − Advance publication of information on satellite networks or satellite systems 9.5D		**X**																																**X**		**2**
7 Issue D	**1**	MOD RESOLUTION 907 (WRC-12) 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 30Bearth stations and radio astronomy stations								**X**		**X**																											**2**
7 Issue D	**2**	MOD RESOLUTION 908 (WRC-12) Electronic submission and publication of advance publication information								**X**		**X**																											**2**
7 Issue E	**1**	NOC ARTICLE 11 Notification and recording of frequency assignments1, 2, 3, 4, 5, 6, 7 (WRC-07)								**X**								**X**																					**2**
9.1.2	**1**	NOC ARTICLE 9 Procedure for effecting coordination with or obtaining agreement of other administrations[1, 2, 3, 4, 5, 6, 7, 8, 8bis] (WRC-12)								**X**								**X**																					**2**
9.1.2	**2**	NOC ARTICLE 11 Notification and recording of frequency assignments[1, 2, 3, 4, 5, 6, 7, 7bis] (WRC-12)								**X**								**X**																					**2**

Agenda Item	N°	DIAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
9.1.2	**3**	MOD APPENDIX 5 (Rev.WRC-12) Identification of administrations with which coordination is to be effected or agreement sought under the provisions of Article 9 TABLE 5-1 (Rev.WRC-12) Technical conditions for coordination (see Article 9)		**X**						**X**								**X**																			**X**	**4**
9.1.2	**4**	NOC APPENDIX 5 (Rev.WRC-12) Identification of administrations with which coordination is to be effected or agreement sought under the provisions of Article 9 TABLE 5-1 (continued) (Rev.WRC-12)								**X**									**X**																				**2**
9.1.2	**5**	NOC APPENDIX 8 (Rev.WRC-03) Method of calculation for determining if coordination is required between geostationary-satellite networks sharing the same frequency bands								**X**									**X**																				**2**
9.1.8	**1**	NOC ARTICLE 9 Procedure to coordinate or secure the agreement of other administrations		**X**															**X**																		**X**		**3**
9.1.8	**2**	NOC ARTICLE 11 Notification and registration of frequency allocations		**X**															**X**																		**X**		**3**
9.1.8	**3**	MOD RESOLUTION 808 (WRC-12) Preliminary agenda for the 2018 World Radiocommunication Conference		**X**															**X**																		**X**		**3**
9.1.8	**4**	SUP RESOLUTION 757 (WRC-12) Regulatory aspects for nanosatellites and picosatellites		**X**															**X**																		**X**		**3**
9 esomps	**1**	MOD ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations (See No. 2.1) 18,4-22 GHz																	**X**							**X**											**X**		**3**

Agenda Item	N°	DIAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
9 esomps	**2**	MOD ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations (See No. 2.1) 24,75-29,9 GHz																**X**							**X**										**X**		**3**
9 esomps	**3**	MOD ARTICLE 5 Frequency allocations Section IV – Table of Frequency Allocations (See No. 2.1) 29,9-34,2 GHz																**X**							**X**										**X**		**3**
9 esomps	**4**	ADD 5.XXX																**X**							**X**										**X**		**3**
9 esomps	**5**	ADD RESOLUTION XXX (WRC-15) Use of the frequency bands 19.7-20.2 GHz and 29.5-30.0 GHz by earth stations in motion communicating with geostationary space stations of the fixed-satellite service																**X**							**X**										**X**		**3**
9.2	**1**	ADD ARTICLE 5 Frequency allocations Section II – Categories of services and allocations1 1								**X**			**X**					**X**																			**3**
9.2	**2**	NOC ARTICLE 5 Frequency allocations 5.34								**X**			**X**					**X**																			**3**
9.2	**3**	NOC ARTICLE 5 Frequency allocations 5.35								**X**			**X**					**X**																			**3**
9.2	**4**	NOC ARTICLE 5 Frequency allocations 5.36								**X**			**X**					**X**																			**3**
9.2	**5**	NOC ARTICLE 5 Frequency allocations 5.37								**X**			**X**					**X**																			**3**
9.2	**6**	NOC ARTICLE 5 Frequency allocations **5.38**								**X**			**X**					**X**																			**3**
9.2	**7**	NOC ARTICLE 5 Frequency allocations **5.39**								**X**			**X**					**X**																			**3**

Agenda Item	N°	DIAP	ATG	ARG	BAH	BRB	BLZ	BOL	B	CAN	CHL	CLM	CTR	DOM	DMA	EQA	SLV	USA	GRD	GTM	GUY	HTI	HND	JMC	MEX	NCG	PNR	PRG	PRU	KNA	VCT	LCA	SUR	TRD	URG	VEN	TOTAL
9.2	**8**	NOC ARTICLE 5 Frequency allocations 5.40								**X**			**X**					**X**																			**3**
9.2	**9**	NOC ARTICLE 5 Frequency allocations 5.41								**X**			**X**					**X**																			**3**
10 A	**1**	MOD RESOLUTION 806 (WRC-15) Agenda for the 2018World Radiocommunication Conference												**X**				**X**																		**X**		**3**
10 A	**2**	ADD X.X												**X**				**X**																		**X**		**3**
10 A	**3**	ADD RESOLUTION AAA (WRC-15) Primary Allocation to the Meteorological Satellite Service in the 460 – 470 MHz Band												**X**				**X**																		**X**		**3**
10 B	**4**	MOD RESOLUTION 806 (WRC-15) Agenda for the 2018World Radiocommunication Conference										**X**		**X**				**X**																		**X**		**4**
10 B	**5**	ADD 1.[5 GHz]										**X**		**X**				**X**																		**X**		**4**
10 B	**6**	ADD RESOLUTION [5GHz] (WRC-15) Consideration of additional primary allocations to the mobile service and identification for the implementation of wireless access systems (WAS) including radio local area networks (RLAN) in the 5350-5470 MHz frequency range										**X**		**X**				**X**																		**X**		**4**

PCC.II/REC. 45 (XXV-15) [3]

PROVISIONS TO PREVENT THE ILLEGAL USE OF RECEIVER DEVICES FOR SUBSCRIPTION SATELLITE TELEVISION

The XXV Meeting of Permanent Consultative Committee II: Radiocommunications (PCC.II),

CONSIDERING:

a) That the subscription satellite television service has had steady growth since its inception in the Americas;

b) That the estimate number of current subscribers of the service to date[4] surpasses 50 million households in the Americas, accounting for some 40% of the paid television market share;

c) That in some countries the population at large has benefited from more competition in the paid television market, with more content options and lower-priced offerings;

d) That over the last few years satellite receiver devices with decryption capabilities have been marketed in the Region for the purpose of illegally accessing broadcast signals for subsequent marketing in the subscription satellite TV arena;

e) That subscription satellite television has been negatively affected, to the extent of putting its future development at risk, since the illegal use cited above represents a significant share of total piracy existing in Latin America,

ACKNOWLEDGING:

a) That some Member States have already taken actions to discourage the use of satellite receiver devices with decryption capabilities, intended to illegally access signals destined to subscription satellite television, including the prohibition of import, sale, lease and entry into service of said devices;

b) That the adoption of similar measures at the regional level would help prevent cross border trade in this type of devices, and would consequently significantly discourage illegal access to the above-mentioned signals, with a variety of inherent benefits,

RECOMMENDS:

1. That Member States which have not as yet set forth provisions to prevent importation, marketing and use of satellite receiver devices with decryption capabilities to illegally access signals from subscription satellite television systems without due authorization or which could be modified for that purpose, consider doing so.

[3] CCP.II-RADIO/doc. 3841/15 rev.1

[4] Data estimates of the Telecommunications Management Group based on the Business Bureau, Market Estimates – December 2014 – Paid TV Market in LATAM, and Leichtman Research Group, Research Notes, 4Q 2014.

2. That subscription satellite television service providers make every effort to keep technical means and procedures for conditional access to broadcast signals up-to-date.

3. That Member States report to the XXVII Meeting of the PCC.II measures adopted on this issue and that the Administration of Colombia will prepare a report of that information.

PCC.II/REC. 46 (XXV-15) [5]

GUIDELINES TO ESTABLISH AGREEMENTS FOR SPECTRUM USE IN COORDINATION AREAS

The XXV Meeting of Permanent Consultative Committee II: Radiocommunications (PCC.II),

CONSIDERING:

a) That the nature of radiocommunication waves, whose propagation does not stop at countries' borders, makes it necessary to have coordination processes between Administrations in order to minimize interferences which may be harmful for telecommunication systems;

b) That all Administrations have the sovereign right to spectrum use within their national territory;

c) That careful planning of frequency assignment to land fixed and mobile stations will improve spectrum use, thereby minimizing harmful interference caused against operations in adjacent or shared frequency bands;

d) That several OAS/CITEL countries' Administrations have entered into agreements for spectrum use in border areas by land fixed and mobile services;

e) That massification of use of telecommunication services creates increasing spectrum demand by land fixed and mobile services, thus increasing likelihood of interference in border areas where there are no agreements for spectrum use;

f) That harmful interferences coming from other countries may affect the proper operation of telecommunication applications intended for people's safety and attention to emergencies,

RECOGNIZING:

a) That Recommendation ITU-R SM.1049-1, "A method of spectrum management to be used for aiding frequency assignment for land services in border areas", provides definitions and examples of spectrum use agreements in coordination areas;

b) That Recommendation ITU-R SM.1132-2, "General principles and methods for sharing between radiocommunication services or between radio stations", provides general principles and methods to facilitate efficient and effective spectrum sharing by multiple telecommunication services or radio stations;

[5] CCP.II-RADIO/doc. 3848/15

c) That the 2014 Declaration of Santo Domingo agrees: “To promote, in the framework of CITEL, the drafting of recommendations and best practices/principles that promote issues for the benefit of telecommunication service users”;

d) That Radio Regulations Article 11 contains provisions for notifications of stations before the International Telecommunications Union and the inscription in the international frequency register,

RECOMMENDS:

That Administrations bear in mind the guidelines submitted in Annex 1 when establishing or updating agreements for spectrum use in coordination areas.

INVITES:

Any Administrations that have not entered into this kind of agreements for land fixed and mobile service bands as per Annex 1, to do so at their earliest convenience, and taking the guidelines presented in Annex 1 as a reference.

ANNEX 1 TO RECOMMENDATION PCC.II/REC. 46 (XXV-15)

GUIDELINES TO ESTABLISH AND TO UPDATE AGREEMENTS AIMED AT FACILITATING COORDINATION OF SPECTRUM USE BY LAND FIXED AND MOBILE SERVICES IN COORDINATION AREAS.

TABLE OF CONTENTS

1. INTRODUCTION

Growth in spectrum use has brought increasing complexities related to spectrum use management in coordination areas, especially in border areas. Aware of this need, Member Administrations of CITEL/PCC.II agreed at the Sub-Working Group on Spectrum Management to start carrying out works toward the preparation of a document with guidelines to facilitate spectrum use coordination for land fixed and mobile services in coordination areas. This agreement to start carrying out works is set forth in Resolution PCC.II/RES. 94 (XXII-13), whose resolves provide as follows:

"1. To start carrying out works aimed at compiling all current Coordination Agreements that describe the conditions of usage and coordination of the different frequency bands for various services.

2. To encourage the Administrations to actively participate in sending agreements currently in force they had signed for their subsequent examination and review of the results that would make it possible to fine-tune and update them, to draft additional documents, and to set the basis for future coordination agreements.

3. To instruct the Sub-Working Group on Spectrum Management to start work aimed at drafting a document of guidelines to facilitate coordination of spectrum use for land fixed and mobile services in coordination areas."

According to the above, the proposal for the structure of the document was submitted and approved at the XXIII Meeting of the PCC.II, held in Cartagena, Colombia.

This document takes several principal concepts of the HCM Agreement's latest version[6], which is the agreement for frequency coordination of land fixed and mobile services of several European countries. Most definitions and coordination procedures are taken from the aforesaid agreement, as they provide a fast and efficient guideline for proper spectrum use in border areas of the abovementioned countries; additionally, many of the agreements entered into by CITEL member countries and which have been analyzed for the development of this document have been found to include these same concepts, albeit they are not explained in an explicit fashion.

Over 30 current agreements were analyzed for the development of this document regarding the use of the spectrum allocated to land fixed and mobile services; these agreements have been established by several CITEL member Administrations. This analysis sought to find common points in general definitions, establish interfering signal levels, coordination procedures and other relevant points in order to establish or update an agreement for spectrum use in coordination areas.

The objective of this document is to provide guidelines to establish or update agreements for spectrum use in border areas, taking into account the fact that although several countries in the region have been creating these agreements for many years, other countries in the region are currently beginning to establish their own agreements; therefore a guideline in this regard would facilitate said tasks and would establish a starting point for negotiating these agreements between countries with no experience in these matters.

[6] http://www.hcm-agreement.eu/http/englisch/verwaltung/index_berliner_vereinbarung.htm

2. DEFINITIONS

The definitions contained in the coordination arrangements will be those contained in Article 1 of the Radio Regulations of the International Telecommunication Union (ITU), as well as those shown below:

2.1. Harmful Interference.

Harmful interference shall mean any emission causing important deterioration in quality of traffic of a radiocommunication service, or which repeatedly interrupts said service by exceeding the maximum power flux or maximum field intensity as specified in the land mobile service, or – in the case of fixed land service – maximum permitted threshold deterioration.

2.2. Coordination Area.

The geographical area established from a reference point or line, which is usually the border between two or more countries, wherein particular technical and procedural conditions are established for the use of a determined frequency band, in order to reduce the risk of harmful interference on communication systems and in order to promote efficient spectrum use.

2.3. Coordination Distance.

The distance as measured from a reference point or line, which is usually the border between two or more countries, wherein the coordination area is established. Coordination distance is established depending on the characteristics of communication systems, operation frequency and other technical factors deemed convenient by Administrations in order to protect their communication systems from eventual harmful interferences.

2.4. Frequencies which require coordination.

Frequencies subject to coordination with the Administration (s) with which a spectrum use agreement has been entered into before a station is commissioned.

2.5. Preferential frequencies.

Frequencies that Administrations, which enter into the agreement (s), could allocate without prior coordination, in accordance with the technical and procedural conditions provided therein.

2.6. Shared Frequencies.

Frequencies that Administrations, which enter into agreement (s), could share with no prior coordination, in accordance with the technical and procedural conditions provided therein.

2.7. Frequencies for future communication networks.

Frequencies which Administrations are obliged to coordinate in accordance with the technical and procedural conditions set forth in the spectrum use agreement signed for the future introduction of a radiocommunication network where the number of sites multiplied by the number of frequencies exceeds 36.

2.8. Frequencies used in accordance with network plans established in geographical areas.

Frequencies used for the land mobile service in signatory countries based on a network plan in a geographical area which has been prepared and adopted before, taking into account the technical characteristics set forth therein.

2.9. Frequencies using preferential frequencies.

Frequencies that Administrations, which enter into agreement (s), could assign with no prior coordination, in accordance with the technical and procedural conditions provided therein.

2.10. Frequencies used based on agreements between operators

Frequencies utilized based on agreements between operators may be used with no prior coordination, provided there is an agreement in effect signed by the Administrations interested in which said agreements area authorized. These agreements between operators may also include the use of codes.

2.11. Frequency registration

Frequency registration includes coordinated frequencies, preferential allocated frequencies, shared frequencies, coordinated frequencies for radiocommunication networks and the frequencies used in accordance with network plans established in geographical areas and frequencies using preferential codes.

3. TECHNICAL CONSIDERATIONS

Agreements entered into by two or more countries for spectrum use in coordination areas shall comply with the provisions of the radiocommunications regulation and other basic texts of the International Telecommunications Union (ITU).

It is desirable that the spectrum use agreements include a frequency registration indicating preferential assigned frequencies, shared frequencies, coordinated frequencies for radiocommunication networks and the frequencies used in accordance with network plans established in geographical areas and frequencies using preferential codes. Information details of frequency registration will be agreed upon by the Administrations. The objective of this registration is to use the information from communication systems within the coordination area established for tasks related to planning, technical feasibility analysis, coordination requirements and validation of results.

The Administrations shall agree on the mathematical models or propagation curves to be used for propagation calculations, in order to have a common framework for evaluating requests or planning stations in coordination areas. It is likewise recommended to take into account the Sector of Radiocommunications of the ITU (ITU-R) recommendations and reports from the P and SM series, in relation to modeling radiowave propagation from communication systems and spectrum management.

Depending of the extension of the coordination areas recommended herein, as well as on the needs regarding the use of communication frequencies subject to an eventual agreement of use between two or more countries, it will be necessary to define a set of preferential frequencies for each of the parties, based on spectrum needs on each side of the border. Nevertheless, it is recommended to establish frequency sharing conditions inasmuch as possible, in order to make more efficient and flexible use of the spectrum in the aforesaid coordination areas.

In the case of land mobile use, it is desirable to have parameters such as effective radiated power and the effective height of stations selected for power radiation to be confined to the area intended to cover. It is recommended to avoid excessive station heights and excessive power levels by using several stations and low effective antenna heights. Likewise, the use of directional radiation patterns must be promoted so as to minimize potential interferences.

Likewise, it is recommended for effective radiated power and antenna height at land fixed service stations to be selected in accordance with the required distance from links and service quality conditions. It is recommended to avoid excessive antenna heights and excessive transmitting power, as well as authorizing new antennas with low directivity so as to minimize the risk of potential harmful interference.

4. LAND MOBILE SERVICE BANDS INCLUDED IN THIS DOCUMENT.

146	-	174	MHz
330	-	450	MHz
450	-	470	MHz
698	-	806	MHz
806	-	894	MHz
894	-	960	MHz
1710	-	1780	MHz
1805	-	1880	MHz
1910	-	1990	MHz
2110	-	2180	MHz
2500	-	2690	MHz
3400	-	3600	MHz

5. LAND FIXED SERVICE BANDS INCLUDED IN THIS DOCUMENT.

1427	-	1452	MHz
2200	-	2290	MHz
3700	-	4200	MHz
4400	-	5000	MHz
5925	-	6425	MHz
6425	-	7125	MHz
7125	-	7725	MHz
7725	-	7975	MHz
8025	-	8275	MHz
8275	-	8500	MHz
10.15	-	10.68	MHz
10.7	-	11.7	MHz
12.75	-	13.25	MHz
14.4	-	14.62	MHz
15.23	-	15.35	MHz
17.7	-	19.7	MHz
22	-	22.6	MHz
23	-	23.6	MHz
24.5	-	26.5	MHz

6. COORDINATION PROCEDURES

6.1 Frequencies that warrant coordination.

In the case of land mobile service, a transmission frequency should be coordinated if the transmitter produces field intensity or power flux density within the coordination area of the Administration involved which, at a height of 10 meters above ground level, exceeds the limit established for each band in each particular agreement. A reception frequency should be coordinated in case the receiver requires protection.

It is recommended to perform coordination of the fixed links in bands allocated to land fixed service if the shortest distance of at least one of the stations is less than or equal to the distance defined in section 7 hereto. Any station which, in accordance with link calculations, may cause harmful interference in the coordination area established, or which may need protection, should be coordinated regardless of the distance from the country's border or the reference point for the establishment of the coordination area.

It is recommended that agreements for spectrum use in coordination areas establish the mechanisms to submit a coordination requirement to the other party (ies) of said agreement in the event that one of the signatory Administrations should wish to commission a station. Both the establishment of the aforesaid mechanisms and the type of information required must be agreed upon in order to facilitate analysis by the Administrations to whom the requirement is submitted.

Likewise, should the Administrations to whom the requirement is submitted need any additional data in order to conduct the corresponding analyses on the coordination process, it is recommended to submit a request within 30 calendar days after receipt of the initial coordination request. After this request for additional data, the coordination requesting Administration shall submit the corresponding response to said request within 30 calendar days after the request. Contrariwise, the request or coordination shall be understood as null and void.

Upon receipt of the complete information with regard to the coordination process, the Administration shall evaluate the information in pursuance of the provisions under the agreement for spectrum use. Having concluded the analysis, the Administration to whom the requirement is submitted shall notify the response to the request for coordination within 45 working days starting from the date of receipt of the complete information.

If the Administration to whom the request is submitted has not responded within 45 days, a reminder may be submitted. The Administration shall respond to said reminder within 20 days after receipt thereof.

If the Administration to whom the request is submitted has not responded after the term to do so, the request for coordination shall be construed as approved and the station shall be construed as coordinated.

It must be clarified that the terms proposed above are a guideline and shall be established by the signatory Administrations of the agreements for spectrum use in coordination zones.

Assignment of satisfactorily coordinated frequencies shall be notified to the Administration to whom the request was submitted for the coordination process as soon as the corresponding station is commissioned, but no later than 180 days starting from the approval or understanding of approval of coordination. If the Administration requesting coordination, which received approval, has not notified allocation of the coordinated frequency within 180 days, the Administration to whom the request has been submitted may submit a reminder. If the Administration, which submitted the request for coordination, has not submitted the allocation notification of the coordinated frequency after 30 days, the request and the whole coordination process shall be understood as null and void.

Should an Administration wish to change the technical parameters of stations, which have previously been coordinated, a notification shall be submitted to the other Administration bound by the agreement for said purpose. Coordination could be requested if said change increases the likelihood of interference with stations located in the neighboring country (ies) signing the agreement. If the changes to the technical parameters do not increase – or even decrease – potential interference to stations of the other country (ies) signing the agreement, the change shall only be notified. It is recommended to define the manner in which updates will be made to the frequency registration.

Likewise, periods of temporary use of shared frequency can be defined (e.g. 30 days) without conducting the coordination process. The Administration planning to use a shared frequency in a temporary manner shall notify the other Administration bound by the agreement at its earliest convenience. Should temporary use of a shared frequency cause interference in a station of the other country (ies) signing the agreement, the station using the temporary frequency shall cease its emissions forthwith. It is recommended that use of temporary frequency be made in the preferential frequencies inasmuch as possible.

Whenever temporary frequency is no longer in use, the Administration which made use of said frequencies shall notify the other country (ies) signing the agreement and proceed to update the frequency registry.

6.2. Preferential frequencies

As part of the agreement for spectrum use in coordination areas, signatory Administrations may define frequencies of preferential use for one of the Administrations involved in the agreement. Allocation of preferential frequencies assigned to one Administration shall have priority over assignments made on the same frequencies in the other country signing the agreement. At any rate it is recommended to define the protection conditions of preferential frequencies in the agreement for spectrum use in coordination areas.

The commissioning of a station using a preferential frequency shall be notified to the other country (ies) signing the agreement in order to update the frequency registry.

Should an Administration wish to assign preferential frequencies under conditions different from those agreed upon under the agreement for spectrum use in coordination areas, these assignments shall be subject to the coordination process provided in the previous section.

Unless otherwise provided in the agreement, if the coordination procedure is completed successfully as set out in the previous section, an Administration will be able to make use of a preferential frequency of another Administration with the same rights and obligations set forth for a coordinated frequency.

6.3. Frequencies for future communication networks

Prior to the coordination of a future radiocommunication network, the Administrations will be able to undertake a consultative proceeding in order to facilitate the commissioning of said network. The consultative proceeding shall include planning criteria, as well as the following information:

Planned Frequencies
Coverage area for the whole communications network.
Station Type
Coverage area for each station
Effective radiated power
Maximum effective height of the antenna
Designation of emission
Network implementation plan
Characteristics of the networks' antennas
Polarization of the antenna

The Administration to whom the request was submitted shall acknowledge receipt of the information and the request for consultation, and submit the relevant response within 60 calendar days.

Consultation meetings may be necessary in some cases due to the complexity of the networks planned in order to expedite the process.

Should there be no prior consultation, the Administration to whom the request for coordination was submitted shall respond to the request for coordination within 180 days after receipt thereof. The requesting Administration shall notify the other signatory Administration (s) as to the date whereupon the network will be commissioned.

Stations, which are part of a coordinated communications network, shall be registered in the frequency registration, including date of termination of the coordination proceeding, and they shall have the same rights as coordinated stations under the coordination proceedings explained in previous sections.

Coordination of communication networks shall be understood as null and void if the stations in the communications network are not commissioned within 30 months after termination of the coordination process.

6.4. Frequencies using preferential codes.

Agreements for spectrum use in coordination areas may include the agreement between Administrations for the exclusive use of code or code packages to be transmitted in the same central frequencies. The Administrations may make use of said codes under the technical and operational conditions defined in each particular agreement without the need for coordination processes.

The Administrations will have priority over the use of codes or code blocks granted under the spectrum use agreement.

It is recommended to establish mechanisms for the proper notification of the commissioning of stations which use these preferential codes or code blocks, in order to update the frequency registration.

If an Administration wishes to assign frequencies which use preferential codes or code blocks under different conditions from those agreed upon under the agreement for spectrum use in coordination areas, these assignments shall be subject to the coordination process described in section 6.1.

Unless otherwise provided in the agreement, if the coordination procedure provided in the previous section is successfully completed, an Administration may make use of a frequency that uses preferential codes or code blocks of another Administration with the same rights and obligations set forth for a coordinated frequency.

6.5. Frequencies used deriving from agreements between operators.

Operators in neighboring countries are authorized to enter into mutual agreements under the condition that the interested Administrations previously sign an agreement authorizing said agreements.

Agreements between operators may or may not adhere to the technical parameters or to other conditions set forth in the agreements signed between the interested Administrations.

6.6. Evaluation of requests for coordination.

The Administrations to whom the request for coordination was submitted shall take into account at least the following frequencies evaluation requests for coordination:

* Frequencies in the frequency registration.
* Frequencies used in accordance with the agreements for spectrum use in coordination areas.
* Frequencies in the process of responding to a request for coordination (chronologically organized from the oldest to the latest request).

Initially, a request for coordination of a station to operate land mobile service may be rejected only if the station:
a. Produces an interfering field intensity or power flux density which exceeds the maximum levels established in the agreement for the specific band at a station within the frequency registration,

b. Proposes the use of a frequency without meeting the conditions agreed upon in the agreement for spectrum use in coordination areas signed,

c. Produces an interfering field intensity or power flux density which exceeds the maximum levels established in the agreement for the specific band at a station in process of coordination,

d. Produces an interfering field intensity or power flux density which exceeds the maximum levels established in the agreement for the specific band at a distance greater that the coordination distance.

Likewise, the protection requirement of a receiver may be rejected in the case of land mobile services, only if:

a. At least one of the coordinated transmitters of the Administration to whom the request was submitted produces a field intensity interference in the corresponding receiver which exceeds the maximum field intensity interference or power flux density levels established in the agreement,

b. Protection to the receiver limits the use of a preferential frequency of the Administration to whom the request was submitted under the conditions set forth in the agreement,

c. One of the transmitters awaiting response to a request for coordination from the Administration to whom the request was submitted produces a field intensity interference in the corresponding receiver which exceeds the maximum field intensity interference or power flux density levels established in the agreement,

d. Interfering field intensity or power flux density conditions are not met for the specific band at a distance greater that the coordination distance.

On the other hand, a request for coordination from a station operating in the land fixed service may be rejected only if:

a. The station produces receiver threshold deterioration which exceeds the maximum permitted value in section 7 hereto, at a station appertaining to the frequency registration,

b. Is intended for the use of a frequency without meeting the conditions agreed upon in the agreement,

c. Produces receiver threshold deterioration, which exceeds the maximum permitted value in section 7 hereto, at a station awaiting response to a request for coordination.

In Fixed Service, protection to a receiver may only be rejected if:

a. The request for coordination for an associated transmitter has been denied,
b. Protection to the receiver limits the use of a preferential frequency of the Administration to whom the request was submitted under the conditions set forth in the agreement.

6.6.1. Evaluation of requests including testing

In order to make more efficient use of the spectrum, avoid potential interference and facilitate growth of the existing networks, Administrations involved in the coordination process are likely to begin operation of the communication networks during a testing period. Conditions of the testing period, measurements to be carried out and procedure conditions for data exchange shall be established on a case-by-case basis. It is recommended to provide this mechanism during the establishment of the agreement for spectrum use.

Once all testing is completed, the Administration to whom the request for coordination was submitted shall communicate its final decision within 30 days after termination of the testing period.

7. DATA EXCHANGE.

The Administrations shall agree upon the terms and conditions for data exchange and periodicity of said exchange.

It is recommended to exchange information of the assignments every three or six months in order to keep updated registries, even if no coordination actions have been required.

For matters relating to spectrum measurement date exchange, signatory Administrations may establish their procedures in accordance with the provisions of recommendation PCC.II/REC. 44 (XXII1-14) "Guidelines for the harmonization of measurement procedures for the technical verification of spectrum use for coordination in border areas".

8. DETERMINING LAND MOBILE SERVICE COORDINATION NEEDS.

It is recommended to establish coordination needs for land fixed service stations in accordance with maximum levels of permitted interfering signal for each technology or technology group used in the bands that are the subject matter of the study. This level of permitted interfering signal established by the technology will allow to determine the coordination area and the maximum permitted relative height above ground level.

Values must be determined so that the maximum permitted interference levels are not exceeded outside the coordination area.

In practice, agreements have been signed establishing one or more frequency channels which are shared in the coordination area. These shared channels or ranges claim no protection from signals coming from the other end of the coordination area. This possibility provides Administrations with flexibility in allocation.

In case of land mobile networks using IMT[7] technologies, it is recommended firstly to promote agreements between operators for the adequate provision of their services. Notwithstanding the agreements operators may reach, it is recommended that countries establish agreements for eventual dispute resolution between operators on each side of the border or in coordination areas. With certain technologies, it is possible to negotiate the use of preferential codes or code blocks in accordance with the provisions of section 6.2 hereto. These codes or code blocks shall be granted or negotiated in accordance with the particular needs of each Administration sharing the coordination area.

[7] See: Recommendation ITU-R M. 2012 Detailed specifications of the terrestrial radio interfaces of International Mobile Telecommunications Advanced (IMT-Advanced);
REC ITU-R M. 1034, Requirements for the radio interface(s) for International Mobile Telecommunications-2000 (IMT-2000)

9. DETERMINING LAND FIXED SERVICE COORDINATION NEEDS.

It is recommended to establish the coordination needs for land fixed service in accordance with the threshold degradation produced by a station to a fixed service station.

Coordination distance[8]

Coordination distance depends on the frequency. The following table shows coordination distances according to reference rages, as taken from annex 9 of the latest update of the agreement for spectrum use of several European countries[9]. Administrations can agree upon their own coordination distances depending on the particular conditions of each agreement.

Frequency range [GHz]			Coordination Distance [km]
1	-	5	200*
> 5	-	10	150*
> 10	-	12	100
> 12	-	20	80
> 20	-	24.5	60
> 24.5	-	30	40
> 30	-	39.5	30
> 39.5	-	43.5	20

* The coordination distance for frequencies under 10GHz is limited to 100 km for antenna heights below 300 meter above sea level.

Definition of threshold deterioration (TD)

A radio receiver's threshold deterioration is the required signal level in order to attain a specific bit error rate (BER). Due to presence of an interfering signal, it is necessary to increase the desired signal level in order to maintain the same bit error rate.

For a specific error rate, the difference between the increase in signal due to presence of an interfering signal and the value of the threshold without any interference is called threshold degradation (TD). Threshold deterioration is assumed to be equivalent to the increase in threshold noise caused by the presence of an interfering signal at the entrance of the receiver.

Acceptable threshold deterioration

Acceptable threshold degradation caused in a fixed link receiver by an external fixed link shall not exceed 1dB

[8] Taken from annex 9 of the HCM Agrement http://www.hcm-agreement.eu/http/englisch/verwaltung/index_berliner_vereinbarung.htm

[9] http://www.hcm-agreement.eu/http/englisch/verwaltung/index_berliner_vereinbarung.htm

PCC.II/REC. 47 (XXV-15) [10]

TECHNICAL RECOMMENDATIONS FOR COMPATIBILITY OF DIGITAL TERRESTRIAL TELEVISION (DTT) BROADCASTING SERVICE IN THE UHF BAND BELOW 698 MHZ WITH LAND MOBILE SERVICE IN THE 698 MHZ-806 MHZ BAND

The XXV Meeting of Permanent Consultative Committee II: Radiocommunications (PCC.II),

CONSIDERING:

a) That it is imperative to increase the penetration of broadband services in the region's countries, especially in rural and currently underserved areas, with a view to maximizing the social and economic benefits of the digital age while upholding existing and future digital television broadcasting services;

b) That the 470 MHz–608 MHz and 614 MHz–698 MHz bands are allocated on a primary basis to the broadcasting service in Regions 1 and 2 on a co-primary basis in Region 3 and are used mainly by this service in most places of the world;

c) That many countries are using the 470 MHz–608 MHz and 614 MHz–698 MHz frequency bands for high-definition television and other higher definition modes;

d) That the television digitalization process is an opportunity for countries to redeploy the radio spectrum in order to provide their inhabitants with more social and economic benefits;

e) That it is imperative to guarantee protection to the broadcasting service in the UHF band below 698 MHz;

f) That the deployment of high-speed land mobile services in the 698 MHz–806 MHz frequency bands shall enable the region's broadband coverage to increase substantially, facilitating penetration and, as a result, increasing each country's productivity and competitiveness;

g) That some of the region's countries have started, or are currently in the process of, granting licenses to use the 698 MHz-806 MHz frequency bands for mobile services;

h) That various studies conducted worldwide have shown that there is interference between the international mobile telecommunication systems (IMT) being deployed in the 698 MHz-806 MHz frequency band and television services in the UHF band below 698 MHz, because of which mitigation measures must be adopted depending on the specific conditions of the networks deployed in each country;

i) That land mobile systems currently deployed in the 698 MHz–806 MHz band include IMT and trunking systems, among others;

j) That various of the region's countries have conducted technical studies that enable optimal use of the 698 MHz–806 MHz band and the proper operation of mobile broadband services, while protecting broadcasting service in the UHF band below 698 MHz;

[10] CCP.II-RADIO/doc. 3849/15 cor.1

k) That the results of these studies are of the utmost importance, to be used by all of the region's countries as a reference,

RECOGNIZING:

a) That, in the International Telecommunication Union (ITU) Radio Regulations, the 698 MHz–806 MHz band is allocated on a primary basis to Region 2 and identified for International Mobile Telecommunications (IMT);

b) That Resolution 224 (Rev. WRC-12) resolves, among other issues, that the Administrations that are implementing or planning to implement IMT consider using bands identified for IMT below 1 GHz;

c) That ITU-R Recommendation M.1036, "Frequency arrangements for implementation of the terrestrial component of International Mobile Telecommunications (IMT) in the bands identified for IMT in the Radio Regulations (RR)," provides frequency arrangements for IMT in the 698 MHz–806 MHz band;

d) That Recommendation PCC.II-REC. 30 (XVIII-11), "Frequency arrangements of the 698 MHz–806 MHz Band in the Americas for broadband mobile services," provides frequency arrangements for IMT in the 698 MHz–806 MHz band in the Americas;

e) That ITU-R Report M.2241 "Compatibility studies in relation to Resolution 224 (Rev. WRC-12)in the bands 698-806 MHz and 790-862 MHz," provides compatibility studies with respect to Resolution 224 in the 698-806 MHz and 790-862 MHz bands;

f) That ITU-R Report BT.2247, "Field measurement and analysis of compatibility between DTTB and IMT," refers to the review of compatibility between the systems considered in the present recommendation;

g) That ITU-R Recommendation M.1767 establishes a protection criterion of land mobile systems from interference caused by terrestrial digital video and audio broadcasting systems in the VHF (174-230 MHz) and UHF (470-862 MHz) shared bands allocated on a primary basis. It provides the methodology and formulas to assess the maximum allowable field strength of digital terrestrial broadcasting signals into the land mobile system bandwidth, also taking into account the case of potential partial overlap in frequencies between both systems;

h) That ITU-R Report M.2264 provides guidance on the development of frequency arrangements for systems operating in large contiguous bandwidths in the mobile service, with a view to assisting Administrations on spectrum planning issues;

i) That, according to Decision PCC.II/DEC. 167 (XXIII-14), technical studies concerned with the subject addressed in the present recommendation are available in the CITEL Virtual Community's Discussion Group on the Digital Dividend Spectrum, established by Decision PCC.II/DEC. 118 (XVII-11),

RECOMMENDS:

1. That the Administrations consider the mitigation techniques identified in the studies concerning compatibility of the digital terrestrial television service (DTT) in the UHF band below 698 MHz with land mobile service systems in the 698 MHz–806 MHz frequency band compiled in Annex A, in accordance with their particular needs;

2. That the Administrations, as deemed advisable, carry out the technical and administrative activities to guarantee the compatibility of the digital terrestrial television service (DTT) in the UHF band below 698 MHz with land mobile service systems in the 698 MHz–806 MHz frequency band in border areas;

3. That the Administrations that conduct new studies concerning compatibility of the digital terrestrial television (DTT) broadcasting service in the UHF band below 698 MHz with land mobile service systems in the 698 MHz–806 MHz band, present the studies at the successive meetings of PCC.II for the purposes of incorporating them into Annex hereto.

ANNEX TO RECOMMENDATION PCC.II/REC. 47 (XXV-15)

TECHNIQUES TO BE CONSIDERED TO FACILITATE COMPATIBILITY OF DIGITAL TERRESTRIAL TELEVISION SERVICE (DTT) IN THE UHF BAND BELOW 698 MHz WITH LAND MOBILE SERVICE IN THE 698 MHz-806 MHz BAND

Section I presents the description of the broadcasting service reception systems, as well as the description of the land mobile reception systems. Section II describes the possible interference cases and section III describes the mitigation techniques to facilitate the compatibility of the mentioned services.

I. Reception systems[11] [12]

First, it is important to identify the reception systems in each country subject to interference; each reception system will be a specific case:

1. Possibilities of DTT reception systems:

a) TV reception with an external antenna;
b) TV reception with an internal antenna;
c) reception of the TV antenna amplifier with a collective antenna; and
d) TV reception at mobile terminals (One-seg). (In case of ISDB).

2. Possibilities of radio broadcasting reception systems:

a) reception of base station, repeater or node; and
b) reception of the mobile station (terminal).

II. Types of interference[23]

Types of harmful interference caused by radiocommunication system transmitters in DTT reception are as follows:

a) reception saturation;
b) TV reception degradation;
c) image channel interference; and
d) interference from unwanted emissions.

[11] CCP.II-RADIO/doc. 3661/14 – "Information document regarding Brazilian tests on the coexistence of IMT (LTE) in the 700 MHz band with DTV (ISDB-T)" (Information document submitted by the delegation of Brazil)
[12] CCP.II-RADIO/doc. 3512/14 – "Report on laboratory tests on the interference of the LTE mobile broadband in the 700 MHz band into Digital TV in 470 - 698 MHz band" (Document submitted by ABERT - Brazilian Radio and TV Broadcasters Association),

Types of harmful interference caused by DTT transmitters in radiocommunication systems are as follows:
e) reception saturation; and
f) interference from unwanted emissions.

III. Mitigation techniques

1. Organization of the spectrum intended for land mobile service so as to minimize interferences with DTT

1.1 DVB-T2 - LTE[13]

Based on one of the included studies, it can be observed that, as interference increases (protection margin worsens) so does the bandwidth of the LTE signals. Because of that, those studies consider that, in band distribution by blocks, the LTE block with the lesser bandwidth should be in the channel adjacent to the DTT in the digital dividend band.

2. Limitation of power emissions in high broadcasting channels.

The establishment of adequate transmission power, according to specific location, address and channels, may guarantee compatibility and minimize mutual harmful interferences.[14]

2.1. ISDB-T - LTE[15]

Limiting power emissions using planning that avoids high-power broadcasting stations in high channels (48-51) helps to reduce out-of-band interference, especially blocking interference experienced by the LTE base station. Setting power limits in broadcasting signals in channels immediately adjacent to the receiver of the LTE base station is highly beneficial and could reduce the separation distance required when combined with other mitigation techniques.

2.2. DVB-T2 - LTE[16]

In the studies being reviewed, the technical conditions of the potential use of channel 51 of DTT (692 to 698 MHz) were closely assessed, which made it possible to conclude that the protection margin that was measured does not significantly change when the guard band is greater than 9 MHz.

For example, as for the analysis for reception of portable DTT indoors, results show that the minimum distance between the LTE mobile terminal and DTT receiver for a LTE bandwidth of 15 MHz must be 10 meters when in the same room and 4 meters when in different rooms. By applying a domestic filter of 8 dB of minimum rejection, it was possible to reduce minimum distance problems by a half.

It is up to each Administration to decide whether or not to use channel 51 to increase the guard band between services. If channel 51 is chosen, the studies conducted by Colombia suggest it be used in rural areas, where the DTT signal level received is designed to meet the conditions of fixed reception on

[13] CCP.II-RADIO/doc. 3545/14 - "Study results of compatibility between Digital TV services with DVB-T2 standard and IMT and P25 systems" (Document submitted by the delegation of Colombia)
[14] CCP.II-RADIO/doc. 3661/14 – "Information document regarding Brazilian tests on the compatibility of IMT (LTE) in the 700 MHz band with DTV (ISDB-T)" (Information document submitted by the delegation of Brazil)
[15] PCC.II RADIO/doc. 3635/14 – "Interference studies in 700MHz in Brazil" (Document submitted by GSMA/Brazil)
[16] CCP.II-RADIO/doc. 3545/14 - "Study results of compatibility between Digital TV services with DVB-T2 standard and IMT and P25 systems" (Document submitted by the delegation of Colombia)

rooftop using a directional antenna. Likewise, using a robust DTT transmission mode is helpful in these cases.

3. Use of RF filters at base stations of the land mobile service to block signals from broadcasting stations

3.1. ISDB-T – LTE[17] [18]

One way to reduce the separation distances required between the broadcasting and base stations to prevent blocking of the latter, by inserting additional attenuation, is using a filter in the LTE base station to reduce the interfering signal.

4. Use of RF filters in DTT receivers[19]

- Downlink: Using filters in television receivers and in the emission at LTE base stations makes it possible to mitigate LTE downlink interference.
- Uplink: The LTE uplink interference level towards the television receivers depends on the existing guard band between DTT and LTE, as well as on the bandwidth of said link.

4.1. DVB-T2 – LTE[20]

The use of low-pass RF filters for DTT receivers, either domestic for television sets or professional for facilities with a collective antenna, makes it possible to lower interference. Necessary attenuation of the filters increases as the bandwidth of the adjacent LTE signal increases. The results of the studies show that the necessary attenuation of the filters for blocks from 10 MHz to 20 MHz ranges from 17dB to 20dB. It is must be highlighted that filters introduce insertion losses of about 3 dB in the high portion of the DTT band.

4.2. ISDB-T – LTE[21]

In those cases where interference with the ISDB-T receiver has been proven, a low-pass filter in that receiver may be used to decrease the interference.

5. Establishment of minimum separation distances between DTT antennas and land mobile service devices[22]

[17] CCP.II RADIO/doc. 3635/14 – "Interference studies in 700MHz in Brazil" (Document submitted by GSMA/Brazil)

[18] CCP.II-RADIO/doc. 3661/14 – "Information document regarding Brazilian tests on the compatibility of IMT (LTE) in the 700 MHz band with DTV (ISDB-T)" (Information document submitted by the delegation of Brazil)

[19] CCP.II-RADIO/doc. 3512/14 – "Report on laboratory tests on the interference of the LTE mobile broadband in the 700 MHz band into Digital TV in 470 - 698 MHz band" (Document submitted by ABERT - Brazilian Radio and TV Broadcasters Association),

[20] CCP.II-RADIO/doc. 3545/14 - "Study results of compatibility between Digital TV services with DVB-T2 standard and IMT and P25 systems" (Document submitted by the delegation of Colombia)

[21] CCP.II RADIO/doc. 3635/14 – "Interference studies in 700MHz in Brazil" (Document submitted by GSMA/Brazil)

[22] CCP.II-RADIO/doc. 3661/14 – "Information document regarding Brazilian tests on the compatibility of IMT (LTE) in the 700 MHz band with DTV (ISDB-T)" (Information document submitted by the delegation of Brazil)

Establishment of a minimum distance between the transmitters of one system and the receivers of the other, so that protection ratios are met and can coexist without any mutual harmful interference, is a solution to be considered.

6. Selection of orthogonal polarizations

6.1. ISDB-T – LTE[10]

Most ISDB-T emissions have horizontal polarization. Using vertically polarized LTE signals may increase discrimination with the horizontally polarized broadcasting antennas and make the receiver less vulnerable to interfering signals. According to the studies submitted, the use of orthogonal polarizations would offer supplementary discrimination.

7. Promoting the use of high-quality TV receivers[10]

Administrations may specify minimum performance and quality criteria for digital television receivers in their equipment homologation and user protection policies.

The possibility that receiver quality may be supported by some of the previously mentioned interference mitigation techniques and that a high-quality receiver alone does not guarantee the adequate reception of DTT signals in the presence of interfering signals must be taken into consideration.

PCC.II/REC. 48 (XXV-15) [23]

REGISTRATION OF EARTH SYSTEMS OF THE FIXED-SATELLITE SERVICE

The XXV Meeting of Permanent Consultative Committee II: Radiocommunications (PCC.II),

CONSIDERING:

a) That the next ITU World Radiocommunication Conference (WRC-15) will examine and adopt suitable measures in relation to possible additional primary spectrum allocations for the mobile service and identify additional frequency bands for international mobile telecommunications (IMT), as well as associated transitory provisions, in accordance with item 1.1 of the agenda;

b) That the potential frequency bands considered in ITU-R studies include the 3 400-4 200 MHz and 5925-6425 MHz bands;

c) That the ITU-R report "Sharing studies between IMT-Advanced systems and geostationary-satellite networks in the fixed-satellite service in the 3400-4200 and 4500-4800 MHz frequency bands" determines minimum required separation distances for co-frequency and adjacent band operations;

d) That in Region 2 of the ITU, the band 3 400-4 200 MHz is allocated on a primary basis to the fixed and fixed-satellite (space-to-Earth) services. The band 3 500-4 200 MHz is also allocated to the mobile service (mobile except aeronautical) on a co-primary basis. The band 5 925-6 425 MHz is allocated on a co-primary basis to fixed, mobile and fixed satellite services (Earth-to-space);

[23] CCP.II-RADIO/doc. 3849/15 cor.1

e) That parts of the 3 400-4 200 MHz and 5 925-6 425 MHz bands are widely used by OAS/CITEL member countries for fixed-satellite service networks and national satellite systems;

f) That Recommendation PCC.II/REC. 27 (XIV-09) "Notification of earth systems operating in the fixed-satellite service (FSS) (Space-to-Earth)" invites OAS/CITEL Administrations to follow the notification procedures of ITU's Radiocommunication Bureau for the registration of FSS earth stations;

g) That WRC-07 identified spectrum for IMT in the band 3 400-3 600 MHz in countries of region 1 and region 3 and included criteria for coordination of the mobile service with the FSS and criteria for the protection of earth stations in the FSS networks,

RECOGNIZING:

a) The call of the Director of ITU's Radiocommunication Bureau (reference number 09AT(SSD)O-2014-002925) to register earth stations operating in the frequency bands mentioned in considering 2;

b) That it is of prime importance that suitable measures are taken so that earth stations of the fixed-satellite service are protected from harmful interference caused by terrestrial services and that they obtain international recognition and suitable protection in relation to future and existing services;

c) The need to protect FSS services in frequency bands considered as candidates for IMT;

d) That, in adopting its decisions with regard to the 3400-4200 MHz and 5925-6425 MHz frequency bands, WRC-15 will take into account the actual use of this part of the spectrum;

e) That, nonetheless, there is a significant administrative burden on countries to undertake the detailed coordination and notification process on an individual basis for each operating earth station in their countries, recognizing that there may be thousands of such earth stations;

f) That, therefore, OAS/CITEL Administrations may need the assistance of ITU's Radiocommunication Bureau in how to accomplish coordination and notification of such large numbers of earth stations,

RECOMMENDS:

1. That OAS/CITEL Administrations send information on the identified earth stations operating in C-band in their country to ITU's Radiocommunication Bureau in order to initiate the co-ordination, notification and registration procedures recorded in Article 9 and 11 of the Radiocommunication Regulations, in the interest of ensuring the international protection and recognition thereof;

2. That, to the extent possible, OAS/CITEL Administrations send to the Radiocommunication Bureau the minimum information on earth stations indicated in the attachment to this Recommendation, and, if necessary, request assistance for the corresponding registration;

3. That, if appropriate, OAS/CITEL Administrations that have made the corresponding registration should send updated information on earth stations in order to be recognized by the Radiocommunication Bureau;

4. That OAS/CITEL Administrations inform the ITU's Radiocommunication Bureau the numbers, areas of operation, and technical parameters of earth stations in their territories that operate with GSO FSS space stations in the 3400-4200 MHz and 5925-6425 MHz bands without individual authorizations.

ATTACHMENT TO RECOMMENDATION PCC.II/REC. 48 (XXV-15)

Minimum information on earth stations in order for the RB to begin providing assistance for the purposes of creating co-ordination outlines

AP4 Item No.	***SpaceCap Item No.***	**Descripción**
A.1.e.2	Earth station name	Name of earth station
A.1.f.2	*Adm*	Symbol of notifying Administration country
A.1.e.3.a	Ctry	Symbol of country or geographical area in which the earth station is situated
A.1.e.3.b	lat_deg	Latitude coordinate of the station in degrees, minutes and seconds
A.1.e.3.b	lat_min	Minutes of the station's latitude coordinate expressed in degrees, minutes and seconds
A.1.e.3.b	lat_ns	Indicator of the latitude direction: North [N] or South [S]
A.1.e.3.b	lat_sec	Second part of the station's latitude coordinate in degrees, minutes and seconds
A.1.e.3.b	long_deg	Degrees of the station's longitude coordinate in degrees, minutes and seconds
A.1.e.3.b	long_ew	Indicator of the longitude direction: East [E] or West [W]
A.1.e.3.b	long_min	Minutes of the station's longitude coordinate expressed in degrees, minutes and seconds
A.1.e.3.b	long_sec	Second part of the station's longitude coordinate in degrees, minutes and seconds
A.4.c.1	Satellite name	Name of associated space station
A.4.a.1	Long_nom	Orbital position of the associated space station
	E	***Transmission characteristics of the transmitting earth station antenna***
B.5.a	Gain	Maximum isotropic gain of the earth station antenna
C.2.a.1	Min freq_MHz	Minimum allocated transmission frequency in MHz
C.2.a.1	Max freq_MHz	Maximum allocated transmission frequency in MHz
B.5.c.2.a	Antenna pattern	Pattern of transmitting antenna
	R	***Characteristics of the receiving earth station antenna***
B.5.a	Gain	Maximum isotropic gain of the earth station antenna
C.2.a.1	Min freq_MHz	Minimum allocated transmission frequency in MHz
C.2.a.1	Max freq_MHz	Maximum allocated transmission frequency in MHz
C.5.b	noise_Temp	Noise temperature of receiving system
B.5.c.2.a	Antenna pattern	Pattern of receiving antenna

Note 1: If an earth station is situated in front of an elevated obstacle (mountain, cliff or building), it is also necessary to submit the elevation angle of the horizon, measured to said obstacles. Otherwise, it is assumed that all angles are 0 degrees for the conservative concept of the coordination.

Note 2: The earth station type is presumed as TC (earth station in the fixed-satellite service)

Note 3: If there are any difficulties in providing the information mentioned above, please contact the RB.

Note 4: In the case of GSO FSS earth stations that are authorized by CITEL member states without individual authorizations, the information above should include, in lieu of specific station data for items 1-13 of the table, information describing the area of operations of the earth stations (by latitude and longitude, where feasible), the names/orbital ranges of associated space stations, and the approximate number of such earth stations that are in operation or planned for operation.

Additional characteristics required to complete a form for the coordination and notification of an earth station

SpaceCap and AP4 Item No.	*Characteristics to be provided for each earth station*
A.3.a	Name of earth station operator
A.7.d	Antenna height, in meters above mean sea level
C.4.b	Nature of service (e.g. PC – Public Correspondence, CO – Official Correspondence)
C.8.b.2 C.8.b.3.a	Maximum mean power density in dB (W/Hz) applied to the antenna input

PCC.II/DEC. 173 (XXV-15) [24]

REQUEST FOR INFORMATION ABOUT THE CURRENT AND PLANNED USE OF THE BANDS 1 980-2 025 MHZ AND 2 160-2 200 MHZ BY THE OAS/CITEL ADMINISTRATIONS FOR TERRESTRIAL AND SATELLITE SERVICES

The XXV Meeting of Permanent Consultative Committee II: Radiocommunications (PCC.II),

DECIDES:

1. To request the Secretariat of CITEL to distribute to the Member State Administrations the questionnaire annexed hereto in order to assess use of the bands 1 980-2 025 MHz and 2160-2 200 MHz by the OAS/CITEL Administrations for terrestrial and satellite services.

2. To instruct the Rapporteur for this survey (Luciana Camargos, lcamargos@gsma.com) to provide the Secretariat of CITEL the support needed to implement *decides* 1.

3. To invite the OAS/CITEL Administrations to forward, by August 1, 2015, their replies on the questionnaire to the Rapporteur for this survey (Luciana Camargos, lcamargos@gsma.com) with a copy to the Secretariat of CITEL (citel@oas.org).

ANNEX TO DECISION PCC.II/DEC. 173 (XXV-15)

REGIONAL SURVEY

USE OF THE BANDS 1 980-2 025 MHZ AND 2 160-2 200 MHZ BY THE OAS/CITEL ADMINISTRATIONS FOR SATELLITE AND TERRESTRIAL SERVICES

Introduction

This survey addresses the need to understand the use of the bands 1 980-2 025 MHz and 2 160-2 200 MHz by OAS/CITEL Administrations for fixed, mobile and mobile-satellite (Earth-to-space) with the view to consider possible improvements in the current regulatory framework for harmonization, in particular with the mobile broadband use under the mobile service allocation.

In this regard, OAS/CITEL Administrations are kindly requested to provide information about their current and planned use so that it can be considered in the development of harmonized band plans in Region 2 for mobile broadband applications.

[24] CCP.II-RADIO/doc. 3838/15

It should be noted that these bands are identified for IMT under footnote RR No. **5.388** and Working Party 5D has started to work on a band plan for the use of this band by IMT.

Background

The bands 1 980-2 010 MHz 2 170-2 200 are allocated to the fixed, mobile and mobile-satellite services on a primary basis in all Regions.

The bands 2 010-2 025 MHz and 2 160-2 170 MHz are allocated to fixed and mobile services on a primary basis in all Regions and to the mobile-satellite service on a primary basis in Region 2.

According to footnote RR No. **5.388,** the bands 1 885-2 025 MHz and 2 110-2 200 MHz are intended for use, on a worldwide basis, by Administrations wishing to implement International Mobile Telecommunications (IMT). Such use does not preclude the use of these bands by other services to which they are allocated. The bands should be made available for IMT in accordance with Resolution 212 (Rev.WRC-07) (See also Resolution 223 (Rev.WRC-07)*).

Information on party surveyed:

Name of organization:	
Country:	
Party responsible for survey:	
E-mail address:	
Contact telephone:	

Questionnaire:

OAS/CITEL Administrations are kindly requested to provide, by August 1, 2015 to the Rapporteur for this survey (Luciana Camargos, lcamargos@gsma.com) with a copy to the Secretariat of CITEL (citel@oas.org) information about:

1. the services listed in your national table of allocations for the bands 1 980-2 025 MHz and 2 160-2 200 MHz;
2. the current and planned use of these bands in your country.

PCC.II/DEC. 174 (XXV-15)[25]

CITEL – ITU VIRTUAL TRAINING AND DISCUSSION SESSION ON RJ81 SOFTWARE

The XXV Meeting of Permanent Consultative Committee II: Radiocommunication (PCC.II),

DECIDES:

1. To hold a CITEL-ITU virtual training and discussion session on RJ81 software before the XXVI meeting of the PCC.II. It would be held through the OAS / CITEL virtual platform, with a draft agenda based, in general terms, on the one submitted in the attachment.

2. To designate the Rapporteur on "Issues concerning the updating and revision of the 1981 and 1988 Rio de Janeiro Agreements", Mr. Claudio Castro, so he can, jointly with the PCC.II Chair and the Secretariat of CITEL, coordinate this event, and define the date and agenda with the Radiocommunication Bureau of the International Telecommunication Union (ITU).

3. To leave open the possibility to hold more virtual sessions on this topic, as required by the members.

4. To encourage the Administrations to take part in this virtual training and discussion session.

ANNEX TO DECISION PCC.II/DEC. 174 (XXV-15)

DRAFT AGENDA

1. Opening
2. ITU presentation on the RJ81 software (http://www.itu.int/ITU-R/eBCD/MemberPages/eCalculations.aspx) beta version:
   - 2.1 Description of the software's basic functions
   - 2.2 Practical examples of usage (analysis requests, processing requests, and technical configuration to evaluate, visualize, export and interpret the results)
   - 2.3 Possible uses for the purpose of national planning and international coordination of AM sound broadcasting stations
3. Questions and answers

[25] CCP.II-RADIO/doc. 3836/15

PCC.II/DEC. 175 (XXV-15) [26]

VIRTUAL SESSION TO DISSEMINATE INFORMATION ABOUT IMT

The XXV Meeting of Permanent Consultative Committee II: Radiocommunications (PCC.II),

DECIDES:

1. To hold a virtual session to disseminate information about International Mobile Telecommunications (IMT), using the OAS/CITEL distance platform, by Mr. José Costa PCC.II Coordinator for IMT, on April 14 and 15 in Spanish and English respectively. Please find the description in the Annex to this Decision.

2. To encourage members to participate in these virtual sessions.

ANNEX TO DECISION PCC.II/DEC. 175 (XXV-15)

Description

The purpose of this tutorial is to explain the activities and results on International Mobile Telecommunications (IMT) in the Radiocommunication Sector of the International Telecommunication Union (ITU), ITU-R, and complementary activities in regional and national organizations. The term "IMT" is the root name that encompasses both IMT-2000 and IMT-Advanced collectively.

Besides the ongoing work on IMT standardization and spectrum harmonization, a major project has been initiated in WP 5D towards the definition of requirements and standards for the next generation mobile networks, "IMT for 2020 and beyond". WP 5D is studying the definition of a work plan, timeline, process, requirements, and deliverables for the future development of IMT, necessary to provide by the 2020 timeframe the expected ITU-R outcome for the evolution of IMT in support of the next generation of mobile broadband communications systems.

WP 5D is using provisionally the moniker "IMT-2020" and the specific nomenclature to be adopted for the future development of IMT is expected to be determined at the Radiocommunication Assembly 2015 (RA-15), which will be held in Geneva, Switzerland, from 26-30 October 2015.

[26] CCP.II-RADIO/doc. 3853/15

PCC.II/DEC. 176 (XXV-15) [27]

WRC-15 ELECTRONIC WORKING METHODS

The XXV Meeting of Permanent Consultative Committee II: Radiocommunications (PCC.II),

DECIDES:

1. To establish the use of the Virtual Community of the Organization of American States during the World Radiocommunication Conference 2015 (WRC-15) as was done for WRC-12.

2. To instruct the CITEL Secretariat to develop electronic working methods for WRC-15 based on the procedures utilized during WRC-12 and transmit these procedures to Member States prior to the XXVI meeting of CITEL PCC II for final approval.

3. To do a test of the system during the Conference Preparatory Meeting (CPM15-2).

PCC.II/DEC. 177 (XXV-15) [28]

VIRTUAL SESSIONS TO DISSEMINATE INFORMATION ABOUT PREPARATIONS FOR WRC-15

The XXV Meeting of Permanent Consultative Committee II: Radiocommunications (PCC.II),

DECIDES:

1. To hold a series of virtual sessions to disseminate information about preparations for the World Radiocommunication Conference (WRC-15) before the XXVI meeting of PCC.II, via the OAS/CITEL distance platform, in accordance with the preliminary program attached below as an Annex.

2. To designate the Chair of the Working Group, Mr. Héctor Budé, so that he can coordinate these events jointly with the Chair of PCC.II and the CITEL Secretariat.

3. To encourage members to participate in these virtual sessions.

[27] CCP.II-RADIO/doc. 3837/15
[28] CCP.II-RADIO/doc. 3840/15 rev.1

ANNEX TO DECISION PCC.II/DEC. 177 (XXV-15)

PRELIMINARY PROGRAM FOR THE VIRTUAL SESSIONS

Working Sub-Group	Issues	Agenda Items	Date
SGT-1	MOBILE & FIXED	1.1, 1.2, 1.3	28 April 2015 23 June 2015 and 28 July 2015
SGT-2	RADIOLOCATION, AMATEURS, MARITIME & AERONAUTICAL	1.4, 1.5, 1.15, 1.16, 1.17, 1.18	2 June 2015
SGT-3	SPACE SCIENCE & MSS	1.10, 1.11, 1.12, 1.13, 1.14, 1.9.2, 9.1.1	14 July 2015
SGT-4	FSS & SATELLITE REGULATORY	1.6.1, 1.6.2, 1.7, 1.8, 1.9.1, 7, 9.1, 9.1.2, 9.1.3, 9.1.5, 9.1.8, 9.2*,9.3 *Satellite issues	30 June 2015
SGT-5	GENERAL REGULATORY, FUTURE WORK & OTHER	2, 4, 8, 9.1.4, 9.1.6, 9.1.7, 9.2*, 10 *Non-satellite issues	9 June 2015

PCC.II / DEC. 178 (XXV-15) [29]

EDITION OF DOCUMENTS FOR WRC-15

The XXV Meeting of Permanent Consultative Committee II: Radiocommunications (PCC.II),

DECIDES:

1. To request the Working Group Relative to CITEL's Preparation for Regional and World Radiocommunications Conferences (Chair, Vice-Chair, Coordinators, Vice-Coordinators, Rapporteurs and alternate Rapporteurs), in collaboration with the Secretariat of CITEL, to edit the documents containing the Preliminary Proposals, Draft Inter-American Proposals and Inter-American Proposals arising from this XXV Meeting (documents CCP.II-RADIO/doc. 3816/15, CCP.II-RADIO/doc. 3817/15, CCP.II-RADIO/doc. 3818/15 with the last revision) in order to confirm that the text is based on the

[29] CCP.II-RADIO/doc. 3842/15 rev.1

appropriate version of the Radio Regulations, that the versions in CITEL's working languages are aligned and correct.

2. To instruct the Coordinators, Alternate Coordinators, Rapporteurs and Alternate Rapporteurs to prepare the documents using the template and guidelines of the Radiocommunication Bureau of the International Telecommunication Union (ITU) for the World Radiocommunication Conference of 2015 (WRC-15).

3. To instruct the CITEL Secretariat to distribute the edited documents as of April 20, 2015.

PCC.II/DEC. 179 (XXV-15) [30]

CITEL INPUT TO THE INFORMAL GROUP ON WRC-15 STRUCTURE

The XXV Meeting of Permanent Consultative Committee II: Radiocommunications (PCC.II),

DECIDES:

1. To designate Ms. Chantal Beaumier from the Administration of Canada and Mr. Tarcísio Aurélio Bakaus from the Administration of Brazil as the CITEL/PCC.II rapporteur and vice rapporteur for informal group discussions on WRC-15 Structure.

2. To instruct the CITEL/PCC.II rapporteur and vice rapporteur for informal group discussions on WRC-15 Structure to submit the CITEL/PCC II views on WRC-15 structure indicated in the Annex at the next meeting scheduled to coincide with the Conference Preparatory Meeting (CPM 15-2).

ANNEX TO DECISION PCC.II/DEC. XXX (XXV-15)

CITEL WRC-15 Structure Proposal

PLENARY		
COM 4	**COM 5**	**COM 6**
WG 4A 1.5, 1.17, 1.18, global flight tracking 3*, 5*	**WG 5A** 1.11, 1.12, 1.13, 1.14 3*, 5*	**WG 6A** 2, 4, 8, 9.1.4, 9.1.6, 9.1.7 , 9.2* 3*, 5*
WG 4B 1.4, 1.15, 1.16	**WG 5B** 1.6, 1.7, 1.9, 1.10, 9.1.1	**WG 6B** 10

[30] CCP.II-RADIO/doc. 3844/15 rev.1

PLENARY		
COM 4 3*, 5*	**COM 5** 3*, 5*	**COM 6**
WG 4C 1.1, 1.2, 1.3 3*, 5*	**WG 5C** 1.8, 7, 9.1.2, 9.1.3, 9.1.5, 9.1.8, 9.2*, 9.3 3*, 5*	
* Relevant parts.		

VI. LISTA DE DOCUMENTOS BÁSICOS

Sumary Minutes of the Inaugural Session and First Plenary Session	CCP.II-RADIO/doc. 3822/15 cor.1
Sumary Minutes of the Second Plenary Session	CCP.II-RADIO/doc. 3851/15
Sumary Minutes of the Third Plenary Session and of the Closing Plenary Session	CCP.II-RADIO/doc. 3856/15
Working Group on Preparation for Regional and World Radiocommunication Conferences	CCP.II-RADIO/doc. 3852/15
Working Group on Terrestrial Fixed and Mobile Radiocommunication Services	CCP.II-RADIO/doc. 3855/15
Working Group on Satellite Systems to Provide Fixed and Mobile Services	CCP.II-RADIO/doc. 3854/15
Working Group on Broadcasting	CCP.II-RADIO/doc. 3847/15
List of Documents	CCP.II-RADIO/doc. 3717/15 rev.3
List de Participant	CCP.II-RADIO/doc. 3718/15 rev.1
Final Report for the Meeting	CCP.II-RADIO/doc. 3857/15 rev.1