



Over View of Coordination and Notification Procedures (Non-Planned Space Services)

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Contents



Essence of coordination approach Two stage procedure – A, N or C(A), N **Examination of Coordination Request** Publication of CR/C, CR/D and CR/E **Recording in MIFR Resolution 49 and Resolution 552 BR Actions at the end Regulatory Time Limit WRC-15** Results relating to Space Services



One of the Main Purpose of RR is Interference-free operation



Mechanisms to achieve it
(Allocation, Limits, Licensing, Monitoring)
and

- Planned use
- Coordinated Use
- → First Come First Served (subject to some restrictions) and Obligatory Negotiations



Elements of Coordination Approach



- > Publish a planned use of satellite network
- > Fulfil requirements mentioned in the RR
- Negotiate with concerned administrations and get agreements
- ➤ Record the coordinated assignments in the MIFR (Master International Frequency Register) to be taken into account by other administrations



Elements of Coordination Approach



Elements	Relevant Provisions
Procedures	Articles 9 & 11
Submission format	Appendix 4
Technical & operational limits	Article 5, Articles 21&22 etc.
Criteria and methods to identify coordination requirements	Appendix 5 (Appendices 7 and 8)



Coordination Approach



Satellite networks Not subject to Coordination Procedure

Advanced Publication Information

Notification

Start the clock
(7 years to bring into use)
Inform all administrations of any
planned satellite network (certain
Non-GSO) and its general
description
No priority, No examination

Recording in Master Register (international recognition)

(Bringing into use)



ADVANCE PUBLICATION OF INFORMATION ON SATELLITE NETWORKS (Section I of Article 9)



- ➤ Inform all administrations of any planned satellite network (GSO or Non-GSO) and its general description
- Start of regulatory time limit to be recorded in the MIFR and brought into use
- No priority, No examination



Coordination Approach



Satellite networks Subject to Coordination Procedure

Coordination

Advanced Publication Information

Notification

Inform all administrations of any planned satellite network (GSO & Non-GSO) and detailed description Obligatory negotiation (Goal: interference-free operation)

Start the clock (7 years to bring into use)

Recording in Master Register (international recognition)

(Bringing into use)



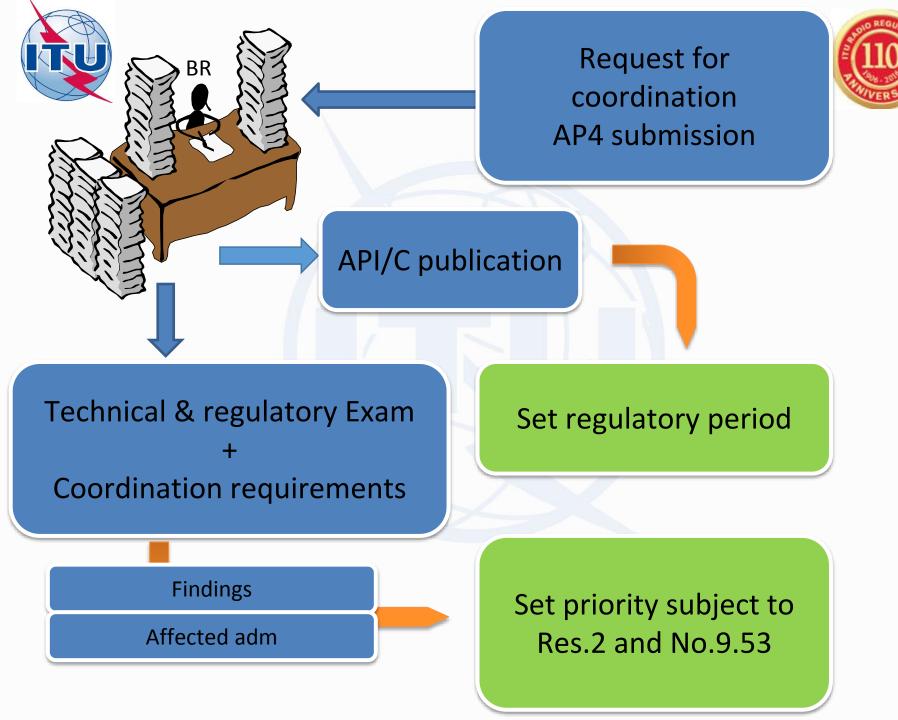
COORDINATION OF SATELLITE NETWORKS



- Section II, Article 9 "Procedure for effecting coordination"
- Contains (almost) all cases of coordination for non-planned satellite networks (GSO and Non-GSO), earth and terrestrial stations
- Not contained in Article 9
 - (1) Non-Planed services w.r.t. Planned services

(see Art 7 of AP30 and AP30A)

(2) BSS sound in the 2.6 GHz w.r.t. Terrestrial Services (See Res 539)





No.9.35 Examination



Examination w.r.t. in conformity with Allocation Table and Other provisions Listed in RoP under No.11.31

Favourable and Unfavourable groups of frequency assignments are split

Findings: Favourable A- Unfavourable N-

Groups with findings N- are not examined further



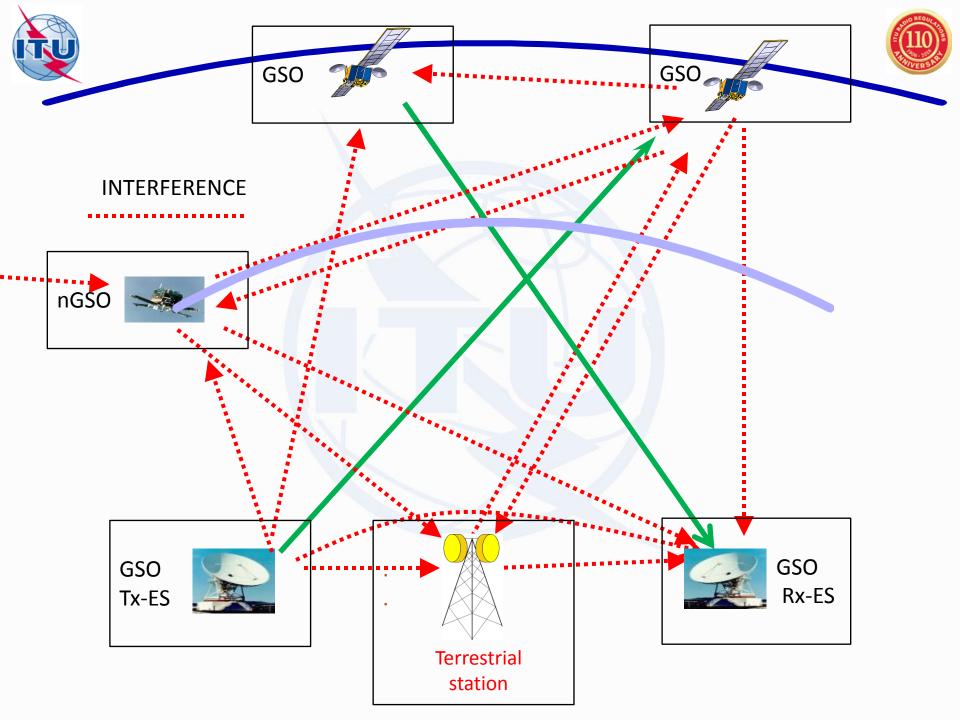
No.9.36 Examination



Coordination Requirement for groups with "A -"

- Establish forms of coordination

 9.7, 9.7A, 9.7B, 9.11, RS33, 9.11A, 9.12, 9.12A, 9.13, 9.14,
 - 9.21/A, 9.21/B, 9.21/C, Ap30/Art.7, Ap30A/Art.7, RS539
- ➤ Identify administrations with which coordination may need to be effected for various forms of coordination
- Identify list of satellite networks





Forms of Coordination



No.9.6:Before BiU or Notify in cases below shall effect coordination (No.9.27/AP 5 -Table 5-1)

Cases	Provision
GSO to GSO	9.7, Art7 AP30/30A
Certain ES of GSO to NGSO	9.7A
NGSO to Certain ES of GSO	9.7B
BSS (GSO/NGSO) to Terrestrial Services	9.11, Res.539
NGSO to NGSO	9.11A/9.12
NGSO to GSO	9.11A/9.12A
GSO to NGSO	9.11A/9.13
NGSO/GSO to Terrestrial Services	9.11A/9.14
the requirement to seek the <u>agreement</u> of other administrations is included in a footnote to the Table of Allocation	9.21

Footnote refers Nos.9.11A – 9.14 or 9.21

No.9.11A (Coordination examined under No.11.32)

e.g. 5.208 The use of the band 137-138 MHz by the **mobile-satellite service** is subject to coordination under No. **9.11A**.

See also RoP Table 9.11A-1; other space services to which 9.11A applies

No.9.21 (Agreement examined under No.11.31)

e.g. 5.286 The band 449.75-450.25 MHz may be used for the space operation service (Earth-to-space) and the space research service (Earth-to-space), subject to agreement obtained under No. 9.21



Criteria and methods for identification



Ap 5 Table 5-1: Forms of coordination, Frequency bands, thresholds/conditions:

TABLE 5-1 (WRC-12)

Technical conditions for coordination (see Article 9)

Reference of Article 9	Case	Frequency bands (and Region) of the service for which coordination is sought	Threshold/condition	Calculation method	Remarks
No. 9.7 GSO/GSO	A station in a satellite network using the geostationary-satellite orbit (GSO), in any space radiocommunication service, in a frequency band and in a Region where this service is not subject to a Plan, in respect of any other satellite network using that orbit, in any space radiocommunication service in a frequency band and in a Region where this service is not subject to a Plan, with the exception of the coordination between earth stations operating in the opposite direction of transmission	1) 3 400-4 200 MHz 5 725-5 850 MHz (Region 1) and 5 850-6 725 MHz 7 025-7 075 MHz 2) 10.95-11.2 GHz 11.45-11.7 GHz 11.7-12.2 GHz (Region 2) 12.2-12.5 GHz (Region 3) 12.5-12.75 GHz (Regions 1 and 3) 12.7-12.75 GHz (Region 2) and 13.75-14.5 GHz	 i) Bandwidth overlap, and ii) any network in the fixed-satellite service (FSS) and any associated space operation functions (see No. 1.23) with a space station within an orbital arc of ±8° of the nominal orbital position of a proposed network in the FSS ii) Bandwidth overlap, and iii) any network in the FSS or broadcasting-satellite service (BSS), not subject to a Plan, and any associated space operation functions (see No. 1.23) with a space station within an orbital arc of ±7° of the nominal orbital position of a proposed network in the FSS or BSS, not subject to a Plan 		With respect to the space services listed in the threshold/condition column in the bands in 1), 2), 3), 4), 5), 6), 7) and 8), an administration may request, pursuant to No. 9.41, to be included in requests for coordination, indicating the networks for which the value of Δ <i>T/T</i> calculated by the method in § 2.2.1.2 and 3.2 of Appendix 8 exceeds 6%. When the Bureau, on request by an affected administration, studies this information pursuant to No. 9.42, the calculation method given in § 2.2.1.2 and 3.2 of Appendix 8 shall be used



Publication : CR/C Special Section



The BR publishes the information (network data) in a Special Section of BR IFIC on DVD-ROM as well as RADIOCOMMUNICATION BUREAU COMMENTS

- Relating to the Findings with respect to No.11.31 (No.9.35 examination)
- ➤ Relating to the coordination examination with respect to No.9.36
 - Administrations identified under all Forms of Coordination
 - List of Satellite networks (9.36.2)
 - Potentially Affected Administrations for some (9.36.1) for information only







UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS

INTERNATIONAL TELECOMMUNICATION UNION

UNIÓN INTERNACIONAL DE TELECOMUNICACIONES

BUREAU DES RAD	IOCOMMUNICATION	IS	RADIOCOMMUNICAT	ION BUREAU	OFICINA DE RADIOCOMUNICACIONES	© I.T.U.					
RÉSEAU À SATELLITE SATELLITE NETWORK RED DE SATÉLITE		X-G1	1	SECTION SPÉCIALE Nº SPECIAL SECTION No. SECCIÓN ESPECIAL N.º	CR/C/411						
STATION TERRIENNE EARTH STATION ESTACIÓN TERRENA				BR IFIC / DATE BR IFIC / DATE BR IFIC / FECHA	2833 / 22.11.2016						
ADM. RESPONSABLE RESPONSIBLE ADM. ADM. RESPONSABLE	LU	LONGITUDE NOMIN NOMINAL LONGITU LONGITUD NOMINA	UDE 5 E	NUMÉRO D'IDENTIFICATION IDENTIFICATION NUMBER NÚMERO DE IDENTIFICACIÓN	16520158						
RENSEIGNEMENTS REÇUS PA	RENSEIGNEMENTS REÇUS PAR LE BUREAU LE / INFORMATION RECEIVED BY THE BUREAU ON / INFORMACIÓN RECIBIDA POR LA OFICINA EL 26.05.2016										
Cette demande de coordination, reçue par le Bureau des radiocommunications en vertu du numéro 9.30 du Règlement des radiocommunications, a été examinée au This request for coordination, received by the Radiocommunication Bureau Radiocommunications de conformidad con el punto Nº 9.30 del Reglement des radiocommunications, a été examinée au vertu du numéro 9.30 du Règlement des radiocommunications, a été examinée au vertu du numéro 9.30 du Règlement des radiocommunications, a été examinée au vertu du numéro 9.30 du Règlement des radiocommunications, a été examinée au vertu du numéro 9.30 du Règlement des radiocommunications, a été examinée au vertu du numéro 9.30 du Règlement des radiocommunications en la conformidat de conformidat con el punto Nº 9.30 del Reglement des radiocommunications en la conformidat con el punto Nº 9.30 del Reglement des radiocommunications en la conformidat con el punto Nº 9.30 del Reglement des radiocommunications en la conformidat con el punto Nº 9.30 del Reglement des radiocommunications en la conformidat con el punto Nº 9.30 del Reglement des radiocommunications en la conformidat con el punto Nº 9.30 del Reglement des radiocommunications en la conformidat con el punto Nº 9.30 del Reglement des radiocommunications en la conformidat con el punto Nº 9.30 del Reglement des radiocommunications en la conformidat con el punto Nº 9.30 del Reglement des radiocommunications en la conformidat con el punto Nº 9.30 del Reglement des radiocommunications en la conformidat con el punto Nº 9.30 del Reglement des radiocommunications en la conformidat con el punto Nº 9.30 del Reglement des radiocommunications en la conformidat con el punto Nº 9.30 del Reglement des radiocommunications en la conformidat con el punto Nº 9.30 del Reglement de Regleme											

titre des numéros 9.35 et 9.36 et est publiée conformément au numéro 9.38. Elle qué dans la colonne de gauche par un X dans la case pertinente.

pursuant to No. 9.30 of the Radio Regulations, has been examined under Nos. | Reglamento de Radiocomunicaciones, se ha examinado de conformidad 9.35 and 9.36 and is published in accordance with No. 9.38. It is subject to the form of coordination indicated in the left-hand column by an X in the relevant box sujeta al formulario de coordinación indicado en la columna de la

con los Nºa 9.35 y 9.36 y se publica de conformidad con el Nº 9.38. Está

/L	un x dans la case pertinente.		izquiero	da con una X en la casilla correspondiente.			
Γ	Type de coordination mentionné dans le Tableau I	Form of coordination referred to in Table I / Forma de coordin	nación mencionada en el cuadro I				
	X 9.7						
L	9.7A			5			
L		Conformément aux numéros 9.50 à 9.52 du Règlement des radiocommunications, les Administrations identifiées	In accordance with Nos. 9.50-9.52 of the Radio Regulations, the Administrations identified in Table I below are requested	De conformidad con los Nºs 9.50-9.52 del Reglamento de Radiocomunicaciones, se solicita a las administraciones			
		dans le Tableau I ci-après sont priées de communiquer	to communicate their decision to the Responsible				
Г		eur décision à l'Administration responsable et au Bureau	administration and the Bureau by the deadline indicated	 decisión a la administración responsable y a la Oficina anter del plazo indicado más abajo. 			
Г	RS539	avant la date limite indiquée ci-dessous.	below.				
	RS33#3						
	Type de coordination mentionné dans le Tableau II.	Form of coordination referred to in Table II / Formulario de c	coordinación remitido al cuadro II				
L	X 9.11						
L	A 9.11A	Les Administrations, énumérées ou non-énumérées dans		Se invita a las administraciones, enumeradas o no en el			
	9.12	e Tableau II ci-après, qui n'acceptent pas la demande de	Administrations listed or not listed in Table II below, which do	cuadro II, que no estén de acuerdo con la solicitud de			

9.12A 9.13 Х 9.14 9.21/A 9.21/B 9.21/C RS33#2.1

coordination au titre des numéros 9.11 à 9.14, 9.21 et RS33#2.1, sont priées de communiquer leurs observations à l'Administration responsable et au Bureau avant la date imite indiquée ci-dessous. Toute Administration qui ne éagira pas au titre du numéro 9.52 avant cette date limite sera considérée comme n'étant pas défavorablement nfluencée et, dans les cas couverts par les numéros 9.11 à 9.14 et RS33#2.1, les dispositions des numéros 9.48 et 9.49 s'appliqueront

not agree to the request for coordination under Nos. 9.11 to 9.14, 9.21 and RS33#2.1 are requested to communicate their comments to the responsible administration and the Bureau by the deadline indicated below. Any administration not responding under No. 9.52 within this deadline shall be regarded as unaffected and, in the cases of Nos. 9.11 to 9.14 and RS33#2.1, the provisions of Nos. 9.48 and 9.49 shall coordinación de conformidad con los Nºa 9.11 a 9.14, 9.21 v RS33#2.1 que comuniquen sus observaciones a la administración responsable y a la Oficina dentro del plazo indicado más abajo. Se considerará que toda administración que no responda de conformidad con el Nº 9.52 dentro del plazo señalado, no está afectada y, en el caso de los Nº 9.11 a 9.14 y RS33#2.1, se aplicarán las disposiciones de los Nº 9.48

DATE LIMITE POUR LA DÉCISION 🖟 XPIRY DATE FOR DECISION / FECHA LÍMITE PARA LA DECISIÓN

22.03.2017





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			Tableau I /Table L/Cuadro I /妻一 /Таблица I / I /لحدة الحدة المعادلة / Таbleau I / Таблица I / I	
	Disposition / Provision / Disposición / 条款 /	Résumé des conditions régissant la coordinatio	Summary of coordination requirements	Resumen de los requisitos de coordinación
	الحكم / Положение	协调要求概述	Сводные потребности в координации	موجز بمتطلبات التنسيق
x	9.7		, BLR, BUL, CAN, CHN, CLM/ASA, CLM, CTI/RAS, CYP, CZE, D/EL MEX, MLA, MNG, NCG, NIG, NOR, PAK, PNG, QAT, RUS/IK, RUS,	
	9.7A			
	9.7B			
x	AP30#7.1	G, GHA, GNB, GNE, GRC, HNG, HOL, HRV, I, INS, IR	BDI, BEL, BFA, BHR, BOT, BUL, CAF, CAN, CHN, CME, COM, CV N, ISR, J, JOR, KEN, KOR, KWT, LBN, LIE, LSO, MAU, MCO, MDA, JS, S, SDN, SEN, SEY, SOM, SRB, SRL, SVK, SWZ, SYR, TUN, T	MKD, MLA, MLT, MOZ, MTN, MWI, NCG, NIG, NMB,
X	AP30A#7.1	AFS, LSO, MCO, MWI, S, SWZ		
	RS539			
	RS33#3			

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<u> </u>												
			Tableau II /Table II /Cuadro II /表二 /Таблица II / الجدول II / ا									
		osition / Provision / posición / 条款 /	Administrations susceptibles d'être défavorablement influencées (à titre d'information uniquement, voir numéro 9.36.1) Potentially affected administrations (for information only, numéro 9.36.1) A ministraciones posiblemente afectadas (sólo para see No. 9.36.1) información, véase el N° 9.36.1)									
		الحكم / оложение	可能受影响的主管部门(仅供参考,见第 9.36.1款) Потенциально затрагиваемые администрации (исключительно для информации, см. п. 9.36.1)									
x	9.11	ı	AFG, ARG*, ATG, AUS/HMD, B*, BAH, BHR, BLR, BOL, BRB, CAN*, CHL, CHN, CLM, CLN, CUB, CVA, CZE, D, DMA, DNK/FRO, DNK/GRL, DOM, E/CNR, E, EGY, EST*, F/AMS, F/BLM, F/CRO, F/GLP*, F/KER, F/MAF*, F/MRT*, F/MYT, F/REU, F/SPM, F, FIN*, G/AIA, G/BER, G/DGA, G/FLK, G/MSR, G/TCA, G/VRG, G*, GNB, GRC GUY, HOL/ABW, HOL/BES, HOL/CUW, HOL/SXM, HRV, HTI, I, IND, IRN*, ISL, ISR, KAZ, KGZ*, KNA, LCA, LTU, MLD, MLT, NOR*, NPL, OMA, PAK, POL, PRG*, PR RRW, RUS*, S, SEN, SUI, SUR, SVK, SVN, SYR, TJK, TKM, TRD, UAE, UKR, URG, USA/PTR*, USA/VIR, USA*, UZB*, VCT, VEN, YEM									
X	9.11	IA										
		9.12										
		9.12A										
	X	9.13	ARG, AUS, CAN, CHN, CYP, D, E, F/GLS, F, G, LIE, NOR, PNG, RUS, USA									
	x	9.14	AFG, AFS/MRN, AFS, AGL, ALB, ALG, AND, ARG*, ARM, ARS*, ATG, AUS/HMD, AUT*, AZE, B*, BAH, BDI, BEL*, BEN, BFA, BHR*, BIH*, BLR*, BOL, BOT, BRB*, BUL, CAF, CAN*, CHL*, CHN*, CLM, CLN*, CME, COD, COG, COM, CPV, CTI, CUB*, CVA, CVP, CZE*, D*, DJI*, DMA, DNK/FRO, DNK/GRL, DNK*, DOM, E/CNR*, E*, EGY*, EQA, ERI*, EST, ETH, F/AMS, F/BLM, F/CRO, F/GLP*, F/GUF, F/KER, F/MAF, F/MRT, F/MYT, F/REU*, F/SPM, F*, FIN*, G/AIA, G/ASC, G/BER, G/DGA, G/FLK, G/CGCA, G/GIB, G/MSR, G/SHN, G/TCA, G/TRC, GV/RG, G*, GAB, GEO, GHA, GMB, GNB*, GNE*, GRD, GUI, GUY, HNG, HOL/ABW, HOL/BEB, HOL/CUW, HOL/SXM, HOL, HRV*, HTI, IND*, IRL*, IRN*, IRQ, ISL, ISR*, JOR*, KAZ, KEN, KGZ*, KNA, KWT*, LBN, LBR, LBY, LCA, LIE, LSO, LTU, LVA*, MAU/ROD, MAU, MCO, MDA, MDG, MKD*, MLD, MLI, MLT, MNE*, MOZ, MRC*, MTN, MWI, NGR, NIG*, NMB, NOR/BVT, NOR*, NPL, OMA*, PAK*, POL, POR/AZR, POR/MDR, POR*, PRG*, PRU, QAT*, ROU, RRW, RUS*, S*, SDN, SEY, SMR, SOM, SRB*, SRL, SSD, STP, SUII*, SUII*, SUI*, SVK*, SVN*, SWZ, SYR*, TCD, TGO, TJK, TKM, TRD, TUN, TUR*, TZA, UAE*, UGA, UKR*, URG*, USA/D*, USA/PTR*, USA/JR*, USA, UZB, VCT, VEN, XZZ//AOE*, XZZ//XBY, XZZ/XBY, XZZ/XWB, YEM*, ZMB, ZWE,									
X	9.21	I/A¹	ARS/ARB, ARS, AUS, B, BEL, BLR, CAN, CHN, CYP, D, E, EGY, F, G, I, IND, INS, IRN, IRQ, ISR, J, KOR, LAO, MLA, NOR, PAK, PNG, QAT, RUS/IK, RUS, S, THA, TUR, UAE, USA									
X	9.21	I/B ¹	ARG, ARS, CAN, E, NOR, RUS, USA									
X	9.21	I/C¹	ARG, ARM, ARS, AZE, BEL, BLR, CAN, CHL, CHN, CUB, CZE, D, E/CNR, E, F/SPM, F, G, GRC, HNG, HRV, I, IRL, IRN, KAZ, KGZ, LTU, MDA, MRC, OMA, PRG, RUS, S, SEN, SVK, SVN, SYR, UKR, USA/PTR, USA, UZB									
	RS3	33#2.1										





OBSERVATIONS	DU	BUREAU	DES
RADIOCOMMUNICA	ATIONS		

Relatives à la Conclusion conformément au Nº 11.31

Faisceau RC1R, assignation de fréquence 5 775 MHz (EI)

DEFAVORABLE

Hors bande. Classe de station non conforme au Tableau d'attribution des fréquences.

Assignation de fréquence 13 875 MHz pour la station terrienne d'émission TYPICAL KU3 (1.20M) avec une densité maximale de puissance =-55 dBW/Hz et une valeur maximale de la puissance en crête =4.2 dBW

DEFAVORABLE

Non conforme au numéro 5.503

 densité de p.i.r.e. >33.6 dB(W/40 kHz) dans la bande 13.77 – 13.78 GHz

Faisceau RU1R, assignations de fréquence 14 125 et 14 375 MHz pour la station terrienne de navire d'émission TYPICAL-KU4 (classe de station TG) avec p.i.r.e. supérieure à 21 dBW

DEFAVORABLE

Non conforme au numéro 5.506A (CMR-03)

• Gain d'antenne maximum dBi (Diamètre d'antenne < 1,2 m)

RADIOCOMMUNICATION BUREAU COMMENTS

Relating to the Findings with respect to No. 11.31

Beam RC1R, frequency assignment 5 775 MHz (EI)

UNFAVOURABLE

Out-of-band. Class of station not in accordance with the Table of Frequency Allocations.

Frequency assignment 13 875 MHz to transmitting earth station TYPICAL KU3 (1.20M) with maximum power density =-55 dBW/Hz and maximum peak power =4.2 dBW

UNFAVOURABLE

Not in accordance with No. 5.503

e.i.r.p. density >33.6 dB(W/40 kHz) in the 13.77
 13.78 GHz band.

Beam RU1R, frequency assignments 14 125 and 14 375 MHz to transmitting ship earth station TYPICAL-KU4 (class of station TG) with e.i.r.p. greater than 21 dBW

UNFAVOURABLE

Not in accordance with No. 5.506A (WRC-03)

Maximum antenna gain dBi (antenna diameter
 1.2 m)

OBSERVACIONES DE LA OFICINA DE RADIOCOMUNICACIONES

Relativas a la Conclusión según N.º 11.31

Haz RC1R, asignación de frecuencia 5 775 MHz (EI)

DESFAVORABLE

Fuera de banda. Clase de estación no se ajusta al Cuadro de Atribución de Frecuencias.

Asignación de frecuencia 13 875 MHz a la estación terrena transmisora TYPICAL KU3 (1.20M) con una densidad máxima de potencia =-55 dBW/Hz y un valor máximo de la potencia de cresta =4.2 dBW

DESFAVORABLE

No es conforme con el número 5.503

 densidad de p.i.r.e. >33.6 dB(W/40 kHz) en la banda 13.77 – 13.78 GHz.

Haz RU1R, asignaciones de frecuencia 14 125 y 14 375 MHz a la estación terrena de barco transmisora TYPICAL-KU4 (clase de estación TG) con p.i.r.e. mayor de 21 dBW

DESFAVORABLE

No es conforme con el número 5.506A (CMR-03)

 Ganancia máxima de antena dBi (Diámetro de antena < 1,2 m)





Relatives à l'examen conformément au Nº 9.36

Voir les pages 3-4 pour le résumé. Pour plus de détails, voir les pages qui suivent.

关于根据第 9.36 款的审查

见第 3-4 页的概述。详细情况见以下各页。

Relating to the examination with respect to No. 9.36

See pages 3-4 for the summary. Details are provided on pages that follow.

Relativas al examen según N.º 9.36

Véanse las páginas 3-4 para el resumen. Se indican los detalles en las páginas siguientes.

Относительно экспертизы по п. 9.36

Сводные данные см. на стр. 3-4. Подробная информация приводится на следующих страницах.

المتعلقة بالتفحص وفقاً للرقم 36.9

انظر الصفحتين 3-4 للاطلاع على الملخص. وللمزيد من التفاصيل انظر الصفحات التالية.

I. Nécessité d'une coordination au niveau du grouge I. Coordination requirements at group level 一、需要在组的层次进行的协调

- І. Потребности в координации на уровне группы
- I. Requisitos de coordinación a nivel de grupo

متطلبات التنسيق على مستوى المجموعة

B1a Beam designation FCN	B2 Emi-Rcp R	BR7a Group id. 116683191	GHz		elta T/T		De	Ho T/T								
designation		•		D(U - T.T	•		elta T/T		Delta T/T		Arc de coordination		•	Arco de coordinación	
FCN	R	116683191			elta T/T		Дел	льта Т/Т		Т/Т	دلتا ۲	协调	310	Дуга коорд	инации	قوس التنسيق
			5			-						ARS/ARB ETH QAT	CYP F RUS/IK	CZE MLA RUS	D NOR S	EGY PNG UAE
		116683192	5									ARS/ARB E IRN RUS/IK USA	CTI/RAS EGY MLA RUS	CYP ETH NOR S	CZE F PNG TUR	D G QAT UAE
		116683193	5									ARS/ARB ETH QAT	CYP F RUS/IK	CZE MLA RUS	D NOR S	EGY PNG UAE
		116683194	5									ARS/ARB E IRN RUS/IK USA	CTI/RAS EGY MLA RUS	CYP ETH NOR S	CZE F PNG TUR	D G QAT UAE
L1R	R	116683195	1		RS CA		HN PAK	EGY RUS	F S	G THA	HOL UAE					
		116683196	1	HOL 1	RS B NS J AE US	M	AN IEX	CHN MLA	EGY PAK	F RUS	G S					
		116683197	1		RS CA		HN AK	EGY RUS	F S	G THA	HOL UAE					





II. Liste des réseaux à satellite (voir N° 9.36.2] 二、卫星网络清单(见第9.36.2款) II. List of satellite networks (see No. 9.36.2)
II. Список спутниковых сетей (см. п. 9.36.2)

II. Lista de redes de satélite (véase el N.º 9.36.2)

II. قائمة بالشبكات الساتلية (انظر الرقم 2.36.9)

Liste des réseaux à satellite pour lesquels Delta T/T > 6% est identifié dans le cas l'uniquement (réseau utile et réseau brouilleur utilisant en partage la même bande de fréquences dans le même sens de transmission) ou qui sont situés à l'intérieur de l'arc de coordination (au titre du N° 9.7)

List of satellite networks for which Delta T/T > 6% identified under Case I only Wanted and interfering networks sharing the same frequency band in the same direction of transmission) of which are within the coordination arc (under No. 9.7)

Lista de redes de satélites para los que Delta T/T > 6% identificadas con arreglo al Caso I solamente (Redes deseada e interferente que comparten la misma banda de frecuencias en la misma dirección de transmisión) o que se encuentran dentro del arco de coordinación (según N.º 9.7)

仅在情形一(使用网络和干扰网络在同一传输方向上共用同一个频段)中由于Delta T/T > 6%,或落入协调弧之内 而得到确认的卫星网络清单(依据 9.7)

Список спутниковых сетей, для которых критерий Дельта Т/Т > 6% определен в рамках только случая I (полезная и мешающая сети, совместно использующие одну и ту же полосу частот для передачи в одном и том же направлении) или которые располагаются в пределах координационной дуги (согласно № 9.7)

قائمة الشبكات الساتلية التي تكون فيها النسبة دلتا ك7T>6 محددة في الحالة ! فقط (الشبكتان للطلوبة والمسببة للتداخل تنقاسمان نطاق التردد نفسه في اتجاه الإرسال نفسه) أو التي تدخل ضمن قوس التنسيق (بموجب الرقم

(7.9)

A1f1 Notifying adm.	A1f3 Inter. sat. org.	A1a Sat. Network	A4a1 Orbital long.	BR3b Category of notif.	BR25 A/T	BR6a Id. no.	BR26 Causing interference	BR27 Receiving interference	BR28 Detected by coord. arc
ALG		ALCOMSAT-24.8W	24.8 W	C	A	113520121	C	R	
		ALCOMSAT-27.6W	27.6 W	C	A	114520218	C	R	
ARG		ARSAT-C	81 W	C	A	110520406	C	R	
		ARSAT-D	81 W	C	A	113520066	C	R	
		ARSAT-F	91.5 W	C	A	115520101	C	R	
		ARSAT-G	72 W	C	A	115520102	C	R	
		ARSAT-H	38.5 W	С	A	115520103	C	R	
		P-P-SAT-1	81 W	N	A	105500330	C		

Liste des réseaux à satellite pour lesquels Delta T/T > 6% est identifié dans le cas II uniquement (réseau utile et réseau brouilleur utilisant en partage la même bande de fréquences dans des sens de transmission poposés (utilisation bidirectionnelle)) (au titre du N° 9.7)

List of satellite networks for which Delta T/T > 6% identified under Case II only (Wanted and interfering networks sharing the same frequency band in opposite directions of transmission (bidirectional use)) (under No. 9.7)

Lista de redes de satélites para los que Delta T/T > 6% identificadas con arreglo al Caso II solamente (Redes deseada e interferente que comparten la misma banda de frecuencias en direcciones opuestas de transmisión (uso bidireccional)) (según N.º 9.7)

仅在情形二(使用网络和干扰网络在相反传输方向上共用相同频段(双向使用))中由于Delta T/T > 6%而得到确认的卫星网络清单(依据 9.7)

Список спутниковых сетей, для которых критерий Дельта Т/Т > 6% определен в рамках только случая II (полезная и мешающая сети, совместно использующие одну и ту же полосу частот при передаче в противоположных направлениях (реверсивное использование частот)) (согласно № 9.7)

قائمة الشبكات الساتلية التي تكون فيها النسبة دلتا %5<T/T محددة في الحالة !! فقط (الشبكتان المطلوبة والمسببة للتداخل تتقاسمان نطاق التردد نفسه في اتجاهي الإرسال المتعاكسين (استخدام ثنائي الاتجاه)) (بموجب الرقم 7.9)

A1f1 Notifying	A1f3 Inter. sat.	A1a Sat. Network	A4a1 Orbital long.	BR3b Category of	BR25 A/T	BR6a Id. no.	BR26 Causing	BR27 Receiving	
adm.	org.			notif.			interference	interference	
ARS	ARB	ARABSAT 8C-20E	20 E	C	A	113520016		R	
		ARABSAT 8D-7.5E	7.5 E	C	A	113520017	C	R	
		ARABSAT 8G-11E	11 E	C	A	113520020	C	R	
		ARABSAT 8H-17E	17 E	C	A	113520021		R	





III. Administrations susceptibles d'être défavorablement influencées au niveau du groupe (à titre d'information uniquement, voir N° 9.36.1) 三、在组的层面潜在的受干扰的主管部门(仅供参考, 见 III. Потенциально затрагиваемые администрации на 第9.36.1款)

III. Potentially affected administrations at group level (for information only, see No. 9.36.1)

уровне группы (исключительно для информации, см. п. 9.36.1)

III. Administraciones posiblemente afectadas a nivel de grupo (sólo para información, véase el N.º 9.36.1)

الله الإدارات التي يحتمل أن تتأثر تأثراً غير مؤات على مستوى المجموعة (انظر الرقم 1.36.9 للعلم فقط)

B1a	B2	BR7a	GHz	Administra	tione ellecen	tiblee d'âtre	défavorable	ment Pot	entially affec	ted administ	ratione unde	r No. 0 11 .	Administrac	ionae noeihl	amente afec	tadas según N.º	
Dia	D2	DIVIA	OHZ		influencées			ment For	entially affect	tou auminist	rations unde	1140. 3.11	Auministrac		9.11	tadas soguir iv.	
Doom.	Emi-Rcp	Crown id		1													
Beam	Emi-Rcp	Group id.			潜在的受干技	九的土官部1、	9.11	· AA	министраци	и, потенциа	•	иваемые	الإدارات التي يحتمل أن تتأثر بموجب الرقم 11.9 ^e				
designation										согласно N	9.11						
TA2R	E	116683120	17	AFG	ARG	ATG	AUS/HMD	В	BAH	BOL	BRB	CAN	CHL	CHN	CLM	CLN	
				CUB	DMA	DNK/FRO	DNK/GRL	DOM	EQA	EST	F/AMS	F/BLM	F/CRO	F/GLP	F/KER	F/MAF	
				F/MRT	F/SPM	FIN	G/AIA	G/BER	G/DGA	G/FLK	G/MSR	G/TCA	G/VRG	G	GRD	GUY	
				HOL/ABW	HOL/BES	HOL/CUW	HOL/SXM	HTI	IND	IRN	ISL	KAZ	KGZ	KNA	LCA	MLD	
				NOR	NPL	PAK	PRG	PRU	RUS	S	SUR	TJK	TKM	TRD	URG	USA/PTR	
				USA/VIR	USA	UZB	VCT	VEN									
TL1R	E	116683146	1	ARG	В	BHR	BLR	CAN	CVA	CZE	D	E/CNR	E	EGY	EST	F/MYT	
				F/REU	F	FIN	G	GNB	GRC	HRV	I	IRN	ISR	LTU	MLT	NOR	
				OMA	POL	QAT	RRW	RUS	SEN	SUI	SVK	SVN	SYR	UAE	UKR	USA/PTR	
				USA	YEM												
		116683147	1	ARG	В	BHR	BLR	CAN	CVA	CZE	D	E/CNR	E	EGY	EST	F/MYT	
				F/REU	F	FIN	G	GNB	GRC	HRV	I	IRN	ISR	LTU	MLT	NOR	
				OMA	POL	QAT	RRW	RUS	SEN	SUI	SVK	SVN	SYR	UAE	UKR	USA/PTR	
				USA	YEM												

B1a	B2	BR7a	GHz		ns susceptibles d'être défavorablement luencées au titre du N° 9.13	Pote	entially affected administrations under No. 9.13	Admir	nistraciones posiblemente afectadas según N.º 9.13
Beam designation	Emi-Rcp	Group id.			在的受干扰的主管部门 9.13	Адм	министрации, потенциально затрагиваемые согласно № 9.13		13.9 الإدارات التي يحتمل أن تتأثر بموجب الرقم
L1R	R	116683195	1	CHN F	,				
		116683196	1	CHN F	,				
		116683197	1	CHN F	,				
		116683198	1	CHN F	,				
		116683199	1	CHN F	•				
		116683200	1	CHN F	•				
LGU	R	116683201	1	CHN F	,				
		116683202	1	CHN F	,				
		116683203	1	CHN F	•				
		116683204	1	CHN F	,				
		116683205	1	CHN F	•				
		116683206	1	CHN F	•				
		116683207	1	CHN F	,				



No more split of network for 21.4-22GHz BSS



- 21.4-22 GHz portion of a request for coordination has been removed and published in a separate special section (CR/F) with the satellite name with "_1"
- ➤ Splitting will stop for all requests for coordination received after 01.01.2017
- When the special procedure under Res.553 has been requested, the notice will still be treated independently and will be published in a CR/F special section



Comment on CR/C



- An administration having received a request for coordination (through publication of CR/C) shall examine the matter with respect to interference which may be caused to, or caused by, its own assignments
- inform the requesting administration and the BR within four months from the date of publication of the BR IFIC of either:
 - its agreement to the proposed use, or
 - its disagreement, giving <u>reasons for the</u>
 <u>disagreement</u>



Final Coordination Requirement



Special Section	Provision	Methods	Final/Subject
List of Adms in CR/C	9.7, Art7 of AP30/30A	ΔT/T, pfd mask	Final
List of Adms in CR/C	9.7 (9.7A, 9.7B)	Coordination Arc (Band Overlap, EPFD)	Subject to request for inclusion or exclusion under Nos.9.41/9.42
List of Adms in 21.4-22GHz band in CR/C and CR/F	9.7	Coordination Arc, pfd mask	Final, 9.41 does not apply
List of Adms in CR/C	9.11 to 9.14, 9.21	Band Overlap, eirp, pfd mask	Subject to comment under No.9.52



CR/E Publication (No.9.42)



- An Adm <u>requests for inclusion</u> or exclusion of adm/network as coordination requirement under No.9.41 using SpaceCom <u>within 4 month</u>
- ➤ No request within 4 month means agreement to the requirements published in CR/C (No.9.43)
- CR/E contains list of administrations/ satellite networks, requested and confirmed by the Bureau for inclusion (No.9.42)
- Final List of coordination requirements (Adms and networks) published in <u>CR/E + CR/C</u>
- ➤ During coordination additional networks can be included with mutual agreement (No.9.42.1)





UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS BUREAU DES RADIOCOMMUNICATIONS

INTERNATIONAL TELECOMMUNICATION UNION RADIOCOMMUNICATION BUREAU

UNIÓN INTERNACIONAL DE TELECOMUNICACIONES

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RÉSEAU À SATELLITE SATELLITE NETWORK RED DE SATÉLITE		SAT-12.5	E	SECTION SPÉCIALE Nº SPECIAL SECTION No. SECCIÓN ESPECIAL N.º	CR/E/111	
STATION TERRIENNE EARTH STATION ESTACIÓN TERRENA				BR IFIC / DATE BR IFIC / DATE BR IFIC / FECHA	2833 / 22.11.201	6
ADM. RESPONSABLE RESPONSIBLE ADM. ADM. RESPONSABLE	UR	LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL	12.5 E	NUMÉRO D'IDENTIFICATION IDENTIFICATION NUMBER NÚMERO DE IDENTIFICACIÓN	15520262	

x	9.41/9.7	1.	La présente Section spéciale est publiée conformément au numéro 9.42 du Règlement des radiocommunications, en ce qui concerne la demande de coordination publiée dans la Section spéciale CR/C citée en référence au	1.	This Special Section is published in accordance with No. 9.42 of the Radio Regulations, in respect of the request for coordination published in the CR/C Special Section referenced at the bottom of this page.	1.	Esta Sección Especial se publica de conformidad con el número 9.42 del Reglamento de Radiocomunicaciones al respecto de la solicitud de coordinación publicada en la Sección Especial CR/C indicada al final de esta página.
	9.41/9.7A	2.	bas de cette page. Les administrations qui ont soumis des observations au titre du numéro.9.41 dans les quatre mois qui ont suivi la publication des	2.	Administrations that have submitted comments under No.9.41 within four months of the date of publication of the mentioned CR/C Special Sections, with respect to	2.	Las Administraciones que han presentado comentarios con arreglo al número 9.41 en el plazo de cuatro meses a partir de la fecha de
	9.41/9.7B		Sections spéciales susmentionnées, en ce qui concerne la forme de la coordination indiquée dans la colonne de gauche par un X dans la case appropriée, sont énumérées dans le Tableau 1 ci après.		the form of coordination indicated in the left-hand column by an X in the relevant box, are listed in Table-I, below.		publicación de la mencionada Sección Especial CR/C, con respecto al fomulario de coordinación indicado en la columna izquierda introduciendo una X en la casilla correspondiente, se indican en el Cuadro-I, que a parece más adelante.

RÉFÉRENCE DE LA SECTION SPÉCIALE (BR IFIC / DATE) SPECIAL SECTION REFERENCE (BR IFIC / DATE) REFERENCIA DE LA SECCIÓN ESPECIAL (BR IFIC / FECHA)

Administrations incluses dans le

processus de coordination

CR/C/394 (BR IFIC 2821 / 07.06.2016)

Tableau I /Table I /Cuadro I /表一/ Таблица I / الجلدول I / Таблица I / الجلدول ا

1	Die	sposición / 条款 /	processus de coordination.	coordination process		. Pin	o cocuminatino d	6 0001	umacion	- 1							
l		م الحکم / оложение	协调过程中包括的主管部门	Администрации, включенные в координации	I. Nécessi	! ité d'une co 生组的层次说		au ni	veau du g	roupe				nts at group l	evel овне группы		sitos de coordinacio
I	X	9.41 / 9.7	BUL, EGY, G, KOR, UAE, USA		\ III \ X \	THINA IVA	C 11 H3 M3 44				poo		поорди				توى المجموعة
ſ		9.41 / 9.7A															
I		9.41 / 9.7B					iées au titre du		/9.7 par :					der No. 9.41/9.7 b		Administr	aciones identificadas seg
						根据第9.41/9.	.7款识别的主管	部门:		4	Администрац	ии, иденти	фицирова	нные согласно п	. 9.41/9.7:	-	دة وفقاً للرقم 7.9/41.9 بموجب
		II. Liste des rése	eaux à satellite	II. List of satellite networks	B1a	B2	BR7a	GHz			Delta T/T		:		Delta T/T	:	Delt
		二、卫星网络清单	单	II. Список спутниковых сетей	Beam designation	Emi-Rcp	Group id.				Delta T/T				Дельта Т/Т		Т/Т
				_	RKA	R	115729640	29	BUL	EGY	G	KOR	UAE	USA			

115729648

19 BUL

EGY

KOR

UAE

USA

Administraciones incluidas en el

procedimiento de coordinación

Liste de

Disposition / Provision /

List of satellite networks for which Delta T/T > 6% but are NOT within the coordination arc (under No. 9.7)

Administration included in the

coordination process

Lista de redes de satelltes para las cuales Δ1/1 > 6% pero NO se encuentran dentro del arco de coordinación (según N.º 9.7)

Delta T/T > 6%但并不属于协调弧范围的卫星网络清单(依据 9.7)

Перечень спутниковых сетей, для которых Delta T/T > 6%, однако НЕ находится в пределах координационной дуги (согласно № 9.7)

قائمة الشبكات الساتلية التي تكون فيها النسبة > 6% ΔT/T ولكنها ليست ضمن قوس التنسيق (بموجب الرقم 7.9)

A1f1 Notifying adm.	A1f3 Inter. sat. org.	A1a Sat. Network	A4a1 Orbital long.	BR3b Category of notif.	BR25 A/T	BR6a Id. no.	BR26 Causing interference	BR27 Receiving interference
BUL		BULSAT-1.9E	1.9 E	C	A	112520195	C	R
EGY		EGJAN1A	7 W	C	A	114520032	C	R
		POTAMOA	c w	C	2	114520070	C	D



CR/D Publication (No.9.53A)



- An Adm <u>informs its disagreement</u> under No.9.52 using SpaceCom <u>within 4 month</u>
- No disagreement within 4 month means agreement to the proposed assignments in CR/C (No.9.52C)
- CR/D contains list of administrations having submitted their disagreement (No.9.53A)
- <u>Final List of coordination requirements</u> (Adms) published in <u>CR/D</u>





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BONDAG DEG NADIOCCIVIIV	TABLE COMMENT	CATION BONEAU	TV	Q 1.11.Q.
RÉSEAU À SATELLITE SATELLITE NETWORK RED DE SATÉLITE	SS-G5	SECTION SPÉCIALE Nº SPECIAL SECTION No. SECCIÓN ESPECIAL N.º	CR/D/302	
STATION TERRIENNE EARTH STATION ESTACIÓN TERRENA		BR IFIC / DATE BR IFIC / DATE BR IFIC / FECHA	2832 / 08.11.20	16
ADM. RESPONSABLE RESPONSIBLE ADM. ADM. RESPONSABLE	LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL	NUMÉRO D'IDENTIFICATION IDENTIFICATION NUMBER NÚMERO DE IDENTIFICACIÓN	15520230	

x	9.11		La présente Section spéciale est publiée conformément au numéro 9.53A du Règlement des	This Special Section is published in accordance with No. 9.53A of the Radio Regulations, in	Esta Sección Especial se publica de conformidad con lo dispuesto en el número 9.53A del			
x	9.11	A	radiocommunications, et concerne la demande de coordination publiée dans la section spéciale CR/C indiquée au bas de cette	respect of the request for coordination published in the CR/C Special Section referenced at the bottom of this page.	Reglamento de Radiocomunicaciones, en lo que respecta a la solicitud de coordinación publicada en la Sección Especial CR/C cuya referencia se indica en el extremo de			
		9.12	page.	page.	esta página.			
		9.12A	Les administrations qui ont soumis des observations au titre du numéro 9.52 dans le délai de quatre mois suivant la	Administrations that have submitted comments under No. 9.52 within four months of the date	En los Cuadros I y II que figuran a continuación se enumeran las administraciones que han presentado			
	X	9.13	concernant le type de coordination indiqué par une croix (X)	of publication of the mentioned CR/C Special Section, with respect to the form of coordination indicated in the left-hand column by an X in the relevant box, are listed in				
	x	9.14	indiquées dans les Tableaux I et II ci-dessous.	Tables I and II below.	de coordinación indicado en la columna de la izquierda mediante una X en el casillero correspondiente.			
X	9.21/A		Conformément au numéro 9.52C, toute administration autre que celles qui ont formulé des observations dans le délai réglementaire, sera réputée ne pas être affectée,	 Pursuant to No. 9.52C, any administration other than those having submitted comments within the regulatory time-limit shall be regarded as unaffected, and 	Según lo dispuesto en el 9.52C, tod administración que no haya presentado comentarios en el plazo de tiempo reglamentario se considerará como n			
x	9.21	/B	et dans le cas de demande de coordination au titre des numéros 9.11 à 9.14 les dispositions des numéros 9.48 et 9.49	in the case of coordination requests under Nos. 9.11 to 9.14 the provisions of Nos. 9.48 and 9.49 shall apply.	afectada, y a las peticiones de coordinación previstas en los números 9.11 a 9.14 se le aplicarán las disposiciones			
X	9.21	/C	s'appliqueront.		de los números 9.48 y 9.49.			
	RS3	3#2.1						

RÉFÉRENCE DE LA SECTION SPÉCIALE (BR IFIC / DATE) SPECIAL SECTION REFERENCE (BR IFIC / DATE) REFERENCIA DE LA SECCIÓN ESPECIAL (BR IFIC / FECHA)

CR/C/391 (BR IFIC 2818 / 26.04.2016)

Tableau I /Table I /Cuadro I /表一/ Таблица I / I الجدول

Tableau II / Table II / Cuadro II / 表二 / Таблица II / II / 具止止し

	Disposition / Provision / Disposición / 条款 / Положение / الحكم		Récapitulatif des coordinations à effectuer	Summary of coordination requirements Res						
			协调要求概述	Сводные данные о будущей координации						
Х	9.11		AUS, BHR, CZE, D, E/CNR, E, EGY, F/MYT, F/R	EU, F, G, GRC, HRV, I, IRN, ISR, J, LTU, NOR, OMA, QAT,						
X	9.11A									
		9.12								
		9.12A								
	X	9.13	AUS, CAN, CHN, CYP, D, F/GLS, F, G, LIE, LUX, NOR, PNG, RUS, USA							
	X	9.14	F/KER, F/MYT, F/REU, F, G/ASC, G/DGA, G/GCA	S/ICO, AUS, AZE, BHR, CHN/HKG, CHN/MAC, CHN, CTI, A, G/GIB, G/SHN, G/TRC, G, GRC, I, IRN, IRQ, ISR, J, KAZ , SUI/I, SUI, THA, TUN, TUR, UAE, UKR, USA/D, UZB, VTI						
X	9.21A		ARS, AUS, AZE, B, CHN, CYP, D, E, EGY, F, G,	INS, IRN, IRQ, ISR, J, LUX, MLA, NOR, PAK, PNG, QAT, F						
X 9.21B			CAN, NOR							
X 9.21C ARM, ARS, AUS, AZE, BHR, BLR, CHN, D, E/CNR, E, EGY, F, G, GRC, HRV, I, IRN, KAZ, KGZ,										
	RS33#	¥2.1		· .						

Nécessité d'une coordination au niveau du groupe / Coordination requirements at group level / Requisitos de coordinaci 在组的层次进行的协调 / Требования на координацию на уровне группы / غلبوت التسبق على مستوى الجموعة

î [B1a	B2	BR7a	BR47	1							,
1	Beam	Emi-Rcp	Group id.	Frequency band (MHz)	1					No.9	J.11	,
. [designation	<u> </u>		1								
	BS2R	E	115713798	1467.000 - 1492.000	AUS	BHR	CZE	D	E/CNR	E	EGY	F/MYT
.	i l		1 '	1	GRC	HRV	I	IRN	ISR	J	LTU	NOR
-	ı l	· '	1 '	1	SUI	UAE	UKR					,
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B1a	B2	BR7a	BR47	
Beam	Emi-Rcp	Group id.	Frequency band (MHz)	No.9



Coordination Approach



Earth Station Coordination Procedure

Coordination

Notification

Inform concerned administrations of detailed descriptions of planned earth stations (no publication, no identification of affected administrations by the Bureau)

Earth stations should be associated with a satellite network for which API and/or CR have been published

Recording in Master Register (international recognition)

(Bringing into use by the Planned date)



Article 11 Notification



- Assignments (final characteristics) have to be <u>notified</u> under Article 11 to be recorded in the MIFR for international recognition <u>within the regulatory period</u>
- In order to be <u>recorded in the MIFR</u>
 Assignments shall
 - Be in conformity with Allocation Table and Other provisions listed in RoP under No.11.31 (No. 11.31 examination)
 - Complete required coordination requirements (No. 11.32 examination)

Or

 Be favourable in examination on probability of harmful interference (C/I) (No.11.32A examination)



Article 11 Notification



- Assignments can also be recorded in the MIFR if requested:
 - Under Nos.4.4/8.4
 - Unfavourable finding under No.11.31
 - Information only no international recognition
 - Under No.11.41
 - Unfavourable finding under Nos11.32 and 11.32A
 - Requirement of No.11.41.2 (indication of coordination effort) and No.11.42 (elimination of harmful interference)
- ➤ Bringing assignments into use has to be confirmed in the notification process (11.47 and 11.44B) within the regulatory period



Part I-S - <u>Acknowledgement</u> of receipt, particulars of complete frequency assignment notices

➤ Part II-S - Findings (mostly favourable) resulting in the recording of the frequency assignment in the MIFR;

➤ Part III-S - <u>Unfavourable Findings</u> resulting in the <u>return</u> of the notice to the notifying administration.







Coordination / API (Advance Publication)



Due Diligence Information



Suspension



Maintenance of MIFR etc.



Notification

(recording in Master Register)



Due Diligence – Res 49



- Resolution 49: To address the problem of orbit and spectrum reservation without actual use (Res 18 of Kyoto PP)
- Applies to satellite network in the FSS, MSS, BSS that is subject to coordination Procedure
- Information on Identity of the satellite network, Spacecraft and Launch services provider is required
- Not submitted within the regulatory deadline results in suppression of submissions



Due Diligence – Res 552



- > Resolution 552: Similar to Res 49 to some extent
- > Applies to BSS in R1,R3 21.4-22G
- Update of DD is required for relocation/deorbitting
- Submission of DD within 30 days after the commencement of the use
- > ITU-ID for new satellites



Suspension



Frequency Assignments can be suspended for a period of 3 years under No.11.49

- ▶ BR should be informed of suspension of use, no later than 6 months from the date of suspension. If not, 3 year suspension period will be reduced by amount of delay
- ➤ Frequency Assignments are considered brought back into use only if conditions of No.11.49.1 are met



CT ITU Reminder



Verification of requirements under Nos.11.44/11.44.1 and Res49 in application of No.11.48

- Reminder sent 6 months before expiry of the 7year regulatory "time limit"
 - CT ITU is posted on the ITU Web site

➤ If the BIU, due diligence information or notification is not received in time, relevant special sections and assignments recorded in the MIFR shall be cancelled



Art 13 – Maintenance of MIFR



> BR is responsible for maintenance of the MIFR

Under No.13.6 BR consult administrations and request more information about DBIU and/or continuous use based on reliable information available

Cancel of the entry shall be subject to a decision of the RRB



New frequency bands for space services

- > 13.4-13.65GHz in R1 for FSS downlink
- > 14.5-14.75GHz 30 countries in R1&2 for FSS uplink
- > 14.5-14.8GHz 9 counties in R3 for FSS uplink
- > 7375-7750MHz downlink for MMSS
- > 7190-7250MHz uplink for EESS
- > 9200-9300MHz, 9900-10000MHz and 10-10.4GHz for EESS (active)



Change of conditions for use

- ➤ Primary allocation of FSS for feeder link of N-GSO MSS in 5091-5150MHz without any time limitation
- Extension of use of smaller antenna for ESV in 5925-6425Hz
- ➤ Removal of 5km distance limitation for Extra Vehicular Activities in 410-420MHz
- Extension of the possibility offered for ESIM in all Regions in 19.7-20.2 GHz and 29.5-30 GHz



Modification to the procedures

- ➤ Reduction of suspension period day-by-day when the information of suspension is received beyond 6 month after suspension
- > Sup. Requirement for submission of API for networks subject to coordination
- New Res. 40 (WRC-15) to increase transparency when one space station is used to bring into use assignments to GSO networks at different orbital locations within a short period of time



Modification to the procedures (cont)

- ➤ Mod. 13.6 to include reason for BR' query and specify period for BR to inform administration of its conclusion in response to administrations' replies
- ➤ Reduction of coordination arc from 8 to 7 degrees in C band and from 7 to 6 degrees in the Ku band
- pfd for uplink in C band and up/downlinks for Ku band outside coordination arc to consider no potential for harmful interference



Summary of Coordination Approach



- > Inform/Publish characteristics
- > Fulfil requirements in RR
- Negotiate with concerned administrations and get agreements
- ➤ Record the coordinated assignments in the MIFR



Thank you!