

2-6 December 2024 Geneva, Switzerland





Technical examination and recording of notification of satellite networks Non-Plan bands

Mehtap Dufour
Radiocommunication Bureau
Space Services Department, Senior Radiocommunication Engineer
https://www.itu.int/ITU-R/go/space/en

EXAMINATION UNDER NO. 11.31 (1)





compliance with table of frequency allocation including footnotes

e.i.r.p. limits of earth stations

limits of power flux density from space stations

Article 5 Frequency allocations

Article 21 Section III

Article 21 Section V

EXAMINATION UNDER NO. 11.31 (2)





station keeping of space stations

pointing accuracies of antenna on geostationary satellites

earth station off-axis power limitations to fixed satellite service.

Article 22 Sect III

Article 22 Sect IV

Article 22 Sect VI

No. 11.31 Example Findings Article 5 Frequency allocations



		lequested by: MUL		Date: 28.11.2024	:19:53 P	и ов	RS ALL.N					Plan Id.		Notice	type: NONGE	0
		1 <u>a Sat.</u> Network II				f. adm. TUR		<u>er.</u> sat. org.				pt 27.02.202	24	BR <u>20 B</u> F	IFIC no. 302	
	BR6a/E	3R6 <u>b ld.</u> no. 1245	00040	BR3a/	BR3 <u>b Provi</u>	sion reference 1	1.2	N	1	BR <u>2 Adn</u>	n. serial n	0.			57	E
Ī	BR7	a/BR7 <u>b_Group</u> id.	1246526	91 BR	1 Date of re	ceipt 27.02.20	24 C2	RR No. 4.	4	BR <u>97</u> No	11 434	RP08	For use i	n accordance wi	th Res 163/16	S4 -
	BR <u>105</u> C	urrent Milestone		BR106 Mileston	e criteria me	et E	R <u>107 Exp</u>	iry of the ne	ext mileston	e perio	1 5	uh_column 13	A1. Conf	formity with th	a Radio Rom	lations
		f bringing into use	as submitte	d by the Administration	15.04.202	23					1 5	ub-column 13	AI. Com	iormity with th	, Kaulo Kegu	nations
Notice Id: 1245000)40	f bringing into use	11.03.20	A2b Period of v	/alid. 10	A3 <u>a Op</u> agen	cy 044	A3b Adm	resp. A	- L	The sym	bols used in su	b-column	13A1 are as fol	lows:	
IMECE		date for 9.1/9.1A	11.03	3.2021							-					
IIVIECE		y date for bringing	into use	11.03.2028		BR63 Confirm	ed date of	bringing int	o use					TADI	E 12 A 1	
Beam: ST		cial Section				7						Pre	eface	TABI	LE 13A1	
		of station	EW		C3a Assi	ned freq. band	200	0								
Emi/Rcp :E		of service	CO		C6a P	olarization type	CR	Ī	C6 <u>b</u>	Polariz	Symbol		Findin	ig favourable wit	n respect to	
Gr. Id: 124652691		tot. peak pwr.		3 C8d2 Contiguous	bandwidth			_			A	RR1503				
		<u>vice</u> area no.	1	C11a3 Service ar	ea diagram						Α	No. 11.31				
Column 13 A1		rdinations/Agreem	ents		'							110. 11.51				
						C2a	Assigned	frequency								
	2233	MHz														
		A13		C7a		C8a1/C8b1	C8a2/0		C8c1		8c2	C8c3	C8c4	C8e1	C8e2	
	API/A/12	Ref. to Special Section	ons	Design. of emis	sion	Max. peak <u>pwr</u> ∩	Max. pwi	r dens. 59	Min. peak g		ttch. N	lin. <u>pwr</u> dens. -59	Attch.	C/N ratio	Attch.	
	111 1/11/11			1 211001112	C7h C	arrier frequency)Δ1D\					12.0		
	2233	MHz			1	urior iroquolicy	1	2,0110 (2,11100	7.1.5							
		C10b1	C10b2	C10c1	C10c2	C10d1/C10d2	C10d3	C10d4	C10d6	C10						
	Assoc	. earth station id.	Type	Geographical coord.	Ctry	Cls. / Nat.	Max. iso.	Bmwdth	Noise	Ant. dia	meter					
	AHLATI	LIBEL	S	032E51 00 39N55 00	TUR	1 TW CO	gain 40	1.81	temp. 200							
				<u> </u>			C10d5a C	co-polar ant								
		Assoc. earth station		<u> </u>	Coef. A	Coef.		Coef.			ef. D	Phi1		Co-polar rad. d	iag.	
	AHLATLI		REC-5													
	Findings		ction 27.02	2.2024 13 <u>A Conform</u>	ity with RR	A	13B <u>1 Pr</u>	ov.		13B2	Remark	<u>s</u>	131	B <u>3 Date</u> of Revi	ew A/10.02	.2028
	13 <u>C Rem</u>	arks														

No. 11.31 Example Findings, Article 5 Frequency allocations



Transmitting space station

Beam	Groups	EreaMin	FreqMax	Class	Coverage	13A	Coordination provision
ST	124652691	2232	2234	EW	XR1	A-	Not Subject <u>To</u> Coordination

SECTION IV - Table 13A: Symbols used in column 13A

TABLE 13A Symbols used in column 13A

I Sub-column 13A1: Conformity with the Radio Regulations

The symbols used in sub-column 13A1 are as follows:

TABLE 13A1

Symbol	Finding favourable with respect to	Use from	Use to
A	RR1503		31.12.1998
Α	No. 11.31	01.01.1999	

Preface Table3 Class of Station EW: Space station in the earth exploration-satellite service (EESS)

	Allocation to services											
Region 1	Region 2	Region 3										
2 200-2 290	SPACE OPERATION (space-to-Ea	arth) (space-to-space)										
	EARTH EXPLORATION-SATELLITE (space-to-Earth) (space-to-											
space)												
	FIXED											
	MOBILE 5.391											
	SPACE RESEARCH (space-to-Earth) (space-to-space)											
5.392												

No. 11. 31 examination, limits of power flux density from space stations

Conformity with Table of Frequency Allocations under Art.5 & Article 21

Notice Id: 119500154

: NSS-G4-26

Beam: TA5R/ Steerable

Emi/Rcp:E

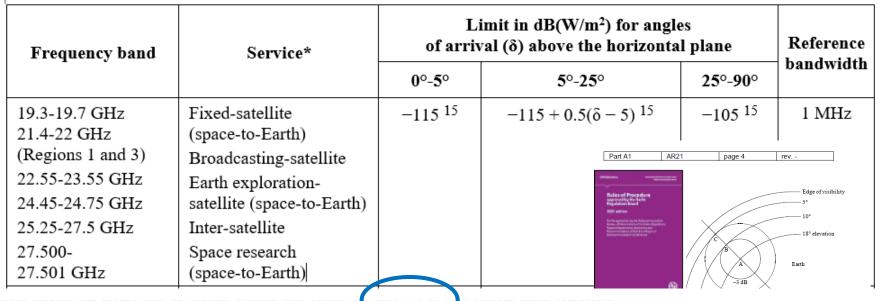
Idendify for

Gr. Id: 119684560 limits of power flux density from space stations exceeding or not?

Column 13 A1 A-

Date Of		A1f <u>1_</u> No			DL		DB er sat on		BR <u>1</u>	Date of red	
	BR3a/BI	R3 <u>b Prov</u>	rision r	efere	nce 1	1.2		N	BR2	Adm. seria	
oplying the m	ethod in Annex 1				Y	Attach. no					
	B3c <u>1</u> Coef. B	Co-polar	anten	na pa	attern					II CI-	
	Coel. B	+					$\overline{}$			Co-pola	
Part	2012 Flag of bringing into use C										
No.		Special S	ection	2		No).			Special S	
560	BR1	Date of r	eceipt	25.)19 C2c	Assoc.	4.4		soc. Sstps. No. 11.43	
	12 <u>b Period</u> of val	Id. 50				cy 014		m. resp. A	<u> </u>		
04.07	.2019			463 I	Contirn	ned date of	bringing ii	nto use 26.	05.2	019	
_	d2 Contiguous b arvice area	andwidth	Poleriz		type [20000 M		C6 <u>b</u>	Pola	rization ang	
					C2a	1 Assigned	frequenc	у			
7	GHz 21.	9	G	Hz							
	C7a			1/C8		C8a2/0		C8c1		C8c2	
1	Design. of emissi 25M0G7W	on	Max.		B.7	Max. pwr	dens.	Min. peak		Attch,	
½	25M0G7W				4.8		9.1		1.8		
3	500KG7W				7.8	-4	9.1	-12	1.2		
	C10c1	C10c2 Ctry		0d1/C	10d2 Nat.	C10d3 Max. iso. gain	C10d4 Bowdth	· I .		C10d7 . diameter	
Geogra	princal goods	1	1			gaiii	l	temp.			
Geogra	princar goods		1	υv	CA	33.6	3.84				
Geogra	priical good.		1	υv	CV	33.6 43.1	1.28	145 145			
Geogra	princar deliver		1			33.6 43.1 53.1	1.28 0.36	145 145 145	- TD		
		oef. A	1	υv	CV	33.6 43.1 53.1 C10d5a C	1.28 0.36	145 145 145 ntenna patte	m	Coef. D	
-polar ref. pa -580-6 -580-6		oef. A	1	υv	CA CA	33.6 43.1 53.1 C10d5a C	1.28 0.36 o-polar a	145 145 145 ntenna patte	m	Coef. D	
-polar ref. pa -580-6 -580-6	ittern C		1 1	υv	CA CA	33.6 43.1 53.1 C10d5a C	1.28 0.36 o-polar a Coe	145 145 145 ntenna patte			
-polar ref. pa -580-6 -580-6 -580-6			1 1	טע טע	CV CV Coef.	33.6 43.1 53.1 C10d5a C	1.28 0.36 o-polar a Coe	145 145 145 ntenna patte		Coef. D	

Conformity with Table of Frequency Allocations under Art.5 & Article 21 a

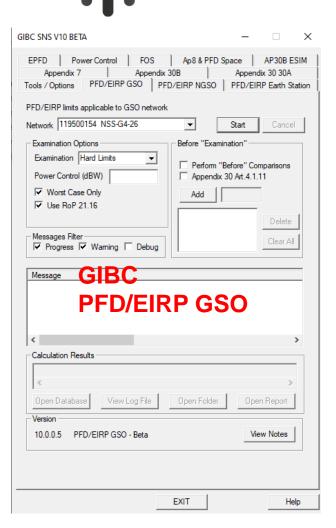


SPACE STATION PFD VALUES WILL BE CHECKED AGAINST HARD LIMITS AND ROP21.16 IS ONLY APPLIED WHERE APPLICABLE

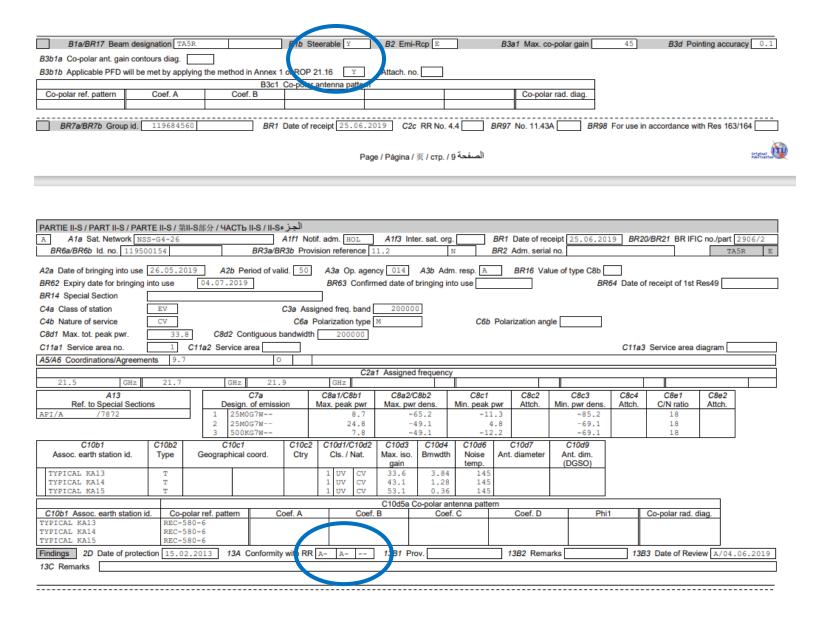
PFD EXAMINATION WITH ROP21.16 N 119500154 HOL NSS-G4-26 95.00 DEG 0.10 0.10 25.06.2019

NO UNFAVORABLE FINDING FOUND IN PFD EXAMINATION.

ntc_id	sat_name	beam_name	emi_rcp	f_steer	grp_id	fdg_reg	pep_min	pep_max	pwr_ds_max	wc_long_	dms wc_lat_dms	wc_adm	wc_ctry	off_axis_gain	pfd_produced	pfd_limit	pfd_excess	fndg_reason
119500154	NSS-G4-26	TA5R	E	Υ	119684560	A-	-11,3	8.7	-65.2	158E3608	57N5535	RUS	RUS	A 2 45	-123.473	-114.999	-8.474	
							G	ir. IQ): 11;	968 4	45 <mark>60</mark> ;	13 F	\ 1 :	A?				
119500154	NSS-G4-26	TA5R	E	Υ	119684560	A-	4.8	24.8	-49.1	138E5324	51N0016	RUS	RUS	43.263	-108.802	-108.144	-0.658	RoP 21.16 met
119500154	NSS-G4-26	TA5R	E	Υ	119684560	Α-	-12.2	7.8	-49.1	158E3608	57N5535	RUS	RUS	40.032	-115.443	-115	-0.443	RoP 21.16 met
119500154	NSS-G4-26	TA5R	E	Υ	119684560	A-	-11.3	8.7	-65.2	158E3608	57N5535	RUS	RUS	45	-123.473	-114.999	-8.474	
119500154	NSS-G4-26	TA5R	E	Υ	119684560	Α-	4.8	24.8	-49.1	138E5324	51N0016	RUS	RUS	43.263	-108.802	-108.144	-0.658	RoP 21.16 met
119500154	NSS-G4-26	TA5R	E	Υ	119684560	Α-	-12.2	7.8	-49.1	158E3608	57N5535	RUS	RUS	40.032	-115.443	-115	-0.443	RoP 21.16 met
119500154	NSS-G4-26	TA5R	E	Υ	119684560	A-	-11.3	8.7	-65.2	158E3608	57N5535	RUS	RUS	45	-123.473	-114.999	-8.474	
119500154	NSS-G4-26	TA5R	E	Υ	119684560	A-	4.8	24.8	-49.1	138E5324	51N0016	RUS	RUS	43.263	-108.802	-108.144	-0.658	RoP 21.16 met
119500154	NSS-G4-26	TA5R	E	Υ	119684560	Α-	-12.2	7.8	-49.1	158E3608	57N5535	RUS	RUS	40.032	-115.443	-115	-0.443	RoP 21.16 met



Conformity with Table of Frequency Allocations under Art.5 & Article 21





View Log File

10.0.0.5 PFD/EIRP GSO - Beta

Version

EXIT

Help

View Notes

B1a/BR17 Beam designation K7GD B1b Steerable Y B2 Emi-Rcp E B3a1 Max. co-polar gain B3d Pointing accuracy 0.3 B3b1b Applicable PFD will be met by applying the method in Annex 1 of ROP 21.16 Attach. no. 142.50 DEG 0.10 0.10 01.05.2024 BR7a/BR7b Group id. BR1 Date of receipt 01.05.2024 C2c RR No. 4.4 BR97 No. 11.43A A2a Date of bringing into use as submitted by the Administration 21.05.2024 A2a Date of bringing into use 21.05.2024 A2b Period of valid. 25 A3a Op. agency 015 A3b Adm. resp. BR16 Value of type C8b REF. BW: 1.000 MH2 BR96 Start date for 9.1/9.1A BR62 Expiry date for bringing into use 02.06.2024 BR63 Confirmed date of bringing into use BR14 Special Section C4a Class of station C3a Assigned freq. band 200000 FINDING: N-CP C4b Nature of service C6a Polarization type C6b INMARSAN-7-142E5 4.7 Page / Págin? -27.9 DEW/H2 BEDY: PEDL: -115.0 20.9 DBi POINTING ACC. 0.30 DEG PROT AREA: NORLD PEROT AREA: NORLD PEROT AREA: -105 14, 15 2D DATE: 01.05.2024 (DR) 21.05.2024 (DB) N DEN PED: -110.3 -115+0.5(6-5)14,15 -105 13 PARTIE III-S / PART III-S / PARTE III-S / 第III-S部分 / YAC EPPD EXAMINATION WITH ROP21.16 BR1 Date of reg BR2 Ad 00.50 -115 14,15 -115-X13 1. Fixed-satellite (space-to-Earth) PROV: (08) RR 21.16 40N3430 Meteorological satellite PROV: (08) RR 21.16 Inter-satellite 17.7-19.3 GHz^{7,8} C8c4 C8e1 C8e2 18.30000 GHZ (space to Earth) 124672989 or emission Min. pwr dens. Attch. C/N ratio Attch. CR/C -47.3 15.6 API/C fndg_reason C1L C10d6 C10d7 C10d9 Asso , ype Geographical coord. Ctry Noise Ant. diameter Ant. dim. RoP 21.16 no position (DGSO) temp. TYP-2.0 C10d5a Co-polar antenna pattern C10b1 Assoc. earth station id. Co-polar ref. pattern Coef. A Coef. B Coef. D Phi1 Coef. C Co-polar rad, diag, TYP-2.0M

13B2 Remarks

13B3 Date of Review

13B1 Prov. X/21.1

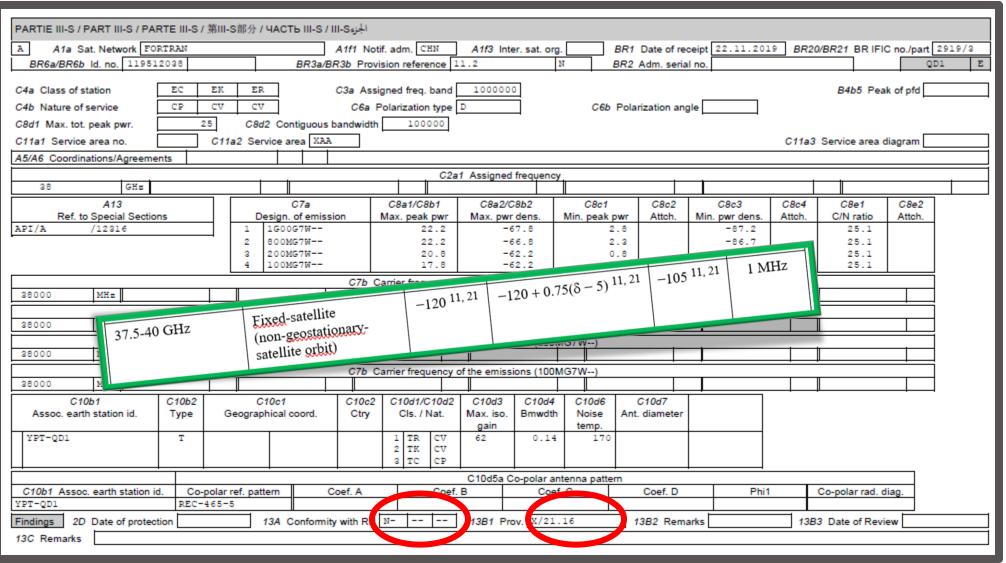
2D Date of protection

13C Remarks

13A Conformity with RR N-

Example of Unfavorable Findings under No. 11.31/Article 21





MIN OP HT: 1040.000 KM

Network 119512038 FORTRAN

PROGR > Closing SRS database connection

PFD for Non GSO calculation finished 18:27

PROGR> End of program.

37.5-40 GHz

pen Database

PROGR > Calculation has been done successfully

PROGR > Export results to output database completed PROGR> Write header row in the output database.

View Log File

Power Control | Coordination 9.7B | PFD Earth-to-space

Examination | Hard limits

PROGR> ----> orbit: 9, op_ht: 1040, apogee: 1040, inclin_ang: 80; (40) RR 21.16; in a PROGR>----> orbit: 10, op_ht: 1040, apogee: 1040, inclin_ang: 80; (40) RR 21.16; in PROGR> ----> orbit: 11, op_ht: 1040, apogee: 1040, inclin_ang: 80; (40) RR 21.16; in PROGR> ----> orbit: 12, op_ht: 1040, apogee: 1040, inclin_ang: 80; (40) RR 21.16; in PROGR> ----> orbit: 13, op_ht: 1040, apogee: 1040, inclin_ang: 80; (40) RR 21.16; in

> Fixed-satellite (non-geostationary-

satellite orbit)

Open Report File

Open Folder

REF.BW: 1.000 MHZ

Messages Filter:

✓ Waming

Debug

GROUP ID: 119800626 CLASS OF STATION: EC/CP EK/CV ER/CV BANDWIDTH: 1000000 KHZ 2D DATE: 20191122 (DR)

ASSIGNED FREQUENCY: 38.00000 GHZ

EMISSION: 100MG7W--PEP MAX: 17.8 DBW PWR DS MAX: -62.2 DBW/HZ

PROVISION: (18) RR 21.16 SERVICE: SPACE RESEARCH

PROT AREA: ALL WORLD ASSOC. EARTH STATION TYPE: T MIN OP HT: 1040.000 KM SAT ALTITUDE: 1040.000 KM

ORBIT ID: 0001 INCLIN ANG: 80.0000 DEG

GAIN: 42.0 DB ARR ANG: 10.0 DEG PFD: -100.3 PFDX: 16.0 PFDL: -116.3 REF.BW: 1.000 MHZ

PROVISION: (40) RR 21.16 SERVICE: FIXED-SATELLITE AND MOBILE-SATELLITE

PROT AREA: ALL WORLD ASSOC. EARTH STATION TYPE: T

ORBIT ID: 0001 SAT ALTITUDE: 1040.000 KM INCLIN ANG: 80.0000 DEG MIN OP HT: 1040.000 KM

GAIN: 42.0 DB ARR ANG: 10.0 DEG

PFD: -100.3 PFDX: 16.0 PFDL: -116.3 REF.BW: 1.000 MHZ

PROVISION: (18) RR 21.16 SERVICE: SPACE RESEARCH

PROT AREA: ALL WORLD ASSOC. EARTH STATION TYPE: T

ORBIT ID: 0002 INCLIN ANG: 80.0000 DEG MIN OP HT: 1040.000 KM SAT ALTITUDE: 1040.000 KM

GAIN: 42.0 DB ARR ANG: 10.0 DEG

PFD: -100.3 PFDX: 16.0 PFDL: -116.3 REF.BW: 1.000 MHZ

PROVISION: (40) RR 21.16 SERVICE: FIXED-SATELLITE AND MOBILE-SATELLITE

PFDL: -116.3

PROT AREA: ALL WORLD ASSOC. EARTH STATION TYPE: T

ORBIT ID: 0002 INCLIN ANG: 80.0000 DEG

GAIN: 42.0 DB ARR ANG: 10.0 DEG PFD: -100.3 PFDX: 16.0

PROVISION: (18) RR 21.16 SERVICE: SPAC

PROT AREA: ALL WORLD

ORBIT ID: 0003 INCLIN ANG: 80.0000 DEG

GAIN: 42.0 DB ARR ANG: 10.0 DEG

PFD: -100.3 PFDX: 16.0 PFDL: -116.3

PROVISION: (40) RR 21.16 SERVICE: FIXE

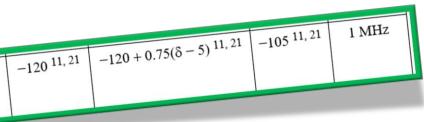
PROT AREA: ALL WORLD

ODDIE ID: UUU3 TMCTIM AMC. SO OCCO DEC



Unfavorable Findings under No. 21.16







FINDING: N-

FINDING: N-

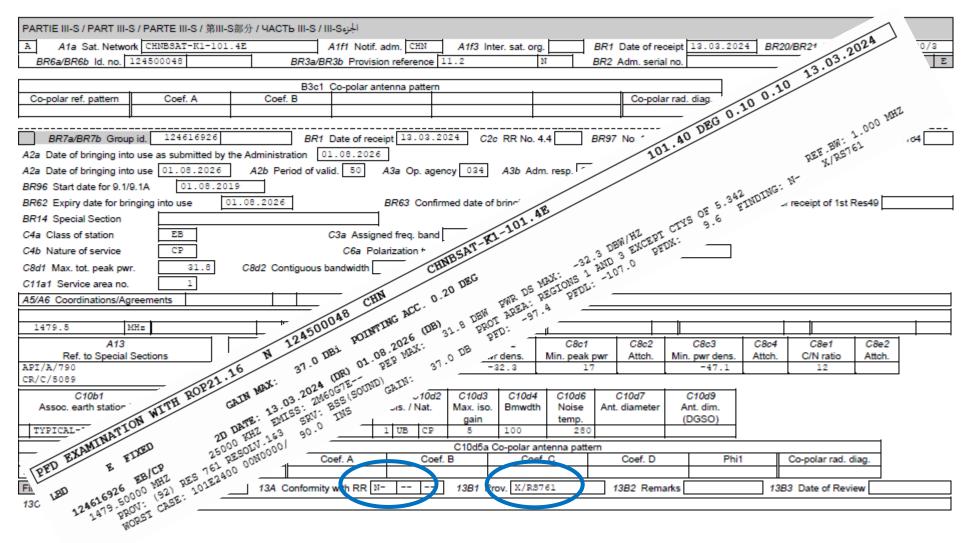
FINDING: N-

SAT ALTITUDE: 1040.000 KM

Start

Example of **Unfavorable** Findings under No. 11.31 X/RS761



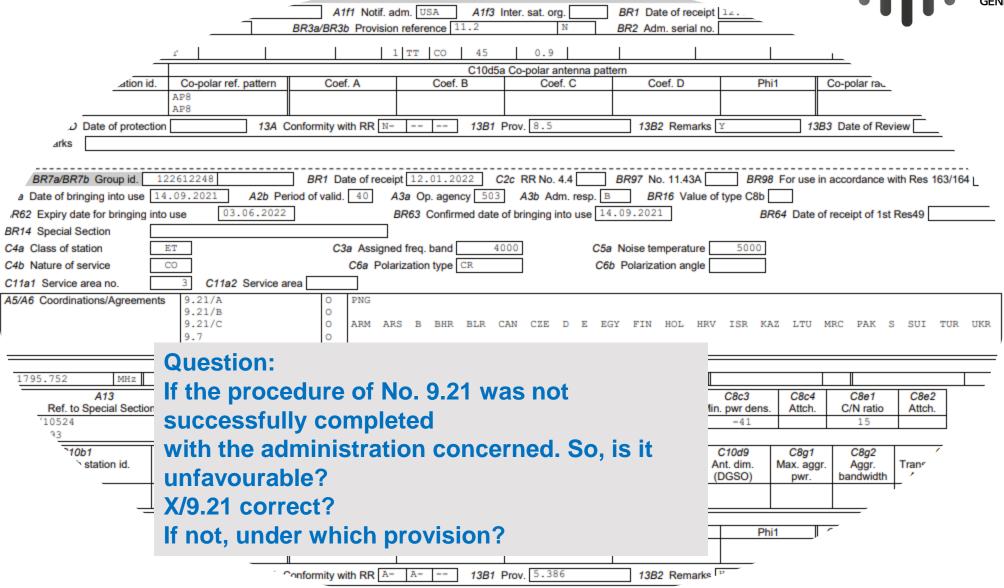


Examination under No. 11.31 FOOTNOTES



Examination under No. 11.31, No.9.21





Examination under No. 11.31, No.9.21



PARTIE II-S / PART II-S / PAR	TEILS / 街	ILQ部分 / UACT	LILE /ILE.	11										
		II-SHP/) / HACT				_								
A A1a Sat. Network P9					. adm. USA		er. sat. or			eceipt 12.01.20	022 BR2	0/BR21 BR IF		
BR6a/BR6b Id. no. 12250	00006		BR3a/BR	3b Provis	ion reference	11.2		N	BR2 Adm. ser	ial no.			Ü	L2 R
TYPICAL 2	T				1 TT CO	45	0.9	1						
								ntenna patte						
C10b1 Assoc. earth station in		olar ref. pattern	Co	ef. A	Coe	ef. B	Coe	f. C	Coef. D	Ph	i1	Co-polar rad.	diag.	
TYPICAL 1 TYPICAL 2	AP8 AP8													
Findings 2D Date of protect	tion	13A	Conformity	with RR	N	13B1 Pr	ov. 8.5		13B2 Rer	marks Y	13B	3 Date of Rev	iew	
13C Remarks														
BR7a/BR7b Group id.	1226122	18	BR1 [Date of re	ceipt 12.01.	2022 C20	RR No.	4.4	BR97 No. 11.4	ISA BR9	R For use in	accordance w	ith Res 16	3/164
			_											0,101
BR62 Expiry date for bringing	A2a Date of bringing into use 14.09.2021 A2b Period of valid. 40 A3a Op. agency 503 A3b Adm. resp. B BR16 Value of type C8b BR62 Expiry date for bringing into use 03.06.2022 BR63 Confirmed date of bringing into use 14.09.2021 BR64 Date of receipt of 1st Res49													
	iiito use	05.00.202	~		Drug Conii	illieu date oi	orniging ii	no use 14.	07.2021	Di	TO# Date of	r receipt or 1st	110349	
BR14 Special Section														
C4e Class of station ET C3a Assigned freq. band 4000 C5e Noise temperature 5000														
C4b Nature of service C0 C6a Polarization type CR C6b Polarization angle														
C11a1 Service area no. 3 C11a2 Service area														
A5/46 Coordinations/Agreements 9,21/A 0 PNG 9,21/B 0 PNG														
	9.2		0	ARM	ARS B BHI	R BLR CA	N CZE	D E EG	FIN HOL	HRV ISR K	AZ LTU	MRC PAK S	SUI T	UR UKR
	9.7		0											
	V/1	1.31.1/C	V	CUB	E/CNR F (G IRN UA	E UZB							
					C	2a1 Assigned	I frequenc	у						
1795.752 MHz	1839.79	5 MHz											_	
A13 Ref. to Special Sectio		Design	C7a n. of emissio	_ .	C8a1/C8b1	C8a2/0		C8c1 Min. peak	C8c2	C8c3	C8c4	C8e1	C8e2	
API/A/10524	ns		n. or emissio	n r	Max. peak pwr 27		gens.	Min. peak		Min. pwr dens.	Attch.	C/N ratio	Attch.	-
CR/C/3993		1 400	10075		21		33			-41		13		J
C10b1	C10b2	C10c		C10c2	C10d1/C10d	2 C10d3	C10d4	_	C10d7	C10d9	C8a1	C8g2		8a3
Assoc. earth station id.	Type	Geographica		Ctry	Cls. / Nat.	Max. iso.	Bmwdth		Ant. diamete		Max. aggr.		Transp. b	andwidth =
						gain				(DGSO)	pwr.	bandwidth	Aggr. b	andwidth
TYPICAL 1 TYPICAL 2	T				1 TT CO 1 TT CO	47 45	0.7							
TIPICAL Z	2				1 11 00									
C10b1 Assoc. earth station is	d Con	olar ref. pattern		ef. A	C04	C10d5a 0	Co-polar a Coe	ntenna patte	m Coef. D	Ph	i4 II	Co-polar rad.	dian	
TYPICAL 1	a. Co-p	olai Tel. pattern		oi. A	COE	n. D	COE		Coel. D	PI	-	oo-polar rad.	uidy.	
TYPICAL 2	AP8													
Findings 2D Date of protection 03.12.2015 13A Conformity with RR \(\bar{A} = \bar{A}														
13C Remarks					-	_	_		_					

Symbol used in provision column	Description
V/11.31.1	The use of this frequency assignment is subject to the application of the procedure of No. 9.21. In the process of application of this procedure the administration of the country designated by the symbol inserted in the "adm" column of the coordination table A5/A6 has formally objected to the proposed use. The Bureau has therefore concluded that the application of the procedure of No. 9.21 was not successfully completed with the administration concerned. A favourable Finding (13A1) was nevertheless formulated on the understanding that no harmful interference shall be caused to the services of or protection claimed from the administration concerned.
V/11.31.1/C	The use of this frequency assignment is subject to the application of the procedure of No. 9.21. In the process of application of this procedure the administration of the country designated by the symbol inserted in the "adm" column of the coordination table A5/A6 has formally objected to the proposed use in relation to its GSO networks (V/11.31.1/A), Non-GSO networks (V/11.31.1/B) and terrestrial stations (V/11.31.1/C). The Bureau has therefore concluded that the application of the procedure of No. 9.21
	was not successfully completed with the administration concerned. A favourable Finding (13A1) was nevertheless formulated on the understanding that no harmful interference shall be caused to the services of or protection claimed from the administration concerned.



Satellite networks **Not** subject to Coordination Procedure to be recorded in MIFR

Advanced Publication Information

Notification

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

Recording in
Master Register
(international
recognition)

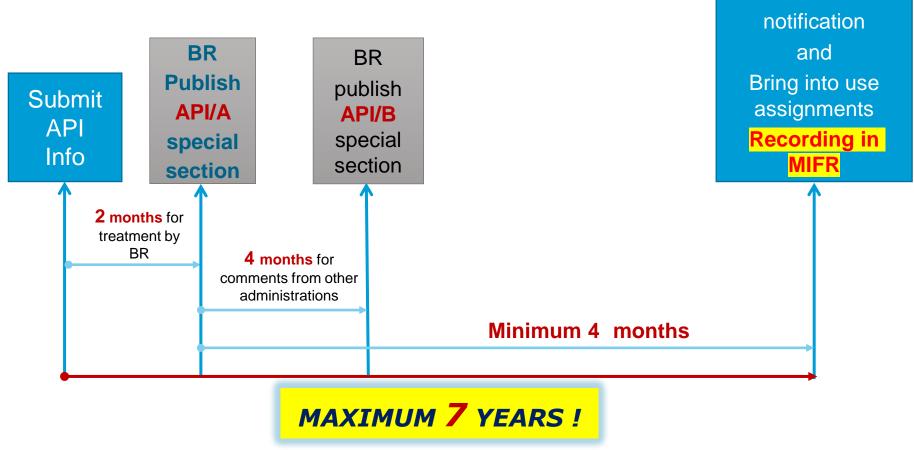
(Bringing into use)

Regulatory procedure for satellite networks not subject to



Submit









UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS
BUREAU DES RADIOCOMMUNICATIONS

INTERNATIONAL TELECOMMUNICATION UNION RADIOCOMMUNICATION BUREAU

UNIÓN INTERNACIONAL DE TELECOMUNICACIONES OFICINA DE RADIOCOMUNICACIONES

η.	_	
-1		

DONE/10 DEC 17/1	BONEAG DEG IN DIGGO MIMONIO ATTOMO			N DONE/IO	TIONAL DE LA DICCOMICITION COICHEC
RÉSEAU À SATELLITE SATELLITE NETWORK RED DE SATÉLITE		IMECE		PARTIE PART PARTE	II-S
STATION TERRIENNE EARTH STATION ESTACIÓN TERRENA				BR IFIC / DATE BR IFIC / DATE BR IFIC / FECHA	3029 / 03.09.2024
ADM. RESPONSABLE RESPONSIBLE ADM. ADM. RESPONSABLE	TUR	LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL	NGSO	NUMÉRO D'IDENTIFICATION IDENTIFICATION NUMBER NÚMERO DE IDENTIFICACIÓN	124500040
RENSEIGNEMENTS REÇUS P	AR LE BUREAU LE /	INFORMATION RECEIVED B	BY THE BUREAU ON / IN	FORMACIÓN RECIBIDA POR LA OFIC	CINA EL 27.02.2024

Ass titre	ignations de fréquence inscrites dans le Fichier de référence au de	Fre	equency assignments recorded in the Master Register under	Asignaciones de frecuencia inscritas en el Registro con arreglo al			
x	Article 11 du Règlement des radiocommunications		X Article 11 of the Radio Regulations		Artículo 11 del Reglamento de Radiocomunicaciones		
	Article 5 des Appendices 30 et/ou 30A		Article 5 of Appendices 30 and/or 30A		Artículo 5 de los Apéndices 30 y/o 30A		
	Article 8 de l'Appendice 30B		Article 8 of Appendix 30B		Artículo 8 del Apéndice 30B		

Pour plus d'informations sur les dispositions réglementaires et l'explication des codes ou symboles utilisés dans cette publication, veuillez consulter la <u>Préface</u>.

For more details on the regulatory provisions and station explanation of the codes or symbols used in publication, please consult the Preface.

Transmitting space station

Beam	Groups	EreqMin	FreqMax	Class	Coverage	13A	Coordination provision
ST	124652691	2232	2234	EW	XR1	A-	Not Subject <u>To</u> Coordination

PARTIE II-S / PART II-S / PARTE II-S / 第II-S部分 / YAC	الجزء Tb II-S / II-S / II-S				
A A1a Sat. Network IMECE	A1f1 Notif. adm. TUR	A1f3 Inter. sat. org.	BR1 Date of receipt 27	7.02.2024 BR20/BR21	BR IFIC no./part 3029/2
BR6a/BR6b ld. no. 124500040	BR3a/BR3b Provision reference 1	11.2 N	BR2 Adm. serial no.	·	TXT E

			C10d5a	Co-polar antenna patt	ern			
C10b1 Assoc. earth station id.	Co-polar ref. pattern	Coef. A	Coef. B	Coef. C	Coef. D	Phi1	Co-polar rad. diag.	
AHLATLIBEL	REC-580-6							
Findings 2D Date of protection	27.02.2024 13A (Conformity with RR A-	13B1 I	Prov.	13B2 Remarks	1	13B3 Date of Review A/	10.02.202

13C Remarks

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

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
- ➢ Bringing assignments into use has to be confirmed in the notification process (11.47 and 11.44B) within the regulatory period

Examination under No. 11.31, Nos.4.4/8.4





Arr Satt Network GASS-1	PARTIE II-S / PART II-S / PARTE II-S / 第II-S部分 /	الجزءS-II-S / II-S / الم								
Co-polar ref. pattern	A A1a Sat. Network CMARS-1	A1f1 No	tif. adm. CHN	A1f3 Inter. sat. or	g. BR1	Date of receipt 01.	.04.2024 BR20	0/BR21 BR IFIC	no./part 302	9/2
Co-polar ref. pattern Coef. A Coef. B Co-polar rad. diag.	BR6a/BR6b ld. no. 124500062	BR3a/BR3b Prov	vision reference 1	1.2	N BR2	Adm. serial no.	·		RUN11	R
Co-polar ref. pattern Coef. A Coef. B Co-polar rad. diag.		P2e1 Ce rele					\neg			
	Co-polar ref. pattern Coef. A		antenna pattern			Co-polar rad. dia	<u> </u>			
### ### ##############################							<u> </u>			
### B43a1 Angle alpha	List of orbital planes					-	-			\neg
BR7a/BR7b Group id. 124669386 BR7 Date of receipt 01.04.2024 C2c Rt No. 4.4 X BR7 No. 11.43A BR98 For use in accordance with Res 163/164	ALL									
BR7a/BR7b Group id. 124669385 BR1 Date of receipt 01.04.2024 C2c R8 No. 4.4 BR37 No. 11.43A BR98 For use in accordance with Res 163/164	B4a3a1 Angle alpha B4a3a2 An	gle beta								
A2a Date of bringing into use as submitted by the Administration 23.07.2020 A2b Period of valid. 20.7.2020 A3b Adm. resp. G BR16 Value of type C8b A4b7cbis Min. elevation angle BR96 Start date for 9.119.1A 19.05.2017 19.05.2024 BR63 Confirmed date of bringing into use BR64 Date of receipt of 1st Res49 BR14 Special Section 2D EX C3a Assigned freq. band 4000 C5a Noise temperature 500 B465 Peak of pfd C4b Nature of service C0 C0 C6a Polarization type CR C6b Polarization angle A5/A6 Coordinations/Agreements C2a1 Assigned frequency Mix Service area in a service and alagram C2a1 Assigned frequency A87 Ref. to Special Sections Design. of emission Max. peak pwr Max. per dens. Min. peak pwr Attch. Min. pwr dens. Attch. C0k2 C8c3 C8c4 C8c1 C8c2 C8c3 C8c3 C8c4 C8c1 C8c2 C8c3 C8c3 C8c4 C8c1 C8c3 C8c3 C8c4 C8c3 C8c3 C8c4 C8c4 C8c4 C8c4 C8c4 C8c4 C8c4 C8c4	BR92 Attach. for missing angle alpha/beta									
### A2a Date of bringing into use ### B76 Can process B76 Can pr	BR7a/BR7b Group id. 124669386	BR1 Date of r	receipt 01.04.20	024 C2c Rf No.	4.4 Y BR: 7	No. 11.43A	BR98 For use in	accordance wit	h Res 163/164	
BR96 Start date for 9.1/9.1A 19.05.2017 BR62 Expiry date for bringing into use 19.05.2024 BR63 Confirmed date of bringing into use BR64 Date of receipt of 1st Res40 BR14 Special Section C4a Class of station ED EK C3a Assigned freq. band 4000 C5a Noise temperature 500 B4b5 Peak of pfd C4b Nature of service C0 C0 C6a Polarization type CR C6b Polarization angle C1fa1 Service area no. C1fa3 Service area diagram C2a1 Assigned frequency C3a2 C3a3 C3a4 C3a	A2a Date of bringing into use as submitted by the	Administration 23.07.20	20							
### BR62 Expiry date for bringing into use	A2a Date of bringing into use 23.07.2020	A2b Period of valid. 30	A3a Op. agen	cy 039 <i>A3b</i> Ad	m. resp. G	BR16 Value of type	e C8b A4b	7cbis Min. eleva	ation angle	\Box
### BR14 Special Section ### C2a Class of station ### C2b Class of station ### C2a Class of station ### C2b Class of station ### C2b Class of station ### C2b Class of station of cervice ### C2b Class of station angle ### C2b Class of Section angle ### C2b Class of Section angle ### C2a Class of Section an	BR96 Start date for 9.1/9.1A 19.05.2017									
C4a Class of station ED EK C3a Assigned freq. band 4000 C5a Noise temperature 500 B4b5 Peak of pfd	BR62 Expiry date for bringing into use 19.0	05.2024	BR63 Confirm	ned date of bringing i	nto use		BR64 Date of	receipt of 1st R	es49	
C4b Nature of service C0 C0 C6a Polarization type CR C6b Polarization angle C11a1 Service area no. C11a3 Service area diagram A5/A6 Coordinations/Agreements C2a1 Assigned frequency 399.9 MRs 397.5 MRs 401.59 MRs C7a Design. of emission Max. peak pwr Attoh. Mrs. pwr dens. Min. peak pwr Attoh. Min. pwr dens. Min. peak pwr Attoh. CN ratio Attoh. CN ratio Attoh. CN ratio Attoh. 1.0.5 -52.5 0.5 -52.5 0.5 -62.5 20 AFI/A/12069 1 2 1 M00GXXr 10.5 -49.5 0.5 -59.5 20 1.0.5 -55.5 0.5 -65.5 20 C7b Carrier frequency of the emissions (2M00GXX-) C7b Carrier frequency of the emissions (1M00GXX-) 401.58 MRs 397.5 MRs 393.9 M	BR14 Special Section									
C11a1 Service area no.	C4a Class of station ED EK	C3a Ass	signed freq. band	4000	C5a Noise	temperature	500	B4b5 Peak	of pfd	
A5/A6 Coordinations/Agreements C2a1 Assigned frequency	C4b Nature of service C0 C0	C6a	Polarization type	CR	C6b Polar	ization angle				
C2a1 Assigned frequency 393.9 MHz 397.5 MHz 401.58 MHz	C11a1 Service area no.	11a3 Service area diagran	n							
Section Sect	A5/A6 Coordinations/Agreements									
C7a	000.0	401 50		1 Assigned frequence	у					
Design. of emission Max. peak pwr Max. pwr dens. Min. peak pwr Attch. Min. pwr dens. Attch. C/N ratio Attch.										
Table Tabl										
3 4M00GXX 10.5 -55.5 0.5 -65.5 20										
C7b Carrier frequency of the emissions (2M00GXX-)	I				I	I	I .			
### Action 1.58 MH							65.5	20		
404.4 MHz 401.58 MHz 397.5 MHz 393.9 MHz	401.58 MHs 397.5 MHs		Carner frequency o	of the emissions (2M)	DUGXX-)			ı	\dashv	
404.4 MHz 401.58 MHz 397.5 MHz 393.9 MHz		C7b (Carrier frequency of	of the emissions (1M	00GXX-)		<u> </u>			
401.58 MHz 397.5 MHz 393.9 MHz	404.4 MHs 401.58 MHs									
C10a1			Carrier frequency o	of the emissions (4M	00GXX-)					
Assoc. space station id. Type Nominal longitude Peanruesig stion CMARS-1 N CUN21								<u> </u>		
CMARS-1 N ZUN21										
Findings 20 Date of protection 1 A Conformity with RR N 1381 Prof. 8.5 1382 Remarks Y 1383 Date of Review										
	Findings 2 Date of protection	1' A Conformity with RR	N	13B1 Pro 8.5	1:	3B2 Remarks Y	13B	3 Date of Revie	w	\Box

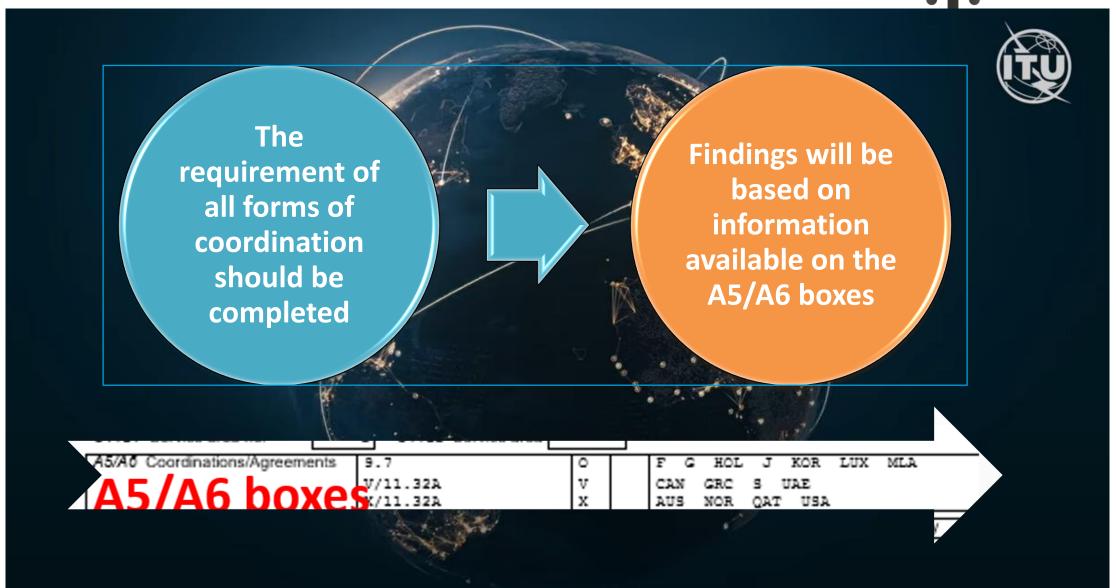
After No. 11.31 Examination





Examination under No. 11.32





Examination under No. 11.32, TYPES OF COORDINATION 1



TABLE 5-1 (Rev.WRC-23)

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 13.75-14.8 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 ±7° of the nominal orbital position of a proposed network in the FSS i) Bandwidth overlap, and ii) 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 ±6° of the nominal orbital position of a proposed network in the FSS or BSS, not subject to a Plan iii) in the frequency band 14.5-14.8 GHz any network in the space research service (SRS) or FSS not subject to a Plan and any associated space operation functions (see No. 1.23) with a space station within an orbital arc of ±6° of the nominal orbital position of a proposed network in the SRS or FSS not subject to a Plan 		With respect to the space services listed in the threshold/condition column in the frequency bands in 1), 2), 2bis), 3), 3bis), 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 ΔT/T 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

No.11.32 is Favourable



~ _
BR7a/BR7b Group id. 123684324 BR1 Date of receipt 27.06.2023 C2c RR No. 4.4 BR97 No. 11.43A BR98 For use in accordance with Res 163/164
BR105 Current Milestone BR106 Milestone criteria met BR107 Expiry of the next milestone period 28.06.2023
A2a Date of bringing into use as submitted by the Administration 28.06.2023
A2a Date of bringing into use 28.06.2023
BR96 Start date for 9.1/9.1A 28.06.2016
BR62 Expiry date for bringing into use 28.06.2023 BR63 Confirmed date of bringing into use BR64 Date of receipt of 1st Res49
BR14 Special Section
C4a Class of station EC C3a Assigned freq. band 500000 C5a Noise temperature 450 B4b5 Peak of pfd
C4b Nature of service CR Cos Solarization type M C6b Polarization angle
C11a1 Service area no. 1 C11a3 Service area diagram
C9c1 Type of multiple acces 1 C9c2 Spectrum mask diagram 1 C11b Affected region
A5/A6 Coordinations/Agree nents 9.12 0
λ
Page / Página 2
TETSENAL Demonstrating - Notice - Order of 12 2024 t 55:42 pm - THE SES AT MOR
TSDM Requested by MULUK
A 18 Sat. Network MULTUS A1f1 Notif. adm. CAN A1f3 Inter. sat. org. BR1 Date of receipt 27.06.2023 BR20 BR IFIC no. 3033
A 1a Sat. Network MULTUS A1f1 Notif. adm. CAN A1f3 Inter. sat. org. BR1 Date of receipt 27.06.2023 BR20 BR IFIC no. 3033 BR6a/BR6b Id. no. 123500110 BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no.
A A1a Sat. Network MULTUS A1f1 Notif. adm. CAN A1f3 Inter. sat. org. BR1 Date of receipt 27.06.2023 BR20 BR IFIC no. 3033 BR6a/BR6b Id. no. 123500110 BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no. R335 C2a1 Assigned frequency
A A1a Sat. Network MULTUS A1f1 Notif. adm. CAN A1f3 Inter. sat. org. BR1 Date of receipt [27.06.2023] BR20 BR IFIC no. [3033] BR6a/BR6b Id. no. 123500110 BR3a/BR3b Provision reference [11.2] N BR2 Adm. serial no. R0333
A 18 Sat. Network MULTUS A 17 Notif. adm. CAN A 173 Inter. sat. org. BR1 Date of receipt 27.06.2023 BR6a/BR6b Id. no. 123500110 BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no. C2a1 Assigned frequency 13 GHz C7a C8a1/C8b1 C8a2/C8b2 C8c1 C8c2 C8c3 C8c4 C8e1 C8e2
A 1a Sat. Network MULTUS A1ff Notif. adm. CAN A1f3 Inter. sat. org. BR1 Date of receipt 27.06.2023 BR20 BR IFIC no. 3033 BR6a/BR6b Id. no. 123500110 BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no. Ref. adm. s
A 18 Sat. Network MULTUS A 17 Notif. adm. CAN A 17 Inter. sat. org. BR1 Date of receipt 27.06.2023 BR20 BR IFIC no. 3033 BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no. C2a1 Assigned frequency 13 GHz C7a C8a1/C8b1 C8a2/C8b2 C8c1 C8c2 C8c3 C8c4 C8e1 C8e2 Ref. to Special Sections Design. of emission Max. peak pwr Max. pwr dens. API/A/11863 CR/C/4333 D 1 110MD7W 15.6 -64.8 2 -78.4 1 110MD7W 15.6 -54.8 2 -68.4 10
A 18 Sat. Network MULTUS A 16 Notif. adm. CAN BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no. C281 Assigned frequency 13 GHz C78 C8a1/C8b1 C8a2/C8b2 C8c1 C8c2 C8c3 C8c4 C8e1 C8e2 Ref. to Special Sections ADDI/A/11863 CR/C/4333 Design. of emission A15.6 -64.8 CR/C/4333 BR20 BR IFIC no. 3033 BR20 BR
A18 Sat. Network MULTUS
Aff Notif. adm. CAN Aff Inter. sat. org. BR1 Date of receipt 27.06.2023 BR20 BR IFIC no. 3033 BR6a/BR6b Id. no. 123500110 BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no. C2a1 Assigned frequency 13 GHz C7a C8a1/C8b1 C8a2/C8b2 C8c1 C8c2 C8c3 C8c4 C8e1 C8e2 CR/C14333 CR/C14333 CR/C14333 CR/C14333 CR/C1433 CR/C14333 CR/C14333 CR/C14333 CR/C163 CR
Aff Notif. adm. CAN Aff Inter. sat. org. BR1 Date of receipt 27.06.2023 BR20 BR IFIC no. 3033 BR6a/BR6b Id. no. 123500110 BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no. C2a1 Assigned frequency 13 GHz C7a C8a1/C8b1 C8a2/C8b2 C8c1 C8c2 C8c3 C8c4 C8e1 C8e2 C8c1 C8c2 C8c3 C8c4 C8c1 C8c2 C8c3 C8c4 C8c1 C8c2 C8c3 C8c4 C8c1 C8c2 C8c3 C8c4 C8c3 C8c4 C8c3 C8c4 C8c3 C8c4 C8c3 C8c4 C8c3 C8c4 C8c4 C8c4 C8c4 C8c4 C8c4 C8c4 C8c4
A 16 Sat. Network MULTUS A 17 Notif. adm. CAN A 17 Inter. sat. org. BR1 Date of receipt [27.06.2023] BR20 BR IFIC no. 3033 BR6a/BR6b Id. no. 123500110 BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no. C2a1 Assigned frequency 13 GHz C3a1 Assigned frequency 13 GHz C3a2 C8c2 C8c3 C8c4 C8c1 C8c2 Ref. to Special Sections ADD Land To Special Sections ADD Land To Special Sections ADD Land To Special Sections CR/C/4333 Design. of emission Max. peak pwr Attch. 1 110MDTW 15.6 -64.8 2 -78.4 10 2 11M0DTW 3 1M10DTW 15.6 -54.8 2 -68.4 10 3 1M10DTW 15.6 -44.8 2 -68.4 10 ATT Land To Special Section Sect
A 11 Sat. Network MULTUS A 11 Notif. adm. CAN A 113 Inter. sat. org. BR1 Date of receipt 27.06.2023 BR20 BR IFIC no. 3033 BR66a/BR6b Id. no. 123500110 BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no. C2a1 Assigned frequency 13 GHz C7a C8a1/C8b1 C8a2/C8b2 C8c1 C8c2 C8c3 C8c4 C8c1 C8c2 C8c2 C8c3 C8c4 C8c2 C8c3 C8c4 C8c2 C8c2 C8c3 C8c4 C8c3 C8c4 C8c2 C8c2 C8c3 C8c4 C8c3 C8c4 C8c2 C8c2 C8c3 C8c4 C8c4 C8c4 C8c4 C8c4 C8c4 C8c4 C8c4
A 16 Sat. Network MULTUS A 17 Notif. adm. CAN A 17 Inter. sat. org. BR1 Date of receipt [27.06.2023] BR20 BR IFIC no. 3033 BR6a/BR6b Id. no. 123500110 BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no. C2a1 Assigned frequency 13 GHz C3a1 Assigned frequency 13 GHz C3a2 C8c2 C8c3 C8c4 C8c1 C8c2 Ref. to Special Sections ADD Land To Special Sections ADD Land To Special Sections ADD Land To Special Sections CR/C/4333 Design. of emission Max. peak pwr Attch. 1 110MDTW 15.6 -64.8 2 -78.4 10 2 11M0DTW 3 1M10DTW 15.6 -54.8 2 -68.4 10 3 1M10DTW 15.6 -44.8 2 -68.4 10 ATT Land To Special Section Sect

Example of Findings under No. 11.32 Assignments in MIFR (Part II-S)



PARTIE II-S PART II-S / PARTE II-S / 第II-S部分 / YACTЬ II-S / III-S / II-S / II-	
A 1a Sat. Network USNN-1 A1f1 Notif. adm. USA A1f3 Inter. sat. org. BR1 Date of receipt 07.07.2021 BR20/BR21 BR IFIC no./part 2969/	
	2
BR6a/BR6b Id. no. 121500147 BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no. U5	R
BR62 Expiry date for bringing into use 29.07.2021 BR63 Confirmed date of bringing into use 04.04.2021 BR64 Date of receipt of 1st Res49	
BR14 Special Section	
C4a Class of station ET C3a Assigned freq. band 4000 C5a Noise temperature 5000 Notice Id:	
C4b Nature of service C0 C6a Polarization type CR C6b Polarization angle	
C11a1 Service area no. 3 C11a2 Service area 121500147	
A5/A6 Coordinations/Agreements 9.21/A 9.21/B 0 PNG Group Id:	
9.21/C O CAN HOL 121707287	
9.7 V/11.31.1/C O PNG V B CUB D E/CNR E F/GUF F/OCE F G I MEX MRC SUI	
C2a1 Assigned frequency	一
1767.725 MHz 1795.752 MHz 1839.795 MHz	
A13 C7a C8a1/C8b1 C8a2/C8b2 C8c1 C8c2 C8c3 C8c4 C8e1 C8e2 Ref. to Special Sections Design. of emission Max. peak pwr Max. pwr dens. Min. peak pwr Attch. Min. pwr dens. Attch. C/N ratio Attch.	
API/A/9507 1 4M00G7W 40 -26 40 -26 15	
CR/C/4029	
	- 1
C10b1 C10b2 C10c1 C10c2 C10d1/C10d2 C10d3 C10d4 C10d7 C10d9 C8g1 C8g2 C8g3 Assoc earth station id Type Geographical coord Ctry Cls / Nat Max iso Browdth Ant diameter Ant dim Max aggr Aggr Transp bandwidt	h =
Assoc. earth station id. Type Geographical coord. Ctry Cls. / Nat. Max. iso. Bmwdth gain Ant. diameter Ant. dim. (DGSO) Max. aggr. bandwidth Aggr. bandwidth Aggr. bandwidth Aggr. bandwidth	
Assoc. earth station id. Type Geographical coord. Ctry Cls. / Nat. Max. iso. Bmwdth Ant. diameter Ant. dim. Max. aggr. Aggr. Transp. bandwidt	
Assoc. earth station id. Type Geographical coord. Ctry Cls. / Nat. Max. iso. gain Typical 4 T Ant. diameter Ant. dim. (DGSO) pwr. Max. aggr. bandwidth Aggr. bandwidth Aggr. bandwidth Aggr. bandwidth	
Assoc. earth station id. Type Geographical coord. Ctry Cls. / Nat. Max. iso. gain Typical 4 Typical 5 Typical 5 Typical 5 Typical 5 Typical 6 Typical 6 Typical 6 Typical 7 T	
Assoc. earth station id. Type Geographical coord. Ctry Cls. / Nat. Max. iso. gain TYPICAL 4 TYPICAL 5 T CO 47 O.7 TYPICAL 5 T C10d5a Co-polar antenna pattern	
Assoc. earth station id. Type Geographical coord. Ctry Cls. / Nat. Max. iso. gain	

Examination under No. 11.32



Space Stations

 Check if notified characteristics are the same or within the envelope of coordination characteristics

If not → relevant interference calculations are carried out on the basis of AP5

If additional administrations identified \rightarrow unfavourable finding will be given and notice returned. \rightarrow Administration would be requested to publish a modification to the related coordination Special Section

See RoP (Rules of Procedure) 11.32





UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS
BUREAU DES RADIOCOMMUNICATIONS

INTERNATIONAL TELECOMMUNICATION UNION RADIOCOMMUNICATION BUREAU

UNIÓN INTERNACIONAL DE TELECOMUNICACIONES
OFICINA DE RADIOCOMUNICACIONES

© I.T.U.

DUNEAU DES IV	DIOCOMMONICATION	10	KADIOCOMIMONICATIO	N BUNEAU O	FIGURA DE RADIOCOMONICACIONES CITAGO
RÉSEAU À SATELLITE SATELLITE NETWORK RED DE SATÉLITE		MULTUS		PARTIE PART PARTE	II-S
STATION TERRIENNE EARTH STATION ESTACIÓN TERRENA				BR IFIC / DATE BR IFIC / DATE BR IFIC / FECHA	3033 / 29.10.2024
ADM. RESPONSABLE RESPONSIBLE ADM. ADM. RESPONSABLE	CAN	LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL	NGSO	NUMÉRO D'IDENTIFICATION IDENTIFICATION NUMBER NÚMERO DE IDENTIFICACIÓN	123500110
RENSEIGNEMENTS REÇUS	PAR LE BUREAU LE /	INFORMATION RECEIVED B	BY THE BUREAU ON / IN	FORMACIÓN RECIBIDA POR LA OFIC	ZINA EL 27.06.2023

Assi titre	ignations de fréquence inscrites dans le Fichier de référence au de	Fre	equency assignments recorded in the	C4b Nature of service C11a1 Service area no.	EC CR	C11a3 Service area	a diagram		М		C5a Noise te		450		B4b5 Pea	c of pfd
X	Article 11 du Règlement des radiocommunications	x	Article 11 of the Radio Regulation	C9c1 Type of multiple acces A5/A6 Coordinations/Agree	nts 9.12	1 C9C2 Spectrun		lgram 1	C118)	Affected reg	gion					
	Article 5 des Appendices 30 et/ou 30A		Article 5 of Appendices 30 and/or						Page / Pág	ina 2						profice
	Article 8 de l'Appendice 30B		Article 8 of Appendix 30B													
				A 1a Sat. Network MU BR6a/BR6b Id. no. 1235	LTUS		A1f1 Noti		A1f3 Inter.			ate of receipt dm. serial no.	Plan ld. 27.06.202	3		type: NONGEO IFIC no. 3033 KS31 R
$\overline{}$		$\overline{}$						C2a	1 Assigned fre	quency						
Pou	r plus d'informations sur les dispositions réglementaires et	For	r more details on the regulator	13 GHz												
	r plus d'informations sur les dispositions réglementaires et			A13		C7a		C8a1/C8b1	C8a2/C8b		C8c1	C8c2	C8c3	C8c4	C8e1	C8e2
l'exp	olication des codes ou symboles utilisés dans cette	exp	planation of the codes or sy	Ref. to Special Section	ns	C7a Design. of emissi 1 110MD7W		C8a1/C8b1 Max. peak pwr 15.6	C8a2/C8b Max. pwr de -64.	ns. Mir			C8c3 n. pwr dens. -78.4	C8c4 Attch.	C8e1 C/N ratio	C8e2 Attch.
l'exp		exp		Ref. to Special Section	ns	Design. of emissi 1 110MD7W 2 11M0D7W		Max. peak pwr 15.6 15.6	Max. pwr de -64. -54.	ns. Mir 8 8			78.4 -78.4 -68.4	C8c4 Attch.	10 10	
l'exp	olication des codes ou symboles utilisés dans cette	exp	planation of the codes or sy	Ref. to Special Section API/A/11863 CR/C/4333		Design. of emissi 1 110MD7W 2 11M0D7W 3 1M10D7W	ion 1	Max. peak pwr 15.6 15.6 15.6	Max. pwr de -64. -54. -44.	ns. Mir 8 8	n. peak pwr 2 2 2	Attch. Mir	n. pwr dens. -78.4	Attch.	10 10 10 10	Attch.
l'exp	olication des codes ou symboles utilisés dans cette	exp	planation of the codes or sy	Ref. to Special Section	C10b2	Design. of emissi 1 110MD7W 2 11M0D7W		Max. peak pwr 15.6 15.6	Max. pwr de -64. -54. -44.	ns. Mir 8 8	n. peak pwr 2 2 2 2 2 C1		-78.4 -68.4 -58.4	C8c4 Attch.	C/N ratio 10 10 10 C8g2 Aggr.	Attch. C8g3 Transp. bandwidth =
l'exp	olication des codes ou symboles utilisés dans cette	exp	planation of the codes or sy	A13 Ref. to Special Section API/A/11863 CR/C/4333 C10b1	C10b2	Design. of emissi 1 110MD7W 2 11M0D7W 3 1M10D7W C10c1	C10c2	Max. peak pwr 15.6 15.6 15.6 15.6	Max. pwr de -64 . -54 . -44 . C10d3 (Max. iso. Bayain	ns. Mir 8 8 8	n. peak pwr 2 2 2 2 2 2 C1 Ant. d	Attch. Mir	-78.4 -68.4 -58.4	Attch. C8g1 Max. aggr.	C/N ratio 10 10 10	Attch.
l'exp	olication des codes ou symboles utilisés dans cette	exp	planation of the codes or sy	Ref. to Special Section API/A/11863 CR/C/4333 C1001 Assoc. earth station id.	C10b2 Type	Design. of emissi 110MD7W 2 11MD7W 3 1M10D7W C10c1 Geographical coord.	C10c2 Ctry	Max. peak pwr 15.6 15.6 15.6 C10d1/C10d2 Cls. / Nat.	Max. pwr de -645444. C10d3 (Max. iso. B gain 48.4 C10d5a Co-p	ns. Mir 8 8 8 8 7010d4 mwdth 0 . 65	n. peak pwr 2 2 2 2 2 2 Ant. d	Attch. Mir	-78.4 -78.4 -68.4 -58.4	C8g1 Max. aggr. pwr.	C/N ratio 10 10 10 20 C8g2 Aggr. bandwidth 500000	C8g3 Transp. bandwidth = Aggr. bandwidth Y
l'exp	olication des codes ou symboles utilisés dans cette	exp	planation of the codes or sy	### A13 Ref. to Special Section API/A/11963 CR/C/4333 C10b1 Assoc. earth station id. KEPLER-L C10b1 Assoc. earth station	Type T Co-pola	Design of emissi 1 10 MD7W - 2 11 MD7W - 3 1M10D7W - 3 1M10D7W - C10c1 Geographical coord.	C10c2 Ctry	Max. peak pwr 15.6 15.6 15.6 C10d1/C10d2 Cls. / Nat.	Max. pwr de -645444. C10d3 (Max. iso. B gain 48.4 C10d5a Co-p	ns. Mir 8 8 8 8 010d4 mwdth	n. peak pwr 2 2 2 2 2 2 Ant. d	Attch. Mir	-78.4 -68.4 -58.4	C8g1 Max. aggr. pwr.	C/N ratio 10 10 10 10 C8g2 Aggr. bandwidth	C8g3 Transp. bandwidth = Aggr. bandwidth Y
l'exp	olication des codes ou symboles utilisés dans cette	exp	planation of the codes or sy	Ref. to Special Section API/A/11863 CR/C/4333 C1001 Assoc. earth station id.	C10b2 Type T 1. Co-pola A-25*L0	Design of emissi	C10c2 Ctry	Max. peak pwr 15.6 15.6 15.6 15.6 17.6 C10d1/C10d2 Cls. / Nat. 1 TC CR	Max. pwr de -645444. C10d3 (Max. iso. B gain 48.4 C10d5a Co-p	ns. Mir 8 8 8 8 7010d4 mwdth 0 . 65	n. peak pwr 2 2 2 2 Ant. d	Attch. Mir	n. pwr dens. -78 . 4 -68 . 4 -58 . 4	C8g1 Max. aggr. pwr. 14	C/N ratio 10 10 10 10 0 C8g2 Aggr. bandwidth 500000 o-polar rad. d	C8g3 Transp. bandwidth = Aggr. bandwidth Y

Nos. 11.32A & 11.33 Examination





The examination of the probability of harmful interference under Nos. 11.32A & 11.33 is carried out when the notifying administration states that the coordination procedure could not be successfully completed for the assignments being notified

Nos. 11.32A & 11.33 Examination



Calculation algorithms (M, C/I, C/N)

Margin algorithm

Procedure of 11.32A \rightarrow C/I calculation (the methoology is described in Rules of Procedure Part B Section B3)

required $\left(\frac{C}{I}\right)$ value, which is

page 7

noise power which includes all internal om other systems

rev. -

equired C/I (dB). Generally, this will be on the modulation characteristics of the dations ITU-R S.483 and ITU-R S.523).

s of a network received before 1 January 2005:

Scenario I (as defined in Section 3):

$$\left(\frac{C}{N_{tot}}\right) = \left(\frac{C}{N}\right)_{obt} - X$$

Scenario II:

$$\left(\frac{C}{N_{tot}}\right) = MIN \left(\frac{C}{N_i}, \left(\frac{C}{N}\right)_{obj}\right) - X$$

- b) For receiving frequency assignments of a network received on and after 1 January
- Scenario I:

Rules of Procedure approved by the Radio Regulations Board

2021 edition (+ rev.2)

For the application, by the Radiocommunication Bureau, of the provisions of the Radio Regulations Regional Agreements, Resolutions and Recommendations of World and Regiona Radiocommunication Conferences



PART B

SECTION B3

Rules concerning methodology for calculation of probability of harmful interference between satellite networks (C/I ratios)

In application of the provisions of No. 11.32A when, as a consequence of continuing disagreement (Nos. 9.63 to 9.65) between two (or a limited number of) administrations, the notifying administration requests the Radiocommunication Bureau, an examination of the probability of harmful interference under No. 11.32A is carried out. For the calculation method and criteria to be used for the interference assessment as well as the findings to be formulated with respect to coordination of their networks under No. 9.7, the Bureau shall proceed as follows.

Probability of harmful interference

VV VV VV.ILU.IIIL/ VVIO AT





Nos. 11.32A & 11.32A.2 (WRC-15)



Procedure of 11.32A.2 -> Resolution 762 (WRC-15))

RES762-1

RESOLUTION 762 (WRC-15)

cation of power flux-density criteria to assess the potential for harmful ference under No. 11.32A for fixed-satellite and broadcasting-satellite service networks in the 6 GHz and 10/11/12/14 GHz frequency bands not subject to a Plan

Radiocommunication Conference (Geneva, 2015),

RESOLUTION 762 (WRC-15)

that the 6 GHz and 10/11/12/14 GHz frequency bands, not subject to a Plan, are sively used with operational satellites about every 2-3° around the geostationary-satellite orbit;

 that there are currently a very large number of satellite networks submitted to the ITU Radiocommunication Sector for these frequency bands;

that the above factors have led to significant difficulties for administrations to introduce

PROCEDURE OF No. 11.32A



PARTIE II-S / PART II-S / PART	TE II-S / 第II-S	部分 / ЧАСТЬ II-S / II-S 🥫	الجز											
A A1a Sat. Network USC	GAE-18A		A1f1 Not	if. adm. USA	A1f3 Int	er. sat. org		BR1 Date of re	eceipt 3	16.03.202	2 BR2	0/BR21 BR IFI	C no./part	3029/2
BR6a/BR6b ld. no. 12250	0050			ision reference	11.2		N	BR2 Adm. seria	al no.				L	EC E
												'		
		B3c1 (Co-polar	antenna patterr	n									
Co-polar ref. pattern	Coef. A	Coef. B						Co-pola	ar rad. (diag.				
<u> </u>														
BR7a/BR7b Group id.	122622557	BR1 [Date of re	eceipt 16.03.	2022 C2d	RR No. 4	.4	BR97 No. 11.43	3A	BR98	For use in	n accordance w	th Res 163	3/164
A2a Date of bringing into use a	s submitted b	y the Administration 05	.09.20	21										
A2a Date of bringing into use	05.09.2021	A2b Period of vali	d. 40	A3a Op. age	ency 503	A3b Adn	n. resp. B	BR16 Va	alue of t	vpe C8b	\neg			
BR96 Start date for 9.1/9.1A	02.09.2	_								,,	_			
BR62 Expiry date for bringing i	nto use	02.09.2022		BR63 Confi	rmed date of	bringing in	to use 05.	09.2021		BR6	4 Date o	f receipt of 1st i	Res49	
BR14 Special Section														•
C4a Class of station	EC	(C3a Assi	gned freq. band	100000	0								
C4b Nature of service	CO		C6a F	olarization type	CR	Ī	C6b	Polarization an	gle					
C8d1 Max. tot. peak pwr.	12	C8d2 Contiguous ba	andwidth			_								
		Cour Comagadas Di	alluwiuu											
C11a1 Service area no.	1	Cour Conlegaces by	and wide i											
C11a1 Service area no. A5/A6 Coordinations/Agreeme	1	0	AUS UAE		J KOR M	LA								
	1 nts 9.7	0	AUS	D G INS	J KOR M		,							
	1 nts 9.7	0	AUS	D G INS			, I							
A5/A6 Coordinations/Agreeme	1 nts 9.7	0	AUS	D G INS		l frequency	C8c1	C8c2		C8c3	C8c4	C8e1	C8e2	
20.7 GHz A13 Ref. to Special Section	1 nts 9.7 V/11.	32A 0 V C7a Design. of emissio	AUS UAE	D G INS C2 C8a1/C8b1 Max. peak pwr	C8a2/0	1 frequency 08b2 r dens.		owr Attch.	1	C8c3 pwr dens.	Attch.	C8e1 C/N ratio	Attch.	
20.7 GHz A13 Ref. to Special Section API/A/10687	1 nts 9.7 V/11.	32A 0 V	AUS UAE	D G INS C2 C8a1/C8b1	C8a2/0	I frequency	C8c1		1					
20.7 GHz 20.7 GHz A13 Ref. to Special Section API/A/10687 CR/C/4063	1 nts 9.7 V/11.	0 V V C7a C7a Design. of emissio 1 1G00F7W	AUS UAE	D G INS C2 C8a1/C8b1 Max. peak pwr 12	C8a2/0 Max. pwi	1 frequency 08b2 r dens. 48	C8c1 Min. peak	owr Attch.	Min.	pwr dens.	Attch.		Attch.	
20.7 GHz 20.7 GHz A13 Ref. to Special Section API/A/10687 CR/C/4063 C10b1	1 nts 9.7 V/11.	C7a Design. of emission 1 1G00F7W C10c1	AUS UAE	D G INS C2 C8a1/C8b1 Max. peak pwr 12 C10d1/C10d2	C8a2/0 Max. pwr	C8b2 r dens.	C8c1 Min. peak	Owr Attch.	Min.	pwr dens.	Attch.		Attch.	
20.7 GHz 20.7 GHz A13 Ref. to Special Section API/A/10687 CR/C/4063	1 nts 9.7 V/11.	0 V V C7a C7a Design. of emissio 1 1G00F7W	AUS UAE	D G INS C2 C8a1/C8b1 Max. peak pwr 12	C8a2/C Max. pwr	1 frequency 08b2 r dens. 48	C8c1 Min. peak C10d6 Noise	owr Attch.	Min.	pwr dens. 10d9 t. dim.	Attch.		Attch.	
A5/A6 Coordinations/Agreeme	1 nts 9.7 V/11.	C7a Design. of emission 1 1G00F7W C10c1	AUS UAE	C8a1/C8b1 Max. peak pwr 12 C10d1/C10d2 Cls. / Nat.	C8a2/0 Max. pwi -0 2 C10d3 Max. iso. gain	C8b2 r dens. 48 C10d4 Bmwdth	C8c1 Min. peak C10d6 Noise temp.	Owr Attch.	Min.	pwr dens.	Attch.		Attch.	
20.7 GHz 20.7 GHz A13 Ref. to Special Section API/A/10687 CR/C/4063 C10b1	1 nts 9.7 V/11.	C7a Design. of emission 1 1G00F7W C10c1	AUS UAE	D G INS C2 C8a1/C8b1 Max. peak pwr 12 C10d1/C10d2	C8a2/C Max. pwn 	C8b2 r dens. 40 C10d4 Bmwdth 0.75	C8c1 Min. peak C10d6 Noise temp.	OWT Attch. 3 C10d7 Ant. diameter	Min.	pwr dens. 10d9 t. dim.	Attch.		Attch.	
A5/A6 Coordinations/Agreeme	1 nts 9.7 V/11.	C7a Design. of emissio 1 1G00F7W C10c1 Geographical coord.	AUS UAE	D G INS C2 C8a1/C8b1 Max. peak pwr 12 C10d1/C10d; Cls. / Nat.	C8a2/C Max. pwn 2 C10d3 Max. iso. gain 47 C10d5a C	C8b2 r dens. 48 C10d4 Bmwdth 0.75 Co-polar an	C8c1 Min. peak C10d6 Noise temp. 800	C10d7 Ant. diameter	Min.	pwr dens. 10d9 t. dim. GSO)	Attch.	C/N ratio	Attch.	
A5/A6 Coordinations/Agreeme	1 nts 9.7 V/11.	C7a Design. of emissio 1 1G00F7W C10c1 Geographical coord.	AUS UAE	C8a1/C8b1 Max. peak pwr 12 C10d1/C10d2 Cls. / Nat.	C8a2/C Max. pwn 	C8b2 r dens. 40 C10d4 Bmwdth 0.75	C8c1 Min. peak C10d6 Noise temp. 800	OWT Attch. 3 C10d7 Ant. diameter	Min.	pwr dens. 10d9 t. dim.	Attch.		Attch.	
A5/A6 Coordinations/Agreeme	1 9.7 V/11.	C7a Design. of emissio 1 1G00F7W C10c1 Geographical coord.	AUS UAE On C10c2 Ctry	C2 C8a1/C8b1 Max. peak pwr 12 C10d1/C10d Cls. / Nat.	C8a2/C Max. pwn 2 C10d3 Max. iso. gain 47 C10d5a C	C8b2 r dens. 48 C10d4 Bmwdth 0.75 Co-polar an	C8c1 Min. peak C10d6 Noise temp. 800	C10d7 Ant. diameter	Min.	pwr dens. 10d9 t. dim. GSO)	Attch.	C/N ratio	Attch.	



CASE OF NO. 11.35

In cases where the Bureau is not in a position to conduct the examination under No.11.32A or No.11.33 (i.e. other than No. 9.7)



The Bureau shall immediately inform the notifying administration, which may then <u>resubmit its notice under No.11.41</u>, under the assumption that the finding under No.11.32A or No.11.33 is unfavourable.

Case of No. 11.35



PARTIE III-S / PART III-S / PARTE III-S / 第III-S部分	الجنة / YACTE III-S / III-S					
R A1a Sat. Network CLEOSAT	A1f1 Notif. adm. LUX	A1f3 Inter. sat. org.	BR1 Date of receipt	22 11 2022 RP2	20/BR21 BR IFIC no./p.	art 2025/3
BR6a/BR6b Id. no. 123500212		11.2 N	BR2 Adm. serial no.	DIV.2	DIVITION DIVITION DE	001 R
Brow Brow Id. 110.	DNOW DNOW I TOVISION TETERENCE I		DNZ Adm. Senarno.			002
BR7a/BR7b Group id. 123737738	BR1 Date of receipt 22.11.2	023 C2c RR No. 4.4	BR97 No. 11.43A	BR98 For use i	n accordance with Res	163/164
A2a Date of bringing into use as submitted by the A	Administration 10.05.2022					
A2a Date of bringing into use 10.05.2022	A2b Period of valid. 50 A3a Op. ager	ncy 010 A3b Adm. resp.	A BR16 Value of	type C8b A4l	b7cbis Min. elevation a	ngle
BR96 Start date for 9.1/9.1A 12.05.2015						
BR62 Expiry date for bringing into use 12.0	5.2022 BR63 Confin	med date of bringing into use	10.05.2022	BR64 Date of	of receipt of 1st Res49	
BR14 Special Section						
C4a Class of station EI	C3a Assigned freq. band	5000 C5	5a Noise temperature	600	B4b5 Peak of pfo	
C4b Nature of service CP	C6a Polarization type	CR C	6b Polarization angle			
C11a1 Service area no. 1	11a3 Service area diagram					
A5/A6 Coordinations/Agreements X/9.12 X/9.12A	X CHN D F RUS T	USA				
	C2a	a1 Assigned frequency				
1613.25 MHs						
A13	C7a C8a1/C8b1	C8a2/C8b2 C8c		C8c3 C8c4	C8e1 C8e	-
Ref. to Special Sections API/A/10250 1	Design. of emissio Max. peak pwr	Max. pwr dens. Min. per	ak pwr Attch. Min	pwr dens. Attch.	C/N ratio Attch	1.
CR/C/4051	120037W 5	-45.0	0	-50.6	12.4	
	C7b Cal equency	of the emissions (120KG7W)				\neg
1613.25 MHs	575 Carl Guerroy	or the emissions (reactor try)				\dashv
C10b1 C10b2	C10c1 C10c2 C10d1	C10d3 C10d4	C10d7	C8a1	C8g2	C8a3
Assoc. earth station id. Type Geogr	raphical coord. Ctry Cls. / Na.	ax. iso. Bmwdth	Ant. diameter	Max. aggi	r. Aggr. Transp	. bandwidth =
USER T	1 UA	X/9.12, —		pwr.	bandwidth Agg	. bandwidth Y
10025	1 102				5000	-
C10b1 Assoc. earth station id. Co-polar ref. p	pattern Coef. A	9.12A nna pa	Coef. D	Phi1	Co-polar rad. diag.	
USER ND-EARTH	SAST. P.		0001. 0	· · · · · ·	So point rad, diag.	
Findings 20 Date of protection	13A Conformity with R A- N- N-	13B1 Prov. 5.372	13B2 Remarks	R 138	B3 Date of Review	
13C Femarks 11.35/9.12,9.12A						





Recording under No. 11.41

When findings unfavorable under Nos. 11.32A & 11.33, a notice can be resubmitted for recording under No. 11.41

 Administration has to indicate that performed efforts to coordinate with those Administrations for which unfavorable findings resulted in the examination under No. 11.32A, without success (No. 11.41.2)

MIFR recording (Part II-S) with an indication:

13A: ANN, 13B1: 11.41/9.7, A5/A6: 11.41/9.7|X| ADM

Upon completion of coordination and in application of No. 11.41B an Administration may request BR to update the coordination status:

13A: AA-, 13B1: empty, A5/A6: 9.7|O| ADM1



Example: Recording under No. 11.41

1_TSUM Requested by: MDLUK Date	: 01.12.2024 1:50:25 PM DB:	SRS_ALL MDB	Plan let	Notice type: GEO						
A A1a Sat. Network USASAT-80B	A1f1 Notif. adm. USA	A1f3 Inter. sat. org. BR1 Da	te of receipt 24.07.2024	BR20 BR IFIC no. 3034						
BR6a/BR6b ld. no. 124500116	BR3a/BR3b Provision reference	11.2 N BR2 Add	m. serial no.	Kaarses E						
1-4-										
Records S	Structures Frequencies Emiss	sions Assoc. Estns Assoc	c. Sstns Provisions	Publications Findings						
[R72/P875 Group id. 124671414		024 C2c RR No. 4.4 BR97 No.	o. 11.43A <i>BR</i> 98 For use	in accordance with Res 163/164						
A2a Date of bringing into use as submitted by the Administration 09.05.2022										
A32 Caic of bringing into use 09.05.2022 A2b Period of valid. 50 A3a Op. agency 017 A3b Adm. resp. A BR16 Value of type C8b										
BR96 Start date for 9.1/9.1A 11.09.2015	5									
5.5.62 Exp.ny date for bringing into use 11	09.2022 BR63 Confin	med date of bringing into use 09.05.2022	2 BR64 Date	of receipt of 1st Res49						
RR14 Special Section										
C4a Class of station EC	C3a Assigned freq. band	60000								
(4b) Liture of service CP	C6a Polarization type	M C6b Polariza	ition angle							
C8d1 Max. tot. peak pwr. 39.7	C8d2 Contiguous bandwidth 36000									
C1,67 Service area no.	11 /1/0 7 IVI									
A5/A6 Coordinations/Agreements 11.41/9.	.7									
9.7	O AUS BLR E G I	HOL IRN KOR LUX MCO NOR PN	G RUS/IK UAE UKR							
		a1 Assigned frequency								
18.63 GHz 18.65	GHz 18.69 GHz	18.71 GHz 18.75	GHz 18.77	GHz						
A13	C7a C8a1/C8b1		C8c2 C8c3 C8c4							
Ref. to Special Sections	Design. of emission Max. peak pwr		Attch. Min. pwr dens. Attch.	C/N ratio Attch.						
API/A/10698	1 36M0G7W 39.7	-35.9 8.3	-67.2	8						
API/A/10698	1 36M0G7W 39.7 2 1M00G7W 24.1	-35.9 8.3 -35.9 -7.2 -48.9 -20.2	-67.2 -67.2 -80.2	8 8						
API/A/10698 CR/C/4164 C10b1 C10b2	1 36M0G7W 39.7 2 1M00G7W 24.1 3 50K0G7W 11.1	-35.9 8.3 -35.9 -7.2 -48.9 -20.2 C10d3 C10d4 C10d6 C10 Max. iso. Bmwdth Noise Ant. dia	-67.2 -67.2 -80.2 Od7 C10d9 ameter Ant. dim.	8 8						
API/A/10698 CR/C/4164 C10b1 Assoc. earth station id. Type Ger	1 36M0G7W 39.7 2 1M00G7W 24.1 3 50K0G7W 11.1 C10c1 C10c2 C10d1/C10d2 cographical coord. Ctry Cls. / Nat.	-35.9 8.3 -35.9 -7.2 -48.9 -20.2 C10d3 C10d4 C10d6 C10 Max. iso. Bmwdth Noise Ant. dia gain temp.	-67.2 -67.2 -80.2 Od7 C10d9	8 8						
API/A/10698 CR/C/4164 C10b1 C10b2	1 36M0G7W 39.7 2 1M00G7W 24.1 3 50K0G7W 11.1 C10c1 C10c2 C10d1/C10d2	-35.9 8.3 -35.9 -7.2 -48.9 -20.2 C10d3 C10d4 C10d6 Ant. dia Max. iso. Bmwdth Noise Ant. dia gain temp.	-67.2 -67.2 -80.2 Od7 C10d9 ameter Ant. dim.	8 8						
API/A/10698 CR/C/4164 C10b1 Assoc. earth station id. Type Gen	1 36M0G7W 39.7 2 1M00G7W 24.1 3 50K0G7W 11.1 C10c1 C10c2 C10d1/C10d2 cographical coord. Ctry Cls. / Nat.	-35.9 8.3 -35.9 -7.2 -48.9 -20.2 C10d3 C10d4 C10d6 Ant. dia max. iso. Bmwdth Noise Ant. dia max. iso. G10d4 C10d6 C10	767.2 -67.2 -80.2 0d7 C10d9 Ant. dim. (DGSO)	8 8 8						
API/A/10698 CR/C/4164 C10b1 Assoc. earth station id. Type Gen TYPICAL KA1.2M02 C10b1 Assoc. earth station id. Co-polar ref	1 36M0G7W 39.7 2 1M00G7W 24.1 3 50K0G7W 11.1 C10c1 C10c2 C10d1/C10d2 cographical coord. Ctry Cls. / Nat.	-35.9 8.3 -35.9 -7.2 -48.9 -20.2 C10d3 C10d4 C10d6 Ant. dia max. iso. Bmwdth Noise Ant. dia max. iso. G10d4 C10d6 C10	-67.2 -67.2 -80.2 Od7 C10d9 ameter Ant. dim.	8 8						
### API/A/10698 #### CR/C/4164 C10b1	1 36M0G7W 39.7 2 1M00G7W 24.1 3 50K0G7W 11.1 C10c1 C10c2 C10d1/C10d2 Ctry Cls. / Nat. 1 TC CP of. pattern Coef. A Coef.	-35.9 8.3 -35.9 -7.2 -48.9 -20.2 C10d3 C10d4 C10d6 C10 Max. iso. Bmwdth Noise temp. 45.2 0.94 200 C10d5a Co-polar antenna pattern B Coef C Co	-67.2 -67.2 -80.2 0d7 C10d9 Ant. dim. (DGSO)	8 8 8 8 Co-polar rad. diag.						
### API/A/10698 CR/C/4164	1 36M0G7W 39.7 2 1M00G7W 24.1 3 50K0G7W 11.1 C10c1 C10c2 C10d1/C10d2 Ctry Cls. / Nat. 1 TC CP of. pattern Coef. A Coef.	-35.9 8.3 -35.9 -7.2 -48.9 -20.2 C10d3 C10d4 C10d6 C10 Max. iso. Bmwdth Noise Ant. dia gain temp. 45.2 0.94 200 C10d5a Co-polar antenna pattern E Coef C Co	-67.2 -67.2 -80.2 0d7 C10d9 Ant. dim. (DGSO)	8 8 8						

No. 11.43A change in the characteristics of an assignment already recorded





ID number	adm			Earth station	long_nom	Date of receipt	ssn_ref	ssn_no	ssn rev/ Sup	ssn rev no	Type of publication	Part/ Art.	WIC/IFIC (ific.mdb)	
(SNS)		Geo.area												date
up down	up down	up down	up down	up down	up down	up down	up down	up down			up down		up down	
116545225	F		VHR2020		N-GSO	17.10.2016	API/A	11940					<u>2839</u>	21.02.2017
116545225	F		VHR2020		N-GSO	17.10.2016	API/B	715					<u>2850</u>	25.07.2017
117500206	F		VHR2020		N-GSO	21.08.2017	PART I-S						2855	03.10.2017
117500206	F		<u>VHR2020</u>		N-GSO	21.08.2017	PART II-S						<u>2874</u>	10.07.2018
117500206	F		VHR2020		N-GSO	10.12.2020	PART I-S						2942	23.03.2021
117500206	F		<u>VHR2020</u>		N-GSO	10.12.2020	PART II-S						<u>2945</u>	04.05.2021
117500206	F		<u>VHR2020</u>		N-GSO	19.07.2021	PART II-S						<u>2967</u>	22.03.2022
117500206	F		VHR2020		N-GSO	27.01.2022	PART I-S						2969	19.04.2022
117500206	F		VHR2020		N-GSO	27.01.2022	PART II-S						2973	14.06.2022
117500206	F		<u>VHR2020</u>		N-GSO	08.02.2022	PART II-S				Resumption		2982	18.10.2022
117500206	F		VHR2020		N-GSO	17.06.2024	PART I-S						3031	01.10.2024
117500206	F		<u>VHR2020</u>		N-GSO	17.06.2024	PART II-S						<u>3034</u>	12.11.2024



BR105 Current Milestone	124682	BR:	106 Milestone	criteria met				ext mileston	BR97 No. 11.43 e period	BAY BR98	For use	in accordance wit	h Res 163/	164
A2a Date of bringing into use as submitted by the Administration 11.05.2021 A2a Date of bringing into use 11.05.2021 A2b Period of valid. 25 A3a Op. agency 100 A3b Adm. resp. A BR16 Value of type C8b A4b7cbis Min. elevation angle														
BR96 Start date for 9.1/9.1A	17.0	0.2024	J											
														k
Page / Página 18 saml											printerla.			
							_							
1 TSUM Requested by 1833	100	Date 01	12.2024 1:	33:28 DM	······································	SES ALL	erbe			Plan id		Matice	type: NOM	CED
M A1a Sat. Network VH				A1f1 Notif. a			ter. sat. org		BR1 Date of re	ceipt 17.06.20	24		IFIC no.	
BR6a/BR6b ld. no. 11750					on reference 3				BR2 Adm. seria					X E
BR62 Expiry date for bringing	into use	17.06.2	2029		BR63 Confirm	ned date of	bringing in	to use 11.0	05.2021	BF	R64 Date	of receipt of 1st R	es49	
BR14 Special Section							_							
C4a Class of station	EW			C3a Assign	ed freq. band	31600	0					B4b5 Peak	of pfd	
C4b Nature of service	CR			C6a Poli	arization type	D		C6b	Polarization and	gle				
C8d1 Max. tot. peak pwr.		L0 C8d	2 Contiguous t	oandwidth	316000									
C11a1 Service area no.	1	C118	3 Service area	a diagram										
A5/A6 Coordinations/Agreeme	ents													
					C2a	1 Assigned	d frequency							
8183 MHz														
A13 Ref. to Special Section	ne	l no	C7a sign. of emissi		08a1/C8b1 ex. peak pwr	C8a2/ Max. pw		C8c1 Min. peak p	Wr Attch.	C8c3 Min. pwr dens.	C8c4 Attch	C8e1 C/N ratio	C8e2 Attch.	
API/A/11940	115		316MG7W	UII WIO	10		75	Willi. peak p		-80	Auch	10	AllCII.	
				C7b Carr	ier frequency	of the emiss	sions (316N	1G7W)			•		=	
8183 MHz														
C10b1	C10b2		10c1		C10d1/C10d2	C10d3	C10d4	C10d6	C10d7					
Assoc. earth station id.	Type	Geograph	nical coord.	Ctry	Cls. / Nat.	Max. iso. gain	Bmwdth	Noise temp.	Ant. diameter					
TYPICAL 3 7 M	T				1 TW CR	47.6	0.66	140	3.7					
LESZNO	S	016E37 17	51N53 08		1 TW CR	51.7	0.46	122	5.5					
BIALOBRZEGI ABU DHABI 2	S	021E03 45 054E27 29			1 TW CR 1 TW CR	51.7 52.1	0.46	122 130	5.5 5.5					
INC DIMES E		COLLET ES	E INEC 03	01112	2 211 011			tenna patter					_	
C10b1 Assoc. earth station in	d. Co-	polar ref. patte	ern C	oef. A	Coef.		Coef		Coef. D	Phi	1	Co-polar rad. di	ag.	
TYPICAL_3_7_M	A-25	*LOG(FI)	3	2										
LESZNO BIALOBRZEGI		*LOG(FI) *LOG(FI)		2										
ABU DHABI 2		*LOG(FI)		2										
Findings 2D Date of protect	tion 17.0	6.2024 1	13A Conformity	with RR A-	-	13B1 Pi	rov. 11.43	A	13B2 Rem	arks	1.	3B3 Date of Revie	w	
13C Remarks									_	_				

EARTH STATIONS NOTIFICATION SPECIAL SECTION PART II-S





UNION FERNATIONALE DES TÉLÉCOMMUNICATIONS

INTERNATIONAL TELECOMMUNICATION UNION

UNIÓN INTERNACIONAL DE TELECOMUNICACIONES
OFICINA DE RADIOCOMUNICACIONES

DITH.

BUREAU DES RA	ADIOCOMMUNICATION	NS	RADIOCOMMUNICATIO	N BUREAU OF	ICINA DE RADIOCOMUNICACIONES	⊌ I.I.U.
RÉSEAU À SATELLITE SATELLITE NETWORK RED DE SATÉLITE		KAZSAT1		PARTIE PART PARTE	II-S	
STATION TERRIENNE EARTH STATION ESTACIÓN TERRENA	S.KARA	KAMYS_31546_E	_FTDMA	BR IFIC / DATE BR IFIC / DATE BR IFIC / FECHA	3032 / 15.10.202	4
ADM. RESPONSABLE RESPONSIBLE ADM. ADM. RESPONSABLE	KAZ	LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL	58.5 E	NUMÉRO D'IDENTIFICATION IDENTIFICATION NUMBER NÚMERO DE IDENTIFICACIÓN	124505051	
RENSEIGNEMENTS REÇUS	NA EL 03.05.2024					

Assignations de fréquence inscrites dans le Fichier de référence au titre de			equency assignments recorded in the Master Register under	Asignaciones de frecuencia inscritas en el Registro con arreglo al			
X	Article 11 du Règlement des radiocommunications		X Article 11 of the Radio Regulations		Artículo 11 del Reglamento de Radiocomunicaciones		
	Article 5 des Appendices 30 et/ou 30A		Article 5 of Appendices 30 and/or 30A		Artículo 5 de los Apéndices 30 y/o 30A		
	Article 8 de l'Appendice 30B		Article 8 of Appendix 30B		Artículo 8 del Apéndice 30B		

Pour plus d'informations sur les dispositions réglementaires et l'explication des codes ou symboles utilisés dans cette publication, veuillez consulter la Préface.

For more details on the regulatory provisions and the explanation of the codes or symbols used in this publication, please consult the Preface.

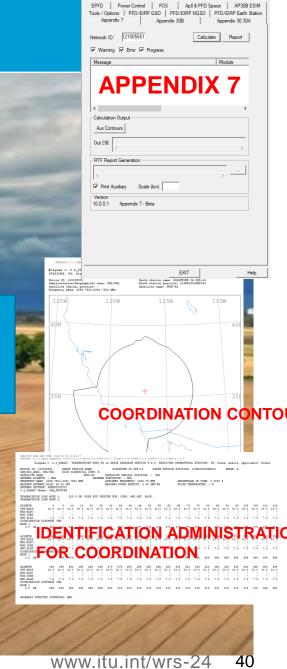
Para más detalles sobre las disposiciones reglamentarias y la explicación de los códigos o símbolos utilizados en esta publicación, sírvase consultar el <u>Prefacio</u>.



PARTIE ILS / PART ILS / PARTE ILS / 第ILS部分 / YACTH ILS / ILS:: 41

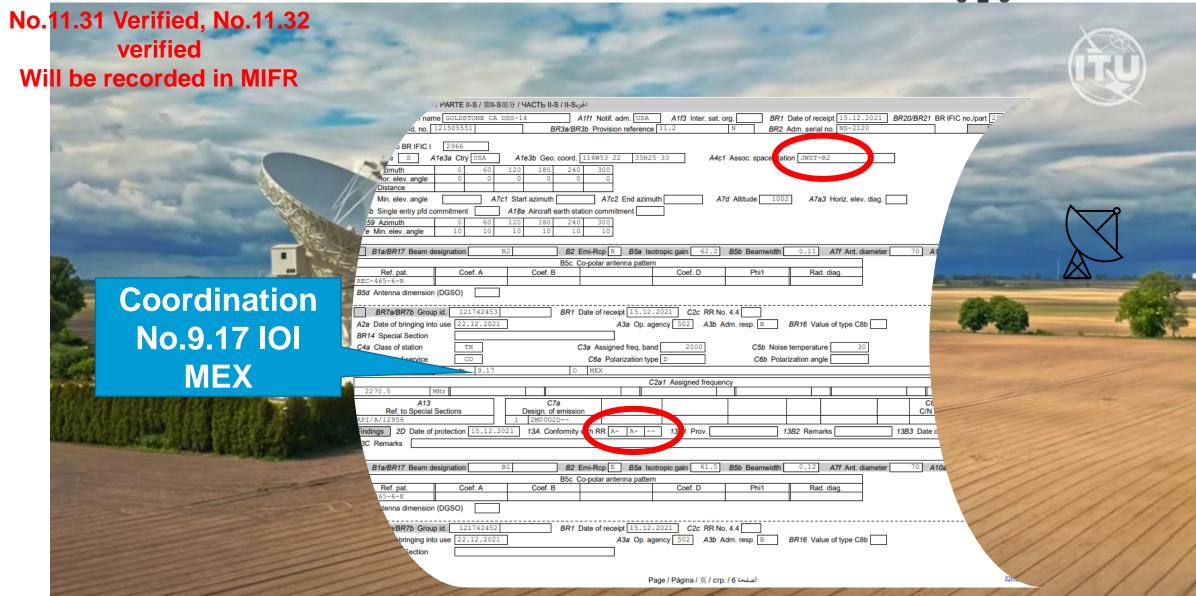
EARTH STATIONS NOTIFICATION AND COORDINATION CONTOUR

	TACHER THAT HE THAT HE THAT THAT THE THE THE THE THE THE THE THE THE TH
	A 1e2 Station name GOLDSTONE CA DSS-14 A1f1 Notif. adm. USA A1f3 Inter. sat. org. BR1 Date of receipt 15.12.2021 BR20/BR21 BR IFIC no./part 2974/2
	BR6a/BR6b Id. no. 121505551 BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no. NS−2120 B2 R
	BR6a/BR6b Id. no. 121505551 BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no. NS-2120 B2 R
	B5c Co-polar antenna pattern
	Ref. pat. Coef. A Coef. B Coef. D Phi1 Rad. diag.
	REC-465-6-R
Sec. of Sec.	B5d Antenna dimension (DGSO) Coordination
Commence of the last of the la	BR7a/BR7b Group id. 121742453 BR1 Date of receipt 15.12.2021 C2c RR No. 4.4
	A2a Data of bringing into use 22 12 2021 A2a On agency 502 A2b Adm reen B RP16 Value of bring Co
	BR14 Special Section S
	C4a Class of station TH C3a Assigned freq. band 2000 C5b Noise temperature
-	
STREET, AND ASS.	C4b Nature of service CO C6a Polarization type D A5/A6 Coordinations/Agreements 9.17 O MEX
NAME OF TAXABLE PARTY.	C2a1 Assigned frequency
-	2270.5 MHz
	Ref. to Special Sections C7a Design. of emission C7a C8e1 C8e2 C/N ratio Attch.
医积量可能及基础	Arti/12956 1 2M002D= 4.5
	Findings 2D Date of protection 15.12.2021 13A Conformity was RR A- A 3B1 Prov. 13B2 Remarks 13B3 Date of Review A/22.11.2021
列7月1日 图画	
Market Committee	13C Remarks
-	
	B1 B2 Emi-Rcp E B5e Isotropic gain 61.5 B5b Beamwidth 0.12 A7f Ant. diameter 70 A10e Coord. area diag. 1
	B5c Co-polar antenna pattern
	Ref. pat. Coef. A Coef. B Coef. D Phi1 Rad. diag.
	REC-465-6-E
	B5d Antenna dimension (DGSO)
	D07-007- Com id 1017-0-50 D04 D4- of conint 15 10 2001 C00 D0 A A
	BR7a/BR7b Group id. 121742452 BR1 Date of receipt 15.12.2021 C2c RR No. 4.4
	A2a Date of bringing into use 22.12.2021 A3b Op. agency 502 A3b Adm. resp. B BR16 Value of type C8b
	A2a Date of bringing into use 22.12.2021 A3a Op. agency 502 A3b Adm. resp. B BR16 Value of type C8b BR14 Special Section
	BR14 Special Section



EARTH STATIONS NOTIFICATION







EARTH STATIONS NOTIFICATION



A1e3b Geo. coord. 037E28 10 55N47 50 A4c1 Assoc. space station EMARSAT-1F		
0 0		
de 26.2 A7c1 Start azimuth 172 A7c2 End azimuth 172.2 A7d Altitude 179 A7a3 Horiz. € Atry pfd commitment A18a Aircraft earth station commitment	UITITU	
BR17 Beam designation CD1 B2 Emi-Rcp R B5a Isotropic gain 47.3 B5b Beamwidth 0.72 A7f An	UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS INTERNATIONAL TELECOMMUNICATION UNIÓN UNIÓN INTERNACIONAL DE TELEC BUREAU DES RADIOCOMMUNICATIONS RADIOCOMMUNICATION BUREAU OFICINA DE RADIOCOMUN	COMUNICACIONES © I.T.
B5c Co-polar antenna pattern	RÉSEAU À SATELLITE SATELLITE NETWORK JWST-R2 PART RED DE SATELITE PARTE	II-S
Ref. pat. Coef. A Coef. B Coef. D Phi1 Rad. diag. .C-580-6 .C-580	STATION TERRIENNE BRIFIC / DATE	4 / 28.06.2022
5d Antenna dimension (DGSO)	ADM. RESPONSABLE RESPONSABLE USA LONGITUDE NOMINALE NOMINAL LONGITUDE NGSO NUMÉRO D'IDENTIFICATION IDENTIFICATION IDENTIFICATI	121505551
BR7a/BR7b Group id. 120646023 BR1 Date of receipt 26.06.2020 C2c RR No. 4.4	RENSEIGNEMENTS REÇUS PAR LE BUREAU LE / INFORMATION RECEIVED BY THE BUREAU ON / INFORMACIÓN RECIBIDA POR LA OFICINA EL	15.12.2021
2a Date of bringing into use 05.06.2020 A3a Op. agency 127 A3b Adm. resp. A BR16 Value of type		
R14 Special Section	Assignations de fréquence inscrites dans le Fichier de référence au titre de Frequency assignments recorded in the Master Register under Asignaciones de frecuencia inscrite de	ritas en el Registro con arreglo al
4a Class of station TC C3a Assigned freq. band 25000 C5b Noise temperature	X Article 11 du Règlement des radiocommunications X Article 11 of the Radio Regulations X Articulo 11 del Reglamento	o de Radiocomunicaciones
4b Nature of service CB C6a Polarization type ▼ C6b Polarization angle	Article 5 des Appendices 30 et/ou 30A Article 5 of Appendices 30 and/or 30A Articulo 5 de los Apéndices	s 30 y/o 30A
5/A6 Coordinations/Agreemen's AP5#6E1 0 X CYP RUS SEY	Article 8 de l'Appendice 30B Article 8 of Appendix 30B Articulo 8 del Apéndice 300	В
Z/11.41 X CYP RUS SEY O BLR/IK HOL PAK THA TUR VTN		
C2a1 Assigned frequency 1.078 MHs 3445.078 MHs 3475.078 MHs 3505.078 MHs	Pour plus d'informations sur les dispositions réglementaires et l'explication des codes ou symboles utilisés dans cette publication, veuillez consulter la <u>Préface</u> . For more details on the regulatory provisions and the explicación de los códigos o publication, veuillez consulter la <u>Préface</u> .	símbolos utilizados en es
## C7a Design. of emission 1 1M91G7W 2 156KG7D 3 156KD7D 4 62K5G7D 5 31K2G7W 5 31K2G7W	C8e1 C8e2 C/N ratio Attch. 8 8 8 8	

- e) for assignments to earth stations in relation to terrestrial stations or earth stations operating in the opposite direction of transmission, when an administration proposes:
 - to bring into use an earth station the coordination area of which does not include any of the territory of any other country;



N/9.17?





PARTIE II-S / PART II-S / PARTE II-S / 第II-S部分 / YACTЬ II-S / II-S / II-S /										
R A1e2 Station nan	ne HUN-SZI-21		A1f1 Notif. adm. HNG	A1f3 Inter. sat. or	g. BR1 [Date of recei	ipt 22.05.2024	BR20/B	R21 BR IFIC no./p	art 3033/2
BR6a/BR6b Id. no.	124505098		3b Provision reference	1.2	N BR2 A	dm. serial n	10.			KR2R E
	<u>'</u>	<u> </u>			<u> </u>					
B1a/BR17 Beam	designation KR2R	B2	Emi-Rop E B5a Isotr	ropic gain 52.7	B5b Beamwidth	0.36	A7f Ant. diame	eter 3.	7 A10a Coord.	area diag. 1
		. B5c	Co-polar antenna pattern							
Ref. pat.	Coef. A	Coef. B		Coef. D	Phi1	Rad.	diag.			
ABCDphil	29	25	32	25	6.9					
B5d Antenna dimensio	n (DGSO)]								
BR7a/BR7b Gro	up id. 124669416	BR1	Date of receipt 22.05.2	024 C2c RR No.	. 4.4					
A2a Date of bringing in	nto use as submitted b	by the Administration								
A2a Date of bringing in	06.06.202	3	A3a Op. age	ncy 063 A3b A	dm. resp. A	BR16 Valu	e of type C8b	\Box		
BR14 Special Section										
C4a Class of station	TC		C3a Assigned freq. band	36000						
C4b Nature of service	CA		C6a Polarization type	H	C6b Polar	rization angle	e			
C8g1 Max. aggr. pwr.	26	C8g2 Aggr. I	bandwidth 36000	C8g3 T	ransp. bandwidth =	Aggr. band	lwidth Y			
A5/A6 Coordinations/A	### A5/A6 Coordinations/Agreements 9.17									
	C2a1 Assigned frequency									
13.893	GHz									
A13 Ref. to Specia		C7a Design. of emiss	C8a1/C8b1 ion Max. peak pwr	C8a2/C8b2 Max. pwr dens.	C8c1 Min. peak pwr	C8c2 Attch.	C8c3 Min. pwr dens.	C8c4 Attch.		
AR11/A/4598		1 36M0G7WDN	26	-49.6	13.8		-61.8			
CR/C/2086			•			•		•	•	
							. —			
	of protection 22.05	.2024 13A Conform	ity with RR A- A	13B1 Prov.		13B2 Rem	arks	13B	3 Date of Review	
13C Remarks										



SUMMARY

The notification process from the notice creation, through Part I-S publication, the technical examination and the final recording in MIFR was presented

Some helpful tips:



- Notice validation without fatal errors minimizes delays in publication/examination
- Monitor IFIC publications
- When difficulties occur, do not hesitate to contact us in BRMAIL@itu.int













Thank you!

ITU – Radiocommunication Bureau

Questions to brmail@itu.int
or mehtap.muluk@itu.int