

Submission of Notification of Earth Station to the Bureau

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- Introduction to Earth Stations Filing Process
- Data Capturing Exercise
- Coordination Contour Creation Exercise
- Submission of Notification to ITU



- Summery of Notification of Earth Stations
- Exercise: Submission of a notification for an earth station already coordinated



Notification of Earth Stations

Earth Station Filing Process

Frequency Study

1.

Article 5 : Frequency Allocations Article 9 : Coordination Provisions Collecting and Capturing Data

2.

Appendix 4: ES CharacteristicsSpaceCap: Data Capturing

3. Coordination Request to Admins

Appendix 7 : Coordination Area GIBC/AP7 : Identify affected Admins

Notification to BR

4.

SpaceCap : Create Notification Notice e-Submission : Submission of Notices to ITU

General procedure of Notification

- 1. Administration creates a notification notice on **SpaceCap** and submits it through **e-Submissions** system
- 2. Receivability examination (completeness, correctness):
 Complete and correct establishing of the date of receipt and publication in Part I-S
 Not complete or Not correct request to provide mandatory information within 30 days or not receivable and, therefore, returned to the administration
- 3. Technical / regulatory examination under No.11.31, 11.32 and 11.33 and findings will be given for Notification:

Favourable – publication in Part II-S and recording in the Master Register
 Unfavourable – publication in Part III-S and returned to the administration under No.11.36, 11.37 or 11.38

The notices returned under No.11.38 may be resubmitted under No.11.41.



Submit

Administration



Administration



Process to submit Notification notice to ITU

1. Create a Notification notice on **SpaceCap** software



- 1. A Notification notice is created by converting Coordination Request to Notification notice.
- 2. Don't forget to capture data items which are not contained in Coordination Request
 - Date bringing into use
 - Coordination status of the earth station with affected administrations
- 2. Validate a Notification notice with **BR SIS Validation**
- 3. Submit Notification notice to BR via e-Submission system



SpaceCap





Exercise Submission of a notification for an earth station already coordinated

0. Exercise Scenario

Submit a Notification notice of the earth station (NEW ES) coordinated until previous exercise to ITU.

1. Prepare an exported/cloned/copied file of Coordination Request before converting it to a Notification Notice. The original SNS file is automatically overwritten when it is updated on SpaceCap.(The files created on SpaceCap are stored at C:\Users\(username\ITU\BR_SPACE_v10.0)



- 2. We aim to create the Notification notice "ES_WRS24_Notif.mdb" in the Zip file for this exercise.
- 3. "ES_WRS24_CR.mdb" in Zip file for Coordination Contour Creation Exercise can be used if a coordination request couldn't be completed in the previous exercise.
- 4. The additional data item captured for a Notification notice are listed in "WRS-24_ES_Exercise_Parameter.pdf".



1. Change Notice Type



Open the copied file of Coordination Request on SpaceCap.

Change Notice type from No. 9.17 to No. 11.2 on Notice tab

Notice	Station	Beam		
Notice Id: Notice subm No. 9.6 C	124 AP4/II and AP4 hitted under/for: Coordination • No. 11. 9.11A Applies • Band Earth Station Coordination tion Coordination between	1/III (Appendix 4 - Annex 2A) 2 Notification First Notification Is 21.4 to 22 GHz Special Procedure under No. 9.7A Administrations under No. 9.17	27.11.2024 Status 01 C Subj. to Coord. Sect.II Art.9 C 11.32 C 11.32 + 11.32A C Earth Station Coordination under No. 9.21	No.11.2 Notificatio
Date: DD.MM A1f1.Notifying Administration A1f3. Intergovernm Satellite Syste Type of Satell	Admini Serial N BEL V BEL V Behal ental ental ental softetionary Satellite Network	stration Ibr Notice tted on f of these istrations. x ork	Notice intended for Addition Modification Suppression BR Identification No. of Station to be modified/suppressed Specific Earth Station	

2. Manage Commitments



Open "Manage Commitment" and check the necessary commitments.

B Specific Earth Station Notice:124		
Notice Station E	Beam	
Notice Id: 124 Administration: BEL	Notice Commitments for Notice #124 SICRAL-2A Save Fulfilled ? Commitment BR109 (PARA 1.6 ROP 4.4) A confirmation that the administration has determined that the frequency assignments und avoid harmful interference and to immediately eliminate such in case of a complaint BR133 Res 678, resolves 1.1 any earth station in the SRS operating in the frequency band 14.8-15.35 GHz shall not excommended that the frequency band 15.35-15.4 GHz, at any radio astronomy site observing in the frequency band 15.35-15.4 GHz, at any radio astronomy site observing in the frequency band 15.35-15.4 GHz, at any radio astronomy site observing in the frequency band 15.35-15.4 GHz, at any radio astronomy site observing in the frequency band 15.35-15.4 GHz, at any radio astronomy site observing in the frequency band 15.35-15.4 GHz, at any radio astronomy site observing in the frequency band 15.35-15.4 GHz, at any radio astronomy site observing in the frequency band 15.35-15.4 GHz, at any radio astronomy site observing in the frequency band 15.35-15.4 GHz, at any radio astronomy site observing in the frequency band 15.35-15.4 GHz, at any radio astronomy site observing in the frequency band 15.35-15.4 GHz	RR 4.4 der No.4.4 meet the conditions referred to in para 1.6 of ROP and that it has identified measures to seed the power flux-density (pfd) level of -156 dB(W/m2) for more than 2% of the time in a 50 15.35-15.4 GHz
Country Longitude BEL Degrees 4 E/W E A4c1. Associated Space Station A4c2. N SICRAL-2A Image Commitments Commitments: Manage Commitments A7d. Altitude 91 Metres A7c. Operating Azimuthal Angles (GSO) A7a	Min 12 C Degrees 50 N/S N Min 36 Sec 0 omi Drbital Longitude (if geostationary) 6.20 E E/W A7b1. Min Elevation Angle (GSO) 30.9 ° A7b2. Table of Minimum Antenna Elevation Angles (NGSO) A7e. Table of Minimum Antenna Elevation Angles (NGSO) A7e. Table of Minimum Antenna Elevation Angles (NGSO) Beam MTR Beam MRR	PFD limit for Space Research Service in 14.8-15.35GHz
1. From 2. To A7a. Horizon 163 165 A7a. Horizon Elevation D attached. S Attachmen	on Diagram See	In this exercise, Commitments are unnecessary.

3. Enter Attachment of coordination contours

• Go to **Beam** tab.



• Enter Attachment number of coordination contour diagrams.

Specific Earth Statio	n Notice:123				
Notice	Station	Beam	Group		
	Notice Id: 123 Characteristics of the Antenna Characteristics of the Antenna Receiving Earth Station Transmitting Earth Station	Administration: BEL a. Beam Designation: MTR d Beam Designation (if changed)	Station Name: NEW ES Assoc. Satellite Transmitting Beam Designation	ne nna More	
	A7f. Antenna Diameter (meters) (only for 13.75-14GHz)	b. Beamwidth Degrees 0.3 10a. E Stn Coordination iagram. See Attachment	Antenna Radiation Pattern B5c. Co-polar Radiation 605 Pattern Id: REC-580-6 ==> APEREC015V01 Diagram attached. See Attachment no.:		[Receiving Beam] [Transmitting Beam] A10a Coordination diagram
	d. Dgso (meters)	List of Available Groups	Coordination for both recei	contour c ving and t	liagrams are necessary

4. Enter Date of Bringing into Use

Enter Date of Bringing into use on General Characteristics tab under Group tab

Notice	Special Section Station	Beam	Group	Emissions	Freaue
Notice 12 3. Observed Freau C Add C M	4 Station NEW ES Name: Iencies and Related Characteristi fod C Sup of the group	EAnt Id MTR cs BR Identification of the Group to be modified/suppressed	R Group Id: 9 Page No	Split Grp Id: BR Data	
A3a, Oper	Bringing into use 7.11.2024	a Group of Frequenci			k here ing Beaml
001 RE	GIE DES TELEGRAPHES ET D	ES TELEPHONES	•	[Transm	nitting Beam]
A3b. Resp A INST	onsible Administration ITUTE BELGE DES SERVICES	POSTAUX ET DES	_	A2a Dat 27.11.2	e of bringing into us
To apply th	nis information to	Apply to all groups in	Apply to all groups		

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5. Update Coordination Agreements (Transmitting Beam)



Fill in **Coordination tab** according to the coordination with affected administrations

Notice Coordination	St. Specia	ation I Section		Beam	1	Gr	oup	1	Emission	ns	Fred	ouencies	1
				Fo	r Tran	ismitti	ng be	eam N	/IRR				
Notice Id:	124 Adm: BI	L Station Name:	NEW ES		E	Ant Id MR	RE	Group	ld: 8	•			
			4	A5/A6. Coord	dination Obta	ined or Agre	ement Obtair	ned					[
Pr	ovision Stat	us Adm/Org	Adm/Org	Adm/Org	Adm/Org	Adm/Org	Adm/Org	Adm/Org	Adm/(rg	Adm/Org	Adm/Org	Adm/(
9.17	Obta	ain D	F	HUL	LUX	SUI							
						-							
_													
					[Tra	nsmit	ting E	Beam	(MRR	x)]			
					A5//	46 Co	ordina	ation/	Agree	ement	s:		
•					9.17	Obta	ined	from	D, F, C	G, HOL	., LUX	and	SUI
Talaatua	condination to				·								

Coordination Agreements are necessary for all Groups.

Affected administrations may be different for each Groups. www.itu.int/wrs-24 13

6. Update Coordination Agreements (Receiving beam)



Fill in Coordination tab according to the coordination with affected administrations

No	tic ina	e ition	Sp	Stati ecial S	on Section		Beam	I	Gr	oup	1	Emission	is	Fred	uencies
							For	Recei	iving k	beam	MTR				
1	lot	ice Id:	124 Adr	m: BEL	Station Name:	NEW ES		E	Ant Id MT	RR	Group Id	± 9	•		
Ē						A	5/A6. Coord	lination Obtai	ined or Agre	ement Obtain	ied			1	
F		Provisio	on	Status	Adm/Org	Adm/Org	Adm/Org	Adm/Org	Adm/Org	Adm/Org	Adm/Org	.dm/Org	Adm/Org	Adm/Org	Adm/(
ŧ		9.17		Obtain	D	r	HUL	G	LUX	DINK				-	
F															
ŀ	+														
F															
ŀ	+						[
F							[Re	eceivii	ng Bea	am (M	ITR)]				
ŀ	+						A5	/A6 Co	oordir	nation	/Agree	ement	ts:		
F	ļ						a 1	7 Obt	ained	from	ואח ח	KE		and	ну
L	(5.1		lanieu		$\overline{\mathbf{D}}, \overline{\mathbf{D}}$	<u>``, ', `</u>	<u>, 1101</u>	anu	LUA
	TOD	o apply coordi ther groups, se	nation to elect the	K		Apply to curr group only	rent C Ap	oply to all grou this beam	^{ups} C ^{Ap} in	ply to all grou this potice	sdr				
	ь	eam or notice (option.		-	group only	in	this beam	in	this notice					

7. Launch BRSIS Validation





7. Validation Results



BRSIS - Validation v10.0.0 - BETA		
Notice Id. 124		
Sat. name: SICRAL-2A Stn. name: NEW ES Type of notice: Notification Status: 01 Adm./Org BEL Orb. pos.: 16.2E Station type: . Validation Reports	5	
created on 27/11/2024 - start time: 12:08:58 - duration: 0min. • Validation: no error • SRSFIX: 1 Error	5sec. by user SUMIYOSH using version: 10.0.0.51	
ALIDATION RESULT: Export 🖨 🌱 🚍 🔍 🖽	Summary	
Drag a column header here to group by that column		
Beam E/R Grp Id Table Field Value Row Valerr Rule	F/W Ap4 Ref Error Message	
	Confirm No fatal errors	
	If Fatal Errors are found, correct a notice to eliminate the errors.	a Notification
	Use the latest version of BRSIS V	alidation software.

() Check before submitting a notification of Earth Station to ITU



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- ♂ Check the following:
 - Associated space station must be already notified to ITU.
 - The beam names of an earth station shall accord with those of the associated space station.
 - The frequency range of an earth station shall be covered by the bands used by the associated space station.
- ✓ Use SpaceCap to convert the notice from No. 9.17 to No. 11.2.
- ✓ Use SpaceCap to update the status of coordination of the earth station with affected administrations.
- Solution Run **BRSIS Validation** software to ensure that there are no fatal errors.
- Submit Notification to ITU via e-Submission system.

Errors in capturing necessary data items may result in Not Receivable or delay of processing in ITU.

() Check before submitting a notification of Earth Station to ITU

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Frequencies of Earth Station (NEW ES)

Beam Name	Transmitting/ Receiving	freq_min	freq_max
MRR	E	8250	8350
MTR	R	7250	7350

- **1. Beam names** of the earth station are the same with those of the associated space station.
- 2. Beam directions of the earth station are opposite against those of the associated space station.
- **3.** Frequency ranges of the earth station are covered by those of the associated space station of the same beam name.

Frequencies of Associated space station (SICRAL-2A)

Beam Name	Transmitting /Receiving	freq_min	freq_max
GE	E	20200	21200
GE	E	20699.7	20700.3
GS	E	2203.1389	2203.739
GU	E	267.0875	267.2625
GU	E	258.1375	258.3125
GU	E	252.1875	252.3625
MTR	E	7250	7750
TE	E	20200	21200
GE	R	43500	44500
GS	R	2028.7	2029.3
GU	R	308.0875	308.2625
GU	R	299.1375	299.3125
GU	R	293.1875	293.3625
MRR	R	7900	8400
RE	R	43500	44500

8. Submit a notice to BR via e-Submission

After creating a notification notice of earth station, submit it to BR via e-Submission (<u>https://www.itu.int/ITU-R/space/e-submission/</u>)

e-Submission of Satellite Network Filings	6112	ITU_USER S\sumiyosh 🛩	
★ Home Submissions AsReceived Published in BR IFIC Users New All Filings Comments Archived	Help Archived comments		
Submission of Satellite network filings captured in electronic format (mdb) a Please click on the icon corresponding to your submission.	nd all relevant attachments.	Home Submissions AsReceived Published in BR IFIC Users Help New All Filings Comments Archived Archived comments	
API and Coordination	Broadcasting Satellite Service (AP30/30	 Upload Notification of Earth Station for Validation All users are strongly requested to use Space Software v9.1 and submit notice in v9.1 The system only accepts uploaded filings in SNS 9.1 format. If you wish to resubmit a notification under 11.41 or 11.46, please go to the Resubmission page. Please don't forget to upload files before submitting for validation. Click the '+' button to upload other than SNS and GIMS mdb files. 	
Notification	Space Operation Functions supporting	SNS(MDB) : MDB file with Notice Data * Browse Upload SNS file Other : Other relevant documents	C Upload
Space Station Earth Station KA Station Resub- mission Due Diligence Earth Station	Article 2A Article 2A Notification Fixed Satellite Service (AP30B)	Browse Upload coordination contour diagrams *Attachments in "other" fields are for information only and should relate to MDB files	C Upload
Non plan Res49/552AP30/30A Res49AP30B Res49	AP30B A6A AP30B A6B AOB A6B Notificati	+ Add additional documents or drag files here	Upload All
Spacecom Comments	AP30B ESIM		

TUWRS



Thank you!

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