



Notification and Recording of Frequency Assignments

(Non-plan, space services)



Mehtap Dufour, Akim Falou-Dine, Nick Sinanis



Overview



- **Notice creation, validation and Part I-S publication**
 - Nick Sinanis
- **Technical examination**
 - Mehtap Dufour
- **Part III-S publication, return of notice and resubmission request**
 - Akim Falou-Dine
- **Findings and recording**
 - Mehtap Dufour



Notice Lifetime



- **Administration sends Art. 11 filing**
 - Email submissions are always confirmed in return by BR
- **Receivability tests (completeness, correctness)**
- **Part I-S is published**
- **Technical examination**
- **Favorable findings -> Part II-S publication & Recording**
- **Unfavorable findings -> Part III-S publication**

- **Returned notices that can be resubmitted, will restart the above cycle, until the final recording takes place**



Notice creation



- **CRC to Notification filing conversion**
 - Easiest way to have a starting point
- **NGSO API to Notification**
 - See instructions in Wednesday's presentation
- **Manual capturing**
 - Tedious, have more control
- In all cases, **SpaceVal** is the **mandatory** but also the essential way to identify problems prior to submission



Understanding validation output



SNS Validation Errors

Rule Report First Prev Next Last Space Rules Earth Rules Plan Rules

Validation Report for 114500101 User SINANIS created on 16.12.2016 09:46:50 with SpaceVal 8.0
G:\BRIFIC-2834\Space\Databases_v8\SRS_Data\srs2834.mdb

Ntc ID: 114500101 Adm: CAN Sat Name: CANSAT-50 Orb Pos: -107.3 Action:A Status:50 D_RCV: 1
Fatal Errors: 0 Warnin

	Beam	E/R	Grp id	Table	Field	Value	Row no	Val err	Rule	Severit	Ap4_Ref	
	KNTH	E	114662739	e_as_stn	bmwidth	2.6	2 695	4	W	C.10.d.4	Value outside comput	
			114662740		bmwidth	2.6	2 695	4	W	C.10.d.4	Value outside comput	

- Double-click on a table line to display more details



Understanding validation output



SNS Validation Rule

695 Item no: 695 Field: bmwidth Table: e_as_stn

Table: e_as_stn Ap4 Ref: C.10.d.4

Field: bmwidth angular width of radiation main lobe expressed in degrees with two decimal positions

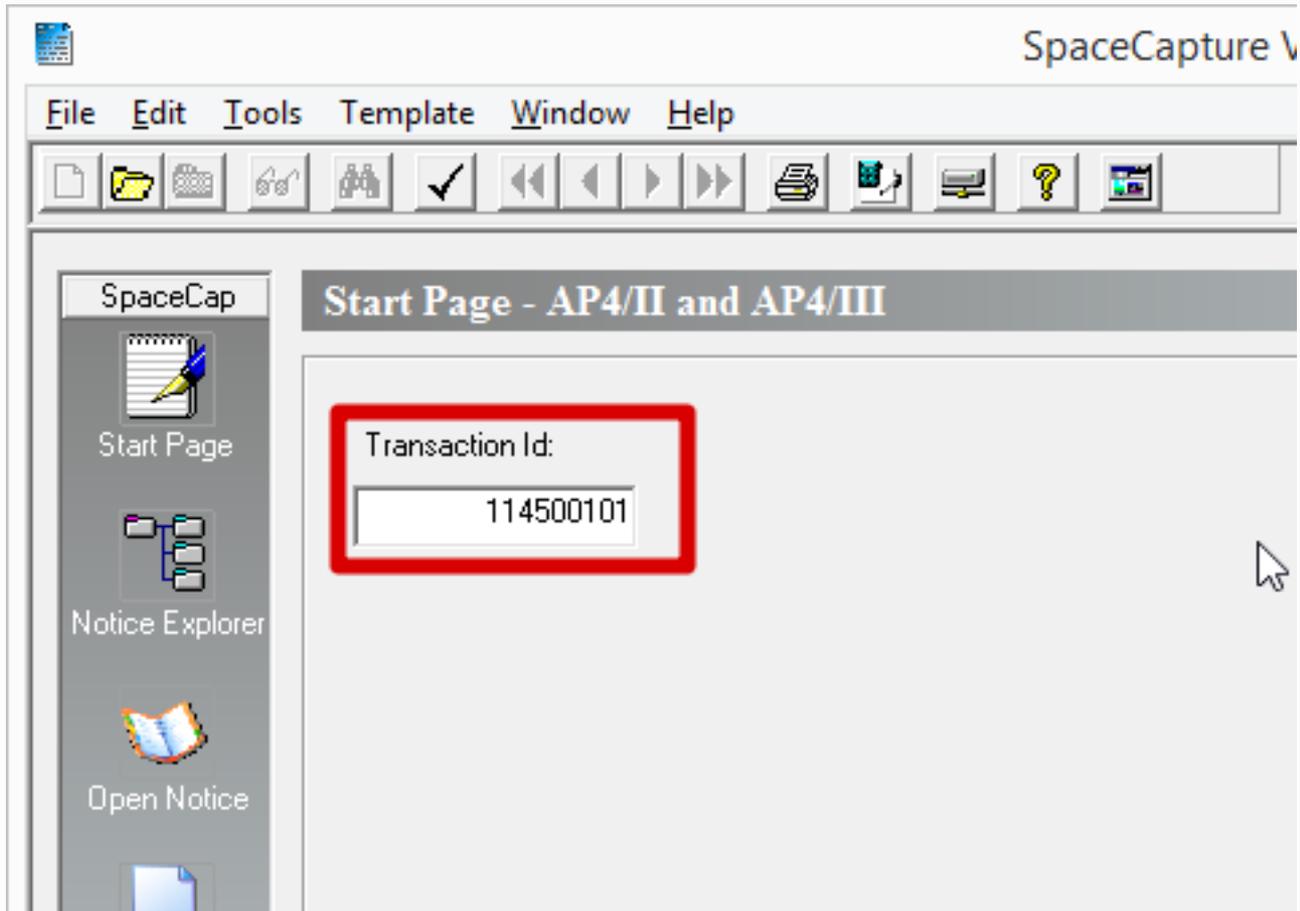
Val No: 695 Applies to: all except for ISS (inter-satellite-service)

Val Rule: E: value must be within the range from the minimum allowable to the maximum allowable calculated as per Appendix 6 of the Annex (W)

Err Message: Value outside computed allowable range (1.79 - 2.28)



Accessing Notice Data



- Download **DATA** file from Workshop Program Page



Notice Publication – Starting SpacePUB



The screenshot shows the SpaceCapture V8 software interface. The title bar reads "SpaceCapture V8 - [Set Notice Template]". The menu bar includes "File", "Edit", "Tools", "Template", "Window", and "Help". The toolbar contains various icons, including a printer icon. The main window is titled "Notice Explorer - AP4/II and AP4/III" and displays a table of notices. A context menu is open over the first row of the table, with the "Print Notice" option highlighted by a red rectangle.

Notice id.	Type	Adm./Org.	Orb. Pos.	Station name	Date rcv.	Status
List of notices						
114500101 [A]	G	CAN/	107.3W	CANSAT-5		Count=1

- Open Notice
- Show Selected Entity
- View History
- Print Notice**
- Export Notice(s)
- Clone
- Delete
- Assign Notice Id
- Renumber Notice Id
- Modify Notice Action Code
- Modify Date of Receipt
- Designate Group



Part I-S publication



UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS
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RADIOCOMMUNICATION BUREAU

UNIÓN INTERNACIONAL DE TELECOMUNICACIONES
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RÉSEAU À SATELLITE SATELLITE NETWORK RED DE SATÉLITE	CANSAT-50		PARTIE PART PARTE	I-S
STATION TERRIENNE EARTH STATION ESTACIÓN TERRENA	---		BR IFIC / DATE BR IFIC / DATE BR IFIC / FECHA	2814 / 01.03.2016
ADM. RESPONSABLE RESPONSIBLE ADM. ADM. RESPONSABLE	CAN	LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL	107.3 W	NUMÉRO D'IDENTIFICATION IDENTIFICATION NUMBER NÚMERO DE IDENTIFICACIÓN
RENSEIGNEMENTS REÇUS PAR LE BUREAU LE / INFORMATION RECEIVED BY THE BUREAU ON / INFORMACIÓN RECIBIDA POR LA OFICINA EL				10.04.2015

Notifications reçues au titre de		Notifications received under		Notificaciones recibidas en virtud de lo dispuesto en	
X	Article 11 du Règlement des radiocommunications	X	Article 11 of the Radio Regulations	X	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

<p>Pour plus d'informations sur les dispositions réglementaires et l'explication des codes ou symboles utilisés dans cette publication, veuillez consulter la Préface.</p>	<p>For more details on the regulatory provisions and the explanation of the codes or symbols used in this publication, please consult the Preface.</p>	<p>Para más detalles sobre las disposiciones reglamentarias y la explicación de los códigos o símbolos utilizados en esta publicación, sírvase consultar el Prefacio.</p>
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- Find them in the BR IFIC, [SNL online](#)



A few hints...



- **Ensure that an appropriate explanation is provided when fatal errors were not resolved**
- **Prepare as complete as possible notices**
 - Adding later a few associated E/S will result to a MOD and extra cost
- **MODs are more involved transactions that BR will be happy to provide assistance**
 - Careful when modifying station-level data as this will likely result in reexamining also the recorded network
 - The same for beam-level data



Notice Creation, Validation

Technical Examination

Part III-S, Return of Notice, Resubmission

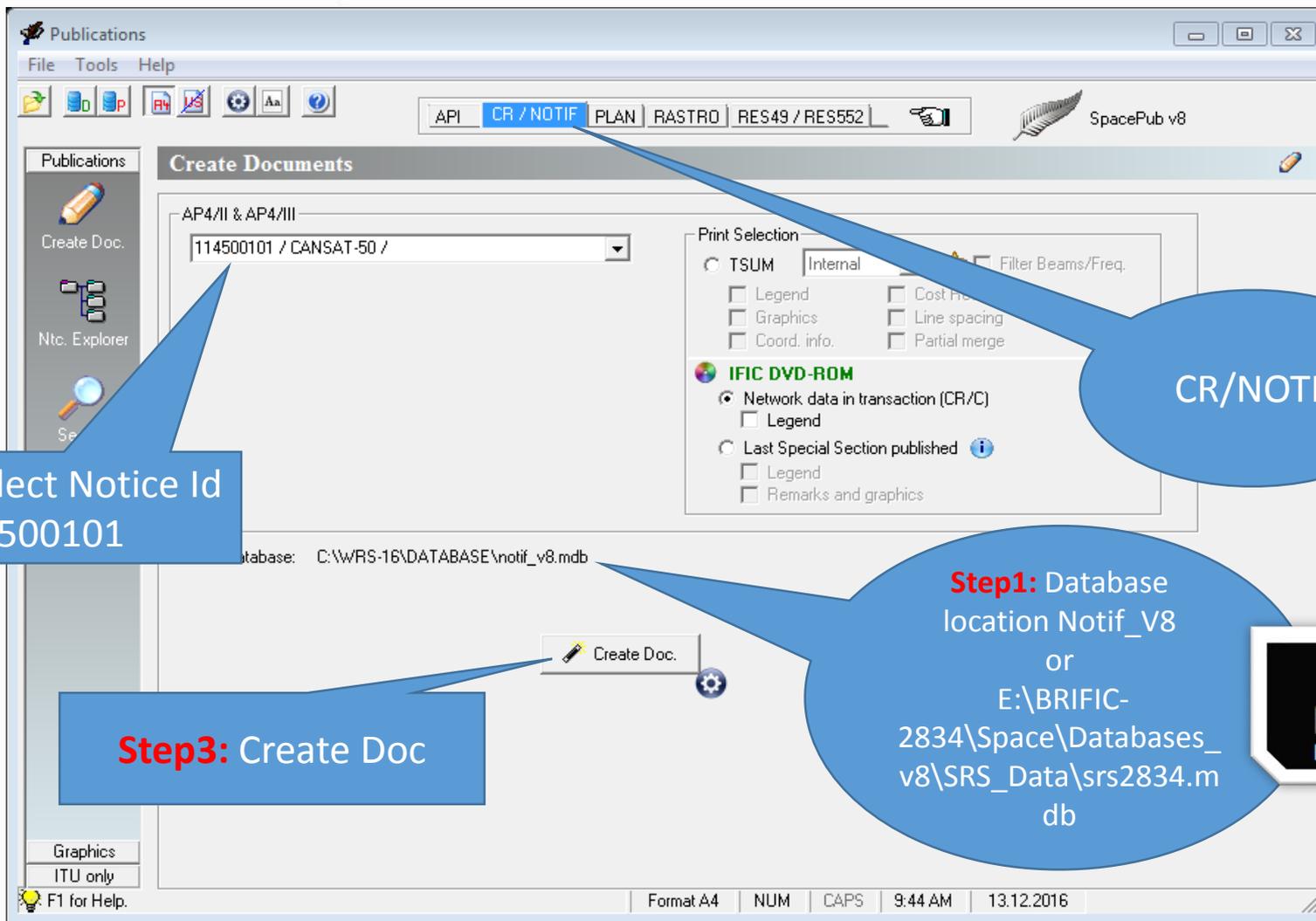
Findings and Recording

**Conformity of Table of
Frequency Allocations
under Art. 5**

**Other relevant provisions
(Rules of Procedure)**

- Footnotes, RESs, RECs
- Successful application of No. 9.21
- Articles 21 to 57 (Space → 21,22,23)

No. 11.31 Example Findings



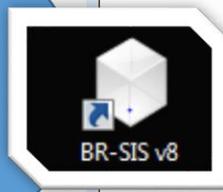
The screenshot shows the SpacePub v8 software interface. The 'Create Documents' window is active, displaying a dropdown menu with '114500101 / CANSAT-50 /' selected. The 'Print Selection' panel is visible on the right, with 'IFIC DVD-ROM' selected and 'Network data in transaction (CR/C)' checked. The status bar at the bottom shows 'Format A4 NUM CAPS 9:44 AM 13.12.2016'. Three blue callout boxes provide instructions: 'Step 2: Select Notice Id 114500101' points to the dropdown menu; 'Step 3: Create Doc' points to the 'Create Doc.' button; and 'Step 1: Database location Notif_v8 or E:\BRIFIC-2834\Space\Databases_v8\SRS_Data\srs2834.mdb' points to the database path. A 'BR-SIS v8' icon is also present in the bottom right corner.

Step 2: Select Notice Id
114500101

Step 3: Create Doc

CR/NOTIF

Step 1: Database location Notif_v8
or
E:\BRIFIC-2834\Space\Databases_v8\SRS_Data\srs2834.mdb





No. 11.31 Example Findings



<https://www.itu.int/en/ITU-R/space/Pages/wrs2016SpaceWorkshop.aspx>

11:30 - 11:50		Analysis of AP30/30A examination results	<i>Exercise: EPPD</i> Q&A
11:50 - 12:00		Commenting (non-SpaceCom)	
12:00 - 12:30		Q&A	Notification of satellite networks <i>Exercise: RES-49/RES-552</i>
12:30 - 13:15	LUNCH	Presentation on the Radio Regulations Navigation Tool	Presentation on the Radio Regulations Navigation Tool
13:15 - 14:00		LUNCH	LUNCH
14:00 - 14:30	<i>Exercise: BR software installation (V8)</i>	Earth Station (ES) <i>Exercise: Capturing of ES for coordination</i> <i>Exercise: Creation of ES Coordination Contours</i>	(13:15 -14:30)
14:30 - 15:00	Non-Plan services Receivability of forms of Space notices	Submission of ES Notification ES capture instructions	Notification of satellite networks <i>Exercises: 11.32A, 11.41</i> <i>Plan III-S publication scenario</i>
15:00 - 15:15	Cost Recovery <i>Exercise: Cost recovery calculation using SpaceCap</i>		
15:15 - 15:30	Break	<i>Exercise: Characteristics of Typical ES in FSS</i>	

Notif V8 database location



No. 11.31 Example Findings



TSUM Requested by: MDL0K Date: 28.11.2016 14:33:15 DB: 114500101EXAMPLE1.MDB Plan Id: Notice type: GEO

A A1a Sat. Network CANSAT-50 A1f1 Notifying adm. CAN A1f3 Inter. sat. org. BR1 Date of receipt 13.08.2014 BR20 BR IFIC no. 2832

BR6a/BR6b Id. no. 114500101 BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no.

A1f2 Submitted on behalf

A4a1 Orbital long. 107.3 W BR61 Original orb. long. 107.3 W A4a2a East Long. tolerance limit 0.05 A4a2b West Long. tolerance limit 0.05 A4a2c Inclination excursion 0.05

A17a Compliance with PFD limit dB(W/(m²·1MHz)) in the band 1164 - 1215 MHz

A17b1 Calculated aggregate PFD value in the band 4990.0 - 5000.0 MHz

A17b2 Calculated aggregate PFD value in the band 5030.0 - 5150.0 MHz

A17d Mean PFD in the band 35.5 - 36.0 GHz

A17e2a Calculated PFD value in the band 42.5 - 43.5 GHz at RA SDT

A17e2b Calculated PFD value in the band 42.5 - 43.5 GHz at RA SDT

A17e2c Calculated PFD value in the band 42.5 - 43.5 GHz at RA VLBI

A16a Compliance with off-axis power limitation Y A18a Aircraft earth station commitment

In/Ext 2 First notif. or Resub. F IFIC I 2814 Part 1 IFIC III/III 2832 Part 2 Last modified 28.11.2016

Status 50 Date 27.10.2016 Prev. Status 49 Basic Mod. Cfreq Val Repub. flag Y Split flag Y Merge option

Special Section 1 No. Special Section 2 No. Special Section 3 No.

Compare id. Records Structures Straps Noise gamma Orbits Horizon elevations

Compare id. Compare beam Records Structures Finding required

B1a/BR17 Beam designation KRRH B1b Steerable B2 Emi-Rcp R B3a1 Max. co-polar gain 35 B3d Pointing accuracy 0.07

B3b1 Co-polar ant. gain contours diag. 1 B3e Ant. gain vs orbit long. diag. 1

B3c1 Co-polar antenna pattern

Co-polar ref. pattern	Coef. A	Coef. B	Co-polar rad. diag.
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Page no. 41 IFIC I 2781 Part 1 IFIC III/III 2832 Part 2 Update date 08.11.2016 Finding required Cost Rec. Provision

Date of receipt of API 05.12.2007 Flag of bringing into use C

Special Section 1 No. Special Section 2 No. Special Section 3 No.

Notes

Compare id. Records Structures Frequencies Emissions Assoc. Estns Assoc. Stns Provisions Publications Findings

BR7a/BR7b Group id. 114662773 BR1 Date of receipt 13.08.2014 C2c RR No. 4.4

A2a Date of bringing into use 15.04.2014 A2b Period of valid. 20 A3a Op. agency 014 A3b Adm. resp. B BR16 Value of type C8b

BR62 Expiry date for bringing into use 05.12.2014 BR63 Confirmed date of bringing into use 15.04.2014 BR64 Date of receipt of 1st Res49

BR14 Special Section

C4a Class of station EC C3a Assigned freq. band 27000 C5a Noise temperature 825

C4b Nature of service CP C6a Polarization type H C6b Polarization angle

C11a1 Service area no. 1 C11a2 Service area C11a3 Service area diagram 1

A5/A6 Coordinations/Agreements 9.7 O G USA

Notice Id: 114500101



TSUM Requested by: MDL0K Date: 28.11.2016 14:33:15 DB: 114500101EXAMPLE1.MDB Plan Id: Notice type: GEO

A A1a Sat. Network CANSAT-50 A1f1 Notifying adm. CAN A1f3 Inter. sat. org. BR1 Date of receipt 13.08.2014 BR20 BR IFIC no. 2832

BR6a/BR6b Id. no. 114500101 BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no.

C2a1 Assigned frequency

13.77075 GHz	13.80125 GHz	13.83175 GHz	13.86225 GHz	13.89275 GHz	13.92325 GHz	13.95375 GHz	13.98425 GHz		
A13 Ref to Special Sections	C7a Design of emission	C8a1/C8b1 Max peak nwr	C8a2/C8b2 Max nwr dens	C8c1 Min peak nwr	C8c2 Attach	C8c3 Min nwr dens	C8c4 Attach	C8e1 C/N ratio	C8e2 Attach



No. 11.31 Example Findings



A A1a Sat. Network CANSAT-50 A1f1 Notifying adm. CAN A1f3 Inter. sat. org. BR1 Date of receipt 13.08.2014 BR20 BR IFIC no. 2832
 BR6a/BR6b Id. no. 114500101 BR3a/BR3b Provision reference 11.2 BR2 Adm. serial no.

C10d5a Co-polar antenna pattern				
C10b1 Assoc. earth station id.	Co-polar ref. pattern	Coef. A	Coef. B	Coef. C
TYPICAL 5.6M	ABCDphi1	29	25	32

Notice Id: 114500101

Findings 2D Date of protection 05.06.2008 13A Conformity with RR A- A- -- 13B1 Provision
 13C Remarks

Page no. 46 IFIC I 2781 Part 1 IFIC III/III 2832 Part 2 Update date 08.11.2016 Finding required Cost Rec. Provision

Date of receipt of API 05.12.2007 Flag of bringing into use C

Special Section 1 No. Special Section 2 No. Special Section 3 No.

Notes

Compare id. Records Structures Frequencies Emissions Assoc. Estns Assoc. Sstns Provisions Publications Findings

BR7a/BR7b Group id. 114662778 BR1 Date of receipt 13.08.2014 C2c BR No. 4.4

Select Group Id
114662778

A2a Date of bringing into use 15.04.2014 A2b of type C8b

BR62 Expiry date for bringing into use 05.12.2014 BR64 Date of receipt of 1st Res49

BR14 Special Section

C4a Class of station EC C3a As 825

C4b Nature of service CP C6a C6b

C11a1 Service area no. 1 C11a2 Service area C11a3 Service area diagram 1

A5/A6 Coordinations/Agreements 9.7 0 6 USA

C2a1 Assigned frequency				
13.80125 GHz	13.83175 GHz	13.86225 GHz	13.89275 GHz	13.92325 GHz
A13 Ref. to Special Sections				
API/A/4865				
CR/C/2233				
C7a Design. of emission	C8a1/C8b1 Max. peak pwr	C8a2/C8b2 Max. pwr dens.	C8c1 Min. peak pwr	
1 5M48G7D--	14.9	-52.4	12.7	
2 1M40G7D--	9	-52.4	6.8	
3 3Z0RG7D--	2.6	-52.4	0.4	
4 6M10G7W--	15.4	-52.4	13.2	

Favourable findings
under No. 11.31

C10b1 Assoc. earth station id.	C10b2 Type	C10c1 Geographical coord.	C10c2 Ctry	C10d1/C10d2 Cls. / Nat.	C10d3 Max. iso. gain	C10d4 Bmwidth	C10d5 Ant. dim. (DGSO)	C8g1 Max. aggr. pwr.	C8g2 Aggr. bandwidth	C8g3 Transp. bandwidth = Aggr. bandwidth
TYPICAL 2.4M	T			1 TC CP	49.2	0.5	2.4			6.4

C10d5a Co-polar antenna pattern							
C10b1 Assoc. earth station id.	Co-polar ref. pattern	Coef. A	Coef. B	Coef. C	Coef. D	Phi1	Co-polar rad. diag.
TYPICAL 2.4M	ABCDphi1	29	25	32	25	7	

Findings 2D Date of protection 05.06.2008 13A Conformity with RR A- A- -- 13B1 Provision 13B2 Remarks 13B3 Date of Review
 13C Remarks

Page no. 47 IFIC I 2781 Part 1 IFIC III/III 2832 Part 2 Update date 08.11.2016 Finding required Cost Rec. Provision



Examination under No. 11.31 (1)



Art 5

- *compliance with table of frequency allocation including footnotes*

Art 21 Sect III

- *power limits of earth stations are complied*

Art 21 Sect V

- *limits of power flux density from space stations*

Article 22 Sect III

- *station keeping of space stations*

Article 22 Sect IV

- *pointing accuracies of antenna on geostationary satellites*

Article 22 Sect VI

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



Conformity with Table of Frequency Allocations under Art. 5



13.75-14 FIXED-SATELLITE (Earth-to-space) 5.484A
 RADIOLOCATION
 Earth exploration-satellite
 Standard frequency and time signal-satellite (Earth-to-space)
 Space research
 5.499 5.500 5.501 5.502 5.503



```

PFD.LST - Notepad
File Edit Format View Help
START OF JOB SNSBPFD      28.11.16      15.38.10      VERSION 7.13.0.1
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
$
      114500101 H  muluk      01N
EARTH STATION E.I.R.P. VALUES BE CHECKED AGAINST §22.26 LIMIT (ONLY FOR AP30B NETWORKS) AND ARTICLE 21 LIMITS
SPACE STATION PFD VALUES WILL BE CHECKED AGAINST HARD LIMITS ONLY
$
      SNS      PFD EXAMINATION      REQUESTED BY :      muluk      DATE: 28/11/16      15:38:10      PAGE: 0001
CAN      CANSAT-50      107.30w  0.05 0.05      13.08.14      N 114.500101
ALL FINDINGS WITH RESPECT TO HARD LIMITS ARE FAVORABLE
$
PROGRAM SNSBPFD TERMINATED OK
CPU TIME SPENT ON THIS JOB :      15
ESTN POWER EXAM TOT CPU :      4
NO. OF ESTN POWER EXAMS :      2080
CPU PER ESTN POWER EXAM (MS) :      1
PFD EXAM TOT CPU :      8
NO. OF PFD EXAMS :      772
CPU PER PFD EXAM (MS) :      10
$
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
END OF JOB SNSBPFD      28.11.16      15.38.26      TERM=0000
  
```




Example of Findings under No. 11.31



87a/877 Beam designation **KMRH** 87b Steerable 87c EMI-Rsp **R** 87d Max. co-polar gain **25** 87e Pointing accuracy **0.07**
 87f Co-polar ant. gain contours diag. 87g Ant. gain vs orbit long. diag.

B3C1 Co-polar antenna pattern

Co-polar ref. pattern	Coef. A	Coef. B

Notice Id: 114512032

87a/87d Group id. **114512032** 87f Date of receipt **13.08.2014** L20 RR no. 4.4
 A2a Date of bringing into use **15.04.2014** A2b Period of valid. **20** A3a Up. agency **014** A3b Adm. resp. **B** 87b value of type L20
 87k2 Expiry date for bringing into use **05.12.2014** 87k3 Confirmed date of bringing into use **13.08.2014** 87k4 Date of receipt of 1st Res49
 87f4 Special section
 L4a Class of station **LC** L4b Assigned req. band **27000** L4c Noise temperature **825**
 L4d Nature of service **CP** L4e Polarization type **R** L4f Polarization angle
 L77a1 Service area no. L77a2 Service area L77a3 Service area diagram

A57a6 Coordinations/Agreements **9.7**

L2a7 Assigned frequency

13.77075 GHz	47a	47b	47c	47d	47e	47f	47g	47h	47i	47j	47k	47l	47m	47n	47o	47p	47q	47r	47s	47t	47u	47v	47w	47x	47y	47z	

Ref. to Special Sections API/A / 4855 CR/C / 2233	47a Design. of emission	47b/47c Max. peak pwr		47d/47e Max. pwr dens.		47f Min. peak pwr		47g Atch.		47h Min. pwr dens.		47i Atch.		47j C/N ratio		47k Atch.	
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1 5M40G7D--	14.9		-52.4		12.7					-54.7				6.1		
	2 1M40G7D--	9		-52.4		6.8					-54.7				5.9		
	3 3Z0K67D--	2.6		-52.4		0.4					-54.7				5.8		
	4 6M10G7D--	15.4		-52.4		13.2					-54.7				6.4		

47m7 Assoc. earth station id.	47m8 type	47m9 Geographical coord.		47m10 Utry	47m11/47m12 Cls. / Nat.		47m13 Max. iso. gain	47m14 Bmwidth	47m15 Ant. diameter	47m16 Ant. dim. (UGSU)	47m17 Max. aggr. pwr.	47m18 Aggr. bandwidth	47m19 Transp. bandwidth = Aggr. bandwidth
TYPICAL 2.4M	T				1	TC	CP	49.2	0.61	2.4			

ITU-R M/F/D/C Requested by **INDIA** Date: **20.12.14** 1458 0820140 GB: **INDIA** 616 Plan id.: Notice type: **GR**

A7a Sat. network **CANSAI-5U** A77 Notifying adm. **IND** A77.3 Inter. sat. org. 87f Date of receipt **13.08.2014** 87z/87z1 BR II-IL no. part **2032/3**
 87a/87d id. no. **114512032** 87a/87d Provision reference **11.2** 87z Adm. sena no. **INDIA** / 2

C10D5a Co-polar antenna pattern

47m7 Assoc. earth station id.	Co-polar ref. pattern	Coef. A	Coef. B	Coef. C	Coef. D	PH1	Co-polar rad. diag.
TYPICAL 2.4M	ABCDPH1	25		25			Y

Findings **20** Date of protection 73a Conformity with **RRM-- --** 73b Provisi **12/5.503** 73b2 Remarks 73b3 Date of review
 73c Remarks



Example of Findings under No. 11.31



A	A1a Sat. Network CANSAT-50	A1f1 Notifying adm. CAN	A1f3 Inter. sat. org.	BR1 Date of receipt 13.08.2014	BR20 BR IFIC no. 2832
	BR6a/BR6b Id. no. 114500101	BR3a/BR3b Provision reference 11.2		BR2 Adm. serial no.	
A1f2 Submitted on behalf					
A4a1	Orbital long. 107.3 W	BR61 Original orb. long. 107.3 W	A4a2a East Long. tolerance limit 0.05	A4a2b West Long. tolerance limit 0.05	A4a2c Inclination excursion 0.05
A17a	Compliance with PFD limit dB(W/(m ² -1MHz)) in the band 1184 - 1215 MHz				
A17b1	Calculated aggregate PFD value in the band 4990.0 - 5000.0 MHz				
A17b2	Calculated aggregate PFD value in the band 5030.0 - 5150.0 MHz				
A17d	Mean PFD in the band 35.5 - 36.0 GHz				
A17e2a	Calculated PFD value in the band 42.5 - 43.5 GHz at RA SDT				
A17e2b	Calculated PFD value in the band 42.5 - 43.5 GHz at RA SDT				
A17e2c	Calculated PFD value in the band 42.5 - 43.5 GHz at RA VLB				
A16a	Compliance with off-axis power limitation Y				
A18a	Aircraft earth station commitment				
Int/Ext	E	First notif. or Resub. F	IFIC I	2832	Part 2
Status	50	Date 27.10.2016	Prev. Status 49	IFIC II	Last modified 28.11.2016
Special Section 1		No.	Special Section 2		No.
Compare id.		Records	Structures	IFIC III	2832
Compare id.		Compare beam	Records	Structures	Finding required
B1a/BR17	Beam designation RYRH				
B1b	Steersble				
B2	Emi-Rop R				
B3a1	Max. co-polar gain 35				
B3d	Pointing accuracy 0.07				
B3b1	Co-polar ant. gain contours diag. 1				
B3e	Ant. gain vs orbit long. diag. 1				
B3c1 Co-polar antenna pattern					
Co-polar ref. pattern	Coef. A	Coef. B			Co-polar rad. diag.
Page no.	41	IFIC I 2781	Part 1	IFIC II/III 2832	Part 2
Date of receipt of API	05.12.2007				
Flag of bringing into use	C				
Special Section 1		No.	Special Section 2		No.
Special Section 3		No.			
Notes					
Compare id.		Records	Structures	Frequencies	Emissions
Assoc. Estns	Assoc. Estns				OS
BR7a/BR7b	Group id. 114662773				
BR1	Date of receipt 13.08.2014				
C2c	RR No. 4.4				
A2a	Date of bringing into use 15.04.2014				
A2b	Period of valid. 20				
A3a	Op. agency 014				
A3b	Adm. resp. B				
BR62	Expiry date for bringing into use 05.12.2014				
BR63	Confirmed date of bringing into use 15.04.2014				
BR14	Special Section				
C4a	Class of station EC				
C3a	Assigned freq. band 27000				
C5a	Noise temperature 825				
C4b	Nature of service CP				
C6a	Polarization type H				
C6b	Polarization angle				
C11a1	Service area no. 1				
C11a2	Service area				
C11a3	Service area diagram 1				
A5/A6	Coordinations/Agreements 9.7				
	G USA				

Station keeping

Notice Id: 114500101

Pointing Accuracy



Example of Findings under No. 11.31 No. 9.21



Notice Id: 115500172

Special Section 1	<input type="text"/>	No.	<input type="text"/>	Special Section 2	<input type="text"/>	No.	<input type="text"/>	Special Section 3	<input type="text"/>																																																																					
Notes	<input type="text"/>																																																																													
Compare id.	<input type="text"/>	Records	<input type="text"/>	Structures	<input type="text"/>	Frequencies	<input type="text"/>	Emissions	<input type="text"/>																																																																					
	<input type="text"/>	Assoc. Estrs	<input type="text"/>	Assoc. Sctns	<input type="text"/>																																																																									
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Group Id: 115691636	<input type="text" value="115691636"/>	BR1 Date of receipt	<input type="text" value="20.11.2015"/>	C2c RR No. 4.4	<input type="text"/>																																																																									
	<input type="text" value="11.07.2017"/>	A2b Period of valid.	<input type="text" value="30"/>	A3a Op. agency	<input type="text" value="001"/>	A3b Adm. resp.	<input type="text" value="A"/>	BR10 Value	<input type="text"/>																																																																					
	<input type="text" value="11.07.2019"/>	BR03 Confirmed date of bringing into use	<input type="text"/>																																																																											
BR14 Special Section	<input type="text"/>																																																																													
C4a Class of station	<input type="text" value="EI"/>	C3a Assigned freq. band	<input type="text" value="125000"/>	C5a Noise temperature																																																																										
C4b Nature of service	<input type="text" value="CO"/>	C6a Polarization type	<input type="text" value="H"/>	C6b Polarization angle																																																																										
C11a1 Service area no.	<input type="text" value="1"/>	C11a2 Service area	<input type="text"/>																																																																											
A5/A6 Coordinations/Agreements	<table border="1"> <tr><td>B.21/A</td><td>O</td></tr> <tr><td>B.21/B</td><td>O</td></tr> <tr><td>B.7</td><td>O</td></tr> <tr><td>V/11.31.1/A</td><td>V</td></tr> <tr><td>V/11.31.1/C</td><td>V</td></tr> <tr><td>X/9.7</td><td>X</td></tr> </table>	B.21/A	O	B.21/B	O	B.7	O	V/11.31.1/A	V	V/11.31.1/C	V	X/9.7	X	<table border="1"> <tr><td>E</td><td>MLA</td><td>USA</td></tr> <tr><td>E</td><td>MLA</td><td>USA</td></tr> <tr><td>ARS</td><td>AUS</td><td>B</td><td>CAN</td><td>CHN</td><td>CYP</td><td>D</td><td>EGY</td><td>F</td><td>G</td><td>I</td><td>INS</td><td>IRN</td><td>IRQ</td></tr> <tr><td>AUS</td><td>CAN</td><td>CHN</td><td>INS</td><td>KAZ</td><td>KOR</td><td>MLA</td><td>USA</td><td>USA/GUM</td><td>USA/HWA</td><td colspan="4"></td></tr> <tr><td>ARS</td><td>AUS</td><td>B</td><td>BEL</td><td>BLR</td><td>CAN</td><td>CHN</td><td>CLM</td><td>CYP</td><td>D</td><td>EGY</td><td>F</td><td>G</td><td>I</td><td>INS</td></tr> <tr><td>TUR</td><td>UAE</td><td colspan="13"></td></tr> </table>	E	MLA	USA	E	MLA	USA	ARS	AUS	B	CAN	CHN	CYP	D	EGY	F	G	I	INS	IRN	IRQ	AUS	CAN	CHN	INS	KAZ	KOR	MLA	USA	USA/GUM	USA/HWA					ARS	AUS	B	BEL	BLR	CAN	CHN	CLM	CYP	D	EGY	F	G	I	INS	TUR	UAE													
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TUR	UAE																																																																													



After No. 11.31 Examination



When No. 11.31 finding is favourable, the assignment shall be recorded in the Master Register,

or examined further to Nos. 11.32 to 11.33, as appropriate

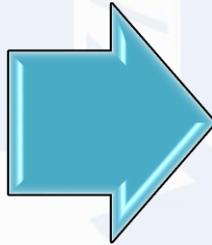


Examination under No. 11.32



COORDINATION PROVISIONS

The requirement of all forms of coordination should be completed



Findings will be based on information available on the A5/A6 boxes



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



ITU-MIFR-3 REQUESTED BY: AMURK Date: 30.12.2016 08:20:00 GB: NOR11-016 Part II: Notice type: 200
 A174 Sat. Network: CAN521-50 A177 Notifying adm.: CAN A173 Inter. sat. org.: BSM Date of receipt: 13.08.2014 BSM2/BM21 BSM int. no. part: 203271
 BSM/BM10 id. no.: 114500101 BSM/BM10 Provision reference: 11.2 M BSM2 Adm. send no.: BSM2

B301 Co-polar antenna pattern
 Co-polar ref. pattern: Coef. A: Coef. B: Co-polar rad. diag.

BSM/BM10 Group id.: 114502781 BSM Date of receipt: 13.08.2014 L20 KR No. 4.4:
 A24 Date of bringing into use: 15.04.2014 A20 Period of valid.: 20 A34 Up. agency: 014 A30 Adm. resp.: B BSM76 value of type L20:
 BSM72 Expiry date for bringing into use: 05.12.2014 BSM73 Confirmed date of bringing into use: 15.04.2014 BSM74 Date of receipt of 1st Res#:

BSM74 special section:
 L48 Class of station: EC L34 Assigned req. band: 27000 L38 Noise temperature: 825
 L40 Nature of service: CP L36 Polarization type: V L30 Polarization angle:
 L77A7 Service area no.: 1 L77A2 Service area: L77A3 Service area diagram:

A57A6 Coordination/Aggr. items: 3.7 U G USA

L247 Assigned frequency
 13.78275 GHz | 13.81425 GHz | 13.84575 GHz | 13.87525 GHz | 13.90575 GHz | 13.93625 GHz | 13.96675 GHz

A173 Ref. to Special Sections	L78 Design. of emission	L887/L807 Max. peak pwr		L882/L802 Max. pwr dens.		L807 Min. peak pwr	L802 Atch.	L803 Min. pwr dens.	L804 Atch.	L807 L/N ratio	L802 Atch.
		1	2	3	4	5	6	7	8	9	10
API/A/485 CR/C/2233	3000G7D--	13.6	-53.8	13.6	-53.8	3.2		-58.2		6.1	
	1M40G7D--	7.6	-53.8	1.2	-53.8	3.3		-58.2		5.9	
	2X00G7D--	1.2	-53.8	-3.1	-53.8	-3.1		-58.2		5.8	
	80X0G7D--	-6.9	-55.9	-9.1	-55.9	-9.1		-58.2		7	
	26X7G1E--	-11.2	-55.5	-13.5	-55.5	-13.5		-57.7		8.3	

L7007 Assoc. earth station id.	L7002 Type	L7007 Geographical coord.	L7002 Ltry	L7007/L7002 Cls. / Nat.	L7003 Max. iso. gain	L7004 Bmwidth	L7007 Ant. diameter	L7008 Ant. dim. (UGSU)	L807 Max. aggr. pwr.	L802 Aggr. bandwidth	L803 Transp. bandwidth = Aggr. bandwidth
TYPICAL 3.7M	T			1/10 CP	53	0.39	3.7				

L7005 Co-polar antenna pattern
 L7007 Assoc. earth station id.: TYPICAL 3.7M
 Co-polar ref. pattern: ABCDPhi1
 Coef. A: 25 Coef. B: 32 Coef. C: 25 Coef. D: 7 P11: 7
 Co-polar rad. diag.:

Findings: 20 Date of protection: 05.06.2008 734 Contention with KR: &- &- -- 7367 Provision: 7362 Remarks: 7363 Date of Renewal:

730 Remarks:

BSM/BM10 Group id.: 114502782 BSM Date of receipt: 13.08.2014 L20 KR No. 4.4:
 A24 Date of bringing into use: 15.04.2014 A20 Period of valid.: 20 A34 Up. agency: 014 A30 Adm. resp.: B BSM76 value of type L20:
 BSM72 Expiry date for bringing into use: 05.12.2014 BSM73 Confirmed date of bringing into use: 15.04.2014 BSM74 Date of receipt of 1st Res#:

BSM74 special section:
 L48 Class of station: EC L34 Assigned req. band: 27000 L38 Noise temperature: 825
 L40 Nature of service: CP L36 Polarization type: V L30 Polarization angle:
 L77A7 Service area no.: 1 L77A2 Service area: L77A3 Service area diagram:



Notice Id: 114500101

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 → unfavourable finding will be given and notice returned. → Administration would be requested to publish a modification to the related coordination Special Section

See RoP (Rules of Procedure) 11.32



Example of Findings under No. 11.32



BR7a/BR7b Group id. BR1 Date of receipt C2c RR No. 4.4
 A2a Date of bringing into use A2b Period of valid. A3a Op. agency A3b Adm. resp. BR16 Value of type C8b
 BR62 Expiry date for bringing into use BR63 Confirmed date of bringing into use
 BR14 Special Section

Notice Id: 116500024

Page / Página 28



ITU Requested by: Date: IP: Plan id: Notice type:
 A A1a Sat. Network A1f1 Notifying adm. A1f3 Inter. sat. org. BR1 Date of receipt BR20 BR IFIC no.
 BR6a/BR6b Id. no. BR3a/BR3b Provision reference N BR2 Adm. serial no.

C4a Class of station C3a Assigned freq. band
 C4b Nature of service C6a Polarization type C6b Polarization angle
 C8d1 Max. tot. peak pwr. C8d2 Contiguous bandwidth
 C11a1 Service area no. C11a2 Service area C11a3 Service area diagram
 A5/A6 Coordinations/Agreements

9.13	O	F	LUX
9.14	O	F	WAL
9.7	O	ARG	AUS B F F/ESA F/EUT G LUX PAK RUS SMG USA
X/9.7	X	HOL	INS MEX UAE

C2a1 Assigned frequency										
1537	MHz									

A13 Ref. to Special Sections	C7a		C8a1/C8b1	C8a2/C8b2	C8c1	C8c2	C8c3	C8c4	C8e1	C8e2
	Design. of emission	Max. peak pwr	Max. pwr dens.	Min. peak pwr	Atch.	Min. pwr dens.	Atch.	C/N ratio	Atch.	
API/A/5534	1	5M00G7W--	11.5	-55.5	9.5			-57.5	-5.1	
CR/C/2448	2	1M25G7W--	6.4	-54.6	4.4			-56.6	-3.4	
	3	1M25G7W--	17.3	-43.7	13.3			-47.7	-0.4	
	4	200KG7W--	5.1	-47.9	3.1			-49.9	2.6	
	5	62K5G7W--	11.5	-36.5	7.5			-40.5	4.8	

C10b1	C10b2	C10c1	C10c2	C10d1/C10d2	C10d3	C10d4	C10d6	C10d7	C10d9
Assoc. earth station id.	Type	Geographical coord.	City	Cls. / Nat.	Max. iso. gain	Bmwdth	Noise temp.	Ant. diameter	Ant. dim. (DGSO)
TYPICAL-2	T			1 TG 2 UA CP	3		500		

C10d5a Co-polar antenna pattern							
C10b1	Co-polar ref. pattern	Coef. A	Coef. B	Coef. C	Coef. D	Phi1	Co-polar rad. diag.
TYPICAL-2	ND-EARTH						

Findings Date of protection 13A Conformity with RR 13B1 Provision 13B2 Remarks 13B3 Date of Review



Assignments in MIFR Part II-S Publication



UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS
BUREAU DES RADIOCOMMUNICATIONS

INTERNATIONAL TELECOMMUNICATION UNION
RADIOCOMMUNICATION BUREAU

UNIÓN INTERNACIONAL DE TELECOMUNICACIONES
OFICINA DE RADIOCOMMUNICACIONES

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RÉSEAU À SATELLITE SATELLITE NETWORK RED DE SATÉLITE	CANSAT-50		PARTIE PART PARTE	II-S
STATION TERRIENNE EARTH STATION ESTACIÓN TERRENA	---		BR IFIC / DATE BR IFIC / DATE BR IFIC / FECHA	2832 / 08.11.2016
ADM. RESPONSABLE RESPONSIBLE ADM. ADM. RESPONSABLE	CAN	LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL	107.3 W	NUMÉRO D'IDENTIFICATION IDENTIFICATION NUMBER NÚMERO DE IDENTIFICACIÓN
RENSEIGNEMENTS REÇUS PAR LE BUREAU LE / INFORMATION RECEIVED BY THE BUREAU ON / INFORMACIÓN RECIBIDA POR LA OFICINA EL				10.04.2015

Assignations de fréquence inscrites dans le Fichier de référence au titre de		Frequency assignments recorded in the Master Register under		Asignaciones de frecuencia inscrites en el Registro con arreglo al	
X	Article 11 du Règlement des radiocommunications	X	Article 11 of the Radio Regulations	X	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

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Notice Creation, Validation

Technical Examination

Part III-S, Return of Notice, Resubmission

Findings and Recording

RESUBMISSIONS

Unfavourable findings under No. 11.32/11.32A/11.33

- No. 11.46 is applicable
 - The resubmission will retain the original date of submission, unless the resubmission is received more than 6 months after the date of which the original submission was returned
 - In other words, important to resubmit within 6 months to retain the original date of submission

RESUBMISSION NOT APPLICABLE

Unfavourable
finding under
No. 11.31

- **No. 11.46 is not applicable**
- **Will have a new date of receipt upon resubmission**



RESUBMISSION NOT APPLICABLE

Notice Id:114512032



87A/87F Beam designation	KMRH	87D Steerable		82 EMI-Rsp	B	83A7 Max. co-polar gain	25	83A8 Pointing accuracy	0.07
83D7 Co-polar ant. gain contours diag.	<input type="checkbox"/>	83E Ant. gain vs orbit long. diag.	<input type="checkbox"/>						
B301 Co-polar antenna pattern									
Co-polar ref. pattern	Coef. A	Coef. B				Co-polar rad. diag.			

87A/87D Group id.	114512032	87F Date of receipt	13.08.2014	U20 RR No. 4.4					
A4A Date of bringing into use	15.04.2014	A4B Period of valid.	20	A4C Up. agency	014	A4D Adm. resp.	B	87B Value of type U20	
87B2 Expiry date for bringing into use	05.12.2014	87B3 Confirmed date of bringing into use	15.04.2014	87B4 Date of receipt of 1st Res4W					
87F4 Special section									
U4A Class of station	EL	U4B Assigned req. band	27000	U4C Noise temperature	825				
U4D Nature of service	CP	U4E Polarization type	B	U4F Polarization angle					
U77A7 Service area no.	1	U77A2 Service area		U77A3 Service area diagram	1				
A37A6 Coordinations/Agreements	9.7	0	0	0	0	0	0	0	0

U2A7 Assigned frequency											
13.77075 GHz											
A73 Ref. to Special Sections		U7A Design. of emission		U8A7/U8D7 Max. peak pwr		U8A2/U8D2 Max. pwr dens.		U8D7 Min. peak pwr		U8C2 Attach.	
API/A	74865	1	5M40G7D--	14.9	-52.4	12.7	-54.7	-54.7	6.1	U8E7 U/N ratio	
CB/C	72233	2	1M40G7D--	9	-52.4	6.8	-54.7	-54.7	5.9	U8E2 Attach.	
		3	3ZUK47D--	2.6	-52.4	0.4	-54.7	-54.7	5.8		
		4	6M10G7D--	15.4	-52.4	13.2	-54.7	-54.7	6.4		

U7D7 Assoc. earth station id.	U7D2 Type	U7D3 Geographical coord.	U7D2 Utry	U7D7/U7D2 Uis. / Nat.	U7D3 Max. iso. gain	U7D4 Bmwidth	U7D7 Ant. diameter	U7D9 Ant. dim. (UGSU)	U8G7 Max. aggr. pwr.	U8G2 Aggr. bandwidth	U8G3 Intransp. bandwidth = Aggr. bandwidth
TYPICAL 2.4M	T			1 TC CP	49.2	0.6L	2.4				

TS-0001-01-03 Requested by	MDLOR	Date	26.12.2013	U20 RR No.	4.4	RR No.	114512032	Notice type	U20
A7A Sat. Network	CANSAT-50	A77 Notifying adm.	USM	A73 Inter. sat. org.		87F Date of receipt	13.08.2014	87B/87C7 BK IHL no. part	283273
87A/87D id. no.	114512032	87A/87D Provision reference	11.2	87C Adm. sens. no.		87C7			

U105A Co-polar antenna pattern									
U7D7 Assoc. earth station id.	Co-polar ref. pattern	Coef. A	Coef. B	Coef. C	Coef. D	Phi1	Co-polar rad. diag.		
TYPICAL 2.4M	ABCDPHIL	29	25	2	25	7			
Findings	U20 Date of protection	73A Conformity with	R/M- -- --	73B7 Provision	X/5.503	73B2 Remarks		73B3 Date of renewal	
73L Remarks									



PART III-S PUBLICATION



UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS
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OFICINA DE RADIOCOMMUNICACIONES

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RÉSEAU À SATELLITE SATELLITE NETWORK RED DE SATÉLITE	CANSAT-50		PARTIE PART PARTE	III-S
STATION TERRIENNE EARTH STATION ESTACIÓN TERRENA	---		BR IFIC / DATE BR IFIC / DATE BR IFIC / FECHA	2832 / 08.11.2016
ADM. RESPONSABLE RESPONSIBLE ADM. ADM. RESPONSABLE	CAN	LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL	107.3 W	NUMÉRO D'IDENTIFICATION IDENTIFICATION NUMBER NÚMERO DE IDENTIFICACIÓN
RENSEIGNEMENTS REÇUS PAR LE BUREAU LE / INFORMATION RECEIVED BY THE BUREAU ON / INFORMACIÓN RECIBIDA POR LA OFICINA EL				10.04.2015

Assignations de fréquence retournées à l'administration notificatrice au titre de		Frequency assignments returned to the notifying Administration under		Asignaciones de frecuencia devueltas a la Administración notificante en virtud del	
X	Article 11 du Règlement des radiocommunications	X	Article 11 of the Radio Regulations	X	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

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RESUBMISSION APPLICABLE

Notice Id:115500228



BR/BA/BR/BA ID.No. 115500228	BR/BA/BR/BA Provision reference 11.2	M	BR/BA Adm.
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C2A7 Assigned frequency					
7926	MHz	7966	MHz	8022	MHz

A73 Ref. to Special Sections	C7A Design. of emission	C8A1/C801 Max. peak pwr	C8A2/C802 Max. pwr dens.	C801 Min. peak pwr	C8 Attc
API/A /5513	1 10M0G70--	15.3	-54.7	-0.7	
CR/C /2566	2 36M0G70--	20.8	-54.7	4.8	
	3 2M04GXX--	8.3	-54.7	-7.7	
	4 384KGXX--	1.1	-54.7	-14.9	
	5 32K0GXX--	-9.7	-54.7	-25.7	

C7001 Assoc. earth station id.	C7002 Type	C7003 Geographical coord.	C7004 Utry	C7005/C7006 Cls. / Nat.	C7007 Max. iso. gain	C7008 Bmwidth	C7009 Ant. diam
TYPICAL X7.2 METER	T			I TC CO	53.7	0.37	

C1005a Co-polar antenna pattern					
C7001 Assoc. earth station id.	Co-polar ref. pattern	Coef. A	Coef. B	Coef. C	Coef
TYPICAL X7.2 METER	REC-580-b				

Findings	20 Date of protection	734 Conformity with	<input checked="" type="checkbox"/> A- <input type="checkbox"/> M- <input type="checkbox"/> --	387 Provision	7
736 Remarks					



Return of Notice Letter



Radiocommunication Bureau (BR)

Our Ref.: 11SG(SPR)O-2016-003297

Geneva, 7 September 2016

Contact: Attila Matas
Telephone: +41 22 730 6105
E-mail: attila.matas@itu.int

Ministry of Information and Communications (MIC)
18, Nguyen Du Street
VN - HANOI, 10000
Viet Nam

For your reply:
Fax: +41 22 730 5785
E-mail: BRmail@itu.int

Faxes: +84 4 35564930
+84 4 35564916

Subject: Return of notice for the VIETSAT-132 satellite network

Dear Madam/Sir,

The notice of the subject satellite network or the part of it with frequency assignments which has been given an unfavourable finding is returned to your Administration in accordance with the procedure prescribed in Article 11 of the Radio Regulations. The reason for the unfavourable finding is explained below by an X in the square opposite the appropriate text.

Please note that the printed copy of the satellite network summary is no longer enclosed with this communication. However, a detailed printout of the satellite network characteristics and its findings can be generated from the BRIFIC mentioned in paragraph 1 of the Remarks. Detailed instructions for printing the related information may be found at: <http://www.itu.int/en/ITU-R/space/Documents/part3s.pdf>.

Yours faithfully,

Jian Wang,
Chief a.i., Space Services Department

International Telecommunication Union • Place des Nations • CH-1211 Geneva 20 • Switzerland
Tel: +41 22 730 5111 • Fax: +41 22 733 7256 • E-mail: itu@itu.int • www.itu.int • www.itu150.org

Dispatch date:
Sets the **six months counter**
to request **No. 11.46**
resubmission, if applicable



Return of Notice Letter - summary



- 2/7 -

Enclosures



Finding(s) unfavourable with respect to No. 11.31 (see Remarks overleaf).
The notice is returned according to No. 11.36¹.

Cannot be resubmitted!

Finding(s) unfavourable with respect to No. 11.32 (see Remarks overleaf).
The notice is returned according to No. 11.37².

Can be resubmitted!

Finding(s) unfavourable with respect to No. 11.32A or 11.33 (see Remarks overleaf).
The notice is returned according to No. 11.38².

Can be resubmitted!

Non-compliance with No. 9.1 (see Remarks overleaf).

IMPORTANT:

¹ Please note that a notice returned under No. 11.36 cannot be resubmitted under No. 11.46. If the notice is submitted again, the notice will receive a new date of receipt and will be subject to cost recovery fees.

² In accordance with No. 11.46, a notice return under No. 11.37 or No. 11.38, according to the case, has to be resubmitted within six months from the date of the present letter in order to keep its original date of receipt.

Any resubmitted notice which is received by the Bureau more than six months after the date of this letter shall be considered as a new notification with a new date of receipt (see No. 11.46) and will be subjected to cost recovery fees.



Resubmitting after six months



Any resubmitted notice which is received by the Bureau more than six months after the date of this letter shall be considered as a new notification with a new date of receipt (see No. 11.46) and will be subjected to cost recovery fees.



Return of Notice Letter - Tables



1. The finding has been promulgated in Part III-S of BRIFIC No. 2822 of 21 June 2016.
2. The Bureau has examined the notice under No. **11.32A** as requested by your Administration and the frequency assignments mentioned in Table 2 have been given an unfavourable finding under No. **11.32A** and are being returned to your Administration under No. **11.38**.

Table 2

Beam	R/E	Frequency assignment group ID	Administrations having assignments that resulted in unfavourable finding under No. 11.32A (No. 9.7)
TC1	R	115691455	CHN LUX RUS
TC1	R	115691456	CHN LUX RUS
TCK1	R	115691336	CHN RUS
TCK2	R	115691337	CHN RUS
UK2R	R	115691321	AUS CHN
UK2R	R	115691322	CHN
UK2R	R	115691323	CHN
UK2R	R	115691324	CHN
UK2R	R	115691325	CHN

Explicative text to guide Administrations through the steps it needs to follow



Preparing the Response to the Return Letter



- Always provide an update of the coordination status, indicating which agreements have been achieved
- When requesting No. 11.41:

The Bureau notes that your Administration has requested for application of No. **11.41**. In this regard, the Bureau would like to draw your attention to the entry into force on 1 January 2013, of No. **11.41** as modified by WRC-12 and provision **No. 11.41.2** which stipulates that:

*“When submitting notices in application of No. **11.41**, the notifying Administration shall indicate to the Bureau that **efforts have been made to effect coordination** with those administrations whose assignments were the basis of the unfavourable findings under No. **11.38**, without success”.*

When No. 11.46 applies, remember the six months deadline to respond!



Notice Creation, Validation
Technical Examination
Part III-S, Return of Notice, Resubmission
Findings and Recording



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



**Procedure of 11.32A → C/I
calculation
(the methodology is described
in Rules of Procedure)**



PROCEDURE OF No. 11.32A

Notice Id:116500024



BR7a/BR7b Group id. 116612627 BR1 Date of receipt 05.01.2016 C2c RR No. 4.4
 A2a Date of bringing into use 27.02.2016 A2b Period of valid. 20 A3a Op. agency 015 A3b Adm. resp. B BR16 Value of type C8b
 BR62 Expiry date for bringing into use 27.02.2016 BR63 Confirmed date of bringing into use BR64 Date of receipt of 1st Res49
 BR14 Special Section

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TSUM Requested by: MEXOR Date: 01.12.2016 22:47:20 C/R: SRB, ITI, MDE Plan id: Notice type: SBC
 A A1a Sat. Network CANSAT (107.3W)-L A1f1 Notifying adm. CAN A1f3 Inter. sat. org. BR1 Date of receipt 05.01.2016 BR20 BR IFIC no. 2832
 BR6a/BR6b Id. no. 116500024 BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no. 221 R

C4a Class of station EG EI C3a Assigned freq. band 14000
 C4b Nature of service OT CP C6a Polarization type M C6b Polarization angle
 C8d1 Max. tot. peak pwr. 34 C8d2 Contiguous bandwidth 14000
 C11a1 Service area no. 1 C11a2 Service area C11a3 Service area diagram 2
 A5/A6 Coordinations/Agreements
 9.13 O F LUX
 9.14 O F/WAL
 9.7 O ARG AUS B F F/ESA F/EUT G LUX PAK RUS SNG USA
 X/9.7 X HOL INS MEX UAE

C2a1 Assigned frequency

1537	MHz	C7a Design of emission	C8a1/C8b1 Max. peak pwr	C8a2/C8b2 Max. pwr dens.	C8c1 Min. peak pwr	C8c2 Attach.	C8c3 Min. pwr dens.	C8c4 Attach.	C8e1 C/N ratio	C8e2 Attach.
A13 Ref. to Special Sections API/A/5534 CR/C/2448		1 5M00G7W--	11.5	-55.5	9.5		-57.5		-5.1	
		2 1M25G7W--	6.4	-54.6	4.4		-56.6		-3.4	
		3 1M25G7W--	17.3	-43.7	13.3		-47.7		-0.4	
		4 200KG7W--	5.1	-47.9	3.1		-49.9		2.6	
		5 6ZK5G7W--	11.5	-36.5	7.5		-40.5		4.6	

C10b1 Assoc. earth station id.	C10b2 Type	C10c1 Geographical coord.	C10c2 Ctry	C10d1/C10d2 Cls. / Nat.	C10d3 Max. iso. gain	C10d4 Bnwidth	C10d6 Noise temp.	C10d7 Ant. diameter	C10d9 Ant. dim. (DGSO)
TYPICAL-2	T			1 TG 2 UA CP	3		500		

C10d5a Co-polar antenna pattern

C10b1 Assoc. earth station id.	Co-polar ref. pattern	Coef. A	Coef. B	Coef. C	Coef. D	Phi1	Co-polar rad. diag.
TYPICAL-2	ND-EARTH						

Findings 2D Date of protection 13A Conformity with RR A- N- -- B1 Provision 5.353A 13B2 Remarks R 13B3 Date of Review

administration states that the coordination procedure could not be successfully completed



PROCEDURE OF No. 11.32A

Notice Id:114500087



Page no. IFIC I Part IFIC II/III Part Update date Finding required Cost Rec. Provision

Date of receipt of API Flag of bringing into use

Special Section 1 No. Special Section 2 No. Special Section 3 No.

Notes

Compare id. Records Structures Frequencies Emissions Assoc. Estns Assoc. Sstns Provisions Publications Findings

BR7a/BR7b Group id. BR1 Date of receipt C2c RR No. 4.4

A2a Date of bringing into use A2b Period of valid. A3a Op. agency A3b Adm. resp. BR16 Value of type C8b

BR62 Expiry date for bringing into use BR63 Confirmed date of bringing into use BR64 Date of receipt of 1st Res49

BR14 Special Section

C4a Class of station C3a Assigned freq. band C5a Noise temperature

C4b Nature of service C6a Polarization type C6b Polarization angle

C11a1 Service area no. C11a2 Service area C11a3 Service area diagram

A5/A6 Coordination/Access



C2a1 Assigned frequency

13.842	GHz	13.902	GHz	13.962	GHz										
A13 Ref. to Special Sections															
API/A/5908	1		563RG7W--		12.7	-44.8		-1.8		-59.3		5.9			
CR/C/2649	2		282RG7W--		9.7	-44.8		-4.9		-59.4		5.9			
	3		77K0G7W--		6	-42.9		-8.6		-57.5		7.8			
	4		45K0G1W--		3.7	-42.8		-10.9		-57.4		7.8			

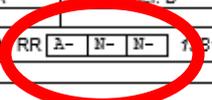
C10b1	C10b2	C10c1	C10c2	C10d1/C10d2	C10d3	C10d4	C10d7	C10d9	C8g1	C8g2	C8g3
Assoc. earth station id.	Type	Geographical coord.	City	Cls. / Nat.	Max. iso. gain	Bandwidth	Ant. diameter	Ant. dim. (DGSO)	Max. aggr. pwr.	Aggr. bandwidth	Transp. bandwidth = Aggr. bandwidth
TYPICAL-K1.2M	T			1 TC CP	43	1.25	1.2				

C10d5a Co-polar antenna pattern

C10b1	Co-polar ref. pattern	Coef. A	Coef. B	Coef. C	Coef. D	Phi1	Co-polar rad. diag.
TYPICAL-K1.2M	REC-580-6						

Findings 2D Date of protection 13A Conformity with RR 13B1 Provision 13B2 Remarks 13B3 Date of Review

13C Remarks



Page no. IFIC I Part IFIC II/III Part Update date Finding required Cost Rec. Provision

Date of receipt of API Flag of bringing into use

Special Section 1 No. Special Section 2 No. Special Section 3 No.

Notes

Compare id. Records Structures Frequencies Emissions Assoc. Estns Assoc. Sstns Provisions Publications Findings

BR7a/BR7b Group id. BR1 Date of receipt C2c RR No. 4.4

States)

administration states that the coordination procedure could not be successfully completed



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



Procedure of 11.32A → *Resolution 762* *(WRC-15))*



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 resubmit its notice under No.11.41, under the assumption that the finding under No.11.32A or No.11.33 is unfavourable.



No. 11.35 – Examination of probability of harmful interference cannot be performed



BR7a/BR7b Group id. 115703470 BR1 Date of receipt 07.12.2015 C2c RR No. 4.4

A2a Date of bringing into use 28.05.2016 A2b Period of valid. 40 A3a Op. agency 010 A3b Adm. resp. A BR16 Value of type C8b

BR62 Expiry date for bringing into use 28.05.2016 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 250000 C5a Noise temperature 700

C4b Nature of service CP C6a Polarization type L C6b Polarization angle 93.5

C11a1 Service area no. 1 C11a2 Service area XVE C11a3 Service area diagram

A5/A6  11.41/9.13 X G USA
11.41/9.7 X EGY ISR J NOR S
9.7 O F/EUT MLA NRU
V/11.32A V G LUX

C2a1 Assigned frequency							
27.625	GHz	28.125	GHz	28.625	GHz	29.125	GHz
27.875	GHz	28.375	GHz	28.875	GHz	29.375	GHz

Notice Id: 114500146

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TSDM Requested by: MDLWR Date: 01.12.2016 29:48:23 DB: 3RS ALL MDG Plan Id. Notice type: 400

M A1a Sat. Network E-SAT-N-E-SW A1f1 Notifying adm. F A1f3 Inter. sat. org. BR1 Date of receipt 07.12.2015 BR20 BR IFIC no. 2832

BR6a/BR6b Id. no. 114500146 BR3a/BR3b Provision reference 11.2 N BR2 Adm. serial no. 001

A13 Ref. to Special Sections	C7a Design. of emission	C8a1/C8b1 Max. peak pwr	C8a2/C8b2 Max. pwr dens.	C8c1 Min. peak pwr	C8c2 Attach.	C8c3 Min. pwr dens.	C8c4 Attach.	C8e1 C/N ratio	C8e2 Attach.
API/A/5666	1 2M00G7W--	7	-56	-11.8		-74.8		6	
CR/C/2524	2 70K0G7W--	-7.5	-56	-26.3		-74.8		6	

C10b1 Assoc. earth station id.	C10b2 Type	C10c1 Geographical coord.	C10c2 City	C10d1/C10d2 Cls. / Nat.	C10d3 Max. iso. gain	C10d4 Bmwidth	C10d7 Ant. diameter	C10d9 Ant. dim. (DGSO)	C8g1 Max. aggr. pwr.	C8g2 Aggr. bandwidth	C8g3 Transp. bandwidth = Aggr. bandwidth
TK045	T			1 TC CP	40.8	1.51					

C10b1 Assoc. earth station id.	Co-polar ref. pattern	Coef. A	Coef. B	Coef. C	Coef. D	Phi1	Co-polar rad. diag.
TK045	A-25*LOG (FI)						

Findings 2D Date of protection 01.12.2009 13A Conformity with RR A- N- N- 13B1 Provision 11.41 13B2 Remarks 13B3 Date of Review 3/28.04.2016

13C Remarks 11.35/9.13; E/071215

Page no. IFIC (I) 2812 Part 1 IFIC (II/III) 2832 Part 2 Update date 27.10.2016 Finding required Cost Rec. Provision



Recording under No. 11.41



When unfavorable findings 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**, 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

Notice Id:114500146



BR7a/BR7b Group id. 115703470 BR1 Date of receipt 07.12.2015 C2c RR No. 4.4

A2a Date of bringing into use 28.05.2016 A2b Period of valid. 40 A3a Op. agency 010 A3b Adm. resp. A BR16 Value of type C8b

BR62 Expiry date for bringing into use 28.05.2016 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 250000 C5a Noise temperature 700

C4b Nature of service CP C6a Polarization type L C6b Polarization angle 93.5

C11a1 Service area no. 1 C11a2 Service area XVE C11a3 Service area diagram

A5/A6 Coordinations/Agreements

11.41/9.13	X	G	USA
11.41/9.7	X	EGY	ISR J NOR S
9.7	O	F/EUI	MLA NRU
V/11.32A	V	G	LUX

C2a1 Assigned frequency

27.625	GH#	28.125	GH#	28.625	GH#	29.125	GH#	29.625	GH#				
27.875	GH#	28.375	GH#	28.875	GH#	29.375	GH#	29.875	GH#				

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TSUM Requested by: M2LOR Date: 01.12.2016 28:46:23 DB: SRS_A11_MDB Plan id: Notice type: RPD

M A1a Sat. Network E-SAT-N-E-SW A1f1 Notifying adm. E A1f3 Inter. sat. org. BR1 Date of receipt 07.12.2015 BR20 BR IFIC no. 2832

BR6a/BR6b Id. no. 114500146 BR3a/BR3b Provision reference 11.2 BR2 Adm. serial no. 001

A13 Ref. to Special Sections		C7a Design of emission	C8a1/C8b1 Max. peak pwr	C8a2/C8b2 Max. pwr dens.	C8c1 Min. peak pwr	C8c2 Attech.	C8c3 Min. pwr dens.	C8c4 Attech.	C8e1 C/N ratio	C8e2 Attech.
API/A/5666		1 2M00G7W--	7	-56	-11.8		-74.8		6	
CR/C/2524		2 70K0G7W--	-7.5	-56	-26.2		-74.8		6	

C10b1 Assoc. earth station id.	C10b2 Type	C10c1 Geographical coord.	C10c2 Ctry	C10d1/C10d2 Cls. / Nat.	C10d3 Max. iso. gain	C10d4 Bmwidth	C10d7 Ant. diameter	C10d9 Ant. dim. (DGSO)	C8g1 Max. aggr. pwr.	C8g2 Aggr. bandwidth	C8g3 Transp. bandwidth = Aggr. bandwidth
TK045	T			1 TC CP	40.8	1.51					

C10d5a Co-polar antenna pattern

C10b1 Assoc. earth station id.	Co-polar ref. pattern	Coef. A	Coef. B	Coef. C	Coef. D	Phi1	Co-polar rad. diag.
TK045	A-25*LOG(FI)	29					

Findings 2D Date of protection 01.12.2009 13A Conformity with RR A- N- N- 13B1 Provision 11.41 13B2 Remarks 13B3 Date of Review 28.04.2016

13C Remarks 11.35/9.13; E/071215

Page no. IFIC (I) 2812 Part 1 IFIC (III) 2832 Part 2 Update date 27.10.2016 Finding required Cost Rec. Provision

ADM has indicated that efforts have been made to effect coordination with the relevant ADMs, without success - No. 11.41.2



Example: Recording for information purposes only, No. 8.4



Compare id. Records Structures Frequencies Emissions Assoc. Estns Assoc. Sctns Provisions Publications Findings

BR7a/BR7b Group id. BR1 Date of receipt C2c RR No. 4.4

A2a Date of bringing into use A2b Period of valid. A3a Op. agency A3b Adm. resp. BR7c Date of receipt of type 48b

BR62 Expiry date for bringing into use BR63 Confirmed date of bringing into use BR64 Date of receipt of 1st Res49

BR14 Special Section

Notice Id: 115500136

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TSUM: Requested by: M01AR Date: 04.12.2016 09:23:23 DB: SR3: ALL: MOB Plan id: Notice type: GPP

A A1a Sat. Network A1f1 Notifying adm. A1f3 Inter. sat. org. BR1 Date of receipt BR20 BR IFIC no.

BR6a/BR6b Id. no. BR3a/BR3b Provision reference BR2 Adm. serial no.

C4a Class of station C3a Assigned freq. band

C4b Nature of service C6a Polarization type C6b Polarization angle

C8d1 Max. tot. peak pwr. C8d2 Contiguous bandwidth

C11a1 Service area no. C11a2 Service area C11a3 Service area diagram

A5A6 Coordinations/Agreements

C2a1 Assigned frequency																			
10.97	GH#	11.01	GH#	11.05	GH#	11.09	GH#	11.13	GH#	11.17	GH#								
A13 Ref. to Special Sections		C7a Design. of emission		C8a1/C8b1 Max. peak pwr		C8a2/C8b2 Max. pwr dens.		C8c1 Min. peak pwr		C8c2 Attech.		C8c3 Min. pwr dens.		C8c4 Attech.		C8e1 C/N ratio		C8e2 Attech.	
AFI/A/5786 CR/C/2830		1 30M0G7F--		19.4		-54.5		17.5				-56.4				7.9			
		2 2SM6G7F--		20.5		-53.4		20.5				-53.4				10.9			
		3 5M80G7F--		11.5		-55.2		9.7				-57				10.9			

C10b1 Assoc. earth station id.	C10b2 Type	C10c1 Geographical coord.	C10c2 Ctry	C10d1/C10d2 Cls. / Nat.	C10d3 Max. iso. gain	C10d4 Bmwdth	C10d6 Noise temp.	C10d7 Ant. diameter	C10d9 Ant. dim. (DGSO)
TYPICAL-0.9	T			1 TC CP	38.3	1.9	140	0.9	

C10d5a Co-polar antenna pattern							
C10b1 Assoc. earth station id.	Co-polar ref. pattern	Coef. A	Coef. B	Coef. C	Coef. D	Phi1	Co-polar rad. diag.
TYPICAL-0.9	REC-550-6						

Findings 2D Date of protection 13A Conformity with RR 13B1 Provision 13B2 Remarks 13B3 Date of Review

13C Remarks

- ADM has requested **No. 4.4**, Non conforming assignment under **No. 8.4**, it is recorded into MIFR for information purposes only, under **No. 8.5**



Comments/Objections to coordination status in Part-IS, Part-IIS or Part-IIIS



Inquiry/clarification process will be initiated for the following conditions

i) Notifying administration indicated coordination agreement has been obtained while objecting administration indicated that coordination agreement has not been obtained

and

ii) The frequency assignments to which the objecting administration objects are subject to a coordination procedure under Section II of Article 9

and

iii) The objecting administration is considered an affected administration for those frequency assignments the objecting administration indicated as coordination agreement has not been obtained



Summary



- The notification process from the notice creation, through Part I-S publication, the technical examination and the final recording 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!

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