



World Radiocommunication Seminar 2016

Validation, Regulatory / Technical Examinations and Correction of AP30B notices

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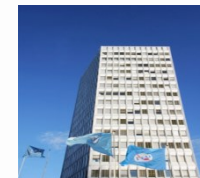
International Telecommunication Union



Processing of Article 6 Submissions (1) (Road Map)



Notifying
Administration



Radiocommunication
Bureau

Submission of validated AP4 data under § 6.1 of AP30B
(8 years before planned date of BiU) in electronic form
(Item 3 «resolves» Res.55 (Rev. WRC-15))

Part A notice
(§6.1 AP30B)

Validation
(SpaceVal)

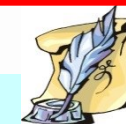


WORKSHOP

Exercise #1

«Fatal» error

OK



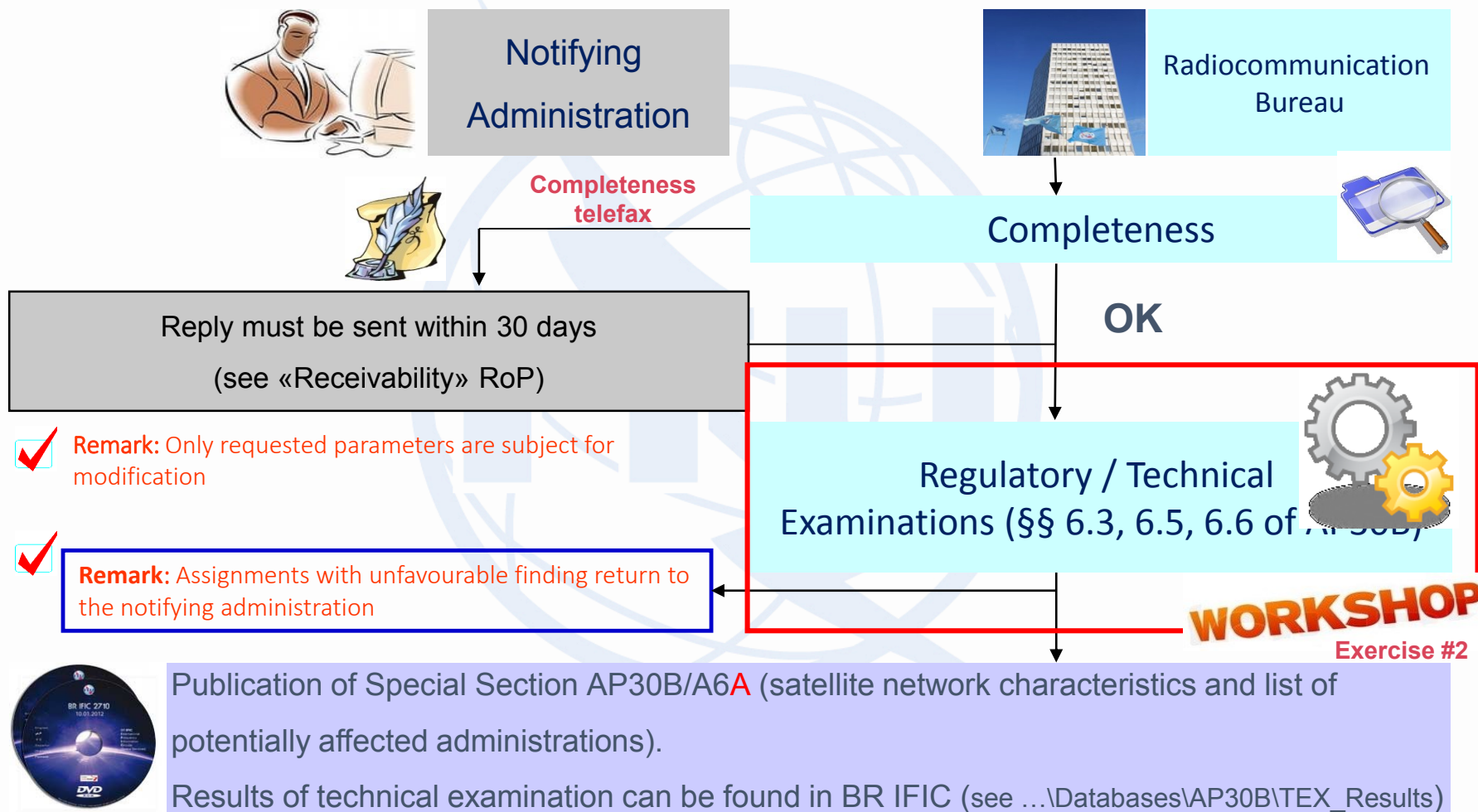
Acknowledgement telefax

Publication of “as received” (BR IFIC & SNL Part C)

<http://http://www.itu.int/en/ITU-R/space/snl/Pages/asreceivedAP30B.aspx>



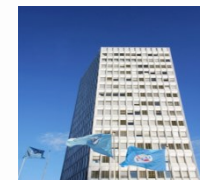
Processing of Article 6 Submissions (2) (Road Map)



Processing of Article 6 Submissions (3) (Road Map)



Administrations



Radiocommunication
Bureau

All administrations should examine each BR IFIC to see whether their allotments / assignments are affected by new submitted assignments and make comments within a period of 4 months



WORKSHOP

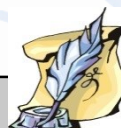
Exercise #3



- ✓ Remark: If affected ADM does not make a comment within 4 months period since the date of BR IFIC publication it is deemed that this ADM has **NOT** agreed

- ✓ Remark: SpaceCom does **NOT** use for submission of AP30B comments

Notifying ADM can request assistance of the BR in respect of an ADM has not replied within 4 months
(§ 6.13 of AP30B)

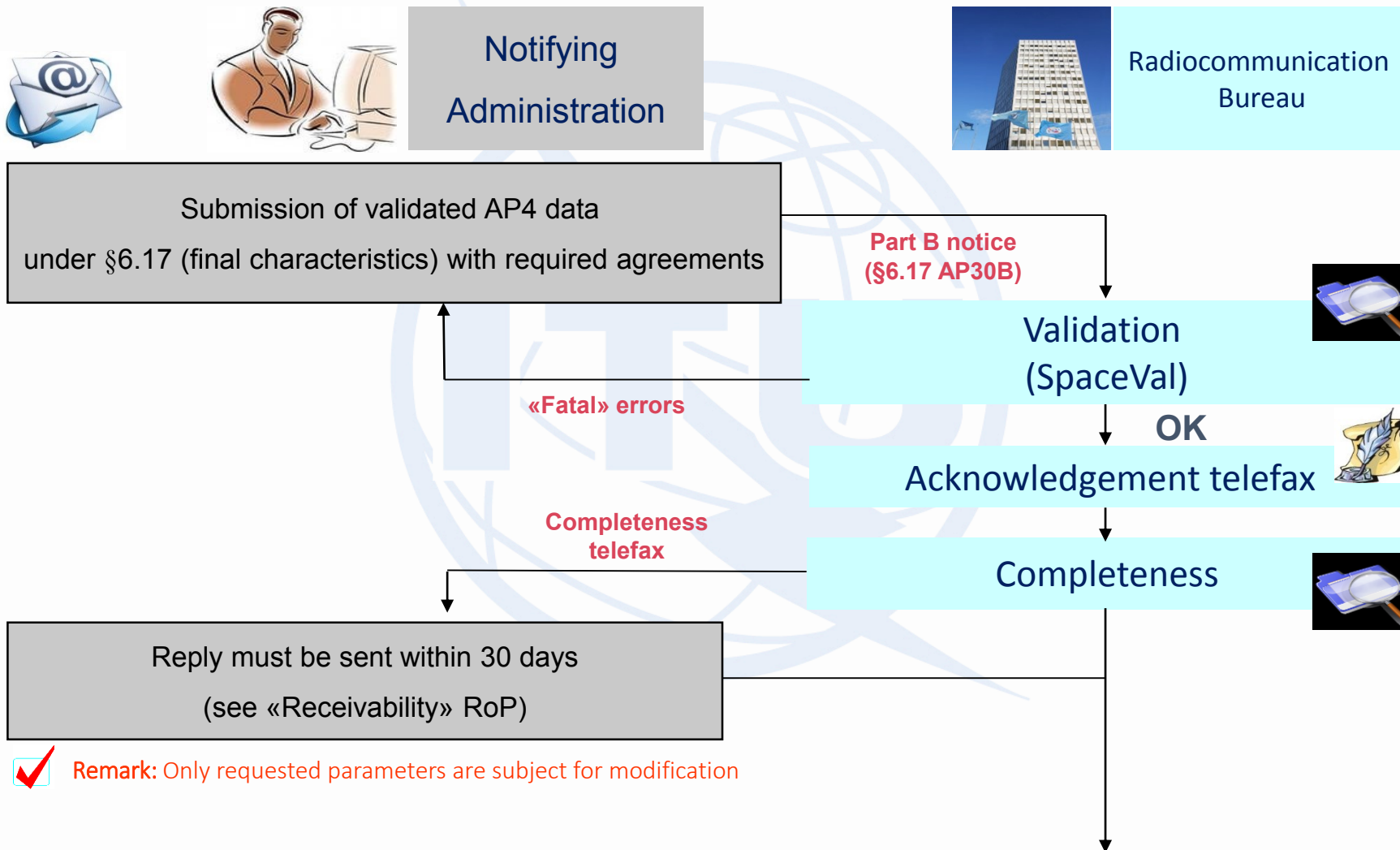


BR assistance
under §§ 6.14 - 6.15 of AP30B

- ✓ Remark: If no decision is communicated to the BR within 30 days after the date of dispatch of the BR reminder the affected ADM has **AGREED** to the subject assignments



Processing of Article 6 Submissions (4) (Road Map)

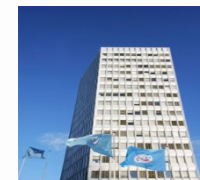


✓ Remark: Only requested parameters are subject for modification

Processing of Article 6 Submissions (5) (Road Map)




Notifying
Administration



Radiocommunication
Bureau

✓ **Remark:** Assignments with unfavourable finding return to the notifying administration

Regulatory / Technical
Examinations
(§§6.19; 6.21; 6.22 of AP30B)



OK

WORKSHOP
Exercise #4

If favorable with respect to allotments, the notifying Administration can resubmit under §6.25



Publication of Special Section AP30B/A6B (final characteristics of satellite network)
Entering the assignments into the List (provisionally, in the case of §6.25 of AP30B)
Updating of the Reference situation



Submission of notification under §8.1
(confirmation of BiU (11.44B + Res.40 (WRC-15))),
Res.49 (Rev. WRC-15) due diligence information



List of AP30B Exercises

WORKSHOP



Exercise 1: Validation and Modification of submission under § 6.1 of AP30B

(file: **116559099_WRS-16_AP30B_v8.mdb; 116559099_WRS-16_AP30B_GIMS.mdb; AP30B_TPs Coord.xlsx**)

at USB-KEY: ...\\Space_Workshops_(14-16-Dec)\07-Plan-and-List-AP30B\01-Exercise-on-submission)

Exercise 2: Regulatory / Technical Examinations of AP30B notice (under § 6.3 of AP30B)

(file: **116559099_WRS-16_AP30B_v8_corr.mdb; 116559099_WRS-16_AP30B_GIMS_corr.mdb**)

at USB-KEY: ...\\Space_Workshops_(14-16-Dec)\07-Plan-and-List-AP30B\01-Exercise-on-submission)

Exercise 3: Analysis of AP30B examination results

(Subject of separate session (Thursday, 15th Dec. at 10.45 in Room Popov))

Exercise 4: Processing of Part-B submissions of AP30B. Regulatory / Technical Examinations (under §§6.19; 6.21; 6.22 AP30B)

(Subject of Special session (Wednesday, 14th Dec. at 17.00 in Room C))



Exercise 1: Validation and Modification submission under § 6.1 of AP30B



WORKSHOP

Interesting Body:

Administrations / Satellite Operators notifying GSO satellite network for the FSS in the frequency bands subject of AP30B

The GOAL:

To validate AP30B notice and make relevant modifications to eliminate Fatal errors, if any

**Relevant BR
SoftWare:**



SpaceVal



SpaceCap



GIMS

Databases:

116559099_WRS-16_AP30B_v8.mdb

116559099_WRS-16_AP30B_GIMS.mdb

AP30B_TPs Coord.xlsx

at USB-KEY: ...\\Space_Workshops_(14-16-Dec)\07-Plan-and-List-AP30B\01-Exercise-on-submission



Exercise 1: Validation and Modification submission under § 6.1 of AP30B



WORKSHOP

1. Start SpaceVal

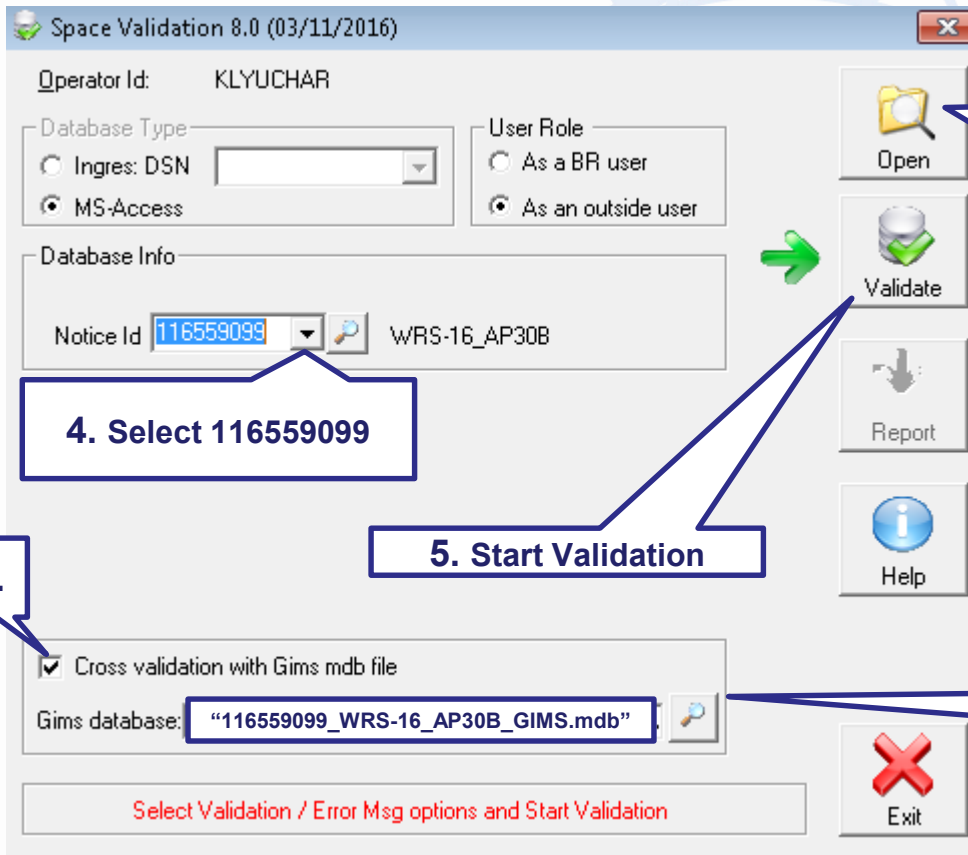


SpaceVal

directly or from SAM



2. Start Validation



Operator Id: KLYUCHAR

Database Type: Ingres: DSN MS-Access

User Role: As a BR user As an outside user

Database Info: Notice Id: 116559099 WRS-16_AP30B

Cross validation with Gims mdb file

Gims database: "116559099_WRS-16_AP30B_GIMS.mdb"

Select Validation / Error Msg options and Start Validation

Buttons: Open, Validate, Report, Help, Exit

Callouts:
1. Click "Open" and find 116559099_WRS-16_AP30B_v8.mdb
2. [Pointing to Gims database field]
3. Find 116559099_WRS-16_AP30B_GIMS.mdb
4. Select 116559099
5. Start Validation

1. Click "Open" and find
116559099_WRS-16_AP30B_v8.mdb

✓ Remark: The subject databases shall be compatible with V8 SNS database



3. Find 116559099_WRS-16_AP30B_GIMS.mdb



Exercise 1: Validation and Modification submission under § 6.1 of AP30B



WORKSHOP

3. Analyze of the Validation Report

Space Validation 8.0 (03/11/2016)

Operator Id: KLYUCHAR

Database Type: Ingres: DSN MS-Access

User Role: As a BR user As an outside user

Database Info: Notice Id: 116559099 WRS-16_AP30B

Cross validation with Gims mdb file

Gims database: "116559099_WRS-16_AP30B_GIMS.mdb"

Validation completed. Click on the <Report> button to view results

Buttons: Open, Validate, Report, Help, Exit

6. Open Validation Report

SNS Validation Errors

Validation Report for 116559099 User KLYUCHAR created on 23/11/2016 12:03:24 with SpaceVal 8.0
 X:\BR\BRSS\SNPKLYUCHAR\116559099_WRS-16_AP30B_v8.mdb
 Ntc ID: 116559099 Adm: SIII Sat Name: WRS-16_AP30B Dtb Pos: 9.45 Action: A Status: 01_D_RCV: 22/11/2016
 Fatal Errors: 6 Warnings: 11

Beam	ER	Gp id	Table	Field	Value	Row no	Val err	Rule	Sevnt	Apd-Ref	Text
RATK	R	9	t_wc_in	long_dec	-69	1703	7	F			Test point is not visible from the satellite
				long_dec	45	17703	7	W			Test point is not on land
				long_dec	80	20703	7	F			Test point is not in the Service Area
		11		long_dec	-69	1703	7	F			Test point is not visible from the satellite
				long_dec	45	17703	7	W			Test point is not on land
				long_dec	80	20703	7	F			Test point is not in the Service Area
			emis	pw_dct_n	-37.8	1675	31	W	C.8.h		Invalid value for up-link under AP30B
RATK			t_beam	beam_na	br	501	3	W	B.1.a		xGIMS: If mandatory antenna gain contours fall on the visible surface of the Earth, they shall also be provided in accordance with Appendix 4 data item B.3.b. Nevertheless, if the resulting satellite absolute invalid value for up-link under AP30B
		13	emis	pw_dct_n	-33.3	1675	31	W	C.8.h		Invalid value for up-link under AP30B
EATK	E		t_beam	beam_na	EATC	501	3	W	B.1.a		xGIMS: If mandatory antenna gain contours fall on the visible surface of the Earth, they shall also be provided in accordance with Appendix 4 data item B.3.b. Nevertheless, if the resulting satellite absolute invalid value for up-link under AP30B
				beam_na	EATC	501	3	F	B.1.a		xGIMS: In accordance with Appendix 4 data item B.3.b a mandatory antenna gain contour is missing (EATC/EATD (Gain Contour))
EATK				bore_long	-9.45	551	3	W	B.3.1.a		xGIMS: SNS coordinates is not one of the GIMS boreight
				beam_na	EATC	501	3	W	B.1.a		xGIMS: If mandatory antenna gain contours fall on the visible surface of the Earth, they shall also be provided in accordance with Appendix 4 data item B.3.b. Nevertheless, if the resulting satellite absolute invalid value for up-link under AP30B
				l_siter	Y	512	3	F	B.1.C		xGIMS: OSB contour is not provided in proper gain contour diagram in GIMS database



Exercise 1: Validation and Modification submission under § 6.1 of AP30B



WORKSHOP

3. Analyze of the Validation Report



Clarification of the Rule

List of Validation Rules (for Plan Space Services)

User: KLYUCHAR created on 23/11/2016 12:03:24 with SpaceVal 8.0
X:\BR\BRSSD\SNP\K...EV\116559099_WRS-16_AP30B_v8.mdb
Ntc Id: 116559099 Adm: SUI Name: WRS-16_AP30B Orb Pos: 9.45 Action: A Status: 01 D_RCV: 22/11/2016
Fatal Errors: 6 Warnings: 11

Beam	E/R	Grp id	Table	Field	Value	Msg no	Val err	Rule	Severit	Ap4_Ref	Text
RATC	R	9	e_as_str	long_dec	-69	1703	7	F			Test point is not visible from the satellite
				long_dec	45	1703	7	W			Test point is not on land
				long_dec	80	20703	7	F			Test point is not in the Service Area
				long_dec	-69	1703	7	F			Test point is not visible from the satellite
									W		
		11		long_dec	80	20703	7	F			Test point is not in the Service Area
				pwr_ds_nbw	-37.8	1675	3.1	W	C.8.h		Invalid value for up-link under AP30B
RATK		13	s_beam	beam_name	RATK	501	3	W	B.1.a		xGIMS: If mandatory antenna gain contours fall on the visible surface of the Earth, they shall also be provided in accordance with Appendix 4 data item B.3.b. Nevertheless, if the resulting satellite absolute
			emiss	pwr_ds_nbw	-33.3	1675	3.1	W	C.8.h		Invalid value for up-link under AP30B
EATC	E		s_beam	beam_name	EATC	501	3	W	B.1.a		xGIMS: If mandatory antenna gain contours fall on the visible surface of the Earth, they shall also be provided in accordance with Appendix 4 data item B.3.b. Nevertheless, if the resulting satellite absolute
				beam_name	EATC	501	3	F	B.1.a		xGIMS: In accordance with Appendix 4 data item B.3.b a mandatory antenna gain contour is missing (EATC/E/CO (Gain Contours)/C)
EATK				bore_long	-9.45	531	3	W	B.3.f.1.a		xGIMS: SNS coordinates is not one of the GIMS boresight
				beam_name	EATK	501	3	W	B.1.a		xGIMS: If mandatory antenna gain contours fall on the visible surface of the Earth, they shall also be provided in accordance with Appendix 4 data item B.3.b. Nevertheless, if the resulting satellite absolute
				f_steer	Y	512	3	F	B.1.C		xGIMS: OdB contour is not provided in co-polar gain contour diagram in GIMS database

8. Warning errors should be considered

7. Fatal errors shall be corrected



Exercise 1: Validation and Modification submission under § 6.1 of AP30B



WORKSHOP

3. Analyze of the Validation Report

9. Select Fatal Error and Click "Rule"

Beam Name

SNS Validation Errors

Validation Report for 116559099 User KLYUCHAR created on 24/11/2016
 X:\BR\BRSSD\SNP\KLYUCHAR\116559099_WRS-16_AP30B_V...
 Ntc ID: 116559099 Adm: SUI Sat Name: WRS-16_AP30B

Beam	E/R	Grp id	Table	Field	Value	Row no	Val		
RATK	R	11	e_as_stn	long_dec	80	20	703		
			emiss	pwr_ds_nbw	-37.8	1	675		
RATK	R	3	s_beam	beam_name	RATK	501			
			emiss	pwr_ds_nbw	-33.3	1	675		
EATC	E	3	s_beam	beam_name	EATC	501	3		
			beam_name	EATC	501	3	F	B.1.a	xGIMS: In accordance with Appendix 4 data item B.3.b a mandatory antenna gain contour is missing.[EATC/E/CO (Gain Contours)/C]
EATK	E	3	bore_long	-9.45	531	3	W	B.3.f.1.a	xGIMS: SNS coordinates is not one of the GIMS boresight
			beam_name	EATK	501	3	W	B.1.a	xGIMS: If mandatory antenna gain contours fall on the visible surface of the Earth, they shall also be provided in accordance with Appendix 4 data item B.3.b. Nevertheless, if the resulting satellite absolute
			f_steer	Y	512	3	F	B.1.C	xGIMS: 0dB contour is not provided in co-polar gain contour diagram in GIMS database

SNS Validation Rule

512 Item no: 512 Field: f_steer Table: s_beam

Table: s_beam Ap4 Ref: B.1.C

Field: f_steer code indicating if the beam is steerable (see No. 1.191) or reconfigurable

Val No: 512 Applies to: all notice types

Val Rule: E: xGIMS: if steerable beam, 0dB contour must be provided in GIMS database (F)

Err Message: xGIMS: 0dB contour is not provided in co-polar gain contour diagram in GIMS database



Exercise 1: Validation and Modification submission under § 6.1 of AP30B



WORKSHOP

4. Correction of the Fatal Errors

A) Run GIMS



The screenshot shows the GIMS software interface. The main window is titled "GIMS" and has a menu bar with "Diagram", "GXT", "Database", "Edit", "View", "Tools", "Window", and "Help". Below the menu bar is a toolbar with various icons. A dropdown menu is open, showing the file path "116559099_WRS-16_AP30B_GIMS.mdb". Below the toolbar is the "GIMS Database Explorer" panel. It shows the database name "116559099_wrs-16_ap30b_gims". There are options to "Browse for ..." and radio buttons for "Geostationary Satellites" (selected) and "Non-geostationary Satellites". There is a "Notice ID:" field and a "Filter by" dropdown set to "Administration". There are checkboxes for "Apply last filters at startup" and "Filter Off". There is a "Select only:" section with checkboxes for "CO (Gain Contours)", "SA (Service Area)", and "AG/GSO (Gain towards the GSO)". There is an "Ignore:" section with checkboxes for "C (Co-polar)" and "X (Cross-polar)". At the bottom is a table with columns: "Notice", "Reason", "Admin.", "Satellite Name", and "Position". The table has one row highlighted in blue with the following data: Notice: 116559099, Reason: P, Admin.: SUJ, Satellite Name: WRS-16_AP30B, Position: 9.45. There are also some icons and checkboxes to the left of the table rows.

Notice	Reason	Admin.	Satellite Name	Position
116559099	P	SUJ	WRS-16_AP30B	9.45

10. Click "Open" and find 116559099_WRS-16_AP30B_GIMS.mdb

11. Select and Open GIMS data for "WRS-16_AP30B" satellite network



Exercise 1: Validation and Modification submission under § 6.1 of AP30B



WORKSHOP

4. Correction of the Fatal Errors

12. Select Beam "EATC" with Fatal Error

13. Click Right Mouse Button and Select "Validate" in the menu

Beam Name

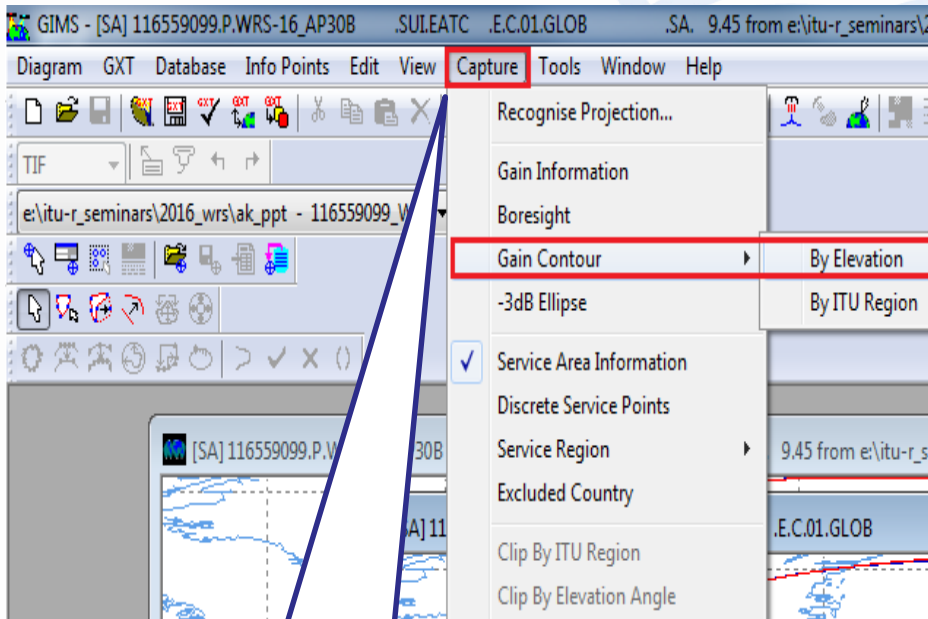
Info about missing gain contours (from GIMS or SpaceVal)

WARN	VAL_E032	-6 dB contour at 90.76;1.6729	Missing mandatory gain contour
WARN	VAL_E034	-10 dB,-20 dB	Possible missing contours

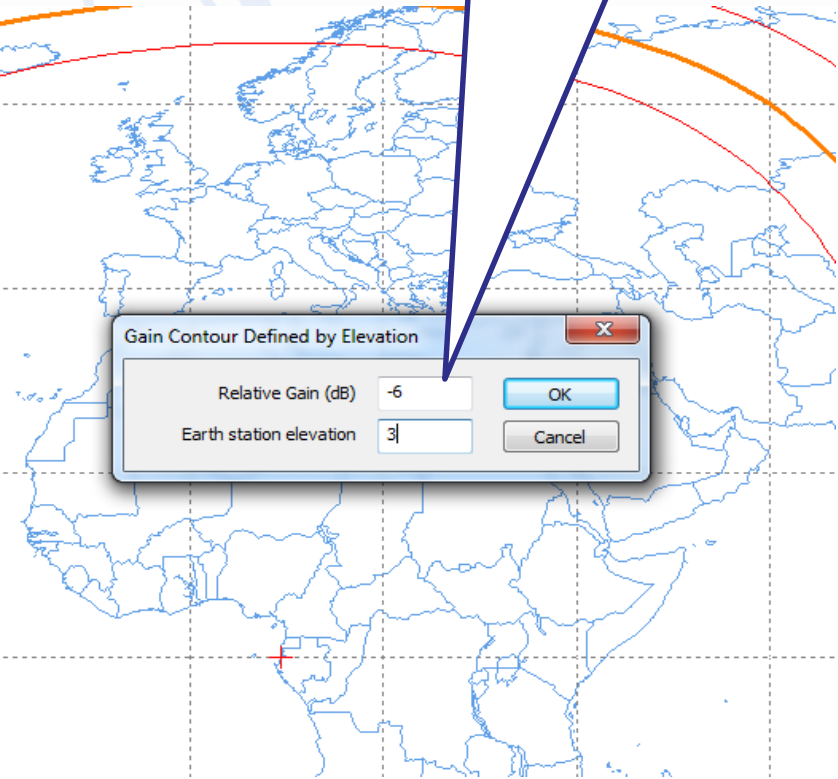
Err Message: xGIMS:In accordance with Appendix 4 data item B.3.b a mandatory antenna gain contour is missing.(EATC/E/CO (Gain Contours)/C)
Missing gain contour and sample area over which the contour is missing:-6 dB contour at 90.76;1.6729

EATC	E		\$_beam	beam_na	EATC	501	3	W	B.1.a	xGIMS:If mandatory antenna gain contours fall on the visible surface of the Earth, they shall also be provided in accordance with Appendix 4 data item B.3.b. Nevertheless, if the resulting satellite absolute
			me	beam_na	EATC	501	3	F	B.1.a	xGIMS:In accordance with Appendix 4 data item B.3.b a mandatory antenna gain contour is missing.(EATC/E/CO (Gain Contours)/C)

4. Correction of the Fatal Errors

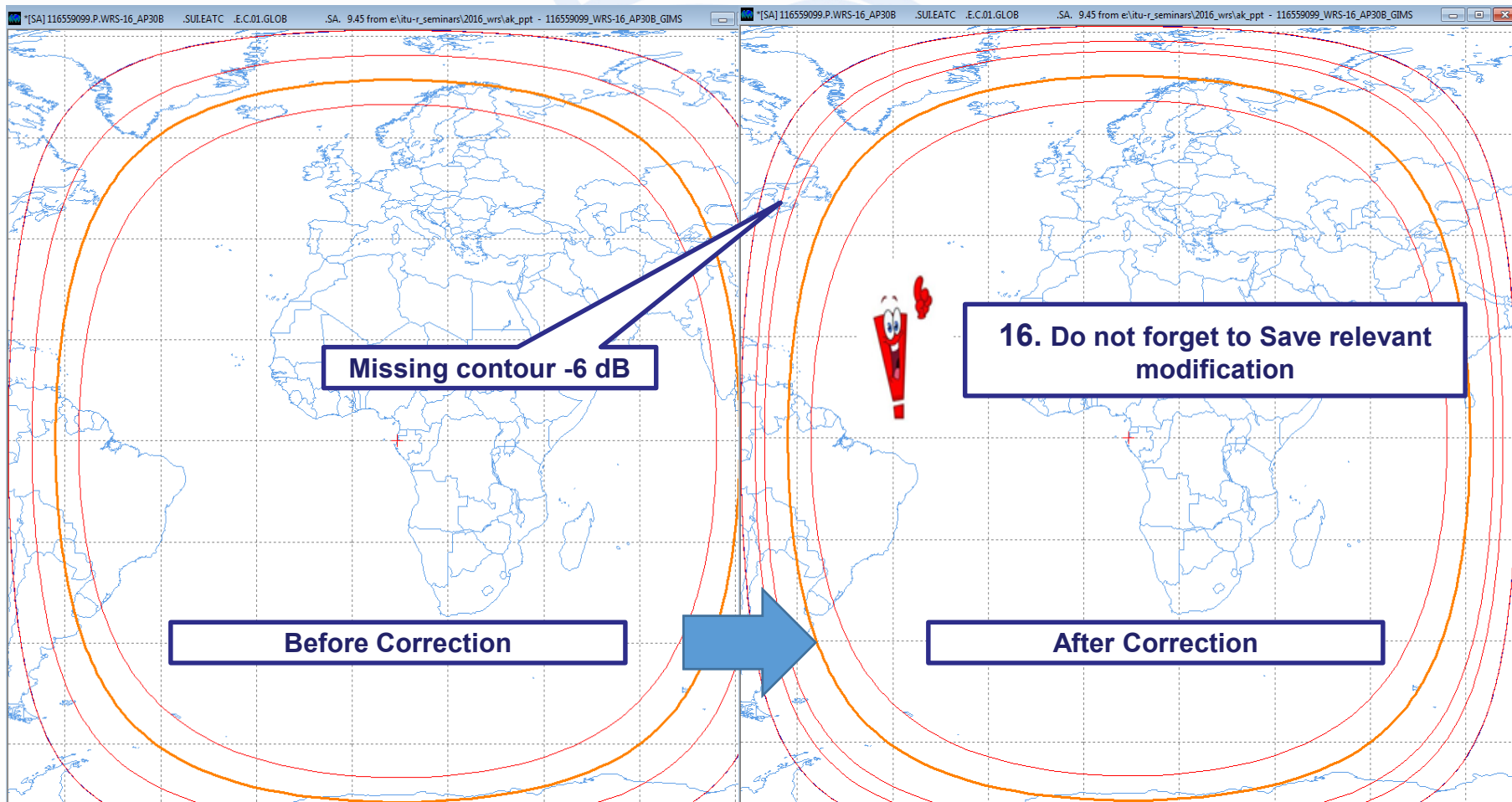


15. Put relevant data “-6 (dB)” / “3 deg” and Click “OK”



14. Select “Capture” -> “Gain Contour” -> “By Elevation” in the main Menu

4. Correction of the Fatal Errors





Exercise 1: Validation and Modification submission under § 6.1 of AP30B



WORKSHOP

4. Correction of the Fatal Errors

The screenshot shows a software window with a world map displaying gain contours. A context menu is open over the beam 'EATK'. The menu items include: View GXT (Ctrl+G), Filter (Ctrl+F), Set Filter, Accept (Enter), Reject (Del), Cut (Ctrl+X), Copy (Ctrl+C), Paste (Ctrl+V), Select All (Ctrl+A), **Validate**, Save (Ctrl+S), Save As, Display Characteristics, Auto Zoom, Zoom, Zoom Out, Satellite Position, Show Key, and Show History. A callout box labeled 'Beam Name' points to the 'EATK' label on the map.

16. Select Beam "EATK" with Fatal Error

17. Click Right Mouse Button and Select "Validate" in the menu

Info about missing gain contours (from GIMS or SpaceVal)

WARN VAL_E034 -20 dB Possible missing contours



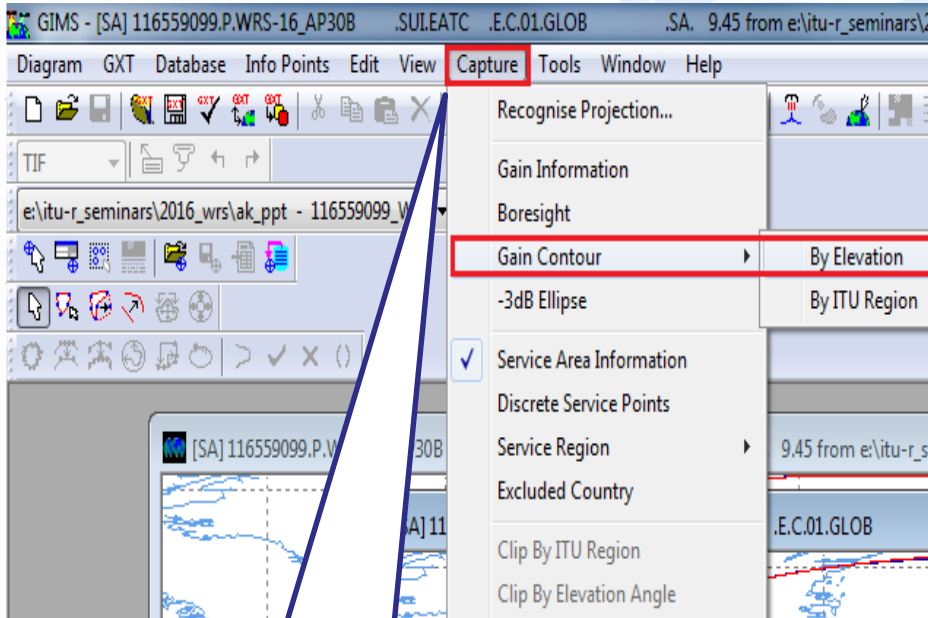
Val Rule: E: xGIMS: if steerable beam, 0dB contour must be provided in GIMS database (F)

Err Message: xGIMS: 0dB contour is not provided in co-polar gain contour diagram in GIMS database

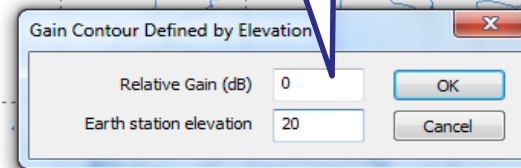
B1a. Beam Designation B1b. Steerable/Reconfigurable Beam

bore_long	-9.45	531	3	W	B.3.f.1.a	xGIMS: SNS coordinates is not one of the GIMS boresight
beam_name	EATK	501	3	W	B.1.a	xGIMS: If mandatory antenna gain contours fall on the visible surface of the Earth, they shall also be provided in accordance with Appendix 4 data item B.3.b. Nevertheless, if the resulting satellite absolute
f_steer	Y	512	3	F	B.1.C	xGIMS: 0dB contour is not provided in co-polar gain contour diagram in GIMS database

4. Correction of the Fatal Errors

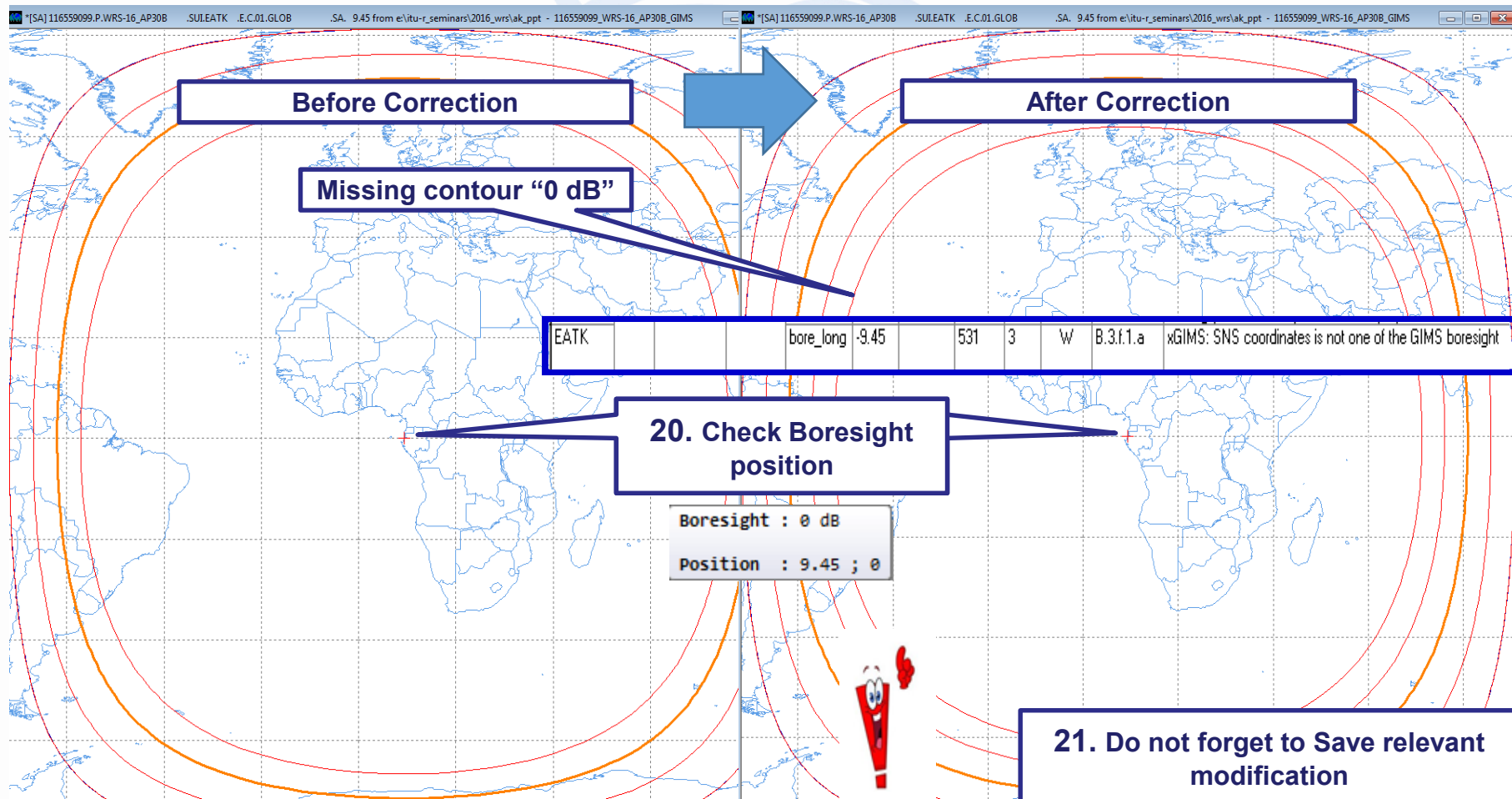


19. Put relevant data "0 (dB)" / "20 deg"
and Click "OK"



18. Select "Capture" ->
"Gain Contour" ->
"By Elevation" in the main
Menu

4. Correction of the Fatal Errors





Exercise 1: Validation and Modification submission under § 6.1 of AP30B



WORKSHOP

4. Correction of the Fatal Errors

B) Run SpaceCap



SpaceCap

22. Click "Open" and find 116559099_WRS-16_AP30B_v8.mdb

23. Select PLAN

24. Cut off "Read-only" mode

25. Select FSS Plan and double click

PLAN ID	Description	Notice Count
00DN	WRC-00 BSS Down-link Plan & List for Regions 1 & 3 (Appendix 30)	0
00LP	WRC-00 Feeder-link Plans and Lists for Regions 1 and 3 at 14&17 GHz (Appendix 30)	0
30_2	RARC BC SAT83 Plan for Region 2 (Appendices 30 & 30A)	0
A30B	WRC07 FSS Plan 6/4 AND 13/10-11 GHz Band (Appendix 30B)	1

Plan/List/Pending notices (Status above 01) read-only mode



Exercise 1: Validation and Modification submission under § 6.1 of AP30B



WORKSHOP

4. Correction of the Fatal Errors

The screenshot shows the SpaceCapture V8 software interface. The main window is titled "Notice Explorer PLAN - WRC07 FSS Plan 6/4 AND 13/10-11 GHz Band (Appendix 30B)". A table lists notices, with the first entry selected: "116559099[A] G SUI/ 9.45E WRS-16_AP30B 22/11/2016 01". A callout box labeled "26. Select WRS-16_AP30B satellite network" points to this entry. To the right, a "Control Box" contains a "Show" button, with a callout box labeled "27. Click 'Show'". Below the table, the "Forms of Notice PLAN - WRC07 FSS Plan 6/4 AND 13/10-11 GHz Band (Appendix 30B)" are displayed. The "Notice Submitted under" section lists various options, with "A30B#6.1A New Additional System" selected. At the bottom, the "List of Available Beams" is shown, with "Beam RATC" selected. A callout box labeled "28. Select 'Beam RATC' (by double click)" points to this selection. The interface also shows fields for "Date of Receipt" (22/11/2016), "Administration Serial Number", "A11. Notifying Administration" (SUI), "A13. Intergovernmental Satellite", "Provision code" (A30B#6.1A), "A4a1. Nominal Orbital Longitude" (9.45° E), "A1a. Identity of the Satellite Network" (WRS-16_AP30B), "A4a2. Longitudinal tolerance" (0.1°), and "A4a2c. Inclination Excursion" (0.05°).



Exercise 1: Validation and Modification submission under § 6.1 of AP30B



WORKSHOP

4. Correction of the Fatal Errors

29. Go to "Group" and further to "Srv Area/Typical Antenna"

30. Select "Group Id:" 9 or 11

31. Click "Edit List of Test Points"

Forms of Notice PLAN - WRC07 FSS Plan 6/4 AND 13/10-11 GHz Band (Appendix 30B)

Coordination | Notice | Beam | **Group** | Strapping | Attachments

Notice Id: 116559099 Satellite Network: WRS-16_AP30B Nominal Orbital Longitude: 9.45 Administration: SUI

Characteristics of the Beam

B2. Receiving Beam (selected) / Transmitting Beam

Shape of the Beam: Elliptical / Other Shape (selected)

B3a1. Co-polar gain: 29 dBi

C12a. Minimum acceptable aggregate carrier-to-interference ratio

B3f1. Aim point Longitude: 9.45° E

List of Available Groups: Group 9, Group 11

Strapping | Attachments | Coordination | Emissions/Frequencies | **Srv Area/Typical Antenna**

Notice Id: 116559099 Satellite Network: WRS-16_AP30B Beam Id: RATC R Group Id: 9

C11a. Test Points (maximum 100)

Longitude degrees E	Latitude degrees N	Antenna Altitude (m)	Climatic Zone	C. Zone in db
-69.0000	-46.0000	0	E	
-53.0000	4.0000	0	P	
-38.0000	-5.0000	0	N	
-18.0000	65.0000	0	G	
-14.0000	13.0000	0	K	
-2.0000	10.0000	0	F	
9.0000	40.0000	0	N	
9.0000	40.0000	0	K	
15.0000	-70.0000	0	A	
15.0000	8.0000	0	N	
16.0000	-16.0000	0	J	
22.0000	-22.0000	0	C	
25.0000	-32.0000	0	D	
25.0000	5.0000	0	N	
34.0000	55.0000	0	E	
37.0000	16.0000	0	C	
45.0000	-6.0000	0	N	
46.0000	-18.0000	0	P	
62.0000	40.0000	0	C	
80.0000	30.0000	0	K	

Service area contour

C11a1. Service Area No. 1 C11a3. Service Area Diagram. See Attachment No. 1

C11a5e. Minimal Elevation Angle

Associated Typical Earth Station Antenna Characteristics

C10d5a. Radiation Pattern AP30B => APERR_002V01 coe/a=29

C10d3. Maximum Isotropic Gain in dBi 49.6

C10d4. Half-power beamwidth in degrees 0.6

Note: These associated typical earth station antenna characteristics are valid for each test point.

Apply these characteristics to all groups in this beam / Apply these characteristics to the Current Group

Overwrite Climatic Zones in db with IDWM Climatic Zones

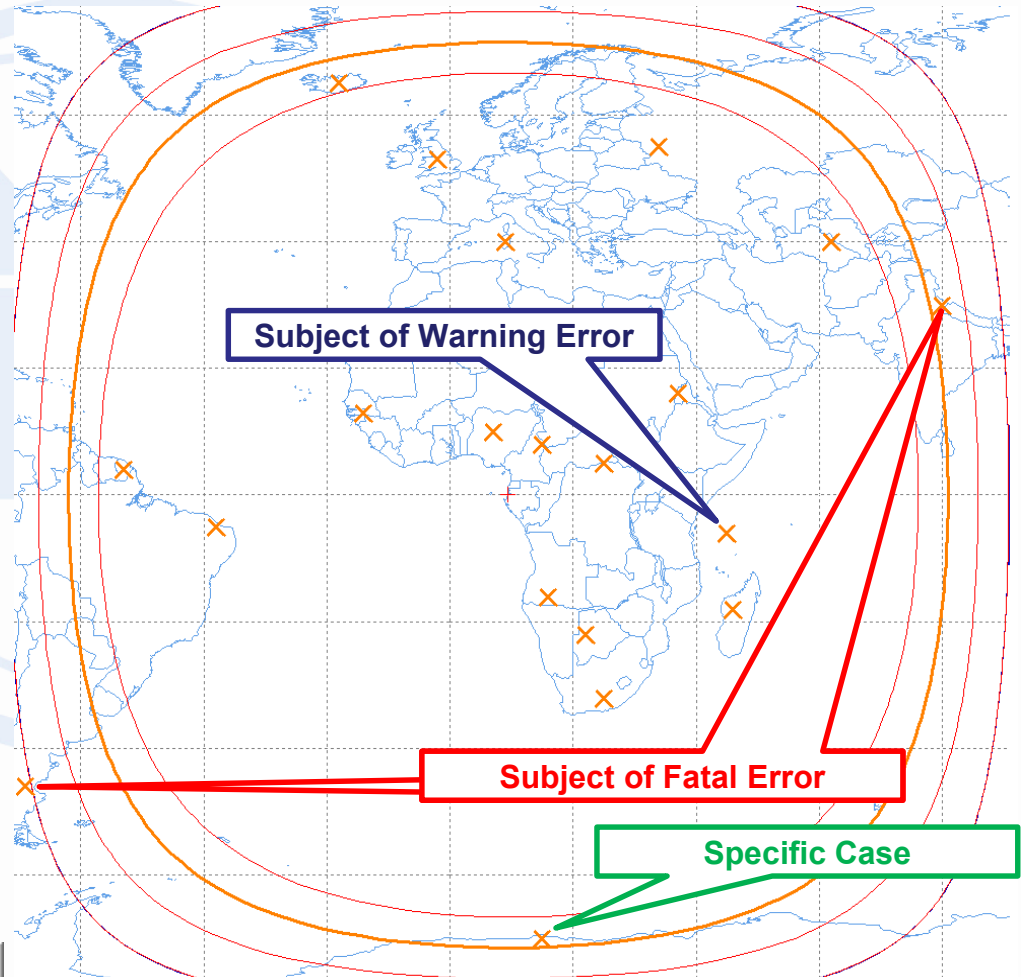
4. Correction of the Fatal Errors

C11a Test Points (Maximum 100)

C11a. Test Points (maximum 100)				
	Longitude degrees E	Latitude degrees N	Antenna Altitude (m)	C. Zone in db
	-69.0000	-46.0000	0	E
	-53.0000	4.0000	0	P
	-38.0000	-5.0000	0	N
	-18.0000	65.0000	0	G
	-14.0000	13.0000	0	K
	-2.0000	53.0000	0	F
	7.0000	10.0000	0	N
	9.0000	40.0000	0	K
	15.0000	-70.0000	0	A
	15.0000	8.0000	0	N
	16.0000	-16.0000	0	J
	22.0000	-22.0000	0	C
	25.0000	-32.0000	0	D
	25.0000	5.0000	0	N
	34.0000	55.0000	0	E
	37.0000	16.0000	0	C
	45.0000	-6.0000	0	N
	46.0000	-18.0000	0	P
	62.0000	40.0000	0	C
	80.0000	30.0000	0	K

32. Correct TPs' coordinates:
-69.0; -46.0 => -56.0; -32.0
15.0; -70.0 => 28.0; -29.0
45.0; -6.0 => 38.0; -6.0
80.0; 30.0 => 76.0; 30.0 and Click

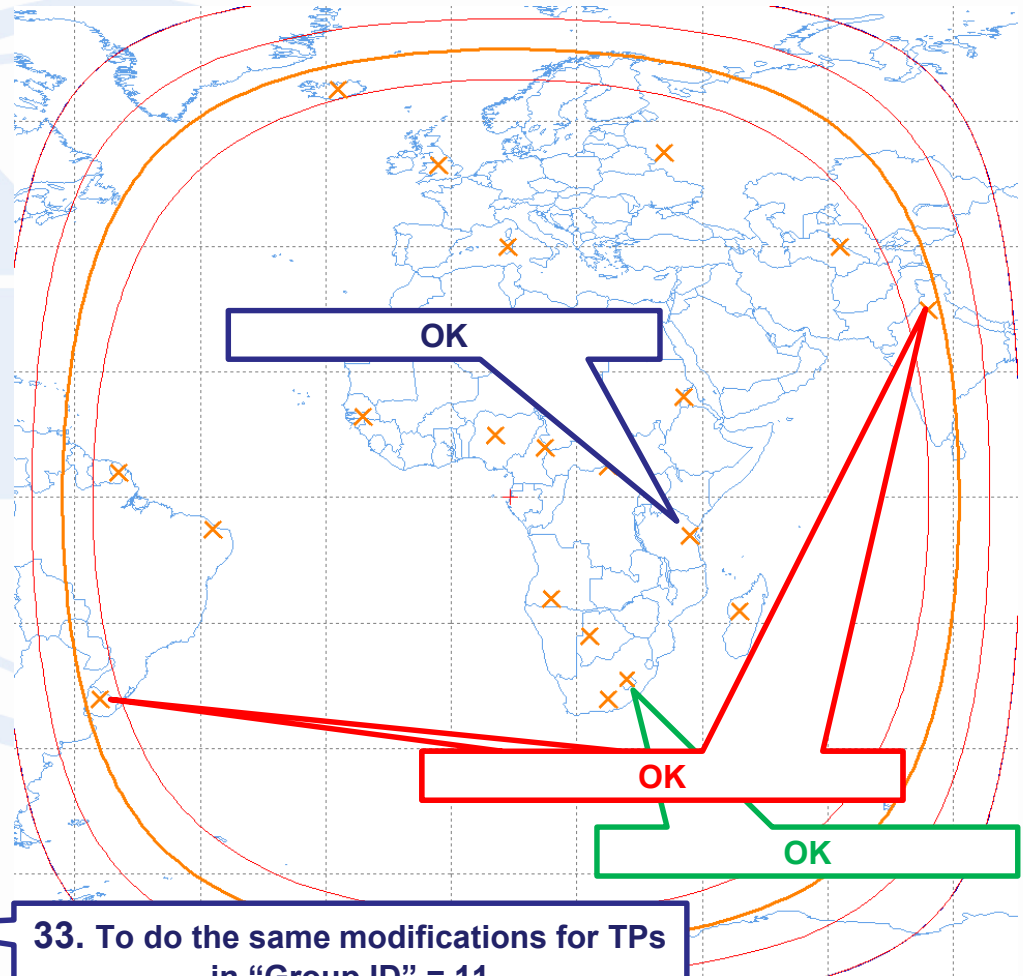
Save and Close



4. Correction of the Fatal Errors

C11a Test Points (Maximum 100)

C11a. Test Points (maximum 100)				
	Longitude degrees E	Latitude degrees N	Antenna Altitude [m]	C. Zone in db
	-56.0000	-32.0000	0	
	-53.0000	4.0000	0	P
	-38.0000	-5.0000	0	N
	-18.0000	65.0000	0	G
	-14.0000	13.0000	0	K
	-2.0000	53.0000	0	F
	7.0000	10.0000	0	N
	9.0000	40.0000	0	K
	15.0000	8.0000	0	N
	16.0000	-16.0000	0	J
	22.0000	-22.0000	0	C
	25.0000	-32.0000	0	D
	25.0000	5.0000	0	N
	28.0000	-29.0000	0	
	34.0000	55.0000	0	E
	37.0000	16.0000	0	C
	38.0000	-6.0000	0	N
	46.0000	-18.0000	0	P
	62.0000	40.0000	0	C
	76.0000	30.0000	0	K



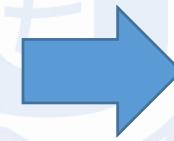
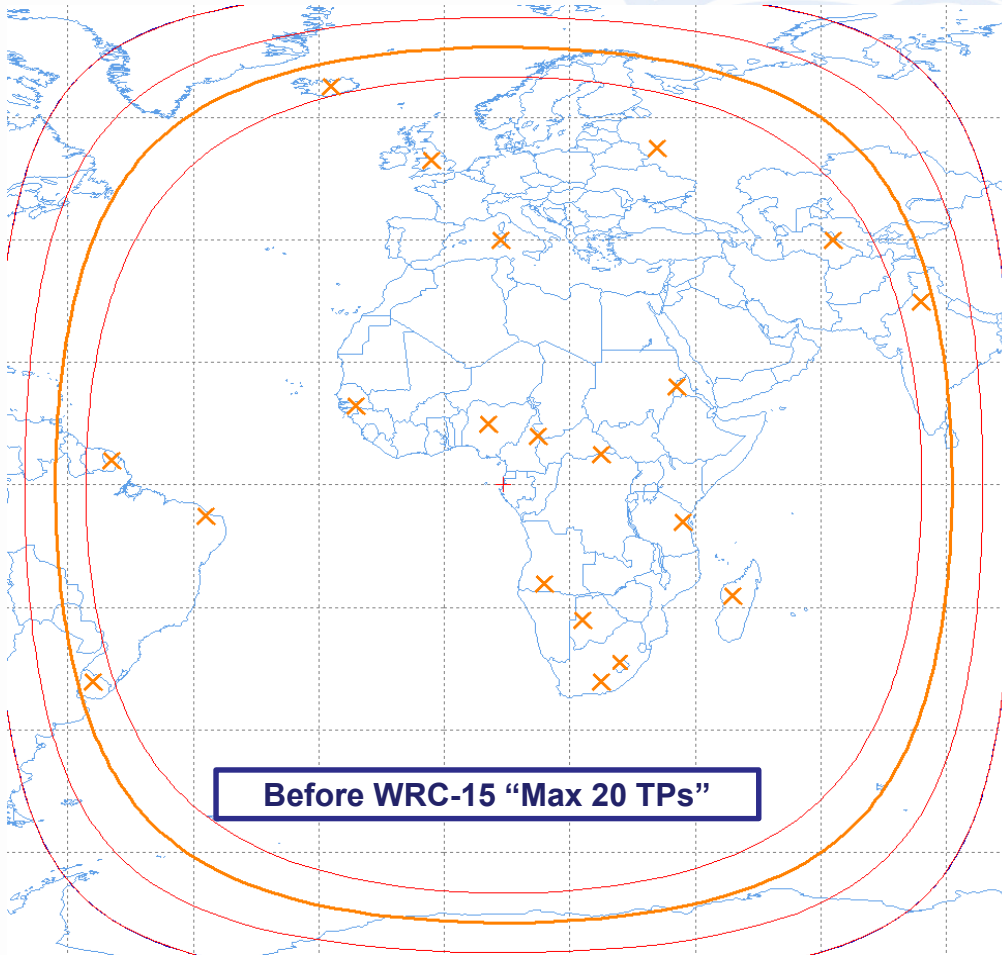
Beam Id: RATC R Group Id: 11

Service area contour: 9

C11a1 Service Area No: 1 C11a3 Service Area D: 11

**33. To do the same modifications for TPs
in "Group ID" = 11**

5. Implementation of WRC-15 Decision “Max 100 TPs”



C11a Test Points (Maximum 100)

C11a. Test Points (maximum 100)				
Longitude degrees E	Latitude degrees N	Antenna Altitude (m)	Climatic Zone	C. Zone in db
-69.0000	-32.0000	0		
-53.0000	4.0000	0		
-38.0000	-5.0000	0		
-18.0000	65.0000	0		
-14.0000	13.0000	0		
-2.0000	53.0000	0		
7.0000	10.0000	0		
9.0000	40.0000	0		
15.0000	8.0000	0		
16.0000	-16.0000	0		
22.0000	-22.0000	0		
25.0000	-32.0000	0		
25.0000	5.0000	0		
28.0000	-29.0000	0		
34.0000	55.0000	0		
37.0000	16.0000	0		
38.0000	-6.0000	0		
46.0000	-18.0000	0		
62.0000	40.0000	0		
76.0000	30.0000	0		



Exercise 1: Validation and Modification submission under § 6.1 of AP30B



WORKSHOP

5. Implementation of WRC-15 Decision “Max 100 TPs”

# TP	E	N
21	-8	40
22	22	40
23	2	45
24	0	30
25	9	35
26	9	60
27	20	50
28	30	50
29	40	30
30	51	25
31	51	35
32	62	35
33	0	10
34	30	25
35	32	40
36	10	20
37	-10	20
38	9	50
39	66	28
40	20	0
41	20	20
42	-5	35
43	-22.8	16.1
44	15	25
45	40	10
46	-7	53
47	-5	6
48	30	6
49	45	35

34. Open Excel file “AP30B_TPs Coord.xlsx” and Copy “Blue marked” cells (from 21 to 75)

35. Back to  SpaceCap .

Forms of Notice PLAN - WRC07 FSS Plan 6/4 AND 13/10-11 GHz Band (Appendix 30B)

Strapping Attachments Coordination
Notice Beam Group Emissions/Frequencies Srv Area/Typical Antenna

Notice Id: 116559099 Satellite Network: WRS-16_AP30B Beam Id: RATCR Group Id: 9

Longitude degrees E	Latitude degrees N	Antenna Altitude (m)	Climatic Zone	C. Zone in db
-69.0000	-32.0000	0		
-53.0000	4.0000	0		
-38.0000	-5.0000	0		
-18.0000	65.0000	0		
-14.0000	13.0000	0		
-2.0000	53.0000	0		
7.0000	10.0000	0		
9.0000	48.0000	0		
15.0000	48.0000	0		
32.0000	0	0		
40.0000	0	0		
46.0000	-6.0000	0		
46.0000	-18.0000	0		
62.0000	40.0000	0		
76.0000	30.0000	0		

Service area contour
C11a1. Service Area No. 1 C11a3. Service Area Diagram. See Attachment No. 1
C11a5e. Minimal Elevation Angle

Associated Typical Earth Station Antenna Characteristics
C10d5a. Radiation Pattern AP30B ==> APERR_002V01 coe1a=23
C10d3. Maximum Isotropic Gain in dBi 49.6
C10d4. Half-power beamwidth in degrees 0.6

Note: These associated typical earth station antenna characteristics are valid for each test point.

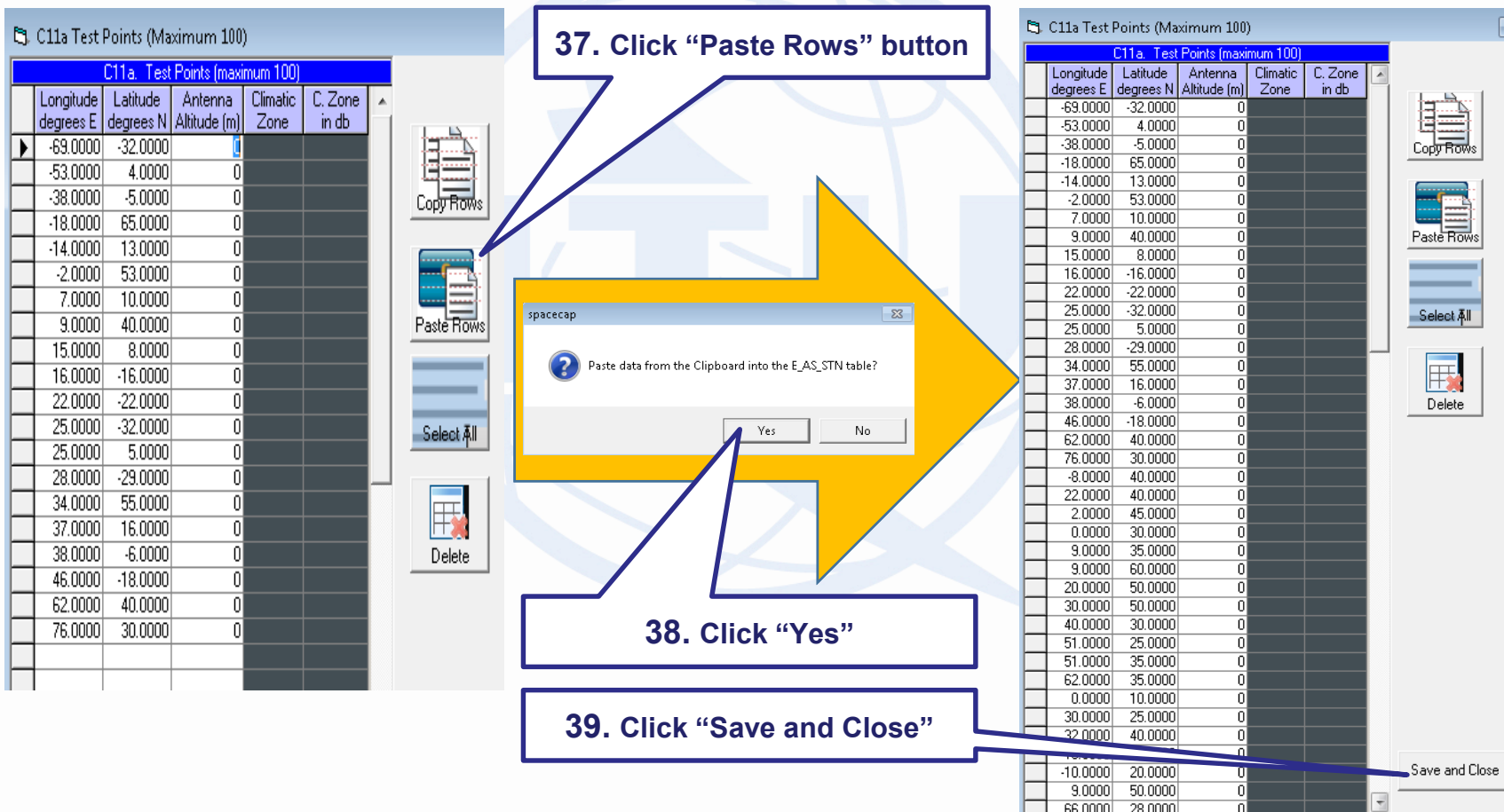
Apply these characteristics to all groups in this beam Apply these characteristics to the Current Group

Overwrite Climatic Zones in db with ID'WM Climatic Zones

For “Group ID” = 9

36. Click “Edit List of Test Points”

5. Implementation of WRC-15 Decision “Max 100 TPs”



37. Click “Paste Rows” button

Longitude degrees E	Latitude degrees N	Antenna Altitude (m)	Climatic Zone	C. Zone in db
-69.0000	-32.0000	0		
-53.0000	4.0000	0		
-38.0000	-5.0000	0		
-18.0000	65.0000	0		
-14.0000	13.0000	0		
-2.0000	53.0000	0		
7.0000	10.0000	0		
9.0000	40.0000	0		
15.0000	8.0000	0		
16.0000	-16.0000	0		
22.0000	-22.0000	0		
25.0000	-32.0000	0		
25.0000	5.0000	0		
28.0000	-29.0000	0		
34.0000	55.0000	0		
37.0000	16.0000	0		
38.0000	-6.0000	0		
46.0000	-18.0000	0		
62.0000	40.0000	0		
76.0000	30.0000	0		

38. Click “Yes”

39. Click “Save and Close”



Exercise 1: Validation and Modification submission under § 6.1 of AP30B



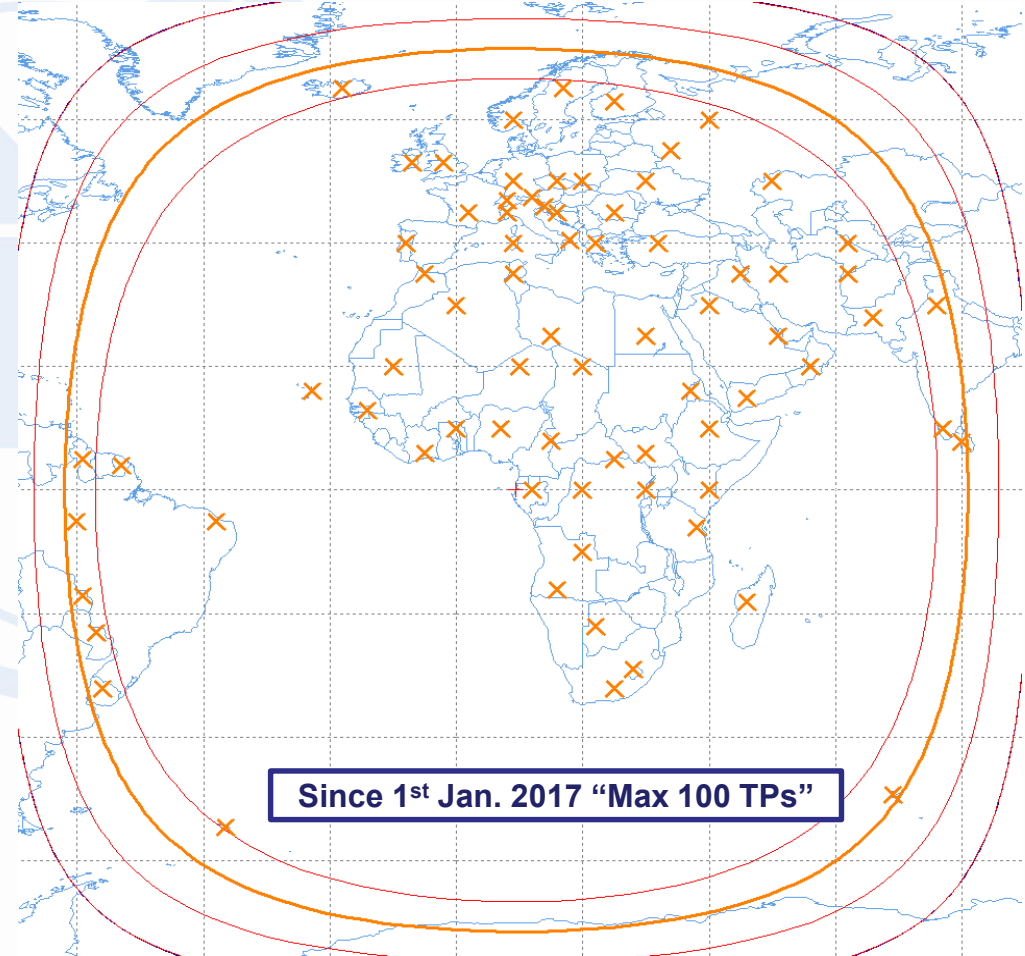
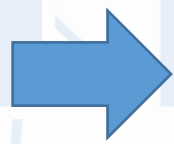
WORKSHOP

5. Implementation of WRC-15 Decision “Max 100 TPs”

C11a Test Points (Maximum 100)

Longitude degrees E	Latitude degrees N	Antenna Altitude (m)	Climatic Zone	C. Zone in db
-69.0000	-32.0000	0		
-53.0000	4.0000	0		
-38.0000	-5.0000	0		
-18.0000	65.0000	0		
-14.0000	13.0000	0		
-2.0000	53.0000	0		
7.0000	10.0000	0		
9.0000	40.0000	0		
15.0000	8.0000	0		
16.0000	-16.0000	0		
22.0000	-22.0000	0		
25.0000	-32.0000	0		
25.0000	5.0000	0		
28.0000	-29.0000	0		
34.0000	55.0000	0		
37.0000	16.0000	0		
38.0000	-6.0000	0		
46.0000	-18.0000	0		
62.0000	40.0000	0		
76.0000	30.0000	0		
-8.0000	40.0000	0		
22.0000	40.0000	0		
2.0000	45.0000	0		
0.0000	30.0000	0		
9.0000	35.0000	0		
9.0000	60.0000	0		
20.0000	50.0000	0		
30.0000	50.0000	0		
40.0000	30.0000	0		
51.0000	25.0000	0		
51.0000	35.0000	0		
62.0000	35.0000	0		
0.0000	10.0000	0		
30.0000	25.0000	0		
32.0000	40.0000	0		
10.0000	20.0000	0		
-10.0000	20.0000	0		
9.0000	50.0000	0		
66.0000	28.0000	0		

Copy Rows
Paste Rows
Select All
Delete
Save and Close





Exercise 1: Validation and Modification submission under § 6.1 of AP30B



WORKSHOP

6. Correction of a Warning Error

40. Back to "Notice"

41. Select "Beam EATK" (by double click)

42. To Check "Aim point" value, it shall be "9.45 E; 0.0 N". Make correction

Forms of Notice PLAN - WRC07 FSS Plan 6/4 AND 13/10-11 GHz Band (Appendix 30B)

Notice

Notice Id: 116559099 Plan: WRC07 FSS Plan 6/4 AND 13/10-11 GHz Band (Appendix 30B) Status: 01

Date of Receipt: DD/MM/YYYY: 22/11/2016 Administration Serial Number: []

A1f1. Notifying Administration: SUI

A1f3. Intergovernmental Satellite: []

Provision code: A30B#6.1A

Notice Submitted under:

- A30B#6.17 Include Assignments in the List
- A30B#6.1A New Additional System
- A30B#6.1C Conversion of Allotment
- A30B#6.1M Modify List assignments
- A30B#6.1T Transfer of Assignments
- A30B#6.25 Notice of Intention
- A30B#6.33B Reinstatement
- A30B#6.33C Reinstatement
- A30B#6.35L Transfer of Allotment
- A30B#6.35P Transfer of Allotment
- A30B#7.2 Allotment

Coordination

Notice

Notice Id: 116559099 Satellite Network: WRS-16

Characteristics of the Beam

B2. Receiving Beam Transmitting Beam

Shape of the Beam: Elliptical Other Shape

B3a1. Co-polar gain: 30.6 dBi

CT12a. Minimum acceptable aggregate carrier-to-interference ratio: []

B3f1. Aim point: Longitude: 9.45° E Latitude: 0° N

List of Available Beams:

- Beam RATC
- Beam RATK
- Beam EATC
- Beam EATK

List of Available Groups:

- Group 8
- Group 14
- Group 19
- Group 20



Exercise 1: Validation and Modification submission under § 6.1 of AP30B



WORKSHOP

7. Close



SpaceCap

Re-Run Validation of notice 116 559 099 by



SpaceVal

SNS Validation Errors

Validation Report for 116559099 User KLYUCHAR created on 24/11/2016 16:18:56 with SpaceVal 8.0
 X:\BR\BRSSD\SNP\KLYUCHAR\Exercise 1\116559099_WRS-16_AP30B_v8_corr.mdb

Ntc ID: 116559099 Adm: SUI Sat Name: WRS-16_AP30B Orb Pos: 9.45 Action:A Status:01 D: 24/11/2016
 Fatal Errors: 0 Warnings: 8

Beam	E/R	Grp id	Table	Field	Value	Row no	Val err	Rule	Severit	Ap4_Ref	Text
RATC	R		s_beam	beam_name	RATC		501	3	W	B.1.a	xGIMS:If mandatory antenna gain contours fall on the visible surface of the Earth, they shall also be provided in accordance with Appendix 4 data item B.3.b. Nevertheless, if the resulting satellite absolute
		11	emiss	pwr_ds_nbw	-37.8	1	675	3.1	W	C.8.h	Invalid value for up-link under AP30B
RATK			s_beam	beam_name	RATK		501	3	W	B.1.a	xGIMS:If mandatory antenna gain contours fall on the visible surface of the Earth, they shall also be provided in accordance with Appendix 4 data item B.3.b. Nevertheless, if the resulting satellite absolute
		13	emiss	pwr_ds_nbw	-33.3	1	675	3.1	W	C.8.h	Invalid value for up-link under AP30B
EATC	E		s_beam	beam_name	EATC		501	3	W	B.1.a	xGIMS:If mandatory antenna gain contours fall on the visible surface of the Earth, they shall also be provided in accordance with Appendix 4 data item B.3.b. Nevertheless, if the resulting satellite absolute
EATK			s_beam	beam_name	EATK		501	3	W	B.1.a	xGIMS:If mandatory antenna gain contours fall on the visible surface of the Earth, they shall also be provided in accordance with Appendix 4 data item B.3.b. Nevertheless, if the resulting satellite absolute

If there is NO Fatal Error – OK, otherwise Make relevant modification and repeat Validation of the notice again

Remark: The notice is ready for technical examination



Exercise 2: Regulatory / Technical Examinations (§ 6.3 AP30B)



WORKSHOP

Interesting Body:

Administrations / Satellite Operators notifying GSO satellite network for the FSS in the frequency bands subject of AP30B

The GOAL:

To do Regulatory / Technical Examinations (§ 6.3 AP30B) of AP30B notice and make relevant modifications to prevent possible unfavourable finding during BR examination, if any

Relevant BR SoftWare:



Databases:

116559099_WRS-16_AP30B_v8_corr.mdb
116559099_WRS-16_AP30B_GIMS_corr.mdb
at USB-KEY: ...\\Space_Workshops_(14-16-Dec)\07-Plan-and-List-AP30B\01-Exercise-on-submission



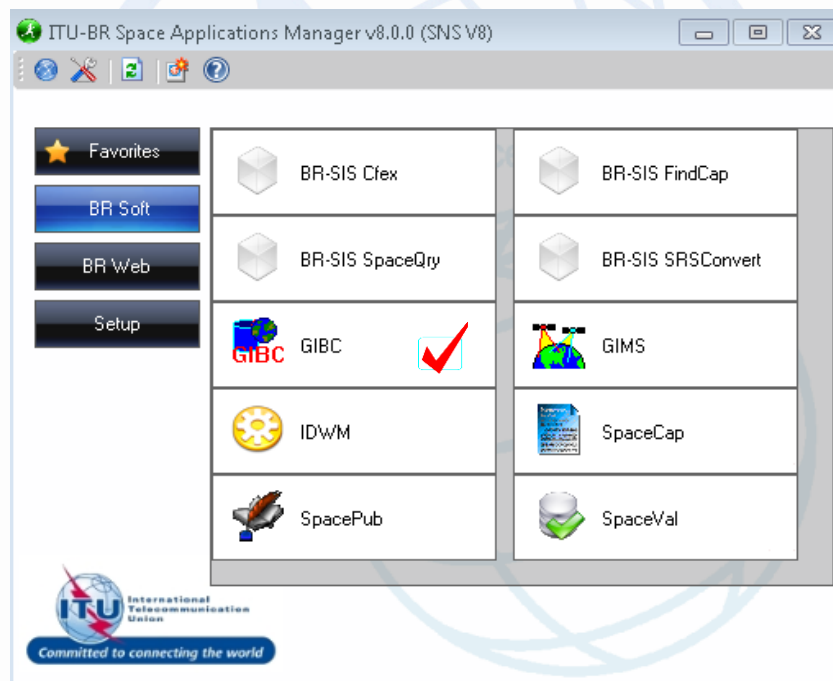
Exercise 2: Regulatory / Technical Examinations (§ 6.3 AP30B)



1. Start GIBC



directly or from SAM





Exercise 2: Regulatory / Technical Examinations (§ 6.3 AP30B)



WORKSHOP

2. Make a proper connection with examined databases

The screenshot shows the 'GIBC SNS V8 - Graphical Interface for Batch Calculations' window. At the top, there are several tabs: 'Appendix 8', 'PFD (terrestrial serv.)', 'PFD (space serv.)', 'Appendix 7', 'Appendix 30B', 'Appendix 30 30A', 'Power Control', and 'Tools / Options'. The 'Tools / Options' tab is highlighted with a red box. Below the tabs, there is a section titled 'Additional GIMS Databases' with a table containing columns for 'Database' and 'Container Path'. Below the table is an 'Add...' button, also highlighted with a red box. At the bottom, there is a section titled 'SRS Database' with a text field containing the path '116559099_WRS-16_AP30B_v8_corr.mdb', a 'Browse...' button highlighted with a red box, and 'Add' and 'Clear' buttons below it.

1. Go to "Tools / Options"

2. Click "Add..." and Select "116559099_WRS-16_AP30B_GIMS_corr.mdb"

3. Click "Browse..." and Select "116559099_WRS-16_AP30B_v8_corr.mdb"



Exercise 2: Regulatory / Technical Examinations (§ 6.3 AP30B)



WORKSHOP

3. Run examination, relevant to §6.3 a) of AP30B

GIBC SNS V8 - Graphical Interface for Batch Calculations

Appendix 30B | Appendix 30.30A | Power Control | Tools / Options
Appendix 9 | **PFD (terrestrial serv.)** | PFD (space serv.) | Appendix 7

D: klyuchar | Schedule | **Start**

Network ID: 116559099

Examination Data
Examination: Hard Limits

Power Control (dBW): 0 | Output Level: Level 1

"Before" Examination
 Perform "Before" Comparisons
Previous Networks: [] [] []

Files Path
C:\BR_TEX_RESULTS\116559099\PFD_H_161124_182106\
Open Folder

8.0.0.1 Part of TEX 8.0.0.1

4. Go to "PFD (terrestrial serv.)"

5. Input "Network ID"
as 116 559 099

6. Check
"Examination" as
"Hard Limits"

7. Start Examination and
wait the results

8. Analyze the
examination results



Exercise 2: Regulatory / Technical Examinations (§ 6.3 AP30B)



WORKSHOP

4. Analyzing of examination results under §6.3 a) of AP30B

```

FNDGS.TXT - Notepad
File Edit Format View Help
116559099RRATC 0000000900000000000000YNSBPFD A-
116559099RRATC 0000000110000000000000YNSBPFD A-
116559099RRATK 0000000100000000000000YNSBPFD A-
116559099RRATK 0000000130000000000000YNSBPFD N-
116559099TEATC 0000000060000000000000YNSBPFD A-
116559099TEATC 0000000120000000000000YNSBPFD A-
116559099TEATC 0000000160000000000000YNSBPFD A-
116559099TEATC 0000000170000000000000YNSBPFD A-
116559099TEATK 0000000080000000000000YNSBPFD A-
116559099TEATK 0000000140000000000000YNSBPFD A-
116559099TEATK 0000000190000000000000YNSBPFD A-
116559099TEATK 0000000200000000000000YNSBPFD A-

```



Take note that § 22.26 RR limit is exceeded (it will be a subject of unfavourable finding during BR examination)

x/22.26

Details of the examination

```

PFD.LST - Notepad
File Edit Format View Help
| START OF JOB SNSBPFD 24.11.16 18.21.06 VERSION 8.0.0.1
AXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
#
116559099 Hklyuchar 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 EIRP EXAMINATION REQUESTED BY : klyuchar DATE: 24/11/16 18:21:06 PAGE: 0001
SUI WRS-16_AP30B 9.45E 0.10 0.10 00.05 22.11.16 P 116.559099
RATK 33.00 DB 116.559099
EC 500000 KHZ DP 22.11.16 000.000013
13.00000 G 500000 KHZ 500M 0.00 DBW (MIN) 0.00 DBW (MAX) -33.30 DBW/HZ -33.30 DBW/HZ (NBW) N- 0001
(13) 22.26 ALL WORLD -60.0000 -5.0000 42.70 AP30B 48.0 -7.15 5.57 2.60 REF. BW 0.040MHZ N-
13.00000 G 500000 KHZ 500M 0.00 DBW (MIN) 0.00 DBW (MAX) -33.30 DBW/HZ -33.30 DBW/HZ (NBW) N- 0001
(13) 22.26 ALL WORLD -59.0000 -17.0000 42.70 AP30B 48.0 -7.15 5.57 2.60 REF. BW 0.040MHZ N-
13.00000 G 500000 KHZ 500M 0.00 DBW (MIN) 0.00 DBW (MAX) -33.30 DBW/HZ -33.30 DBW/HZ (NBW) N- 0001
(13) 22.26 ALL WORLD -59.0000 5.0000 42.70 AP30B 48.0 -7.15 5.57 2.60 REF. BW 0.040MHZ N-

```

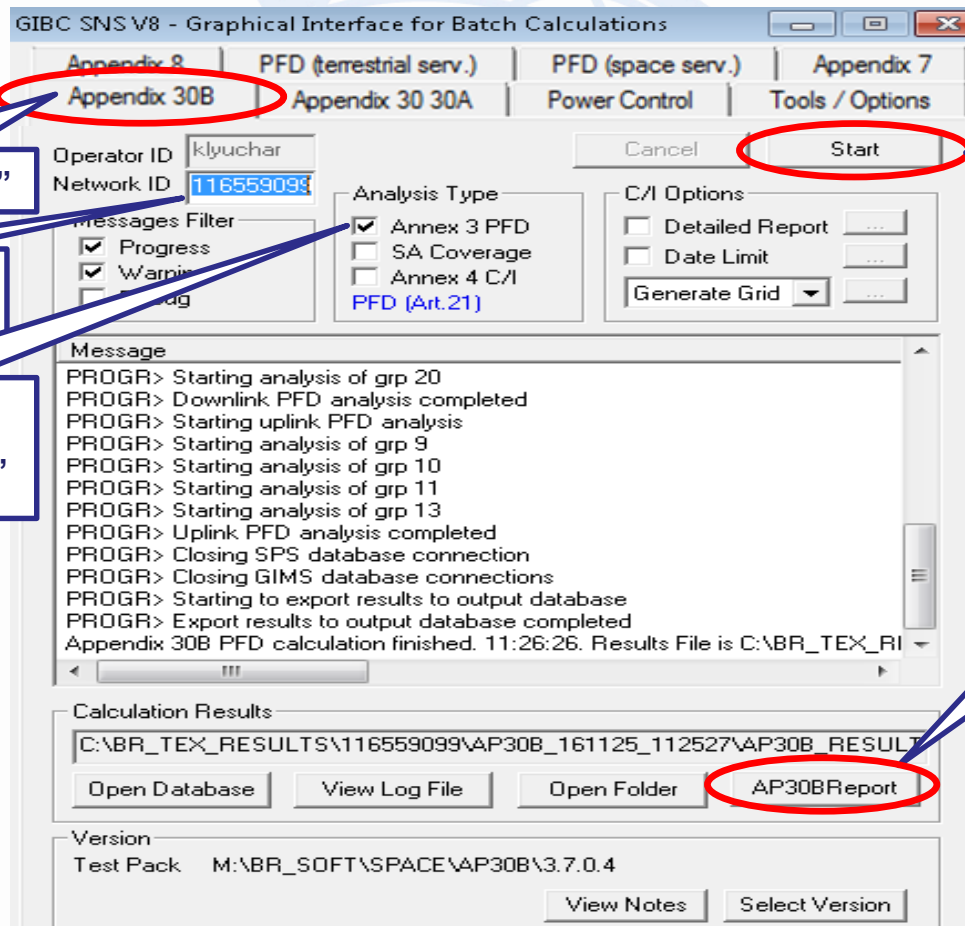


Exercise 2: Regulatory / Technical Examinations (§ 6.3 AP30B)



WORKSHOP

5. Run examination, relevant to §6.3 b) of AP30B



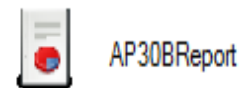
9. Go to "Appendix 30B"

10. Input "Network ID" as 116 559 099

11. Check "Analysis Type" as "Annex 3 PFD"

12. Start Examination and wait the results

13. Analyze the examination results





Exercise 2: Regulatory / Technical Examinations (§ 6.3 AP30B)



WORKSHOP

6. Analyzing of examination results under §6.3 b) of AP30B

AP30BReport

File Edit Query Help

Output database path: C:\BR_TEX_RESULTS\116559099\AP30B_161125_112527\AP30B_RESULTS.MDB

Reload selected database

Main Annex 3 - PFD

Analysis Parameters

Input database path: X:\BR\BRSSD\SNP\KLYUCHAREV\Exercise 2\116559099_WRS-16_AP30B_v8_corr.mdb

Analysis started on: 25/11/2016 11:25 AM

Analysis ended on: 25/11/2016 11:26 AM

Analysis was run by: klyuchar

Software version: M:\BR_SOFT\SPACE\AP30B\3.7.0.4 In production?:

Analysis succeeded?

Query options

Show: **all** groups test/grid points

only favourable only unfavourable

Run Query Found 16 results

Beam Name	E/R	Frequency Band	Group ID	Finding	PFD Excess	PFD Limit	Worst GSD Pos.
EATC	E	6/4	6	A-	-7.567	-127.5	
EATK	E	13/11	8	A-	-10.067	-114	
RATC	R	6/4	9	A-	-6.387	-140	-0.55
RATC	R	6/4	9	A-	-6.38	-140	19.45
RATK	R	13/11	10	A-	-15.25	-133	0.45
RATK	R	13/11	10	A-	-15.243	-133	18.45
RATC	R	6/4	11	N-	8.11	-140	-0.55
RATC	R	6/4	11	N-	8.117	-140	19.45
EATC	E	6/4	12	A-	-7.567	-127.5	
RATK	R	13/11	13	N-	4.297	-133	
RATK	R	13/11	13	N-	4.304	-133	18.45
EATK	E	13/11	14	A-	-10.067	-114	
EATC	E	6/4	16	A-	-10.567	-127.5	
EATC	E	6/4	17	A-	-10.567	-127.5	
EATK	E	13/11	19	A-	-13.067	-114	
EATK	E	13/11	20	A-	-13.067	-114	

Take note that Annex 3 AP30B PFD limit is exceeded (it will be a subject of **Unfavourable** finding during BR examination)

14. Go to "Annex 3 - PFD"

15. Select "Query options"

16. Push "Run Query"

Take note that Annex 3 AP30B PFD limit is exceeded (it will be a subject of **Unfavourable** finding during BR examination)



Exercise 2: Regulatory / Technical Examinations (§ 6.3 AP30B)



WORKSHOP

7. Correction to meet the regulatory limits

Run SpaceCap



SpaceCap

17. Click "Open" and find 116559099_WRS-16_AP30B_v8_corr.mdb

The screenshot shows the SpaceCapture V8 interface. The main window is titled "Start Page - PLAN - WRC07 FSS Plan 6/4 AND 13/10-11 GHz Band (Appendix 30B)". A table of plans is displayed:

PLAN ID	Description	Notice Count
00DN	WRC-00 BSS Down-link Plan & List for Regions 1 & 3 (Appendix 30)	0
00LP	WRC-00 Feeder-link Plans and Lists for Regions 1 and 3 at 14&17 GHz (Appendix 30)	0
30_2	RARC BC SAT83 Plan for Region 2 (Appendices 30 & 30A)	0
A30B	WRC07 FSS Plan 6/4 AND 13/10-11 GHz Band (Appendix 30B)	1

Callout 19 points to the "Read-only" mode checkbox at the bottom of the table, which is currently checked. Callout 18 points to the "PLAN" button in the top toolbar. Callout 20 points to the selected row in the table.

19. Cut off "Read-only" mode

18. Select PLAN

20. Select FSS Plan and double click



Exercise 2: Regulatory / Technical Examinations (§ 6.3 AP30B)



WORKSHOP

7. Correction to meet the regulatory limits

21. Go to "Group" and further to "Emissions/Frequencies"

22. Select "RATC R" in "Beam Id" and "11" in "Group Id:"

23. Reduce "b2. Max Power Density" / "h. Max Power Density over Bdwidth" at least on 8.12 dB (for example "-45.92")

Forms of Notice PLAN - WRC07 FSS Plan 6/4 AND 13/10-11 GHz Band (Appendix 30B)

Coordination
Notice Beam **Group** Strapping Attachments

Notice Id: 116559099 Satellite Network: WRS-16_AP30B Nominal Orbital Longitude: 9.45 Admin

Characteristics of the Beam

B2. Receiving Beam Transmitting Beam
Shape of the Beam: Elliptical Other Shape

B3a1. Co-polar gain: 29 dBi

C12a. Minimum acceptable aggregate carrier-to-interference ratio:
B3f1. Aim point Longitude: 9.45° E

List of Available Groups:
Group 9
Group 11

Strapping Attachments Coordination
Notice Beam Group **Emissions/Frequencies** Srv Area/Typical Antenna

Notice Id: 116559099 Satellite Network: WRS-16_AP30B Beam Id: RATC R Group Id: 11

C7a. Designation of Emission	b2. Maximum Power Density	h. Maximum Power Density over Bdwidth
300M	-37.80	-37.80

C8 Power Characteristics of the transmission

Frequency in MHz
6875.00000

Implementation of Rules of procedure concerning Annex 3 and Annex 4 of Appendix 30B for narrow-band carries

7. Correction to meet the regulatory limits

Forms of Notice PLAN - WRC07 FSS Plan 6/4 AND 13/10-11 GHz Band (Appendix 30B)

Strapping	Attachments	Coordination	Emissions/Frequencies	Srv Area/Typical Antenna
Notice	Beam	Group		

Notice Id: 116559099 Satellite Network: WRS-16_AP30B Beam Id: **RATK R** Group Id: **13**

C7a. Designation of Emission	b2. Maximum Power Density	h. Maximum Power Density over Bdwth	Frequency in MHz
500M	-33.30	-33.30	13000.00

Implementation of Rules of procedure concerning Annex 3 and Annex 4 of Appendix 30B for narrow-band carries

24. Switch to "RATK R" in "Beam Id" and "13" in "Group Id:"

25. Reduce "b2. Max Power Density" / "h. Max Power Density over Bdwth" at least on 5.57 dB (for example "-38.57")

26. Go to "Notice" and then 



SpaceCap

CLOSED



GIBC

OPEN

27. Repeat Steps 1 to 8 and 9 to 13 above and Analyze the new examination results



Exercise 2: Regulatory / Technical Examinations (§ 6.3 AP30B)



WORKSHOP

8. Analyzing of a new examination results under §6.3 b) of AP30B

AP30BReport

File Edit Query Help

Output database path: C:\BR_TEX_RESULTS\116559099\AP30B_161125_155642\AP30B_RESULTS.MDB

Reload selected database

Main Annex 3 - PFD

Analysis Parameters

Input database path: X:\BR\BRSSD\SNP\KLYUCHAREV\Exercise 2\116559099_WRS-16_AP30B_v8_corr_pfd.mdb

Analysis started on: 25/11/2016 3:56 PM

Analysis ended on: 25/11/2016 3:57 PM

Analysis was run by: klyuchar

Software version: M:\BR_SOFT\SPACE\AP30B\3.7.0.4 In production?:

Analysis succeeded?

Query options

Show all groups test/grid points

only favourable only unfavourable

Run Query Found 16 results

Beam Name	E/R	Frequency Band	Group ID	Finding	PFD Excess	PFD Limit	Worst GSD Pos.
EATC	E	6/4	6	A-	-7.567	-127.5	
EATK	E	13/11	8	A-	-10.067	-114	
RATC	R	6/4	9	A-	-6.387	-140	-0.55
RATC	R	6/4	9	A-	-6.38	-140	19.45
RATK	R	13/11	10	A-	-15.25	-133	0.45
RATK	R	13/11	10	A-	-15.243	-133	18.45
RATC	R	6/4	11	A-	-0.01	-140	-0.55
RATC	R	6/4	11	A-	-0.003	-140	19.45
EATC	E	6/4	12	A-	-7.567	-127.5	
RATK	R	13/11	13	A-	-0.973	-133	0.45
RATK	R	13/11	13	A-	-0.966	-133	18.45
EATK	E	13/11	14	A-	-10.067	-114	
EATC	E	6/4	16	A-	-10.567	-127.5	
EATC	E	6/4	17	A-	-10.567	-127.5	
EATK	E	13/11	19	A-	-13.067	-114	
EATK	E	13/11	20	A-	-13.067	-114	

Regulatory limits do not exceed (OK)



Thank you for your attention!



WORKSHOP



Any question?

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