



# World Radiocommunication Seminar 2016

## Exercise on analyzing MSPACEg results

Exercise 1: Viewing TEX results of a R1&3 BSS network

(file: [AP30\\_Regions\\_1\\_3\\_Mspace\\_results.MDB](#))

Exercise 2: Viewing TEX results of a R1&3 BSS Feeder-link network

(file: [AP30A\\_Regions\\_1\\_3\\_Mspace\\_results.MDB](#))

Exercise 3: Viewing TEX results of a Region 2 network

(file: [AP30-30A\\_Region2\\_Mspace\\_results.MDB](#))

Presentation and Databases located at:

[USB drive]:\Space Workshop

\06-Plans-and-Lists-AP30-30A

\02-Analysis-of-Mspace-results

**Thong Pham Viet**

Space Services Department

Radiocommunication Bureau

International Telecommunication Union



## Part A examination



### § 4.1.5 of Appendices 30 & 30A

- Determine the administrations whose frequency assignments are considered to be affected.
- Publish, in a Special Section of its International Frequency Information Circular (BR IFIC):
  - the complete information received under § 4.1.3
  - together with the names of the affected administrations, the corresponding fixed-satellite service networks, the corresponding broadcasting-satellite service assignments and terrestrial stations, as appropriate.

In addition, the Bureau also delivers in the same BR IFIC Mspace results output database.



# Part A Special Section on BR IFIC



UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS  
BUREAU DES RADIOCOMMUNICATIONS

INTERNATIONAL TELECOMMUNICATION UNION  
RADIOCOMMUNICATION BUREAU

UNIÓN INTERNACIONAL DE TELECOMUNICACIONES  
OFICINA DE RADIOCOMUNICACIONES

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RÉSEAU À SATELLITE SATELLITE NETWORK RED DE SATÉLITE		<b>TURKSAT-BSS-31E</b>		SECTION SPÉCIALE N° SPECIAL SECTION No. SECCIÓN ESPECIAL N.º	<b>AP30/E/721</b>
ADM. RESPONSABLE RESPONSIBLE ADM. ADM. RESPONSABLE	<b>TUR</b>	LONGITUDE NOMINALE NOMINAL LONGITUDE LONGITUD NOMINAL	<b>31 E</b>	BR IFIC / DATE BR IFIC / DATE BR IFIC / FECHA	<b>2810 / 05.01.2016</b>
NOTIFIÉ AU NOM DE NOTIFIED ON BEHALF OF NOTIFICADA EN NOMBRE DE				NUMÉRO D'IDENTIFICATION IDENTIFICATION NUMBER NÚMERO DE IDENTIFICACIÓN	<b>115552010</b>
RENSEIGNEMENTS REÇUS PAR LE BUREAU LE / INFORMATION RECEIVED BY THE BUREAU ON / INFORMACIÓN RECIBIDA POR LA OFICINA EL					<b>15.07.2015</b>

Caractéristiques des assignations de fréquence publiées en application de l'Article 4 de l'Appendice 30 du Règlement des radiocommunications

Characteristics of frequency assignments published in application of Article 4 of Appendix 30 to the Radio Regulations

Características de asignaciones de frecuencias publicadas conforme al Artículo 4 del Apéndice 30 del Reglamento de Radiocomunicaciones

La présente Section spéciale concerne des propositions d'assignations nouvelles ou modifiées dans la Liste des liaisons descendantes pour les Régions 1 et 3 dans les bandes de fréquences 11,7-12,5 GHz en Région 1 et/ou 11,7-12,2 GHz en Région 3.

This Special Section concerns proposed new or modified assignments in the Regions 1 and 3 downlink List in the frequency bands 11.7-12.5 GHz in Region 1 and/or 11.7-12.2 GHz in Region 3.

Esta Sección Especial trata de las asignaciones propuestas nuevas o modificadas en la Lista de enlaces descendentes de las Regiones 1 y 3 en las bandas de frecuencias 11,7-12,5 GHz en la Región 1 y/o 11,7-12,2 GHz en la Región 3.

Elle comprend les Parties indiquées ci-dessous par une croix (X) dans la case appropriée.	It is composed of the Parts indicated below by an (X) in the relevant box	Se compone de las Partes indicadas a continuación con una (X) en la casilla pertinente.
<input checked="" type="checkbox"/> <i>Partie A</i> - Projets d'assignations nouvelles ou modifiées dans la Liste pour les Régions 1 et 3.	<input checked="" type="checkbox"/> <i>Part A</i> - Proposed new or modified assignments in the Regions 1 and 3 List.	<input checked="" type="checkbox"/> <i>Parte A</i> - Asignaciones propuestas nuevas o modificadas en la Lista de las Regiones 1 y 3.
<input type="checkbox"/> <i>Partie B</i> - Assignations nouvelles ou modifiées ajoutées à la Liste pour les Régions 1 et 3 en conséquence de l'application avec succès des dispositions de l'Article 4 de l'Appendice 30 ou réseaux de la Liste pour les Régions 1 et 3 optimisés ou fusionnés conformément à la Résolution 548.	<input type="checkbox"/> <i>Part B</i> - New or modified assignments entered in the Regions 1 and 3 List as a result of the successful application of the provisions of Article 4 of Appendix 30 or networks in the Regions 1 and 3 List optimized or merged in accordance with Resolution 548.	<input type="checkbox"/> <i>Parte B</i> - Asignaciones nuevas o modificadas introducidas en la Lista de las Regiones 1 y 3 como resultado de la aplicación satisfactoria de las disposiciones del Artículo 4 del Apéndice 30 o redes de la Lista optimizada o refundida de las Regiones 1 y 3, conforme a la Resolución 548.
<input type="checkbox"/> <i>Partie C</i> - Annulation d'une Section spéciale Partie A publiée et/ou assignations de fréquence annulées de la Liste pour les Régions 1 et 3 conformément au § 4.1.3, à la note de bas de page 7 du § 4.1.5, à la note de bas de page 8 du § 4.1.15 et/ou § 4.1.23 de l'Article 4 de l'Appendice 30 ou Résolution 49.	<input type="checkbox"/> <i>Part C</i> - Cancellation of a previously published Part A Special Section and/or frequency assignments cancelled from the Regions 1 and 3 List in accordance with § 4.1.3, footnote 7 to § 4.1.5, footnote 8 to § 4.1.15 and/or § 4.1.23 of Article 4 of Appendix 30 or Resolution 49.	<input type="checkbox"/> <i>Parte C</i> - Cancelación de una Parte A de la Sección Especial previamente publicada y/o de las asignaciones de frecuencia canceladas de la Lista de las Regiones 1 y 3, de conformidad con el § 4.1.3, la nota 7 del § 4.1.5, la nota 8 del § 4.1.15 y/o § 4.1.23 del Artículo 4 del Apéndice 30 ó Resolución 49.
<input type="checkbox"/> <i>Partie D</i> - Liste des administrations dont l'accord est nécessaire pour mener à bien la procédure de l'Article 4 conformément au § 4.1.10ter de l'Article 4 de l'Appendice 30.	<input type="checkbox"/> <i>Part D</i> - List of administrations whose agreements are required for completion of the Article 4 procedure in accordance with § 4.1.10ter of Article 4 of Appendix 30.	<input type="checkbox"/> <i>Parte D</i> - Lista de administraciones cuyo acuerdo se necesita para terminar el procedimiento del Artículo 4, de conformidad con el § 4.1.10ter del Artículo 4 del Apéndice 30.

SOU MIS AU TITRE DE  
SUBMITTED UNDER  
SOMETIDO CON ARREGLO A

§ 4.1.3

DATE LIMITE POUR LA RÉCEPTION DES COMMENTAIRES :  
EXPIRY DATE FOR THE RECEIPT OF COMMENTS :  
FECHA LÍMITE PARA LA RECEPCIÓN DE LOS COMENTARIOS :

**05.05.2016**



# TEX results included in Special Section



Administrations et/ou réseaux à satellite affectés / Affected administrations and/or satellite networks / Administraciones y/o redes de satélite afectadas  
 受影响的主管部门和/或卫星网络 / Затронутые администрации и/или спутниковые сети / أو الشبكات الساتلية المتأثرة بالإدارات و

A1f1 Notifying adm.	A1f3 Inter. sat. org.	A1a Sat. Network / A1b Plan beam identification	BR6a Id. no.	A4a1 Orbital long.	BR45 Max. EPM/OEPM degradation	BR46 Max. PFD excess
App.30 Art.4, §§4.1.1 a) & 4.1.1 b) - Annexe 1, §1 App.30 Art.4, §§4.1.1 a) & 4.1.1 b) - Annex 1, §1 Ap.30 Art.4, §§4.1.1 a) & 4.1.1 b) - Anexo 1, §1 附录30第4条, 第4.1.1 a)段和 4.1.1 b)段 – 附件1, 第1段 Пр. 30 Ст. 4, пп. 4.1.1 а) и 4.1.1 б) – Дополнение 1, п. 1 الفقرتان 1.1.4 أ) و 1.1.4 ب) من المادة 4 من التذييل 30 - الفقرة 1 من الملحق 1						
ARS	ARB	ARABSAT BSS-26E	111552001	26 E	1.963	5.18
		ARABSAT-BSS1	100551030	26 E	3.944	5.16
		ARABSAT-BSS1A	100552003	26 E	3.778	5.16
		ARABSAT-BSS1B	100552004	26 E	3.550	5.16
		ARABSAT-VB26E	106552003	26 E	3.481	5.19
		ARABSAT-VB30.5E	113552031	30.5 E	11.471	37.95
		ARABSAT-VB34E	112552009	34 E	3.160	16.66
BHR		BHR25500	100550031	34 E	3.688	16.46
COM		COM20700	100550053	29 E	1.832	24.14
F	EUT	EUTELSAT B-36E	95552005	36 E	3.317	5.20
		EUTELSAT B-36E	100552005	36 E	4.096	5.21
HOL		HOL21300	100550096	38.2 E	0.493	0.42

**HOL HOL21300 100550096 38.2 E 0.493 0.42**



# Which part is affected?



## ➤ Satellite network

- Satellite Beam
  - *Frequency Group*
    - Frequency assignment (Channel)
      - Test points



# SPS\_REPORTs



## Compressed report

Give information at pbeam level.  
(pbeam and satellite beam relation:  
**beam\_tr** table)

## Graphical reports

Give information on location of affected  
test point

## Reference Situation/ Findings report

Give information on affected  
channels/test points



# SPS\_REPORTs: Compressed report



**"Compressed" Report (Affected Beams/Channels)**

File

**Affected Beams and Channels (sorted by Administration Symbol)**

Adm.	Orb.Pos.	Beam Name	PFD Criterion [An.1 to App.30]		EPM Criterion [An.1 to App.30]		EPM and PFD Criteria			Sat.Network Id.				
			Identified Channels	Excess	Chan. where Degrad. >0.45	Degrad	Affected Channels	Excess	Degrad					
BFA	-30.00	BFA10700	30,32,34,36,38,40	15.65	30,32,34,36,38,40	12.753	30,32,34,36,38,40	15.65	12.753	BFA10700				
DNK	-33.50	DNK090XR	29,33	11.46	29,33	12.307	29,33	11.46	12.307	DNK090XR				
		DNK091XR	31,35	11.37	31,35	8.528	31,35	11.37	8.528	DNK091XR				
E	-30.00	E___100	29,31,33,35,37,39	15.20	29,31,33,35,37,39	11.693	29,31,33,35,37,39	15.20	11.693	E___100				
		10013235	29,31,33,35,38,40		29,31,33,35,38,40	20.621	29,31,33,35,38,40		15.20	20.621	HISPASAT 2U3			
		10013236												
		10013237												
		10013238												
		10013239												
		10013240												
		10013241												
		10013242												
		10013243												
		10013244												
		10013245												
		10013246												
		HI27D3-2										29,31,33,35,37,39	15.07	29,31,33,35,37,39
HI27D3-3	30,32,34,36,38,40	22.087		30,32,34,36,38,40				22.087				30,32,34,36,38,40	15.07	22.087
HI27D3A2	29,31,33,35,37,39	14.84	29,31,33,35,37,39	20.185	29,31,33,35,37,39	14.84	20.185							
HI27D3A3	30,32,34,36,38,40	18.659	30,32,34,36,38,40	18.659	30,32,34,36,38,40	18.659	18.659							

Data Presentation Options

Cells' Merging:  Merge Cells,  No Cell Merging

Rows' Sorting (also for print):  By Orbital Position,  By Administration

Affected Channels using:  PFD or EPM Criteria,  PFD and EPM

Buttons: Reproduce Report, Print Report, Create Draft of Special Section (in RTF format), Show Output DB Structure



# SPS\_REPORTs: Graphical Reports



**"Graphical" Report**

File

Find Affected Test Points Belonging to Listed Administrations, Satellites, Beams, Channels

Criteria Used for Graphical Report/Query (an empty box means any value)

Administrations	BFA
Sat.Network Id	ALL AFFECTED
Beam Names	ALL AFFECTED
Channels	ALL AFFECTED

Available Values

BFA
BFA10700
10011968
29

Select criteria from combo boxes (click on wanted ones) or type criteria values in the text boxes. Delete unnecessary values from lists in the boxes on the left.

Copy Map onto Clipboard

Run Query and Plot Map

Applied Criteria

- EPM AND PFD
- EPM only
- PFD only

Affected Test Points

- Test point identified as affected using PFD and EPM criteria
- Test point identified as affected using EPM
- Test point identified as affected using PFD criterion

Plot Affected Test Points only

Done... You may prepare and run a new query.





# SPS\_REPORTs: Reference Situation/ Findings Report



**Reference Situation / Calculated Margin Report (Query System)**

Search Criteria  
Criteria Used for Report/Query - empty box means any value

Administrations: BFA  
Longitude:   
Nominal degrees:   
Beam Names:   
Channels:   
Satellite:   
Network Id.(s):

Available Values  
BFA  
-178  
DECME66  
1  
AFG\_\_100

Legend  
Affected Channel: 13  
EPM/PFD Affected Test Point: -4.340, -8.147, 17.091  
EPM Affected Test Point: -7.790, -9.222  
PFD Affected Test Point: 2.940, 2.072, 9.782

Select (or type) criteria from combo boxes on the right (click on wanted ones). Delete not required search criteria from the boxes above.  
Output sorted by Administration, Longitude Nominal, Beam Name, Channel  
--- No value for this test point [Reference Situation, max(PFD Excess)]

Retrieve Ref. Sit. / Margin

**Test Points' Coordinates (Longitude/Latitude) degrees**

Adm.	Orb.Pos.	Beam Name	Ch.	TP 1 Ref.Sit Margin PFDexc.	TP 2 Ref.Sit Margin PFDexc.	TP 3 Ref.Sit Margin PFDexc.	TP 4 Ref.Sit Margin PFDexc.	TP 5 Ref.Sit Margin PFDexc.	TP 6 Ref.Sit Margin PFDexc.	TP 7 Ref.Sit Margin PFDexc.	TP 8 Ref.Sit Margin PFDexc.	TP 9 Ref.Sit Margin PFDexc.	TP 10 Ref.Sit Margin PFDexc.	TP 11 Ref.Sit Margin PFDexc.
	Sat.Network Id.: BFA10700			-2.50*	-5.00*	-5.50*	-1.50*	2.50*						
				9.50*	10.00*	12.00*	12.20*	13.00*						
BFA	-30.00	BFA10700	30	2.407	2.286	1.498	4.625	2.273						
				-11.285	-11.469	-11.701	-9.017	-11.668						
				15.441	15.354	15.365	15.511	15.648						
		BFA10700	32	2.407	2.286	1.497	4.624	2.272						
				-12.340	-12.525	-12.751	-10.072	-12.726						
				15.441	15.354	15.365	15.511	15.648						
		BFA10700	34	2.407	2.286	1.497	4.624	2.272						
				-12.340	-12.525	-12.751	-10.072	-12.726						
				15.441	15.354	15.365	15.511	15.648						
		BFA10700	36	2.362	2.238	1.456	4.581	2.228						
				-12.342	-12.527	-12.753	-10.074	-12.727						
				15.441	15.354	15.365	15.511	15.648						
		BFA10700	38	2.368	2.244	1.461	4.587	2.234						
				-12.341	-12.526	-12.753	-10.073	-12.727						

6 rows displayed. You may specify different criteria and run your next query if you wish

RTF Report Close



# Three Reports can be run in parallel

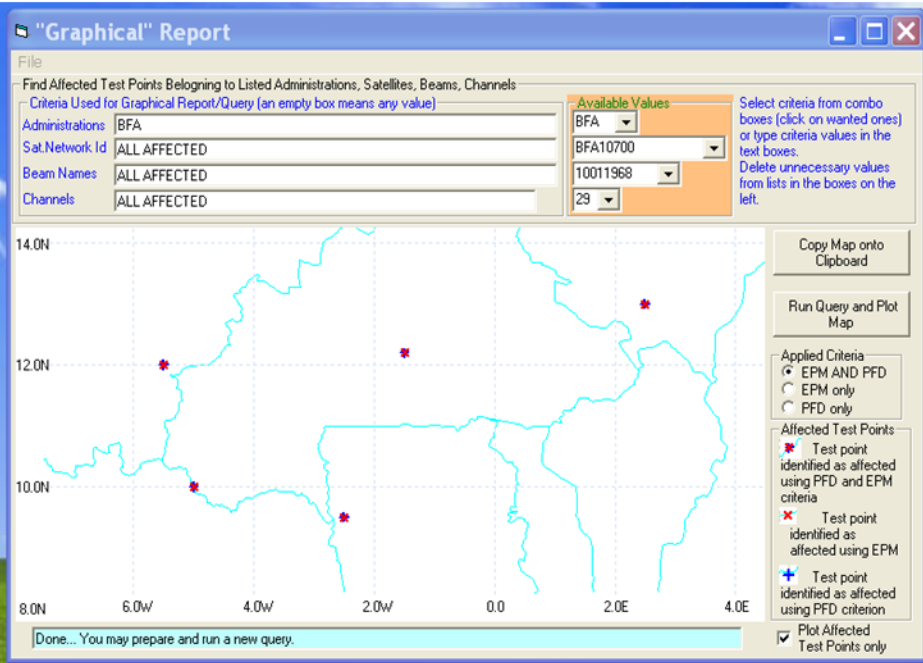


**"Compressed" Report (Affected Beams/Channels)**

Affected Beams and Channels (sorted by Administration Symbol)

Adm.	Orb.Pos	Beam Name	PFD Criterion (An.1 to App.30)		EPM Criterion (An.1 to App.30)		EPM and PFD Criteria		Sat Network Id.	
			Identified Channels	Excess	Chan. where Degrad. >0.45	Degrad	Affected Channels	Excess		Degrad
BFA	-30.00	BFA10700	30,32,34,36,38,40	15.65	30,32,34,36,38,40	12.753	30,32,34,36,38,40	15.65	12.753	BFA10700
DNK	-33.50	DNK090<R	29,33	11.46	29,33	12.307	29,33	11.46	12.307	DNK090<R
		DNK091<R	31,35	11.37	31,35	8.528	31,35	11.37	8.528	DNK091<R
		E 100	29,31,33,35,37,39		29,31,33,35,37,39	11.693	29,31,33,35,37,39		11.693	E 100
		10013235								
		10013236				20.621			20.621	
		10013237								
		10013238								
		10013239				20.624			20.624	
		10013240	29,31,33,35,38,40	15.20	29,31,33,35,38,40		29,31,33,35,38,40	15.20		
		10013241								
		10013242				12.326			12.326	
		10013243								
		10013244								
		10013245				12.328			12.328	
		10013246								
		HI27D3-2	29,31,33,35,37,39	15.07	29,31,33,35,37,39	22.524	29,31,33,35,37,39	15.07	22.524	
		HI27D3-3	30,32,34,36,38,40		30,32,34,36,38,40	22.087	30,32,34,36,38,40		22.087	
		HI27D3A2	29,31,33,35,37,39		29,31,33,35,37,39	20.185	29,31,33,35,37,39		20.185	
		HI27D3A3	30,32,34,36,38,40	14.84	30,32,34,36,38,40	18.659	30,32,34,36,38,40	14.84	18.659	HISPASAT 2U3

Data Presentation Options:  Merge Cells,  No Cell Merging,  Rows' Sorting (also for print) By Orbital Position,  By Administration,  Affected Channels using PFD or EPM Criteria,  PFD and EPM, , , ,



**Reference Situation / Calculated Margin Report (Query System)**

Search Criteria: Criteria Used for Report/Query - empty box means any value

Administrations: BFA  
Longitude: -178  
Nominal degrees: DECME66  
Beam Names: AFG\_100  
Channels: [empty]  
Satellite Network Id(s): [empty]

Available Values: BFA, DECME66, AFG\_100

Select (or type) criteria from combo boxes on the right (click on wanted ones). Delete not required search criteria from the boxes above.

Output sorted by Administration, Longitude Nominal, Beam Name, Channel

--- No value for this test point [Reference Situation, max(PFD Excess)]

Legend:  
 Affected Channel: 13  
 EPM/PFD Affected Test Point: 4.340, 6.147, 17.091  
 EPM Affected Test Point: -7.790, -9.222  
 PFD Affected Test Point: 2.940, 2.072, 9.782

Adm.	Orb.Pos	Beam Name	Ch.	Test Points' Coordinates (Longitude/Latitude) degrees											
				TP 1 Ref.Sit Margin PFDexc.	TP 2 Ref.Sit Margin PFDexc.	TP 3 Ref.Sit Margin PFDexc.	TP 4 Ref.Sit Margin PFDexc.	TP 5 Ref.Sit Margin PFDexc.	TP 6 Ref.Sit Margin PFDexc.	TP 7 Ref.Sit Margin PFDexc.	TP 8 Ref.Sit Margin PFDexc.	TP 9 Ref.Sit Margin PFDexc.	TP 10 Ref.Sit Margin PFDexc.	TP 11 Ref.Sit Margin PFDexc.	
		Sat.Network Id.: BFA10700		2.50° 9.50°	-5.00° 10.00°	-5.50° 12.00°	-1.50° 12.20°	2.50° 13.00°							
		BFA10700	30	2.407 -11.295 15.441	2.286 -11.469 15.354	1.498 -11.701 15.365	4.625 -9.017 15.511	2.273 -11.668 15.648							
		BFA10700	32	2.407 -12.340 15.441	2.286 -12.525 15.354	1.497 -12.751 15.365	4.624 -10.072 15.511	2.272 -12.726 15.648							
		BFA10700	34	2.407 -12.340 15.441	2.286 -12.525 15.354	1.497 -12.751 15.365	4.624 -10.072 15.511	2.272 -12.726 15.648							
		BFA10700	36	2.362 -12.342 15.441	2.238 -12.527 15.354	1.456 -12.753 15.365	4.581 -10.074 15.511	2.228 -12.727 15.648							
		BFA10700	38	2.368 -12.341	2.244 -12.526	1.461 -12.753	4.587 -10.072	2.234 -12.727							

6 rows displayed. You may specify different criteria and run your next query if you wish



# Exercise



You are now requested to do one of the following exercises using SPS\_REPORTS:

Exercise 1: Viewing Mspace results of a R1&3 BSS network  
(file: [AP30\\_Regions\\_1\\_3\\_Mspace\\_results.MDB](#))

Exercise 2: Viewing Mspace results of a R1&3 BSS Feeder-link network  
(file: [AP30A\\_Regions\\_1\\_3\\_Mspace\\_results.MDB](#))

Exercise 3: Viewing Mspace results of a Region 2 network  
(file: [AP30-30A\\_Region2\\_Mspace\\_results.MDB](#))

Databases located at:

[USB drive]:\Space Workshop

\06-Plans-and-Lists-AP30-30A




\02-Analysis-of-Mspace-results



# Step by step to do exercise

1. Copy folder “**06-Plans-and-Lists-AP30-30A**” under “\Space Workshop” from the USB key to your C drive.
2. Find Mspace results database under:

“\06-Plans-and-Lists-AP30-30A\02-Analysis-of-Mspace-results”

Name	Date modified	Type	Size
 AP30_Regions_1_3_Mspace_results.MDB	18.11.2016 3:12 PM	Microsoft Access ...	19,656 KB
 AP30-30A_Region2_Mspace_results.MDB	18.11.2016 3:39 PM	Microsoft Access ...	43,952 KB
 AP30A_Regions_1_3_Mspace_results.MDB	18.11.2016 3:45 PM	Microsoft Access ...	22,112 KB

3. Run SPS\_Reports on the selected Mspace results database to:
  - ✓ *Create Compressed Report*
  - ✓ *Create Graphical Report*
  - ✓ *Create Reference Situation/Findings Report*

( see slides [14-21](#) for Exercise 1, [23-30](#) for Exercise 2 and [32-39](#) for Exercise 3 for step by step to view Mspace results with SPS Reports)

## Exercise 1

# Viewing MSPACE results for a R1&3 BSS network with SPS\_REPORTS

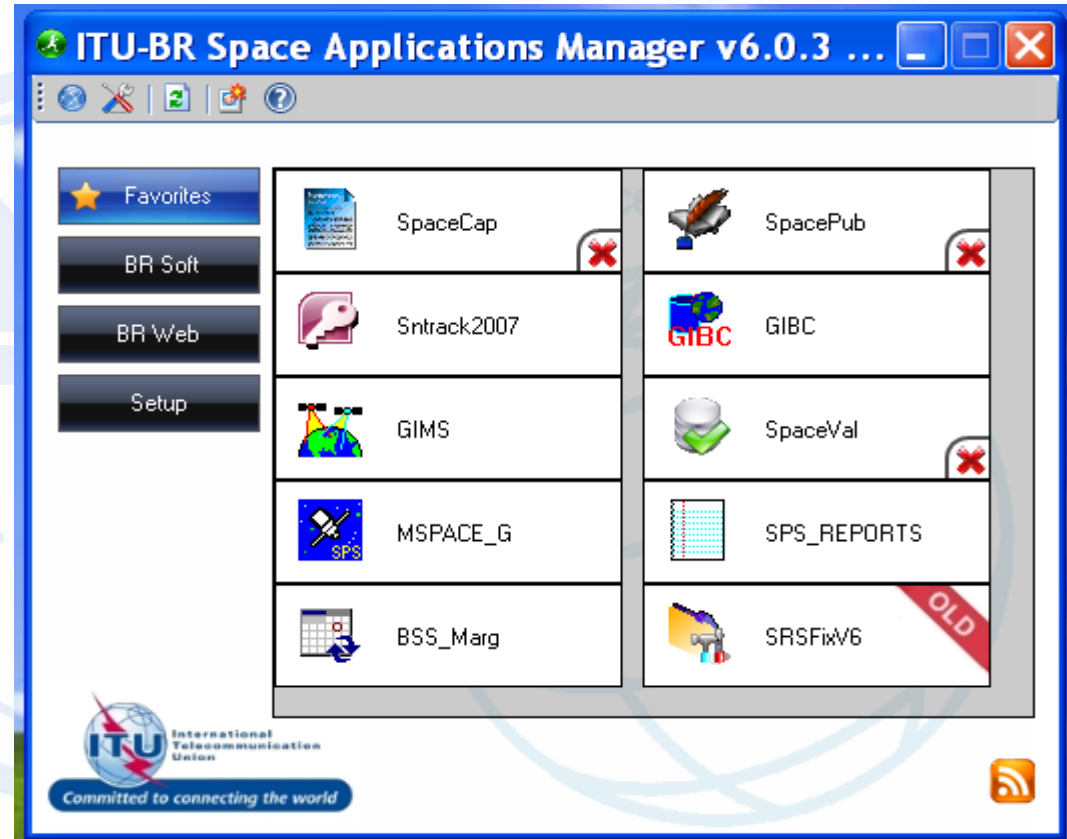


# Exercise 1: Viewing MSPACE results for a R1&3 BSS network with SPS\_REPORTS (1)



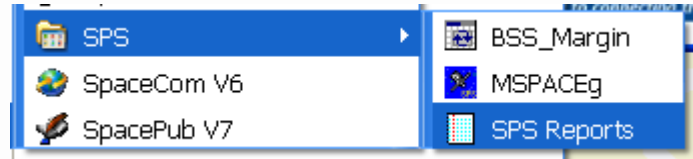
## 1. Start SPS\_REPORTS (V8)

☐ from SAM:



☐ Or from Start menu

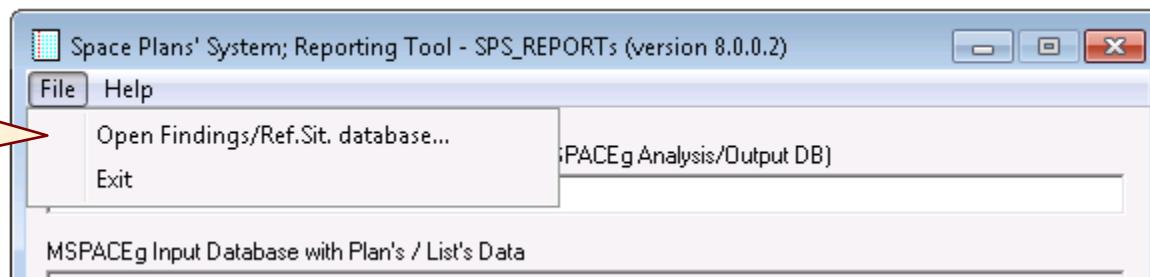
Start > All Programs > BR Space Applications



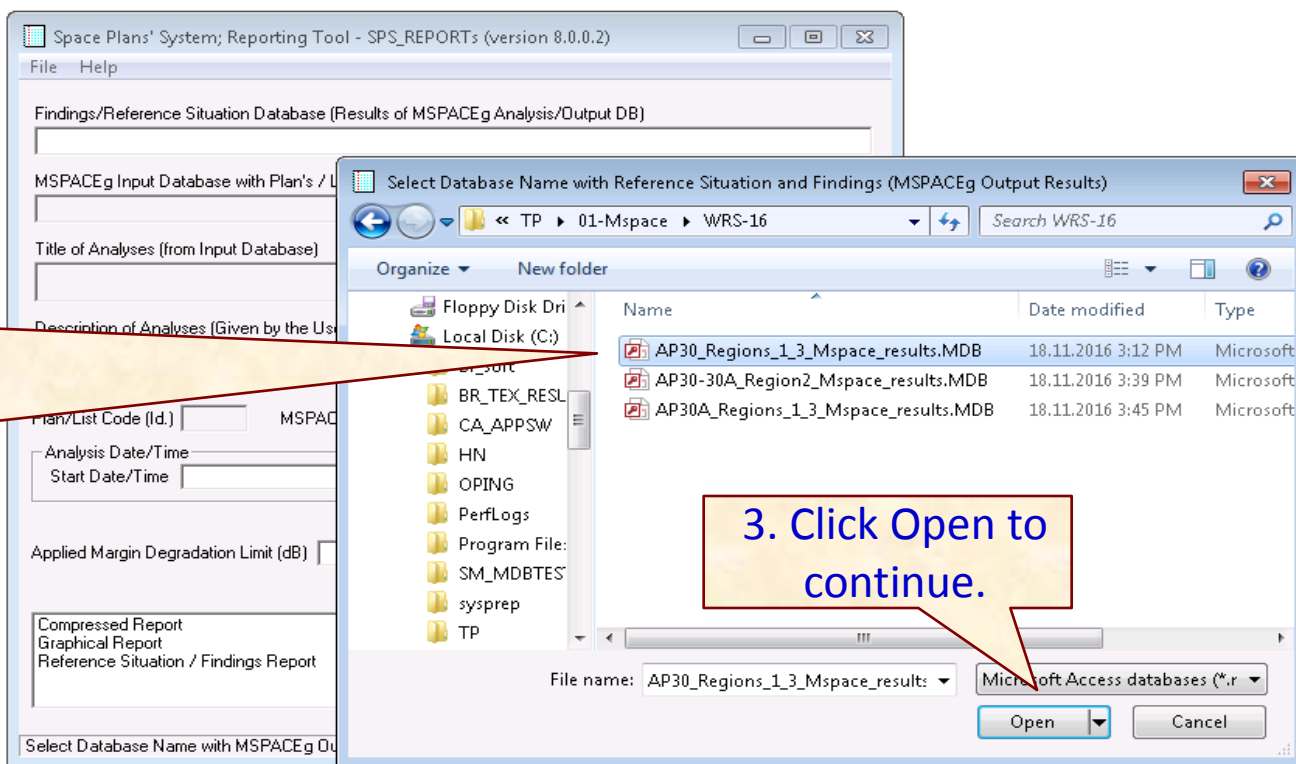
# Exercise 1: Viewing MSPACE results for a R1&3 BSS network with SPS\_REPORTS (2)

## 2. Select a Mspace results database

1. Click Open Findings/Ref. Sit DB...



2. Select a MSPACE results database containing the results of analysis for the R1&3 BSS network.



3. Click Open to continue.

# Exercise 1: Viewing MSPACE results for a R1&3 BSS network with SPS\_REPORTS (3)

## 3. Select a version to analyze

The screenshot shows the 'Space Plans' System; Reporting Tool - SPS\_REPORTS (version 8.0.0.2) window. The main window displays the 'Findings/Reference Situation Database (Results of MSPACEg Analysis/Output DB)' with the path 'C:\TP\01-Mspace\WRS-16\AP30\_Regions\_1\_3\_Mspace\_results.MDB'. Below this, there is a section for 'MSPACEg Input Database with Plan's / List's Data'. Overlaid on this is a dialog box titled 'Select Plan/List which you want to analyse...'. The dialog box contains a table with the following data:

Analysis Version	Plan Id	Title in MSPACEg ASCII Input File	Analysis Description by the User
1	00DN		

Below the table are 'OK' and 'Cancel' buttons. At the bottom of the dialog box, there are options for 'Compressed Report', 'Graphical Report', and 'Reference Situation / Findings Report', along with 'Show Report' and 'Exit' buttons. The status bar at the bottom of the dialog box shows 'Select Database Name with MSPACEg Output Results', '21.11.2016', and '10:46 AM'.

1. Select one version each time.
2. Click on OK.





# Exercise 1: Viewing MSPACE results for a R1&3 BSS network with SPS\_REPORTS (4)

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## 4. Select a report

Space Plans' System; Reporting Tool - SPS\_REPORTS (version 8.0.0.2)

File Help

Findings/Reference Situation Database (Results of MSPACEg Analysis/Output DB)  
C:\TP\01-Mspace\WRS-16\AP30\_Regions\_1\_3\_Mspace\_results.MDB

MSPACEg Input Database with Plan's / List's Data  
C:\TP\01-Mspace\03-For\_WRS-16\AP30\_30A\_100TPs\_V8.mdb

Title of Analyses (from Input Database)  
[Empty text box]

Description of Analyses (Given by the User)  
[Empty text box]

Plan/List Code (Id.)  MSPACEg Version  Selected Analysis Version

Analysis Date/Time  
Start Date/Time  End Date/Time

Applied Margin Degradation Limit (dB)

**Compressed Report**  
Graphical Report  
Reference Situation / Findings Report

Show Report Exit

Select Database Name with MSPACEg Output Results

1. Select one report each time.
2. Click "Show Report"

# Exercise 1: Viewing MSPACE results for a R1&3 BSS network with SPS\_REPORTS (5)

## 4.1 Compressed Report / Draft of Special Section

"Compressed" Report (Affected Beams/Channels)

File

**Affected Beams and Channels(sorted by Orbital Position)**

Orb.Pos.	Adm.	Beam Name	PFD Criterion (An.1 to App.30)		EPM Criterion (An.1 to App.30)		EPM and PFD Criteria		
			Identified Channels	Excess	Chan. where Degrad. >0.45	Degrac	Affected Channels	Excess	Degrac
-33.50	DNK	DNK090XR	29,33	11.46	29,33	12.307	29,33	11.46	12.307
		DNK091XR	31,35	11.37	31,35	8.528	31,35	11.37	8.528
	G	10011968	29,31,33,35,37,39	12.62	29,31,33,35,37,39	13.137	29,31,33,35,37,39	12.62	13.137
		10011969	30,32,34,36,38,40		30,32,34,36,38,40	13.130	30,32,34,36,38,40		13.130
	ISL	ISL04900	29,31,33,35,37,39	11.21	31,33,35,37,39	5.902	31,33,35,37,39	11.21	5.902
SRL	SRL25900	29,31,33,35,37,39	12.59	29,31,33,35,37,39	7.859	29,31,33,35,37,39	12.59	7.859	
-31.50	USA	10017700	30,32,34,36,38,40	29.24	30,32,34,36,38,40	33.487	30,32,34,36,38,40	29.24	33.487
		10017701			31,33,35,37,39	33.859	31,33,35,37,39		33.859
		10017702	31,33,35,37,39		26.073	30,32,34,36,38,40	26.106	31,33,35,37,39	26.106
		10017703	30,32,34,36,38,40			31,33,35,37,39			
		10017704	31,33,35,37,39		26.106	31,33,35,37,39	26.106		
		10017705	30,32,34,36,38,40		26.106	31,33,35,37,39	26.106	31,33,35,37,39	26.106
		10017706	31,33,35,37,39			26.106		31,33,35,37,39	
10017707	31,33,35,37,39	26.106	31,33,35,37,39	26.106					
-30.00	BFA	BFA10700	30,32,34,36,38,40	15.65	30,32,34,36,38,40	12.753	30,32,34,36,38,40	15.65	12.753
	E	E_100	29,31,33,35,37,39	15.20	29,31,33,35,37,39	11.693	29,31,33,35,37,39	15.20	11.693
		10013235	29,31,33,35,38,40		29,31,33,35,38,40	20.621	29,31,33,35,38,40		20.621
		10013236			29,31,33,35,38,40	20.621	29,31,33,35,38,40		20.621
		10013237			29,31,33,35,38,40	20.621	29,31,33,35,38,40		20.621
10013238	29,31,33,35,38,40	20.621		29,31,33,35,38,40	20.621				

Data Presentation Options

Cells' Merging  
 Merge Cells  
 No Cell Merging

Rows' Sorting (also for print)  
 By Orbital Position  
 By Administration

Affected Channels using  
 PFD or EPM Criteria  
 PFD and EPM

Reproduce Report  
Print Report  
Create Draft of Special Section (in RTF format)  
Show Output DB Structure

1. Select "Data Presentation Options"
2. Click "Reproduce Report"

# Exercise 1: Viewing MSPACE results for a R1&3 BSS network with SPS\_REPORTS (6)

## 4.1 Compressed Report / Draft of Special Section (Cont.)

**"Compressed" Report (Affected Beams/Channels)**

File

**Affected Beams and Channels(sorted by Orbital Position)**

Orb.Pos.	Adm.	Beam Name	PFD Criterion (An.1 to App.30)		EPM Criterion (An.1 to App.30)		EPM and PFD Criteria		
			Identified Channels	Excess	Chan. where Degrad. >0.45	Degrac	Affected Channels	Excess	Degrac
-33.50	DNK	DNK090XR	29,33	11.46	29,33	12.307	29,33	11.46	12.307
		DNK091XR	31,35	11.37	31,35	8.528	31,35	11.37	8.528
	G	10011968	29,31,33,35,37,39	12.62	29,31,33,35,37,39	13.137	29,31,33,35,37,39	12.62	13.137
		10011969	30,32,34,36,38,40		30,32,34,36,38,40	13.130	30,32,34,36,38,40		13.130
	ISL	ISL04900	29,31,33,35,37,39	11.21	31,33,35,37,39	5.902	31,33,35,37,39	11.21	5.902
SRL	SRL25900	29,31,33,35,37,39	12.59	29,31,33,35,37,39	7.859	29,31,33,35,37,39	12.59	7.859	
-31.50	USA	10017700	30,32,34,36,38,40	29.24	30,32,34,36,38,40	33.487	30,32,34,36,38,40	29.24	33.487
		10017701			31,33,35,37,39	33.859	31,33,35,37,39		33.859
		10017702	30,32,34,36,38,40		30,32,34,36,38,40	26.073	30,32,34,36,38,40	26.073	
		10017703			31,33,35,37,39	26.106	31,33,35,37,39	26.106	
		10017704			31,33,35,37,39	26.106	31,33,35,37,39	26.106	
		10017705	30,32,34,36,38,40		26.073	30,32,34,36,38,40	26.073		
		10017706	31,33,35,37,39		26.106	31,33,35,37,39	26.106		
10017707	31,33,35,37,39	26.106	31,33,35,37,39	26.106					
-30.00	BFA	BFA10700	30,32,34,36,38,40	15.65	30,32,34,36,38,40	12.753	30,32,34,36,38,40	15.65	12.753
		E_____100	29,31,33,35,37,39	15.20	29,31,33,35,37,39	11.693	29,31,33,35,37,39	11.693	
	10013235	29,31,33,35,38,40	29,31,33,35,38,40		20.621	29,31,33,35,38,40	20.621		
	10013236		29,31,33,35,38,40		20.621	29,31,33,35,38,40	20.621		
	E	10013237	29,31,33,35,38,40	15.20	29,31,33,35,38,40	20.621	29,31,33,35,38,40	15.20	20.621
10013238		29,31,33,35,38,40	15.20	29,31,33,35,38,40	20.621	29,31,33,35,38,40	15.20	20.621	

Data Presentation Options

Cells' Merging  
 Merge Cells  
 No Cell Merging

Rows' Sorting (also for print)  
 By Orbital Position  
 By Administration

Affected Channels using  
 PFD or EPM Criteria  
 PFD and EPM

Reproduce Report  
 Print Report  
 Create Draft of Special Section (in RTF format)  
 Show Output DB Structure

Click here to produce print version of this report. A message will appear to inform you of the location of the resulting file.



# Exercise 1: Viewing MSPACE results for a R1&3 BSS network with SPS\_REPORTS (7)

## 4.2 Graphical Report

Each row could contain multiple criteria.

The screenshot shows the 'Graphical' Report window with the following elements:

- Criteria Used for Graphical Report/Query (an empty box means any value):**
  - Administrations: AFG
  - Sat.Network Id: AFG\_100
  - Beam Names: (empty)
  - Channels: (empty)
- Available Values:**
  - AFG
  - AFG\_100
  - DECME66
  - 1
- Map:** A map showing a coastline with several red 'x' marks representing test points. The map includes a grid with latitude (30.0N to 39.0N) and longitude (60.0E to 75.0E) labels.
- Buttons:** 'Copy Map onto Clipboard' and 'Run Query and Plot Map'.
- Status Bar:** 'Done... You may prepare and run a new query.' and a checkbox for 'Plot Affected Test Points only'.

1. Select criteria for the query.
2. Click "Run Query and Plot Map to view the report".

Select this option to display only affected test points.

# Exercise 1: Viewing MSPACE results for a R1&3 BSS network with SPS\_REPORTS (7)

## 4.3 Reference Situation/Findings Report

Each row could contain multiple criteria.

**Reference Situation / Calculated Margin Report (Query System)**

Search Criteria  
 Criteria Used for Report/Query - empty box means any value  
 Administrations: G  
 Longitude: -33.5  
 Nominal degrees: -33.5  
 Beam Names: 10011968  
 Channels:   
 Satellite:   
 Network Id.(s):   
 Available Values: G, -33.5, DECME66, 1, AFG\_100  
 Legend: Affected Channel: 13, EPM/PFD Affected Test Point: -4.340, -8.147, 17.091, EPM Affected Test Point: -7.790, -9.222, PFD Affected Test Point: 2.940, 2.072, 9.782

Select (or type) criteria from combo boxes on the right (click on wanted ones). Delete not required search criteria from the boxes above.  
 Output sorted by Administration, Longitude Nominal, Beam Name, Channel  
 --- No value for this test point [Reference Situation, max(PFD Excess)]

Retrieve Ref.Sit./ Margin

Test Points' Coordinates (Longitude/Latitude) degrees															
Adm.	Orb.Pos.	Beam Name	Ch.	TP 1 Ref.Sit Margin PFDexc.	TP 2 Ref.Sit Margin PFDexc.	TP 3 Ref.Sit Margin PFDexc.	TP 4 Ref.Sit Margin PFDexc.	TP 5 Ref.Sit Margin PFDexc.	TP 6 Ref.Sit Margin PFDexc.	TP 7 Ref.Sit Margin PFDexc.	TP 8 Ref.Sit Margin PFDexc.	TP 9 Ref.Sit Margin PFDexc.	TP 10 Ref.Sit Margin PFDexc.	TP 11 Ref.Sit Margin PFDexc.	
	Sat.Network Id: UKDIGISAT-4A			-5.36*	-8.30*	15.00*	23.60*	8.70*	3.10*	-8.70*	22.60*	-4.30*	21.90*	22.1	
				36.13*	37.50*	38.00*	38.00*	39.10*	39.70*	42.90*	43.90*	48.20*	48.90*	53.6	
G	-33.50	10011968	29	-7.044	-6.449	-1.075	0.921	-4.283	-6.800	-6.388	-1.618	-5.678	-2.067	-10.2	
				-7.616	-6.990	-2.563	-1.280	-5.068	-7.252	-6.861	-2.814	-6.147	-3.123	-10.4	
		10011968	31	12.625	12.520	12.221	11.799	12.370	12.456	12.257	11.581	12.024	11.418	11.2	
				-8.191	-7.498	-0.896	1.146	-4.295	-7.800	-7.670	-0.915	-5.908	-1.657	-2.2	
		10011968	33	-14.750	-13.921	-12.987	-13.133	-13.262	-13.790	-13.531	-12.657	-12.661	-12.598	-12.6	
			12.625	12.520	12.221	11.799	12.370	12.456	12.257	11.581	12.024	11.418	11.2		
				-7.175	-6.537	-0.935	1.033	-4.361	-6.914	-6.461	-1.426	-5.727	-1.878	-10.2	
				-14.545	-13.720	-12.989	-13.137	-13.270	-13.583	-13.248	-12.693	-12.624	-12.616	-14.3	
				12.625	12.520	12.221	11.799	12.370	12.456	12.257	11.581	12.024	11.418	11.2	
				-8.279	-7.631	-0.857	1.184	-4.472	-7.926	-7.794	-0.873	-6.012	-1.619	-2.1	
				-14.769	-13.952	-12.984	-13.131	-13.285	-13.822	-13.563	-12.654	-12.683	-12.595	-12.6	
				12.625	12.520	12.221	11.799	12.370	12.456	12.257	11.581	12.024	11.418	11.2	
				-8.056	-7.836	-2.011	1.206	-5.653	-8.118	-7.733	-0.984	-5.532	-1.533	-2.1	
				14.720	14.000	13.065	13.131	13.460	13.872	13.547	12.652	12.584	12.5		

6 rows displayed. You may specify different criteria and run your next query if you wish

RTF Report Close

Reference Situation for the test point

Calculated Margin for the test point

Maximum PFD excess at the test point

Click here to retrieve Ref.Sit./Margin

Click here to produce a print version of this report. A message will appear to inform you of the location of the resulting file.

## Exercise 2

# Viewing MSPACE results for a R1&3 BSS Feeder-link network with SPS\_REPORTS

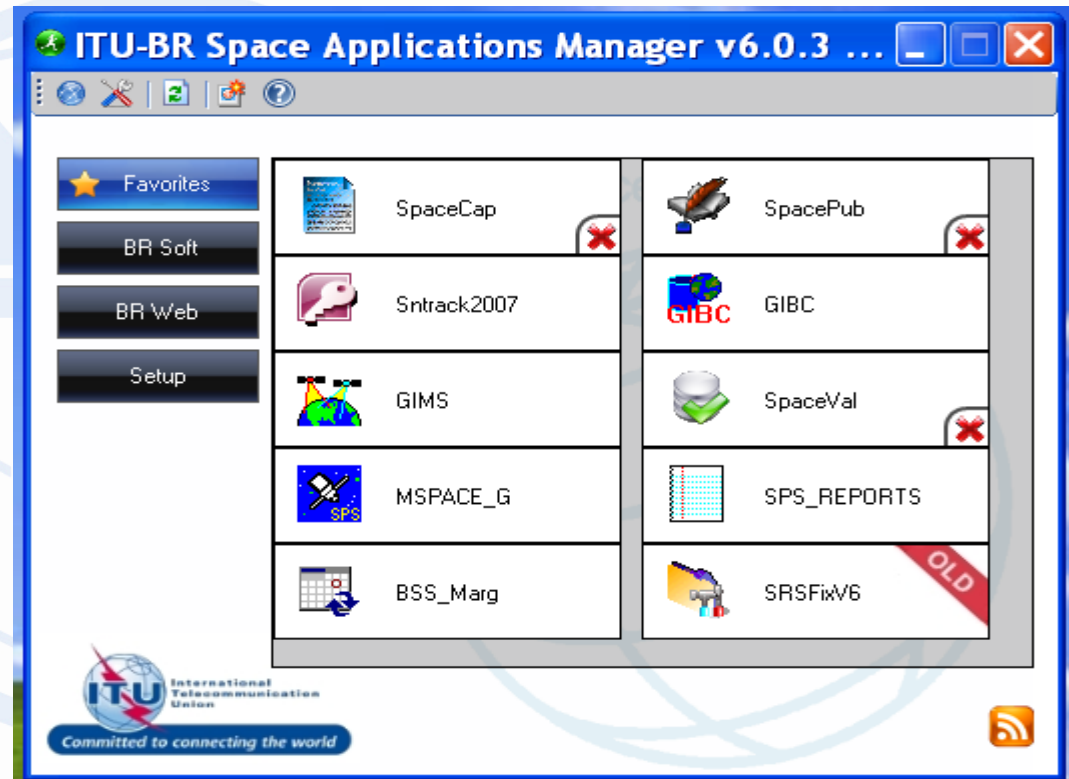


# Exercise 2 : Viewing MSPACE results for a R1&3 BSS Feeder-link network with SPS\_REPORTS (1)



## 1. Start SPS\_REPORTS

from SAM:



Or from Start menu

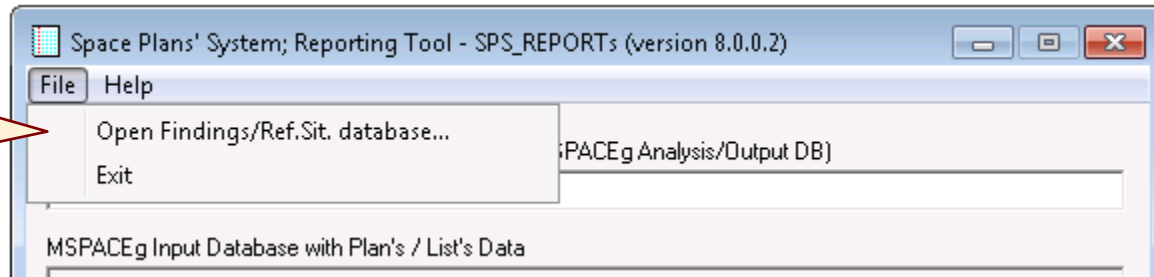
Start > All Programs > BR Space Applications



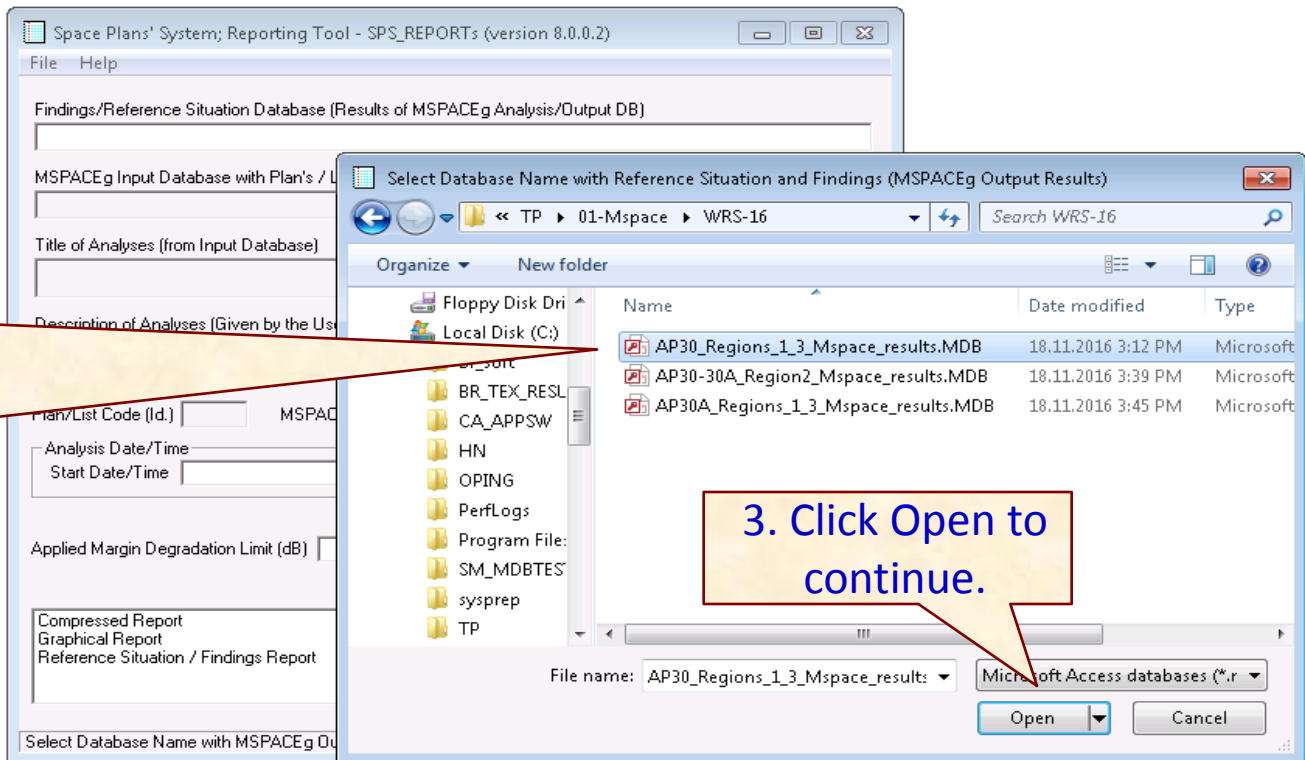
# Exercise 2 : Viewing MSPACE results for a R1&3 BSS Feeder-link network with SPS\_REPORTS (2)

## 2. Select an Mspace results database

1. Click Open Findings/Ref. Sit DB...



2. Select a MSPACE results database containing the results of analysis for the R1&3 BSS network.



3. Click Open to continue.



## Exercise 2 : Viewing MSPACE results for a R1&3 BSS Feeder-link network with SPS\_REPORTS (3)

### 3. Select a version to analyze

Space Plans' System; Reporting Tool - SPS\_REPORTS (version 8.0.0.2)

File Help

Findings/Reference Situation Database (Results of MSPACEg Analysis/Output DB)  
C:\TP\01-Mspace\WRS-16\AP30A\_Regions\_1\_3\_Mspace\_results.MDB

MSPACEg Input Database with Plan's / List's Data  
C:\TP\01-Mspace\03-For\_WRS-16\AP30\_30A\_100TPs\_V8.mdb

Select Plan/List which you want to analyse....

Please, choose a Plan, which you want to analyze from the list below (by clicking on the related row) and click on OK button

Analysis Version	Plan Id	Title in MSPACEg ASCII Input File	Analysis Description by the User
1	00U1		
2	00U2		17 GHz part of merged Regions 1&3 Feeder-link Plan/List

OK Cancel

1. Select one version each time.  
2. Click OK.

Complete Report  
Reference Situation / Findings Report

Show Report Exit

Select Database Name with MSPACEg Output Results 21.11.2016 10:55 AM

## Exercise 2 : Viewing MSPACE results for a R1&3 BSS Feeder-link network with SPS\_REPORTS (4)

### 4. Select a report

Space Plans' System; Reporting Tool - SPS\_REPORTS (version 8.0.0.2)

File Help

Findings/Reference Situation Database (Results of MSPACEg Analysis/Output DB)

MSPACEg Input Database with Plan's / List's Data

Title of Analyses (from Input Database)

Description of Analyses (Given by the User)

Plan/List Code (Id.)  MSPACEg Version  Selected Analysis Version

Analysis Date/Time  
 Start Date/Time  End Date/Time

Applied Margin Degradation Limit (dB)

Compressed Report  
 Graphical Report  
 Reference Situation / Findings Report

Select Database Name with MSPACEg Output Results

1. Select one report each time.
2. Click "Show Report"

# Exercise 2 : Viewing MSPACE results for a R1&3 BSS Feeder-link network with SPS\_REPORTS (5)

## 4.1 Compressed Report / Draft of Special Section

"Compressed" Report (Affected Beams/Channels)

File

**Affected Beams and Channels(sorted by Orbital Position)**

**EPM Criterion (An.1 to App.30)**

Orb.Pos.	Adm.	Beam Name	Channels Identified as Affected (App.30A, Ann.1, Sect.4)	Max.Degrad	Sat.Network Id.	Band GHz
140.00	RUS	RSTRSD51	25	0.722	RST-5	17
142.00	HOL	10017780	9,11,13,15,17,19,21,23	0.702	NSS-BSS 142E	17
		10017781	12,14,16,18,20,22	0.591		17
		10017782	11,13,15,17,19,21,23	0.688		17
		10017783	12,14,16,18,20,22	0.602		17

1. Select "Data Presentation Options"

2. Click "Reproduce Report"

Data Presentation Options

Cells' Merging

Merge Cells

No Cell Merging

Rows' Sorting (also for print)

By Orbital Position

By Administration

Reproduce Report

Print Report

Create Draft of Special Section (in RTF format)

Show Output DB Structure

## Exercise 2 : Viewing MSPACE results for a R1&3 BSS Feeder-link network with SPS\_REPORTS (6)

### 4.1 Compressed Report / Draft of Special Section (Cont.)

"Compressed" Report (Affected Beams/Channels)

File

**Affected Beams and Channels(sorted by Orbital Position)**

**EPM Criterion (An.1 to App.30)**

Orb.Pos.	Adm.	Beam Name	Channels Identified as Affected (App.30A, Ann.1, Sect.4)	Max.Degrad	Sat.Network Id.	Band GHz
140.00	RUS	RSTRSD51	25	0.722	RST-5	17
142.00	HOL	10017780	9,11,13,15,17,19,21,23	0.702	NSS-BSS 142E	17
		10017781	12,14,16,18,20,22	0.591		17
		10017782	11,13,15,17,19,21,23	0.688		17
		10017783	12,14,16,18,20,22	0.602		17

Click here to produce print version of this report. A message will appear to inform you of the location of the resulting file.

Data Presentation Options

Cells' Merging  
 Merge Cells  
 No Cell Merging

Rows' Sorting (also for print)  
 By Orbital Position  
 By Administration

Reproduce Report  
Print Report

Create Draft of Special Section (in RTF format)

Show Output DB Structure

# Exercise 2 : Viewing MSPACE results for a R1&3 BSS Feeder-link network with SPS\_REPORTS (7)

## 4.2 Graphical Report

Each row could contain multiple criteria.

The screenshot shows the 'Graphical' Report software interface. The main window displays a world map with numerous red 'x' markers representing test points. The interface includes a search panel on the left with fields for 'Administrations' (set to 'RUS'), 'Sat.Network Id', 'Beam Names', and 'Channels'. On the right, there is an 'Available Values' section with dropdown menus for 'RUS', 'AFG24501', '00003545', and '1'. Below this, there are buttons for 'Copy Map onto Clipboard' and 'Run Query and Plot Map'. A status bar at the bottom indicates 'Done... You may prepare and run a new query.' and a checkbox for 'Plot Affected Test Points only' is visible.

1. Select criteria for the query.  
2. Click "Run Query and Plot Map to view the report".

Select this option to display only affected test points.

# Exercise 2 : Viewing MSPACE results for a R1&3 BSS Feeder-link network with SPS\_REPORTS (8)

## 4.3 Reference Situation/Findings Report

Each row could contain multiple criteria.

**Reference Situation / Calculated Margin Report (Query System)**

Search Criteria  
Criteria Used for Report/Query - empty box means any value

Administrations: RUS  
Longitude: 140  
Nominal degrees: 140  
Beam Names:   
Channels:   
Satellite:   
Network Id.(s):

Available Values  
RUS  
140  
00003545  
1  
AFG24501

Legend  
Affected Channel: 13  
Affected Test Point: -0.360, -0.985

Select (or type) criteria from combo boxes on the right (click on wanted ones). Delete not required search criteria from the boxes above.

Output sorted by Administration, Longitude Nominal, Beam Name, Channel

N/E - Non-Existing Reference Situation (Additions, Modifications, No Interference)

Retrieve Ref.Sit./ Margin

Test Points' Coordinates (Longitude/Latitude) degrees

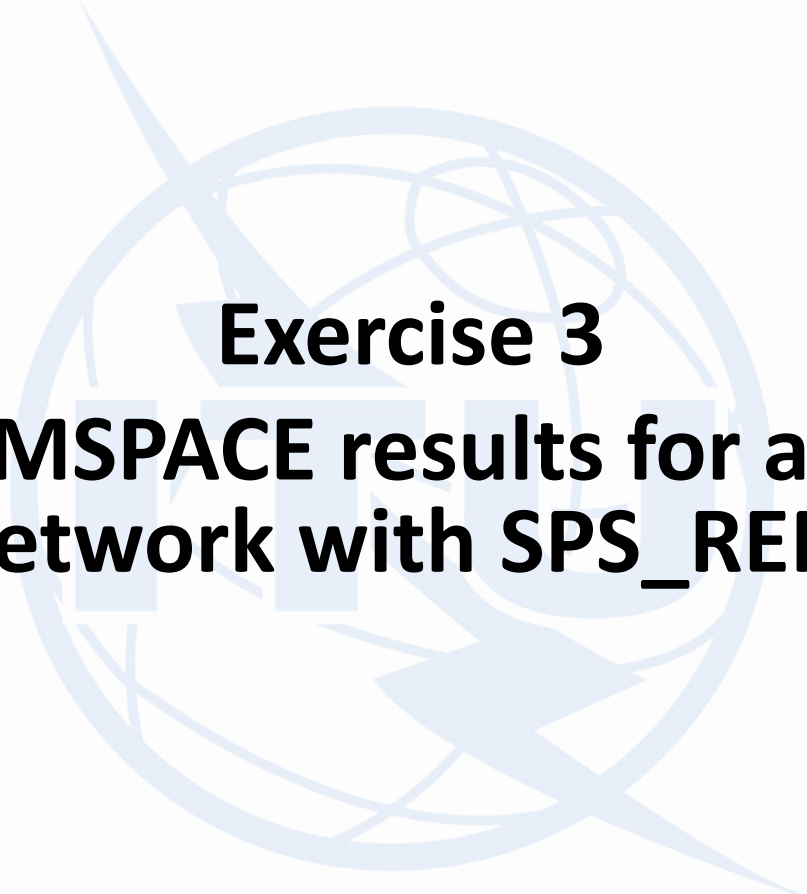
Adm.	Orb.Pos.	Beam Name	Ch.	TP 1 Ref.Sit Margin	TP 2 Ref.Sit Margin	TP 3 Ref.Sit Margin	TP 4 Ref.Sit Margin	TP 5 Ref.Sit Margin	TP 6 Ref.Sit Margin	TP 7 Ref.Sit Margin	TP 8 Ref.Sit Margin	TP 9 Ref.Sit Margin	TP 10 Ref.Sit Margin	TP 11 Ref.Sit Margin
	Sat.Network Id.:			145.48°	87.30°	107.50°	137.60°	168.18°	77.00°	179.50°	-170.00°	162.46°	128.40°	
	RST-5			43.60°	49.22°	50.60°	50.80°	54.43°	60.88°	62.68°	66.00°	69.62°	73.29°	
RUS	140.00	RSTRSD51	25	2.978 2.194	2.074 1.290	3.699 2.915	3.776 2.992	1.150 0.366	3.828 3.044	1.230 0.446	0.062 -0.722	2.894 2.110	3.294 2.510	
		RSTRSD51	27	10.010	9.107	10.732	10.809	8.183	10.860	8.263	7.095	9.927	10.327	
		RSTRSD51	29	5.935 4.501	5.031 3.597	6.656 5.222	6.733 5.299	4.107 2.673	6.785 5.351	4.188 2.754	3.020 1.586	5.852 4.418	6.251 4.817	
		RSTRSD51	31	4.545 3.459	3.641 2.555	5.266 4.180	5.343 4.257	2.717 1.631	5.395 4.309	2.798 1.712	1.630 0.544	4.462 3.376	4.862 3.776	
		RSTRSD51	33	4.545 3.459	3.641 2.555	5.266 4.180	5.343 4.257	2.717 1.631	5.395 4.309	2.797 1.712	1.630 0.544	4.461 3.376	4.861 3.775	
		RSTRSD51	35	4.545 3.459	3.641 2.555	5.266 4.180	5.343 4.257	2.717 1.631	5.395 4.309	2.797 1.712	1.630 0.544	4.461 3.376	4.861 3.775	
		RSTRSD51	37	4.545 3.470	3.641 2.567	5.266 4.192	5.343 4.268	2.717 1.642	5.395 4.320	2.798 1.723	1.630 0.555	4.462 3.387	4.862 3.787	
				4.545	3.641	5.266	5.343	2.717	5.395	2.797	1.630	4.462	4.862	

16 rows displayed. You may specify different criteria and run your next query if you wish

RTF Report Close

Click here to retrieve Ref.Sit./Margin

Click here to produce a print version of this report. A message will appear to inform you of the location of the resulting file.



# **Exercise 3**

## **Viewing MSPACE results for a Region 2 network with SPS\_REPORTS**

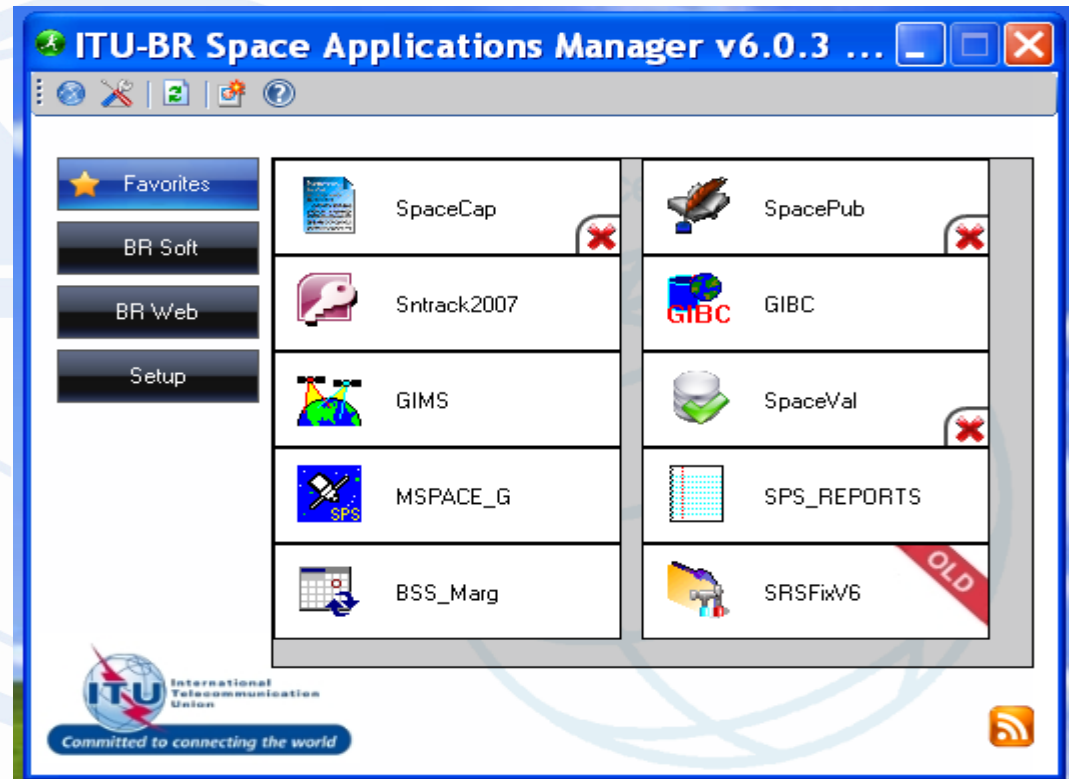


# Exercise 3 : Viewing MSPACE results for a Region 2 network with SPS\_REPORTS (1)



## 1. Start SPS\_REPORTS

from SAM:



Or from Start menu

Start > All Programs > BR Space Applications

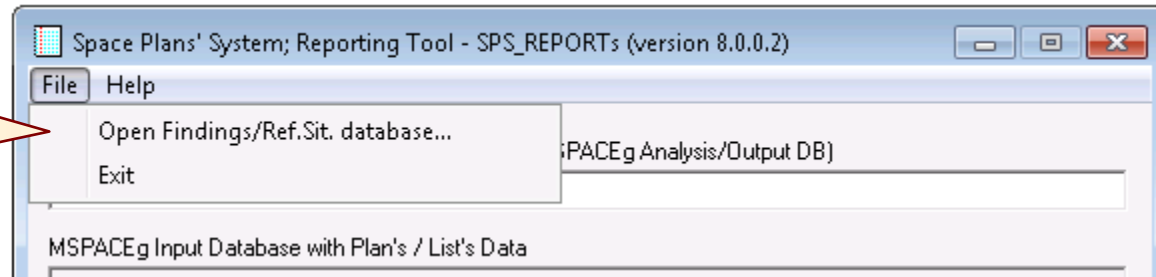




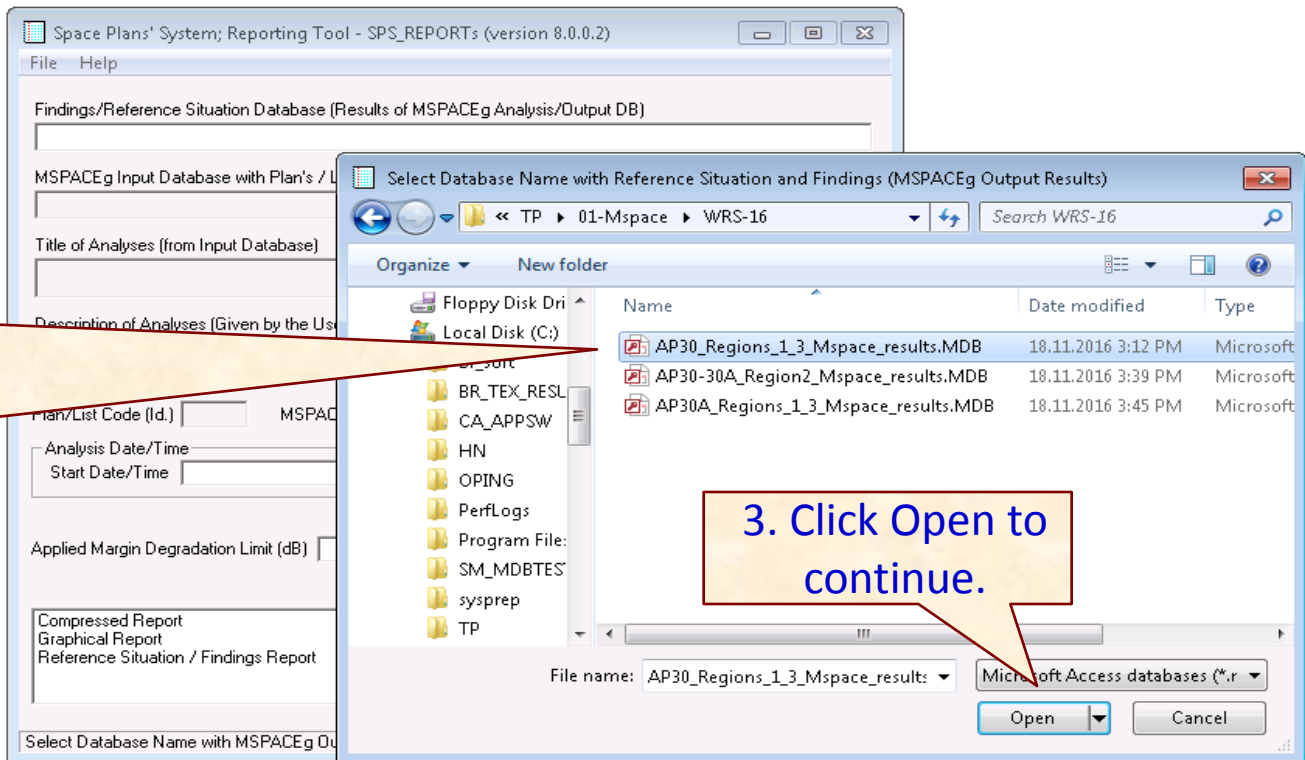
# Exercise 3 : Viewing MSPACE results for a Region 2 network with SPS\_REPORTS (2)

## 2. Select an Mspace results database

1. Click Open Findings/Ref. Sit DB...



2. Select a MSPACE results database containing the results of analysis for the R1&3 BSS network.



3. Click Open to continue.

# Exercise 3 : Viewing MSPACE results for a Region 2 network with SPS\_REPORTS (2)

## 3. Select a version to analyze

Space Plans' System; Reporting Tool - SPS\_REPORTS (version 8.0.0.2)

File Help

Findings/Reference Situation Database (Results of MSPACEg Analysis/Output DB)  
C:\TP\01-Mspace\WRS-16\AP30-30A\_Region2\_Mspace\_results.MDB

MSPACEg Input Database with Plan's / List's Data  
C:\TP\01-Mspace\03-For\_WRS-16\AP30\_30A\_100TPs\_V8.mdb

Select Plan/List which you want to analyse....

Please, choose a Plan, which you want to analyze from the list below (by clicking on the related row) and click on OK button

Analysis Version	Plan Id	Title in MSPACEg ASCII Input File	Analysis Description by the User
1	30_2		

OK Cancel

1. Select one version each time.  
2. Click OK.

Show Report Exit

Database Name with MSPACEg Output Results 21.11.2016 11:01 AM

## Exercise 3 : Viewing MSPACE results for a Region 2 network with SPS\_REPORTS (3)

### 4. Select a report

Space Plans' System; Reporting Tool - SPS\_REPORTs (version 8.0.0.2)

File Help

Findings/Reference Situation Database (Results of MSPACEg Analysis/Output DB)

MSPACEg Input Database with Plan's / List's Data

Title of Analyses (from Input Database)

Description of Analyses (Given by the User)

Plan/List Code (Id.)  MSPACEg Version  Selected Analysis Version

Analysis Date/Time  
 Start Date/Time  End Date/Time

Applied Margin Degradation Limit (dB)

Compressed Report  
 Graphical Report  
 Reference Situation / Findings Report

Show Report Exit

Select Database Name with MSPACEg Output Results

1. Select one report each time.
2. Click “Show Report”

# Exercise 3 : Viewing MSPACE results for a Region 2 network with SPS\_REPORTS (4)

## 4.1 Compressed Report / Draft of Special Section

"Compressed" Report (Affected Beams/Channels)

File

**Affected Beams and Channels(sorted by Orbital Position)**

Orb.Pos.	Adm.	Beam Name	Affected Channels	DEPM Degrad.	Sat.Network Id.
-148.00	USA	USABS9E2	2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32	0.420	USABSS-9
		USABS9O2	1,3,5,7,9,11,13,15,17,19,21,23,25,27,29,31	0.390	USABSS-9
-136.20	MEX	MEX02NTE	3,5,7,9,11,13,15,17,31	0.278	MEX02NTE
-135.80		MEX02NTE	2,4,6,8,10,12,14,16	0.301	MEX02NTE
-129.00	CAN	10017020	3	0.290	CAN-BSS7
		10017021			CAN-BSS7
-119.00	USA	10017225	2,4,6,12,14,16,18	0.274	USABSS-14
		10017229	11,13,15,17,19,21	0.282	USABSS-14
-110.00	USA	10017292	12,14,16,18,20	0.474	USABSS-15
		10017293		0.777	USABSS-15
		10017296		0.462	USABSS-15
		10017297		0.718	USABSS-15
-106.20	CHL	CHLCONT5	3,5,7,9,11,13,15,31	0.272	CHLCONT5
-101.20	USA	00007344	2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32	0.418	USABSS-1R
		00007347		0.489	USABSS-1R
		00007350		0.416	USABSS-1R
		00007353		0.492	USABSS-1R
-92.30	JMC	CRBBLZ01	2	0.264	CRBBLZ01
-86.50	G	10010691	17,21,25,29	0.313	USAT-S3 MOD-C
		10010695		0.310	USAT-S3 MOD-C
		10012848		0.421	USABSS-27

Data Presentation Options

Cells' Merging

Merge Cells

No Cell Merging

Rows' Sorting (also for print)

By Orbital Position

By Administration

Reproduce Report

Print Report

Create Draft of Special Section (in RTF format)

Show Output DB Structure

1. Select "Data Presentation Options"
2. Click "Reproduce Report"

# Exercise 3 : Viewing MSPACE results for a Region 2 network with SPS\_REPORTS (5)

## 4.1 Compressed Report / Draft of Special Section (Cont.)

"Compressed" Report (Affected Beams/Channels)

File

**Affected Beams and Channels(sorted by Orbital Position)**

Orb.Pos.	Adm.	Beam Name	Affected Channels	DEPM Degrad.	Sat.Network Id.
-148.00	USA	USABS9E2	2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32	0.420	USABSS-9
		USABS9O2	1,3,5,7,9,11,13,15,17,19,21,23,25,27,29,31	0.390	USABSS-9
-136.20	MEX	MEX02NTE	3,5,7,9,11,13,15,17,31	0.278	MEX02NTE
-135.80		MEX02NTE	2,4,6,8,10,12,14,16	0.301	MEX02NTE
-129.00	CAN	10017020	3	0.290	CAN-BSS7
		10017021			CAN-BSS7
-119.00	USA	10017225	2,4,6,12,14,16,18	0.274	USABSS-14
		10017229	11,13,15,17,19,21	0.282	USABSS-14
-110.00	USA	10017292	12,14,16,18,20	0.474	USABSS-15
		10017293		0.777	USABSS-15
		10017296	1,3,5,7,9,11,13,15,17,19	0.462	USABSS-15
		10017297		0.718	USABSS-15
-106.20	CHL	CHLCONT5	3,5,7,9,11,13,15,31	0.272	CHLCONT5
-101.20	USA	00007344	2,4,6,8,10,12,14,16,18,20,22,24,26,28,30,32	0.418	USABSS-1R
		00007347		0.489	USABSS-1R
		00007350	1,3,5,7,9,11,13,15,17,19,21,23,25,27,29,31	0.416	USABSS-1R
		00007353		0.492	USABSS-1R
-92.30	JMC	CRBBLZ01	2	0.264	CRBBLZ01
-86.50	G	10010691	17,21,25,29	0.313	USAT-S3 MOD-C
		10010695		0.310	USAT-S3 MOD-C
		10012848	1,5,9,13,17,21,25,29	0.421	USABSS-27

Data Presentation Options

Cells' Merging

Merge Cells

No Cell Merging

Rows' Sorting (also for print)

By Orbital Position

By Administration

Reproduce Report

Print Report

Create Draft of Special Section (in RTF format)

Show Output DB Structure

Click here to produce print version of this report. A message will appear to inform you of the location of the resulting file.

# Exercise 3 : Viewing MSPACE results for a Region 2 network with SPS\_REPORTS (6)

## 4.2 Graphical Report

Each row could contain multiple criteria.

1. Select criteria for the query.
2. Click "Run Query and Plot Map to view the report".

**Criteria Used for Graphical Report/Query (an empty box means any value)**

Administrations: G  
 Sat.Network Id: USAT-S3 MOD-C  
 Beam Names:  
 Channels:

**Available Values**

G  
 USAT-S3 MOD-C  
 10011968  
 1

Select criteria for the query. Click on the boxes (click on the boxes or type criteria in the text boxes. Delete unwanted criteria from lists in the left.

Copy to Clipboard  
 Run Query and Plot Map

Legend:  
 Feeder Link Test Point (blue star)  
 Down Link Test (red star)  
 Plot Affected Test Points only (checkbox)

Done... You may prepare and run a new query.

Select this option to display only affected test points.

# Exercise 3 : Viewing MSPACE results for a Region 2 network with SPS\_REPORTS (7)

## 4.3 Reference Situation/Findings Report

Each row could contain multiple criteria.

**Reference Situation / Calculated Margin Report (Query System)**

Search Criteria  
 - Criteria Used for Report/Query - empty box means any value

Administrations: G  
 Longitude: -86.5  
 Nominal degrees: -86.5  
 Beam Names: USABSS2  
 Channels:   
 Satellite: USAT-S3 MOD-C  
 Network Id.(s):

Available Values  
 G  
 -86.5  
 USABSS2  
 1  
 USAT-S3 MOD-C

Legend  
 Affected Channel: 13  
 Affected Test Point: -0.360, -0.985

Select (or type) criteria from combo boxes on the right (click on wanted ones). Delete not required search criteria from the boxes above.  
 Output sorted by Administration, Longitude Nominal, Beam Name, Channel  
 N/E - Non-Existing Reference Situation (Additions, Modifications, No Interference)

Only Affected Beams / Channels to Be Shown

Retrieve Ref.Sit./ Margin

Test Points' Coordinates (Longitude/Latitude) degrees														
Adm.	Orb.Pos.	Beam Name	Ch.	TP 1 Ref.Sit Margin	TP 2 Ref.Sit Margin	TP 3 Ref.Sit Margin	TP 4 Ref.Sit Margin	TP 5 Ref.Sit Margin	TP 6 Ref.Sit Margin	TP 7 Ref.Sit Margin	TP 8 Ref.Sit Margin	TP 9 Ref.Sit Margin	TP 10 Ref.Sit Margin	TP 11 Ref.Sit Margin
G	-86.50	10010691	21	-3.530 -3.840	-4.530 -4.822	-3.611 -3.838	-4.537 -4.761	-4.950 -5.155	-6.639 -6.795	-6.965 -7.111	-6.472 -6.633	-9.829 -9.933		
		10010691	23	-6.628 -6.783	-6.988 -7.155	-5.730 -5.871	-6.356 -6.505	-6.567 -6.709	-8.263 -8.370	-8.189 -8.300	-7.644 -7.768	-10.629 -10.716		
		10010691	25	-3.534 -3.844	-4.532 -4.824	-3.607 -3.834	-4.539 -4.763	-4.951 -5.156	-6.658 -6.814	-6.971 -7.117	-6.450 -6.612	-9.770 -9.876		
		10010691	27	-6.628 -6.783	-6.988 -7.155	-5.728 -5.869	-6.357 -6.505	-6.570 -6.712	-8.275 -8.383	-8.186 -8.297	-7.648 -7.772	-10.674 -10.761		
		10010691	29	-3.533 -3.843	-4.531 -4.822	-3.606 -3.833	-4.539 -4.763	-4.958 -5.162	-6.642 -6.798	-6.969 -7.114	-6.451 -6.612	-9.833 -9.938		
		10010691	31	-6.627 -6.782	-6.987 -7.155	-5.729 -5.869	-6.356 -6.505	-6.571 -6.713	-8.263 -8.371	-8.187 -8.298	-7.644 -7.767	-10.620 -10.707		
		Sat.Network Id.: USAT-S3 MOD-C		-93.13° 16.77°	-99.87° 16.92°	-99.20° 19.40°	-104.92° 21.52°	-107.45° 24.78°	-100.30° 25.70°	-106.12° 28.63°	-110.97° 29.07°	-117.03° 32.48°		
G	-86.50	10010695	1	-4.532 -4.728	-4.895 -5.108	-4.069 -4.231	-4.776 -4.944	-5.195 -5.349	-7.047 -7.159	-7.142 -7.253	-6.545 -6.670	-9.715 -9.800		
				-6.343	-6.734	-5.502	-6.126	-6.321	-8.030	-7.939	-7.426	-10.455		

32 rows displayed. You may specify different criteria and run your next query if you wish

RTF Report Close

Reference Situation for the test point

Calculated Margin for the test point

Click here to retrieve Ref.Sit./Margin

Click here to produce a print version of this report. A message will appear to inform you of the location of the resulting file.