



**Exercise on viewing results of MSPACEg  
available in BR IFICs with SPS\_REPORTS**

**Workshop on Appendices 30&30A**

**Presented by: THONG PHAM VIET**  
E-mail: [thong.phamviet@itu.int](mailto:thong.phamviet@itu.int)  
Space Notification and Plans Division



# Outline

## General introduction to SPS\_REPORTS

### Exercise on SPS\_REPORTS

Exercise 1: Viewing results of a R1&3 BSS network (Slides 14-22)  
(file: [AP30\\_USABSS-34\\_mspace\\_results.mdb](#))

Exercise 2: Viewing results of a R1&3 BSS Feeder-link submission (Slides 23-31)  
(file: [AP30A\\_NSS-BSS 142E\\_mspace\\_results.mdb](#))

Exercise 3: Viewing results of a Region 2 submission (Slide 32-40)  
(file: [AP30-30A\\_NSS-BSS 58W\\_mspace\\_results.mdb](#))

(files stored at : *"SpacePlans\3\_A30\_30A SPS\_REPORTS exercise\Exercise\*)

Annex1: Where to get a set-up of SPS Package

Annex2: Get Mspaceg results available in BR IFICs

# SPS\_REPORTS (1)

- SPS\_REPORTS is a part of the SPS Package.

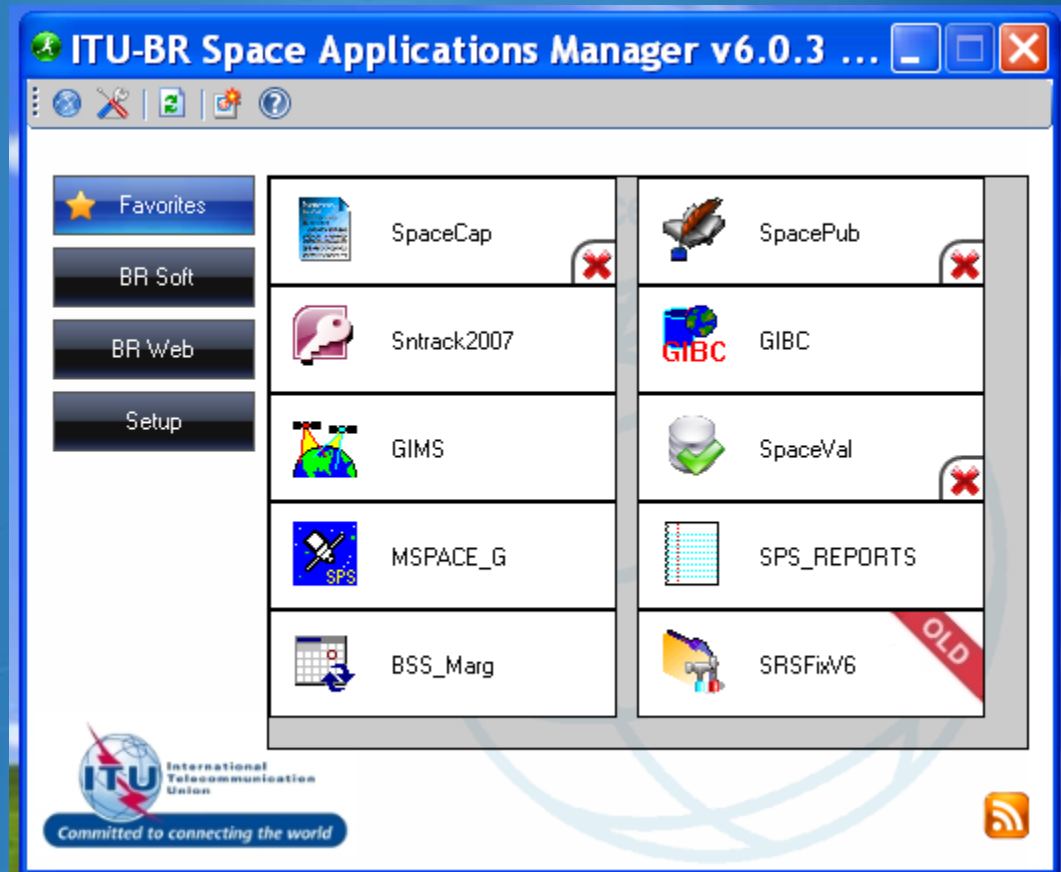


- Its purposes:
  - Listing affected networks with the worst excess/degradation
  - Retrieving Reference Situation/Margin for each test point
  - Displaying test points on a world map

from the results of MSPACEg analysis on an AP30/30A Article 4 network.

# SPS\_REPORTS (2)

- Launching it from the SAM



- Launching it from Start menu  
Start > All Programs > BR Space Applications



# SPS\_REPORTS (3)

1. Compressed report
2. Graphical reports
3. Reference Situation/  
Findings report

**Space Plans' System; Reporting Tool - SPS\_REPO...**

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 or Type Database Name with Reference Situation and Findings (| 06.11.2012 10:03

# Compressed Report

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

File

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

		PFD Criterion (An.1 to App.30)			EPM Criterion (An.1 to App.30)		EPM and PFD Criteria			
Adm.	Orb.Pos.	Beam Name	Identified Channels	Excess	Chan. where Degrad. >0.45	Degrad	Affected Channels	Excess	Degrad	Sat.Network Id.
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		20.621	HISPASAT 2U3
		10013236				20.621			20.621	
		10013237				20.624			20.624	
		10013238								
		10013239				12.326			12.326	
		10013240								
		10013241				12.328			12.328	
		10013242								
		10013243								
		10013244								
		10013245								
		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	
HI27D3-3	30,32,34,36,38,40	22.087	30,32,34,36,38,40	22.087	30,32,34,36,38,40	22.087	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

Reproduce Report  
 Print Report

Create Draft of Special Section (in RTF format)

Show Output DB Structure

# 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

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.

USE THESE  
OPTIONS FOR  
YOUR QUERIES

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

# 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: -4.2, 0.091  
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)]

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 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*							
BFA	-30.00	BFA10700	30	2.407 -11.285 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 -10.073	2.234 -12.727							

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

RTF Report Close

USE THESE  
OPTIONS FOR  
YOUR  
QUERIES



# Three Reports can be run in parallel

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

File

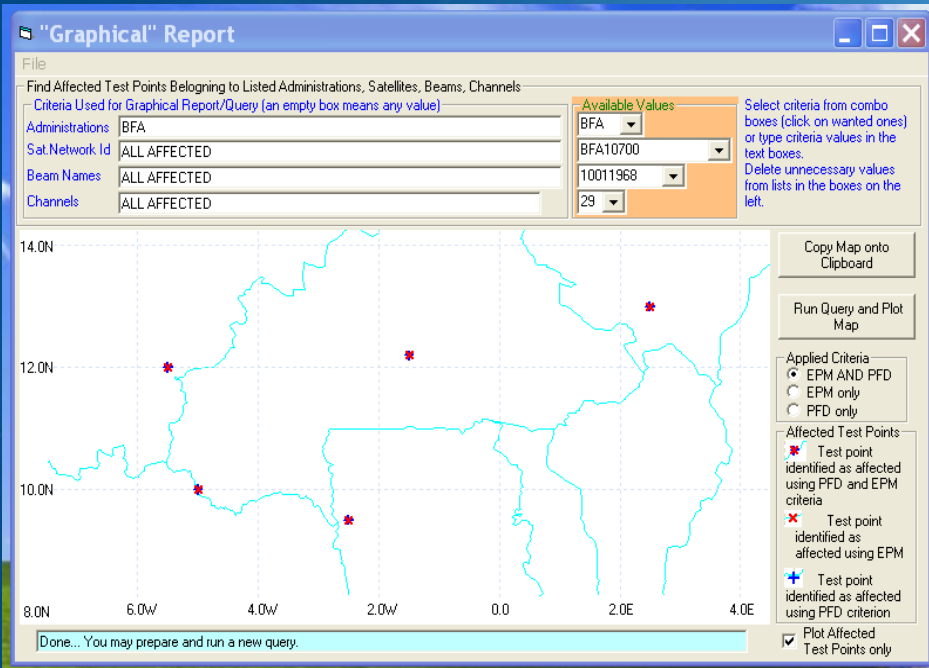
**Affected Beams and Channels(sorted by Administration Symbol)**

		PFD Criterion (An.1 to App.30)			EPM Criterion (An.1 to App.30)			EPM and PFD Criteria		
Adm.	Orb.Pos.	Beam Name	Identified Channels	Excess	Chan. where Degrad. >0.45	Degrad	Affected Channels	Excess	Degrad	Sat.Network Id.
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 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				20.621			20.621	
		10013236								
		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		HISPASAT 2U3
		10013241								
		10013242				12.326			12.326	
		10013243								
		10013244				12.328			12.328	
		10013245								
		10013246								
		HI27D 3-2	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	
		HI27D 3-3	30,32,34,36,38,40		30,32,34,36,38,40	22.087	30,32,34,36,38,40		22.087	
		HI27D 3A2	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	
		HI27D 3A3	30,32,34,36,38,40		30,32,34,36,38,40	18.659	30,32,34,36,38,40		18.659	

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



**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  
 AFG\_100

Legend  
 Affected Channel  
 EPM/PFD Affected Test Point  
 EPM Affected Test Point  
 PFD Affected Test Point

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)]

Only Affected Beams / Channels to Be Shown

		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 9.50	-5.00 10.00	-5.50 12.00	-1.50 12.20	2.50 13.00						
BFA	-30.00	BFA10700	30	2.407 -11.285 15.441	2.286 -11.469 15.354	1.498 -11.701 15.365	4.625 -9.017 15.511	2.273 -11.688 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 15.441	2.244 -12.526 15.354	1.461 -12.753 15.365	4.587 -10.073 15.511	2.234 -12.727 15.648						

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



# Satellite Beam Name vs Mspace Beam Name (pbeam\_name)

111552027[A] G LUX/ 21.5E DBL-G5-21.5E

Beam id: GBL  
Beam id: RG1

1. Satellite Beam Name is the name for a satellite beam given by you when creating a network.
2. The beam name is stored in the s\_beam table in the SPS database.

1. pbeam\_name is the name for a plan beam which is automatically generated by SpaceCap.
2. The pbeam\_name is stored in the beam\_tr table in the SPS database.

ant_diam	pattern_id	design_emi	grp_id	pbeam_name	beam_name	emi_rcp	ntc_id
0.6	289	33M0G7W--	1	00000001	GBL	E	111552027
0.6	289	33M0G7W--	2	00000002	GBL	E	111552027
0.6	289	33M0G7W--	3	00000003	GBL	E	111552027
0.6	289	33M0G7W--	4	00000004	GBL	E	111552027
0.6	289	33M0G7W--	5	00000005	GBL	E	111552027
0.6	289	33M0G7W--	6	00000006	GBL	E	111552027
0.6	289	33M0G7W--	7	00000007	GBL	E	111552027
0.6	289	33M0G7W--	8	00000008	GBL	E	111552027
0.6	289	33M0G7W--	9	00000009	RG1	E	111552027
0.6	289	33M0G7W--	10	00000010	RG1	E	111552027
0.6	289	33M0G7W--	11	00000011	RG1	E	111552027

# Satellite Beam Name vs Mspace Beam Name (pbeam\_name)

- Regions 1 and 3: Mspace Beam Name = F(grp\_id; design\_emi)

s_beam : Table							
ntc_id	emi_rcp	beam_name	f_steer	pattern_id	pattern_id_x	gain	
199999999	E	INT		299	299	31.44	

beam_tr : Table								
ant_diam	pattern_id	design_emi	grp_id	pbeam_name	beam_name	emi_rcp	ntc_id	
0.9	290	33M0G7W--	16983	00000005	INT	E	199999999	

- Region 2: Mspace Beam Name = F(grp\_id\_dn;grp\_id\_up;strapping)

s_beam : Table							
ntc_id	emi_rcp	beam_name	pattern_id	pattern_id_x	gain	f_steer	
199999999	E	R2T	300	300	28.21		
199999999	R	R2R	304	304	31.44		

pl_strap : Table						
ntc_id	freq_dn	freq_up	grp_id_dn	grp_id_up	f_victim_op	
199999999	12224	17324	14268	14269	N	
199999999	12253.16	17353.16	14268	14269	N	
199999999	12282.32	17382.32	14268	14269	N	
199999999	12311.48	17411.48	14268	14269	N	

beam_tr : Table								
ant_diam	pattern_id	design_emi	grp_id	pbeam_name	beam_name	emi_rcp	ntc_id	
0.6	292	24M0G7W--	14268	00000001	R2T	E	199999999	
7	297	24M0G7W--	14269	00000001	R2R	R	199999999	

# Exercise

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

Exercise 1: Viewing TEX results of a R1&3 BSS network  
(file: [AP30\\_USABSS-34\\_mspace\\_results.mdb](#))

Exercise 2: Viewing TEX results of a R1&3 BSS Feeder-link submission  
(file: [AP30A\\_NSS-BSS 142E\\_mspace\\_results.mdb](#))

Exercise 3: Viewing TEX results of a Region 2 submission  
(file: [AP30-30A\\_NSS-BSS 58W\\_mspace\\_results.mdb](#))

# Step by step to do exercise

1. Copy folder “Space Plans” under “\SpaceWorkshop” from the USB key to your C drive.
2. Find Mspace results database under:

“\SpacePlans\3\_A30\_30A SPS\_REPORTs exercise\Exercise\”

Name	Size	Type
AP30A_N55-B55 142E_mspace_results.mdb	11,952 KB	Microsoft Office Access Database
AP30_USAB55-34_mspace_results.mdb	26,384 KB	Microsoft Office Access Database
AP30-30A_N55-B55 58W_mspace_results.mdb	11,996 KB	Microsoft Office Access Database

3. Run SPS\_Reports on the selected Mspace results database to: ( see slides [14-22](#) for Exercise 1, [23-31](#) for Exercise 2 and [32-40](#) for Exercise 3 for step by step to view Mspace results with SPS Reports)

- ✓ Create Compressed Report
- ✓ Create Graphical Report
- ✓ Create Reference Situation/Findings Report

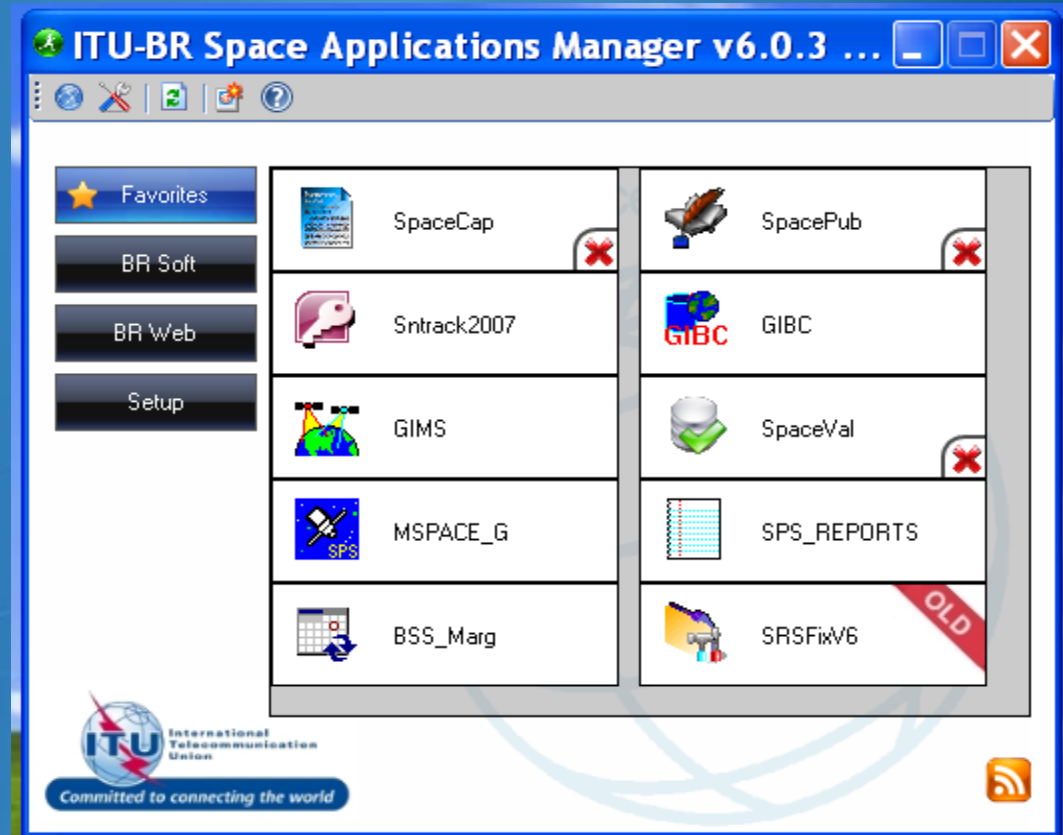
## Exercise 1

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

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

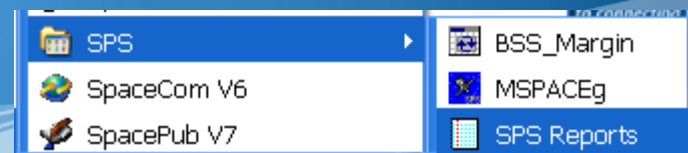
1. Start SPS\_REPORTS

□ from the SAM



□ Or from Start menu

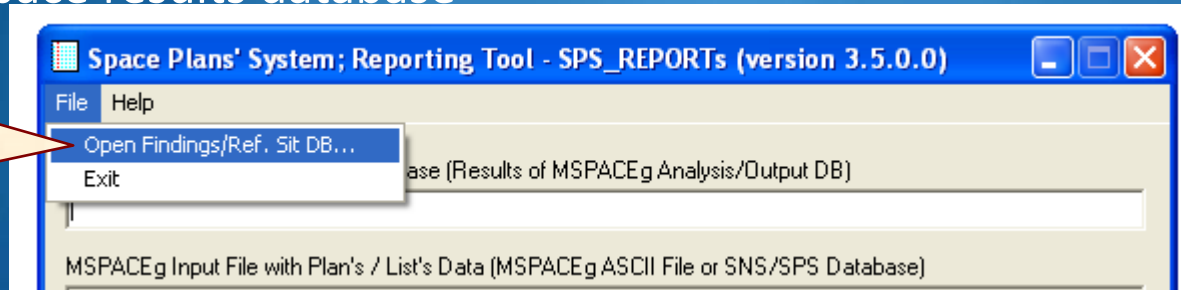
Start > All Programs > BR Space Applications



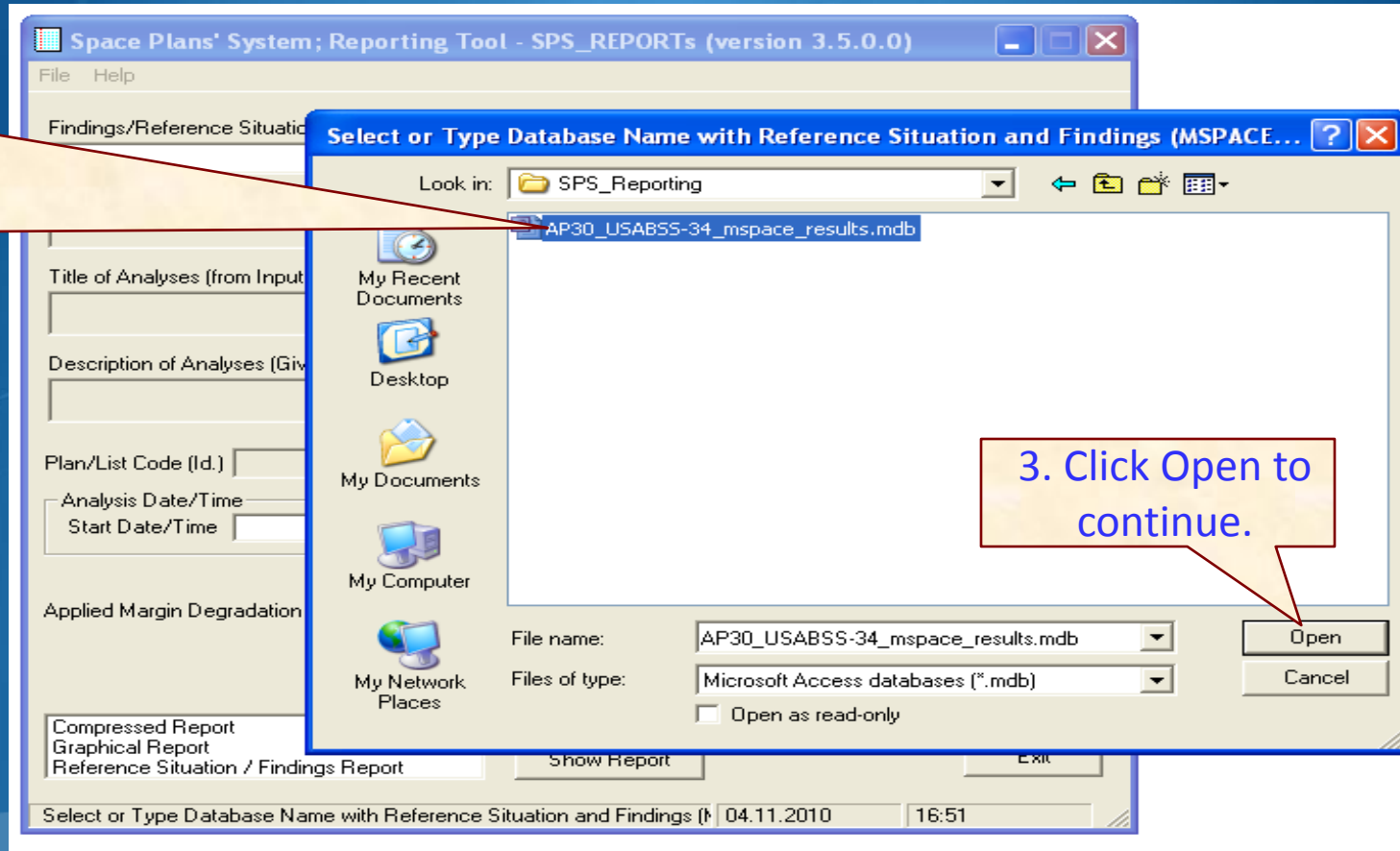
# Exercise 1: Viewing results of MSPACE for a R1&3 BSS network with SPS\_REPORTS (2)

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.

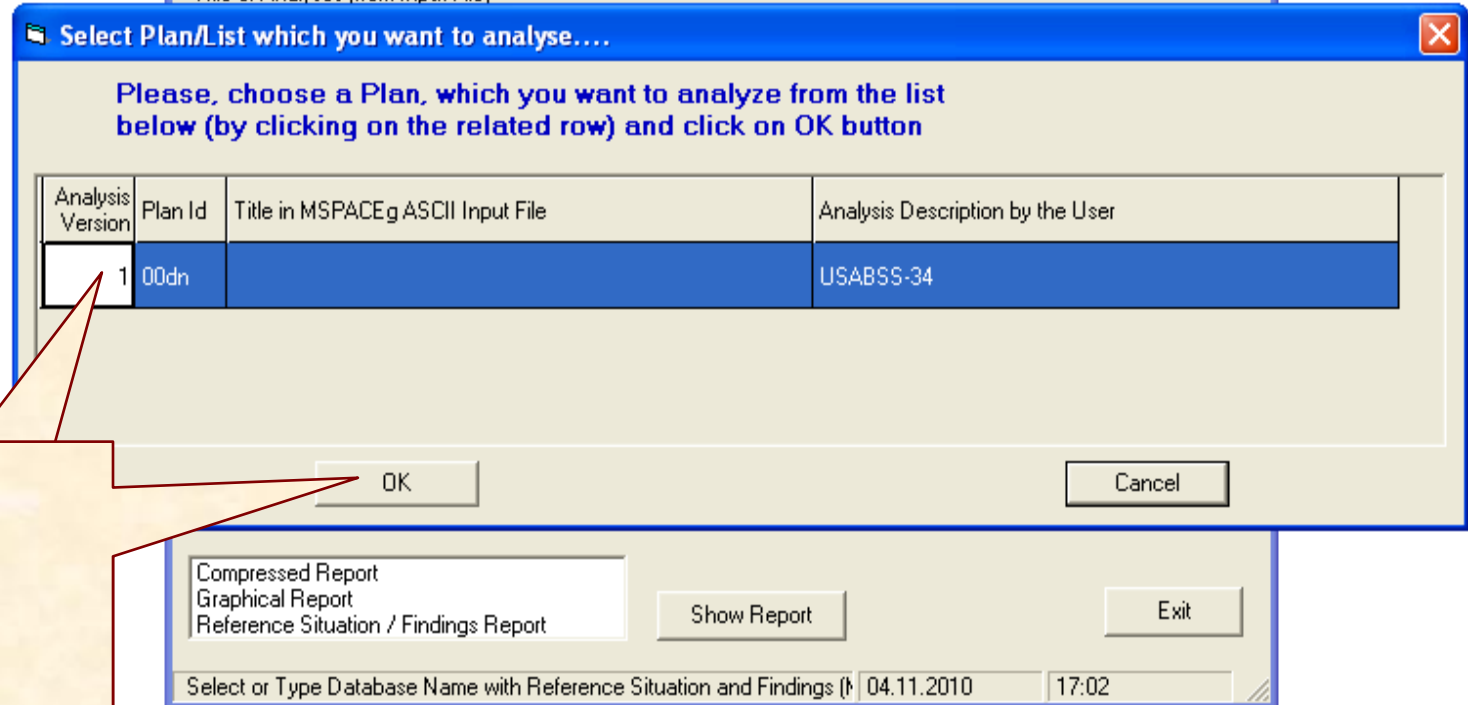
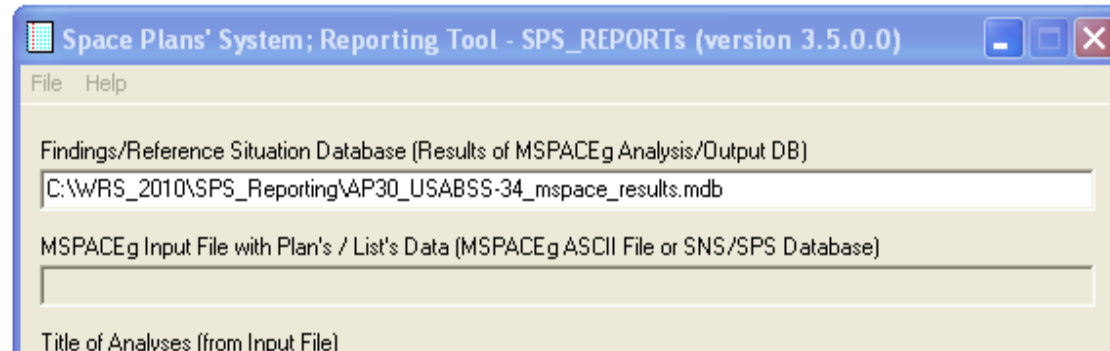


3. Click Open to continue.



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

## 3. Select a version to analyze



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

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

## 4. Select a report

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

Space Plans' System; Reporting Tool - SPS\_REPORTs (version 3.5.0.0)

File Help

Findings/Reference Situation Database (Results of MSPACEg Analysis/Output DB)  
C:\WRS\_2010\SPS\_Reporting\AP30\_USABSS-34\_mspace\_results.mdb

MSPACEg Input File with Plan's / List's Data (MSPACEg ASCII File or SNS/SPS Database)  
C:\MG\PartA\USABSS-34\SPS\_ALL\_20100716\_USABSS-34.mdb

Title of Analyses (from Input File)  
[Empty field]

Description of Analyses (Given by the User)  
USABSS-34

Plan/List Code (Id.) 00dn    MSPACEg Version 6.6.0.1    Selected Analysis Version 1

Analysis Date/Time  
Start Date/Time 28.07.2010 16:05:22    End Date/Time 28.07.2010 18:43:32

Applied Margin Degradation Limit (dB) 0.45

Compressed Report  
Graphical Report  
Reference Situation / Findings Report

Show Report    Exit

Select or Type Database Name with Reference Situation and Findings (↓) 04.11.2010    17:06

# Exercise 1: Viewing results of MSPACE 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		13.130	30,32,34,36,38,40	13.130		
	ISL	ISL04900	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
-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			33.487	30,32,34,36,38,40	33.487		
		10017702	31,33,35,37,39		33.859	31,33,35,37,39	33.859		
		10017703	31,33,35,37,39		33.859	31,33,35,37,39	33.859		
		10017704	30,32,34,36,38,40		26.073	30,32,34,36,38,40	26.073		
		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		
-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	20.621		29,31,33,35,38,40	20.621			
	10013236								
	10013237								
	10013238								

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 results of MSPACE 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	Degrad	Affected Channels	Excess	Degrad
-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		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		
	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

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 results of MSPACE 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' markers representing test points. The map includes a coordinate 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'.

Instructions for using the interface:

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 results of MSPACE 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, DECME68, 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
				12.625	-6.990	-2.563	-1.280	-5.068	-7.252	-6.861	-2.814	-6.147	-3.123	-10.4
				12.625	12.520	12.221	11.799	12.370	12.456	12.257	11.581	12.024	11.418	11.2
		10011968	31	-8.191	-7.498	-0.896	1.146	-4.295	-7.800	-7.670	-0.915	-5.908	-1.657	-2.2
				12.625	-14.750	-13.921	-12.987	-13.133	-13.262	-13.790	-13.531	-12.657	-12.661	-12.598
		12.625	12.520	12.221	11.799	12.370	12.456	12.257	11.581	12.024	11.418	11.2		
		10011968	33	-7.175	-6.537	-0.935	1.033	-4.361	-6.914	-6.461	-1.426	-5.727	-1.878	-10.2
		12.625	-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		
		10011968	35	-8.279	-7.631	-0.857	1.184	-4.472	-7.926	-7.794	-0.873	-6.012	-1.619	-2.1
		12.625	-14.769	-13.952	-12.984	-13.131	-13.295	-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		
		10011968	37	-8.056	-7.836	-2.011	1.206	-5.653	-8.118	-7.733	-0.984	-5.532	-1.533	-2.1
		12.625	-14.720	-14.000	-13.065	-13.131	-13.460	-13.872	-13.547	-12.652	-12.584	-12.595	-12.6	

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

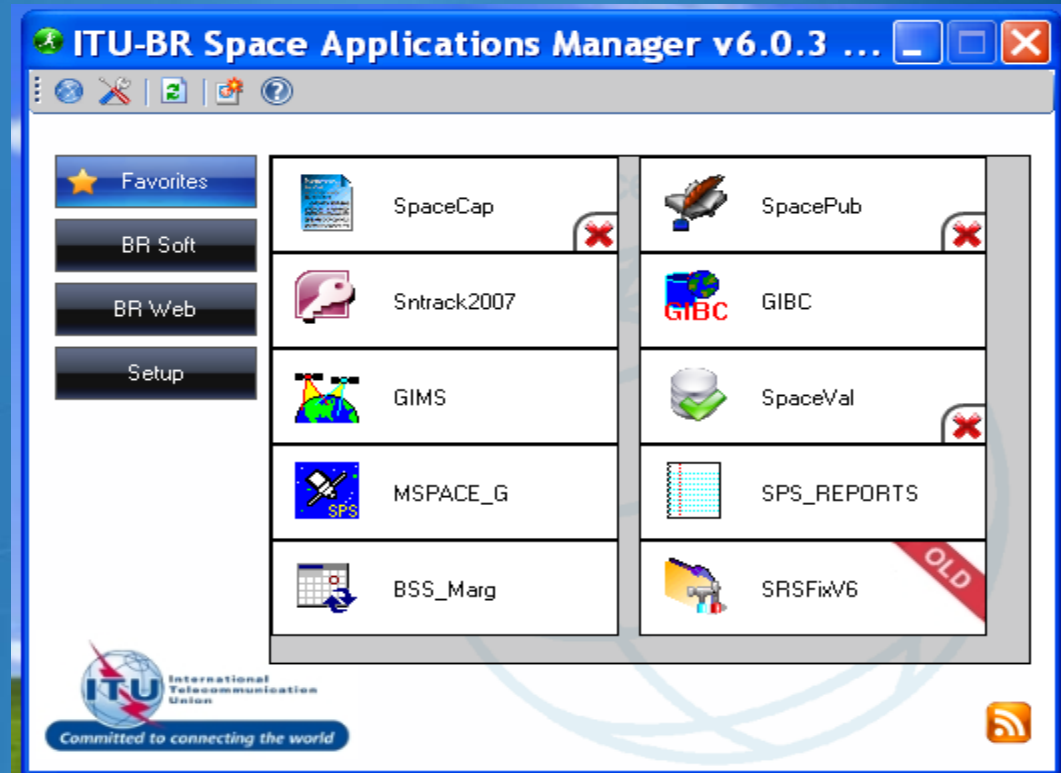
## Exercise 2

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

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

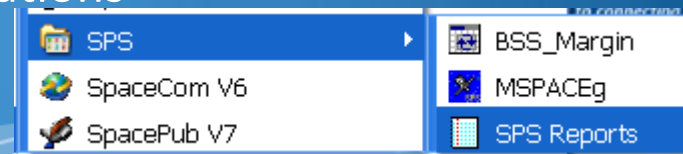
1. Start SPS\_REPORTS

□ from the SAM



□ Or from Start menu

Start > All Programs > BR Space Applications

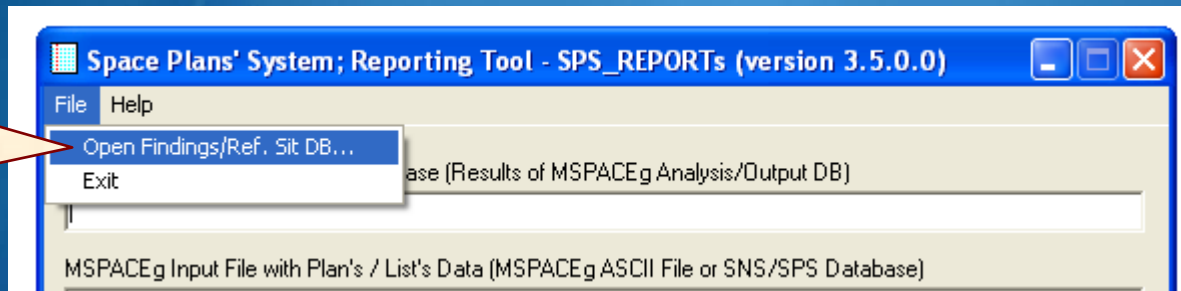




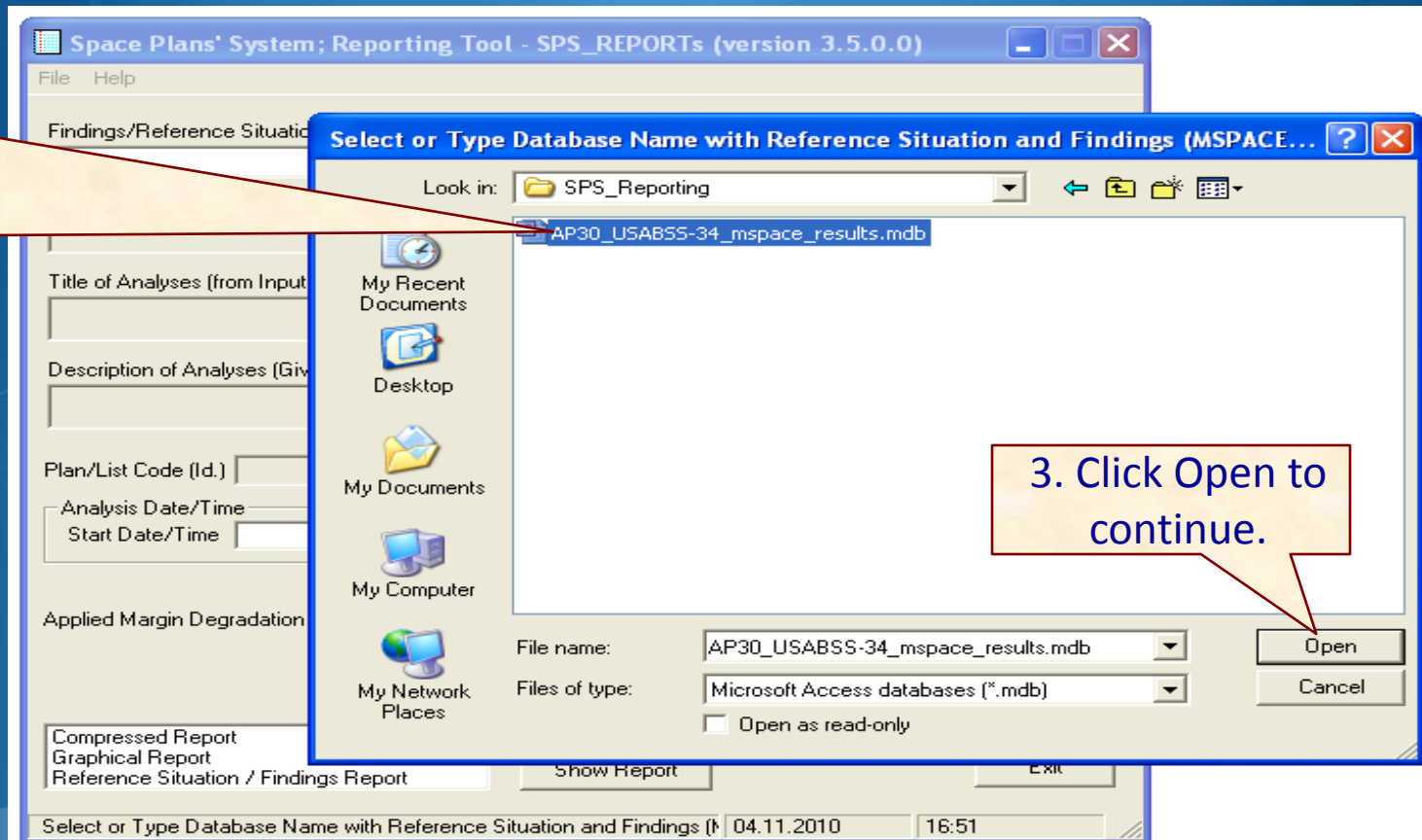
## Exercise 2 : Viewing results of MSPACE for a R1&3 BSS Feeder-link network with SPS\_REPORTS (2)

### 2. Select an Mspace results database

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



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



3. Click Open to continue.

## Exercise 2 : Viewing results of MSPACE 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 3.6.0.1)

File Help

Findings/Reference Situation Database (Results of MSPACEg Analysis/Output DB)  
 C:\WRS\_2010\SPS\_Reporting\AP30A\_NSS-BSS 142E\_mspace\_results.mdb

MSPACEg Input File with Plan's / List's Data (MSPACEg ASCII File or SNS/SPS Database)

**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

Graphical Report  
 Reference Situation / Findings Report

Show Report Exit

Select or Type Database Name with Reference Situation and Findings (f 23.11.2010 14:50

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

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

### 4. Select a report

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

Space Plans' System; Reporting Tool - SPS\_REPORTs (version 3.5.0.0)

File Help

Findings/Reference Situation Database (Results of MSPACEg Analysis/Output DB)  
C:\WRS\_2010\SPS\_Reporting\AP30\_USABSS-34\_mspace\_results.mdb

MSPACEg Input File with Plan's / List's Data (MSPACEg ASCII File or SNS/SPS Database)  
C:\MG\PartA\USABSS-34\SPS\_ALL\_20100716\_USABSS-34.mdb

Title of Analyses (from Input File)  
[Empty field]

Description of Analyses (Given by the User)  
USABSS-34

Plan/List Code (Id.) 00dn    MSPACEg Version 6.6.0.1    Selected Analysis Version 1

Analysis Date/Time  
Start Date/Time 28.07.2010 16:05:22    End Date/Time 28.07.2010 18:43:32

Applied Margin Degradation Limit (dB) 0.45

Compressed Report  
Graphical Report  
Reference Situation / Findings Report

Show Report    Exit

Select or Type Database Name with Reference Situation and Findings (↓) 04.11.2010    17:06

## Exercise 2 : Viewing results of MSPACE 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 results of MSPACE 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 results of MSPACE 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 indicating affected test points. The interface includes several search criteria fields and an 'Available Values' list.

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

- Administrations: RUS
- Sat.Network Id:
- Beam Names:
- Channels:

**Available Values**

- RUS
- AFG24501
- 00003545
- 1

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.

**Buttons:** Copy Map onto Clipboard, Run Query and Plot Map

**Map Coordinates:** 90.00N, 60.00N, 30.00N, 0.0, 30.00S, 60.00S, 90.00S. 150.00W, 120.00W, 90.00W, 60.00W, 30.00W, 0.0, 30.00E, 60.00E, 90.00E, 120.00E, 150.00E.

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

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 2 : Viewing results of MSPACE 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.  
 Only Affected Beams / Channels to Be Shown

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	2.074	3.699	3.776	1.150	3.828	1.230	0.062	2.894	3.294	
				2.194	1.290	2.915	2.992	0.366	3.044	0.446	-0.722	2.110	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	5.031	6.656	6.733	4.107	6.785	4.188	3.020	5.852	6.251	
				4.501	3.597	5.222	5.299	2.673	5.351	2.754	1.586	4.418	4.817	
		RSTRSD51	31	4.545	3.641	5.266	5.343	2.717	5.395	2.798	1.630	4.462	4.862	
				3.459	2.555	4.180	4.257	1.631	4.309	1.712	0.544	3.376	3.776	
RSTRSD51	33	4.545	3.641	5.266	5.343	2.717	5.395	2.797	1.630	4.461	4.861			
		3.459	2.555	4.180	4.257	1.631	4.309	1.712	0.544	3.376	3.775			
RSTRSD51	35	4.545	3.641	5.266	5.343	2.717	5.395	2.797	1.630	4.461	4.861			
		3.459	2.555	4.180	4.257	1.631	4.309	1.712	0.544	3.376	3.775			
RSTRSD51	37	4.545	3.641	5.266	5.343	2.717	5.395	2.798	1.630	4.462	4.862			
		3.470	2.567	4.192	4.268	1.642	4.320	1.723	0.555	3.387	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 print version of this report. A message will appear to inform you of the location of the resulting file.

## Exercise 3

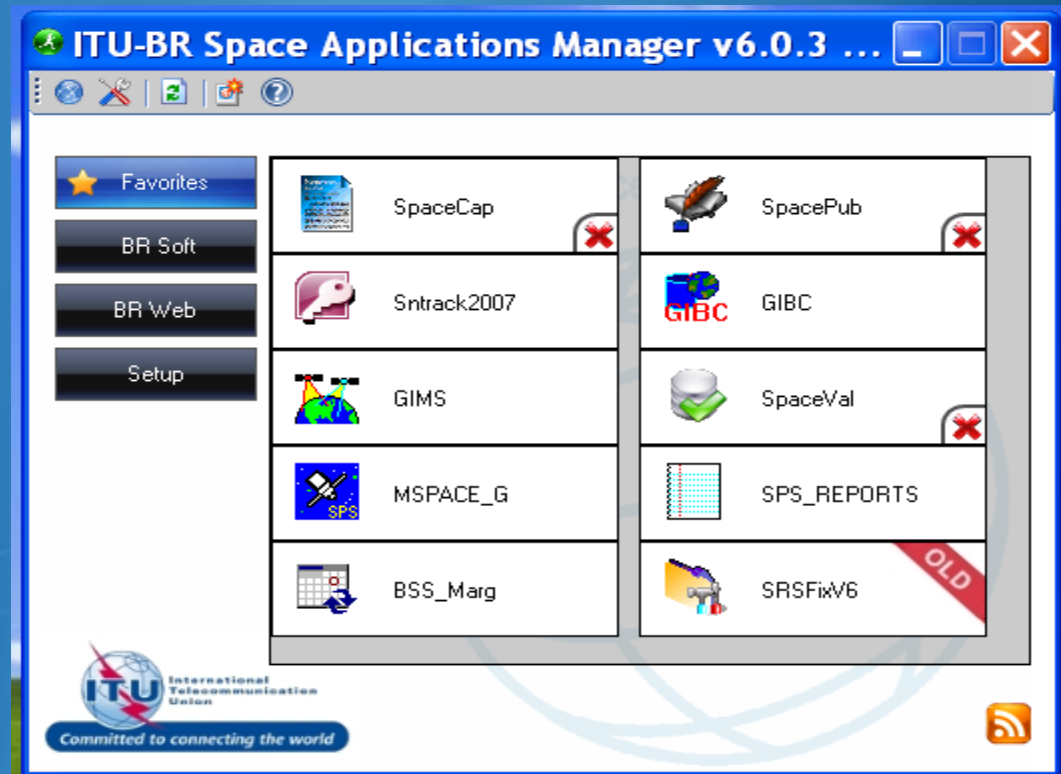
# Viewing results of MSPACE for a Region 2 network with SPS\_REPORTS



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

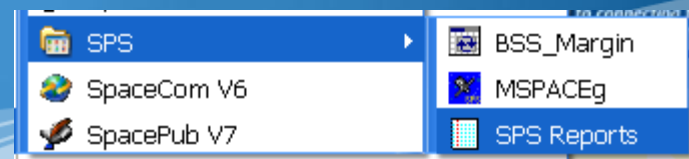
1. Start SPS\_REPORTS

□ from the SAM



□ Or from Start menu

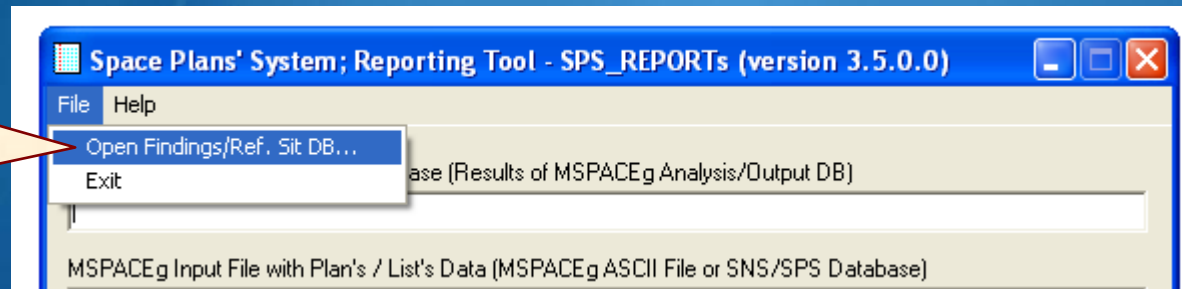
Start > All Programs > BR Space Applications



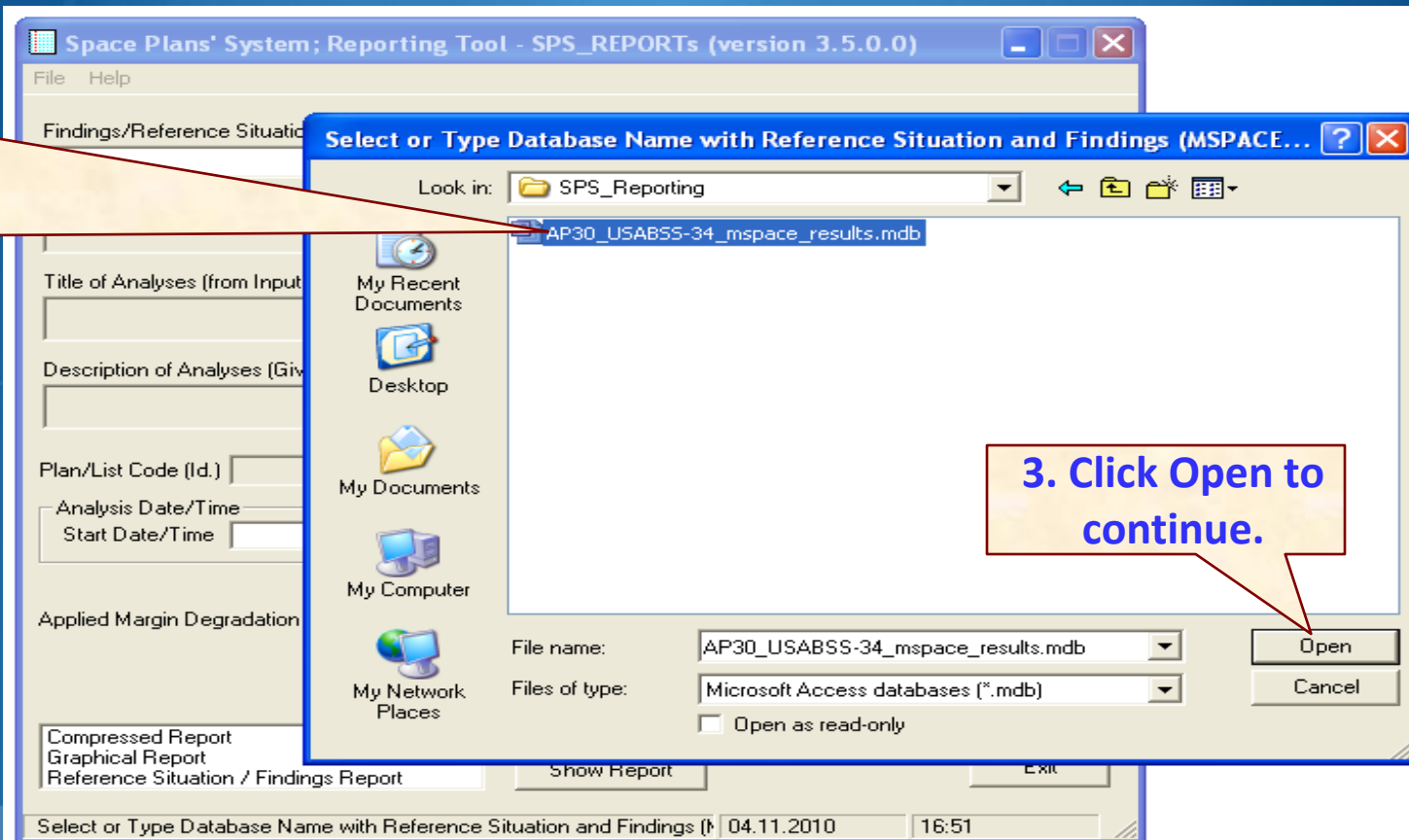
# Exercise 3 : Viewing results of MSPACE for a Region 2 network with SPS\_REPORTS (2)

## 2. Select an Mspace results database

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



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



3. Click Open to continue.

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

### 3. Select a version to analyze

Space Plans' System; Reporting Tool - SPS\_REPORTs (version 3.6.0.1)

File Help

Findings/Reference Situation Database (Results of MSPACEg Analysis/Output DB)  
C:\WRS\_2010\SPS\_Reporting\AP30-30A\_NSS-BSS 58W\_mspace\_results.mdb

MSPACEg Input File with Plan's / List's Data (MSPACEg ASCII File or SNS/SPS Database)

**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		NSS-BSS 58W

OK Cancel

Graphical Report  
Reference Situation / Findings Report

Show Report Exit

Select or Type Database Name with Reference Situation and Findings (F) 23.11.2010 15:19

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

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

### 4. Select a report

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

Space Plans' System; Reporting Tool - SPS\_REPORTs (version 3.5.0.0)

File Help

Findings/Reference Situation Database (Results of MSPACEg Analysis/Output DB)  
C:\WRS\_2010\SPS\_Reporting\AP30\_USABSS-34\_mspace\_results.mdb

MSPACEg Input File with Plan's / List's Data (MSPACEg ASCII File or SNS/SPS Database)  
C:\MG\PartA\USABSS-34\SPS\_ALL\_20100716\_USABSS-34.mdb

Title of Analyses (from Input File)  
[Empty field]

Description of Analyses (Given by the User)  
USABSS-34

Plan/List Code (Id.) 00dn    MSPACEg Version 6.6.0.1    Selected Analysis Version 1

Analysis Date/Time  
Start Date/Time 28.07.2010 16:05:22    End Date/Time 28.07.2010 18:43:32

Applied Margin Degradation Limit (dB) 0.45

Compressed Report  
Graphical Report  
Reference Situation / Findings Report

Show Report    Exit

Select or Type Database Name with Reference Situation and Findings (↓) 04.11.2010    17:06

# Exercise 3 : Viewing results of MSPACE 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 results of MSPACE 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
		USABS9D2	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

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 results of MSPACE 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".

The screenshot displays the 'Graphical' Report interface. The top section contains search criteria: Administrations (G), Sat.Network Id (USAT-S3 MOD-C), Beam Names, and Channels. To the right, the 'Available Values' section shows a list of values: G, USAT-S3 MOD-C, 10011968, and 1. Below the search fields is a map of the Pacific region, showing the coastline and several test points marked with red asterisks. The map's axes range from 15.0N to 30.0N latitude and 120.0W to 90.0W longitude. A legend on the right side of the map identifies the test points: 'Feeder Link Test Point' (marked with a red asterisk), 'Down Link Test Point' (marked with a blue plus sign), and 'Plot Affected Test Points only' (checkbox). The status bar at the bottom indicates 'Done... You may prepare and run a new query.'

Select criteria for the query.  
Delete unwanted values from lists in the left.

Select criteria for the query.  
Delete unwanted values from lists in the left.

Select this option to display only affected test points.

Copy to Clipboard  
Run Query and Plot Map

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

# Exercise 3 : Viewing results of MSPACE 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	-6.734 -7.125	-5.502 -5.893	-6.126 -6.517	-6.321 -6.712	-8.030 -8.421	-7.939 -8.330	-7.426 -7.817	-10.455 -10.846	

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

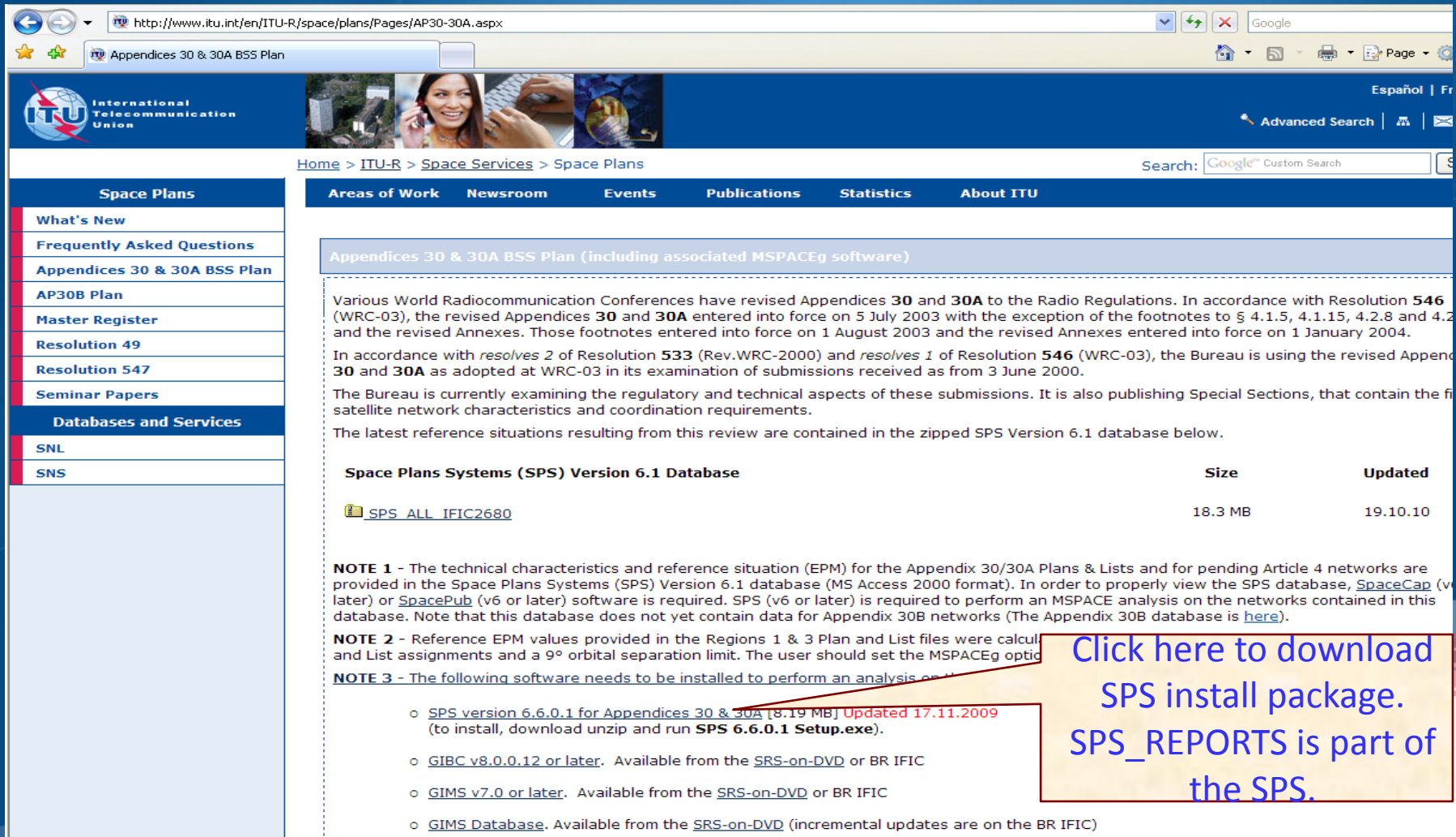
Click here to produce print version of this report. A message will appear to inform you of the location of the resulting file.



# Annex1: Where to get an install package of SPS (1)

- Latest SPS install package could be downloaded from the ITU website at:

<http://www.itu.int/en/ITU-R/space/plans/Pages/AP30-30A.aspx>



International Telecommunication Union

Home > ITU-R > Space Services > Space Plans

Search: Google Custom Search

Areas of Work Newsroom Events Publications Statistics About ITU


## Appendices 30 & 30A BSS Plan (including associated MSPACEg software)

Various World Radiocommunication Conferences have revised Appendices **30** and **30A** to the Radio Regulations. In accordance with Resolution **546** (WRC-03), the revised Appendices **30** and **30A** entered into force on 5 July 2003 with the exception of the footnotes to § 4.1.15, 4.1.15, 4.2.8 and 4.2.9 and the revised Annexes. Those footnotes entered into force on 1 August 2003 and the revised Annexes entered into force on 1 January 2004.

In accordance with *resolves 2* of Resolution **533** (Rev.WRC-2000) and *resolves 1* of Resolution **546** (WRC-03), the Bureau is using the revised Appendices **30** and **30A** as adopted at WRC-03 in its examination of submissions received as from 3 June 2000.

The Bureau is currently examining the regulatory and technical aspects of these submissions. It is also publishing Special Sections, that contain the final satellite network characteristics and coordination requirements.

The latest reference situations resulting from this review are contained in the zipped SPS Version 6.1 database below.

Space Plans Systems (SPS) Version 6.1 Database	Size	Updated
 <a href="#">SPS ALL IFIC2680</a>	18.3 MB	19.10.10

**NOTE 1** - The technical characteristics and reference situation (EPM) for the Appendix 30/30A Plans & Lists and for pending Article 4 networks are provided in the Space Plans Systems (SPS) Version 6.1 database (MS Access 2000 format). In order to properly view the SPS database, [SpaceCap](#) (v6 or later) or [SpacePub](#) (v6 or later) software is required. SPS (v6 or later) is required to perform an MSPACEg analysis on the networks contained in this database. Note that this database does not yet contain data for Appendix 30B networks (The Appendix 30B database is [here](#)).

**NOTE 2** - Reference EPM values provided in the Regions 1 & 3 Plan and List files were calculated using the SPS (v6 or later) software and List assignments and a 9° orbital separation limit. The user should set the MSPACEg option to 'Yes'.

**NOTE 3** - The following software needs to be installed to perform an analysis on the SPS database:

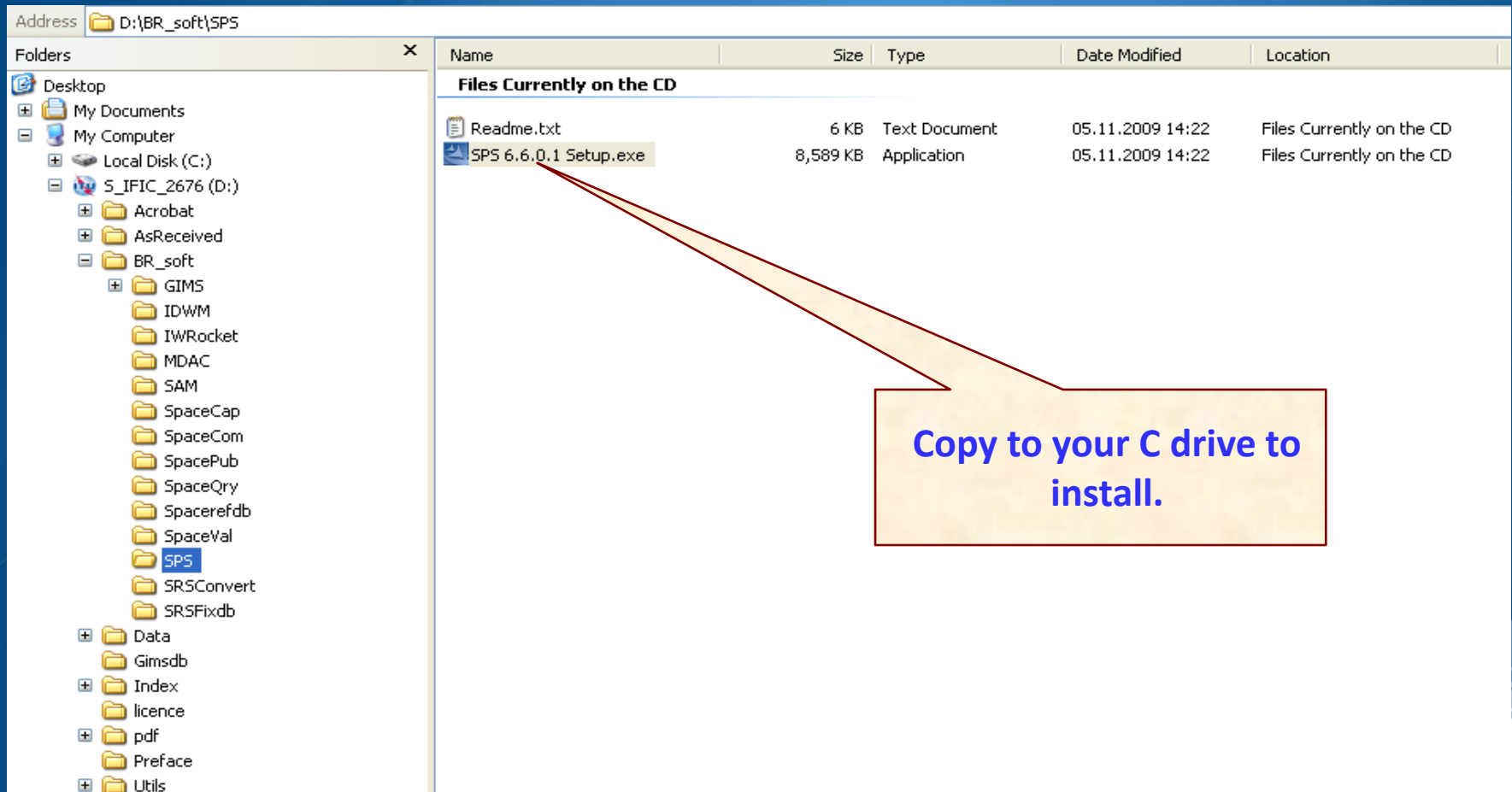
- o [SPS version 6.6.0.1 for Appendices 30 & 30A](#) [8.19 MB] Updated 17.11.2009 (to install, download unzip and run **SPS 6.6.0.1 Setup.exe**).
- o [GIBC v8.0.0.12 or later](#). Available from the [SRS-on-DVD](#) or BR IFIC
- o [GIMS v7.0 or later](#). Available from the [SRS-on-DVD](#) or BR IFIC
- o [GIMS Database](#). Available from the [SRS-on-DVD](#) (incremental updates are on the BR IFIC)

Click here to download SPS install package. SPS\_REPORTS is part of the SPS.

# Annex1: Where to get an install package of SPS (2)

- SPS install package could also be obtained from BR IFICs (Space Services) from the following directory.

\BR\_soft\SPS\



Address: D:\BR\_soft\SPS

Folders:

- Desktop
- My Documents
- My Computer
- Local Disk (C:)
- S\_IFIC\_2676 (D:)
  - Acrobat
  - AsReceived
  - BR\_soft
    - GIMS
    - IDWM
    - IWRocket
    - MDAC
    - SAM
    - SpaceCap
    - SpaceCom
    - SpacePub
    - SpaceQry
    - Spacerefdb
    - SpaceVal
    - SPS**
    - SRSConvert
    - SRSFixdb
  - Data
  - Gimsdb
  - Index
  - licence
  - pdf
  - Preface
  - Utils

Name	Size	Type	Date Modified	Location
<b>Files Currently on the CD</b>				
Readme.txt	6 KB	Text Document	05.11.2009 14:22	Files Currently on the CD
SPS 6.6.0.1 Setup.exe	8,589 KB	Application	05.11.2009 14:22	Files Currently on the CD

**Copy to your C drive to install.**

# Annex2: Get Mspace results available in BR IFICs (1)

The screenshot shows a Windows File Explorer window with the address bar set to `D:\Databases\AP30_30A\TEX_Results`. The left sidebar shows a tree view of folders, with `TEX_Results` selected. The main pane displays a list of files and folders currently on the disc:

Name	Date modified	Type	Size
Files Currently on the Disc (9)			
MSPACE_results_IFIC2769.zip	07.05.2014 2:09 PM	WinRAR ZIP archive	345,305 KB
113552037_DBL-G6-127.5E_PFD_results.txt	22.04.2014 7:55 PM	Text Document	540 KB
113552038_NB-SAT-109.65-OD-EV_PFD_results.txt	25.04.2014 7:35 AM	Text Document	2 KB
113552039_NB-SAT-109.85-OD-EV_PFD_results.txt	25.04.2014 7:35 AM	Text Document	2 KB
113552040_NB-SAT-110-OD_PFD_results.txt	25.04.2014 7:35 AM	Text Document	2 KB
113552041_105.5W_PFD_results.txt	25.04.2014 7:35 AM	Text Document	59 KB
114552001_PFD_results.txt	28.04.2014 11:50 PM	Text Document	1,636 KB
114552002_PFD_results.txt	28.04.2014 2:26 PM	Text Document	588 KB
114555001_PFD_results.txt	27.04.2014 11:34 AM	Text Document	2 KB

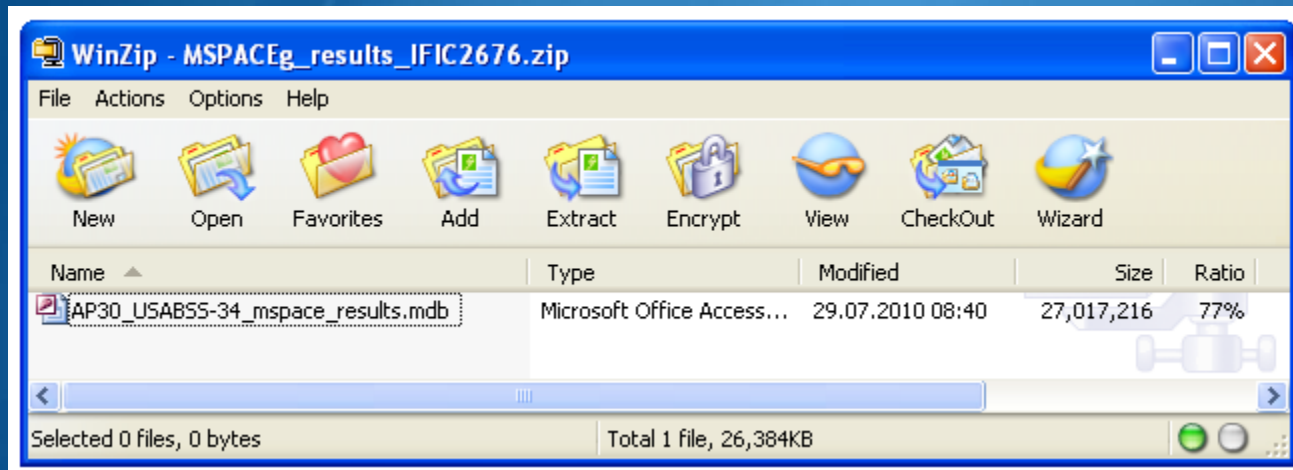
Annotations in the image:

- A callout box points to the `TEX_Results` folder in the left sidebar, stating: "Folder containing the compressed file with Mspaceg output database."
- A callout box points to the `MSPACE_results_IFIC2769.zip` file in the main list, stating: "Compressed file to be copied."

Copy the compressed file with Mspaceg output databases containing analysis results from the BRIFIC to the user's computer.

## Annex2: Get Mspace results available in BR IFICs (2)

Unpack the compressed file to get the Mspaceg output database(s)



The analysis results of the USABSS-34 network (downlink part) are stored in the file having name, which combines:

- ✓ a prefix - AP30 for R1&3 BSS; AP30A for R1&3 BSS Feeder-link and AP30\_30A for R2 BSS/Feeder-link;
- ✓ a given network name (USABSS-34);
- ✓ suffix – mspaceg\_results;
- ✓ dot (.);
- ✓ extension – MDB.