

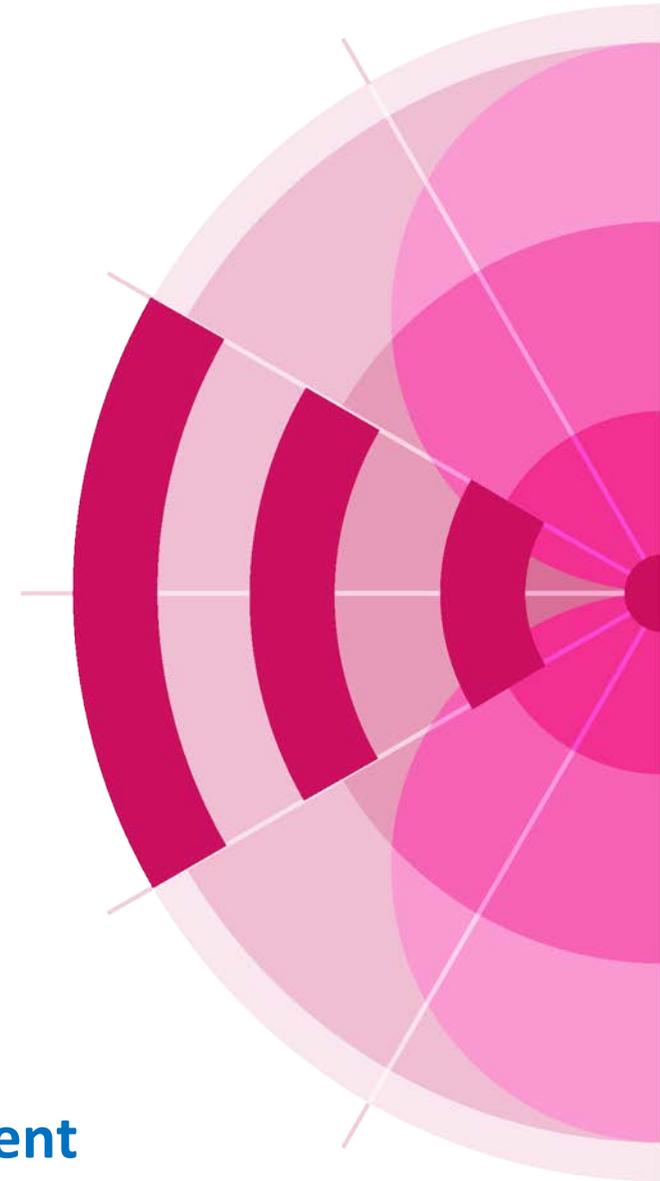
**ITUWRS**  
ONLINE2020

29<sup>TH</sup> WORLD RADIOCOMMUNICATION SEMINAR  
**30 November - 11 December 2020**

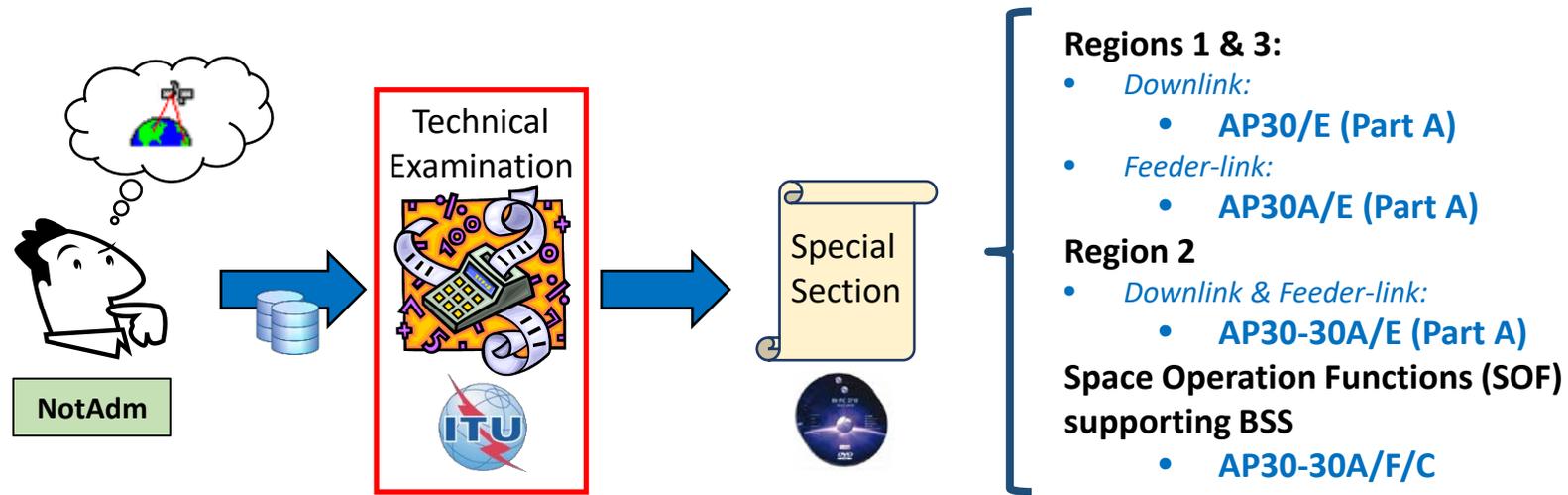
# Examination of results

## AP30/30A

**Alvaro de Vega**  
**Space Services Department**  
alvaro.devega@itu.int



# Technical examination of submitted notices



- Once the databases submitted are complete
  - The BR performs a technical examination to determine the **potential interference** of the incoming network to the existing services from other administrations
  - As a result, the BR publishes the **identification of potentially affected administrations/networks** in a Special Section, which is considered as a **request for coordination** for these administrations

## Technical examination

## Identification of Plan assignments

**Annex 1:** How to read examination results

**Annex 2:** How to know if my Administration is affected

**Annex 3:** Exercise: detect identification with SpaceQry

# Regulatory and software tools used for examination

- Regulatory provisions

- **Regions 1 & 3**

- Downlink (AP30/E)

- Identification: § 4.1.1 of Appendix 30
      - Interference criteria: Annex 1 of Appendix 30

- Feeder-link (AP30A/E)

- Identification: § 4.1.1 of Appendix 30A
      - Interference criteria: Annex 1 of Appendix 30A

- **Region 2**

- Downlink and feeder-link (AP30-30A/E)

- Identification: § 4.2.3 of Appendix 30 and § 4.2.2 of Appendix 30A
      - Interference criteria: Annex 1 of Appendices 30 and 30A

- **Space Operation Functions (SOF)**

- AP30-30A/F/C

- Identification: No.9.7, § 7.1 of Appendices 30 and 30A, § 4.1.1 d) and § 4.2.3 d) of Appendix 30
      - Interference criteria: Annex 4 of Appendices 30 and 30A, Appendix 5, Annex 1 of Appendix 30

- BR Software tools



- Plan vs Plan  
(R1&3 vs R1&3 or R2 vs R2)



- Plan vs non-Plan
- Plan vs Plan (different Plan)  
(R1&3 vs R2 or R2 vs R1&3)



# Tec. examination: Hard Limits

- Regions 1 & 3

- **Downlink (AP30/E)**

- **PFD hard limit of  $-103.6 \text{ dB(W/(m}^2 \cdot 27\text{MHz))}$**

- AP30 Provision: § 1 Annex 1 of Appendix 30
      - BR Software: GIBC/AP30-30A

- **Orbital limitations**

- AP30 Provision: Annex 7 of Appendix 30
      - BR Software: BR-SIS Validation/GIMS

- **Feeder-link (AP30A/E)**

- **PFD hard limit of  $-76 \text{ dB(W/(m}^2 \cdot 27\text{MHz))}$**

- AP30A Provision: § 4 Annex 1 of Appendix 30A
      - BR Software: GIBC/AP30-30A

- Region 2

- **AP30-30A/E**

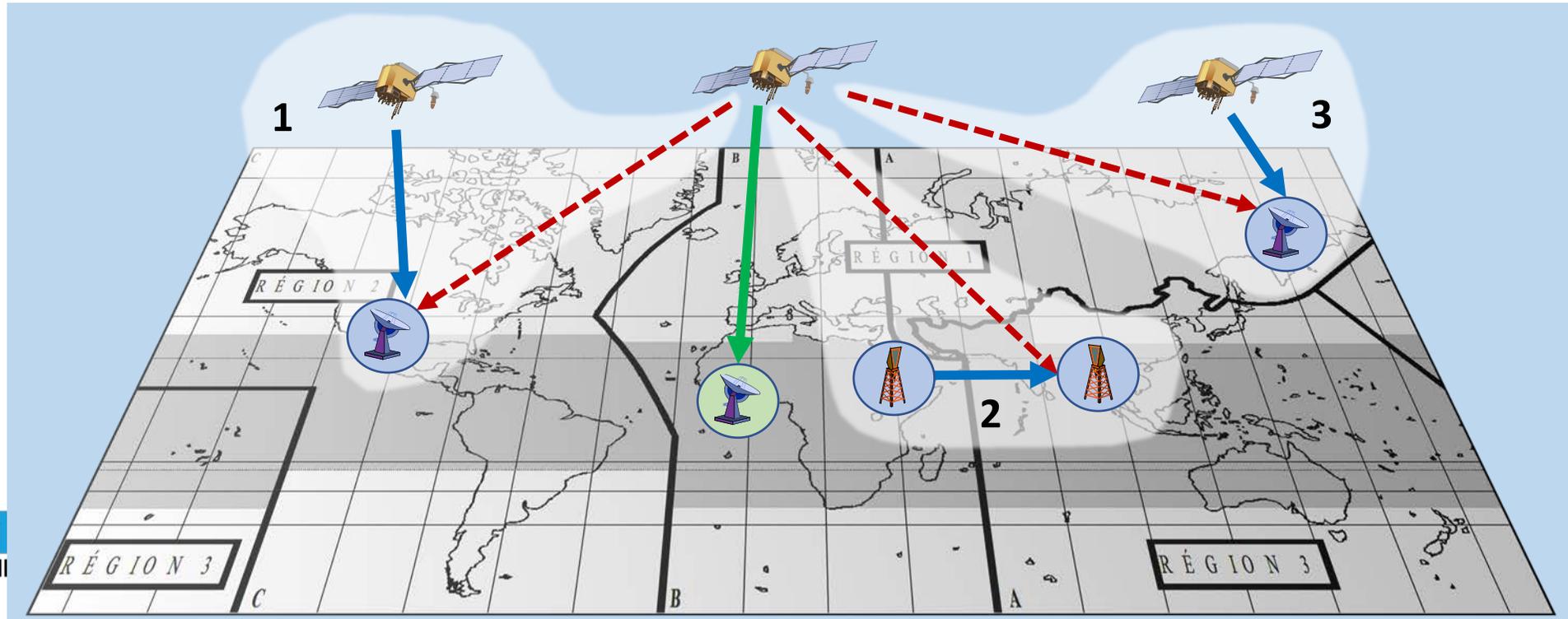
- **Orbital limitations**

- AP30 Provision: Annex 7 of Appendix 30
      - BR Software: BR-SIS Validation/GIMS

*Annex 7 of Appendix 30 was revised by WRC-19 and some orbital and power limitations were removed (see Resolutions 558, 559 and 768 (WRC-19))*

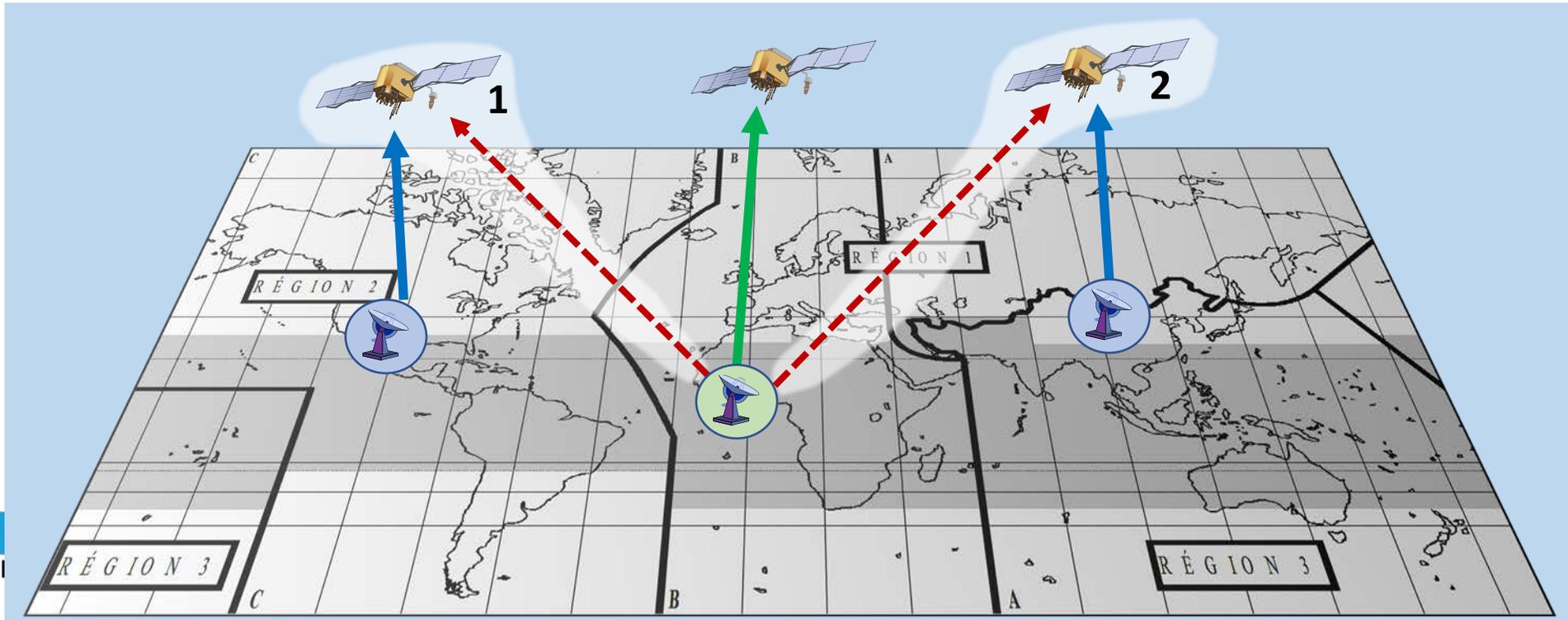
# Tec. examination: Interference scenario & criteria

Incoming assignments			Existing assignments						Cases	
Special Section	Type	Region	Type	Region	Identification provision	Interference Criteria	RR (AP30)	BR Software		
AP30/E	BSS	1 & 3	BSS Plan	1 & 3	§ 4.1.1 a)	EPM, PFD, Orbital separation	Annex 1 Section 1	MSPACE	3	
			BSS List & Pending	1 & 3	§ 4.1.1 b)					
			BSS Plan & Pending	2	§ 4.1.1 c)	PFD mask	Annex 1 Section 3	GIBC/PFD (space)		1
			Terrestrial services	All	§ 4.1.1 d)	PFD mask	Annex 1 Section 4	GIBC/PFD (terrest.)		2
			Non-planned FSS, Article 2A	All	§ 4.1.1 e)	PFD mask	Annex 1 Section 6	GIBC/PFD (space)		1, 3



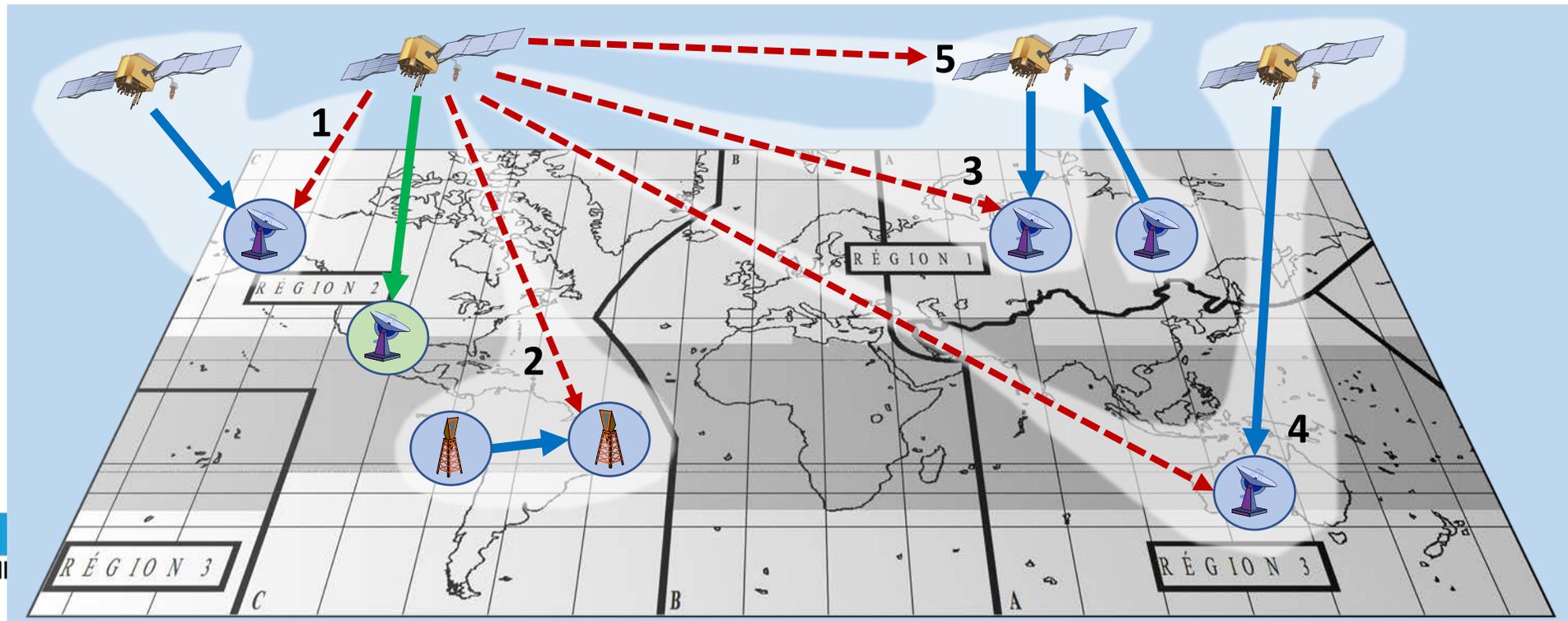
# Tec. examination: Interference scenario & criteria

Incoming assignments			Existing assignments						Cases
Special Section	Type	Region	Type	Region	Identification provision	Interference Criteria	RR (AP30A)	BR Software	
AP30A/E	Feeder-link to BSS	1 & 3	Feeder-link Plan	1 & 3	§ 4.1.1 a)	EPM, Orbital separation	Annex 1 Section 4	MSPACE	2
			Feeder-link List & Pending	1 & 3	§ 4.1.1 b)				
			Feeder-link Plan & Pending	2	§ 4.1.1 c)	ΔT/T	An. 1 Sect. 5	GIBC/AP8	1
			Non-planned FSS	2	§ 4.1.1 d)		Annex 1 Section 6		1
			Article 2A	All					1, 2



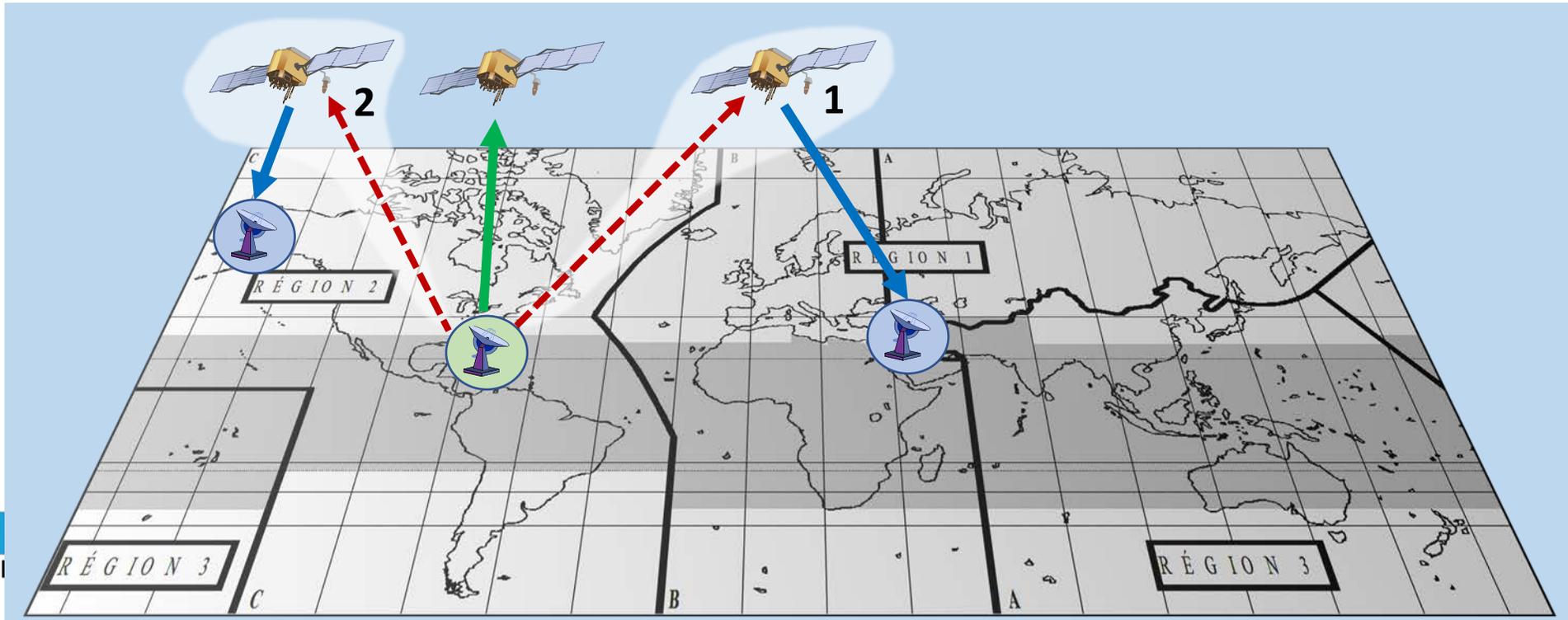
# Tec. examination: Interference scenario & criteria

Incoming assignments			Existing assignments					Cases	
Special Section	Type	Region	Type	Region	Identification provision	Interference Criteria	RR (AP30)		BR Software
AP30-30A/E	BSS	2	BSS Plan	1	§ 4.2.3 a)	PFD mask	Annex 1 Section 3	GIBC/PFD (space)	3
			BSS List & Pending	1	§ 4.2.3 b)				
			BSS Plan & Pending	2	§ 4.2.3 c)	OEPM	Annex 1 Section 2	MSPACE	1
			Terrestrial services	All	§ 4.2.3 d)	PFD mask	Annex 1 Section 4	GIBC/PFD (terrest.)	2
			Non-planned FSS, Article 2A	All	§ 4.2.3 e)	PFD, $\Delta T/T$	An. 1 Sect. 6 & 7	GIBC/PFD (space) GIBC/AP8	1, 3, 4, 5
			Non-planned BSS	R3	§ 4.2.3 f)	PFD mask	Annex 1 Section 3	GIBC/PFD (space)	4



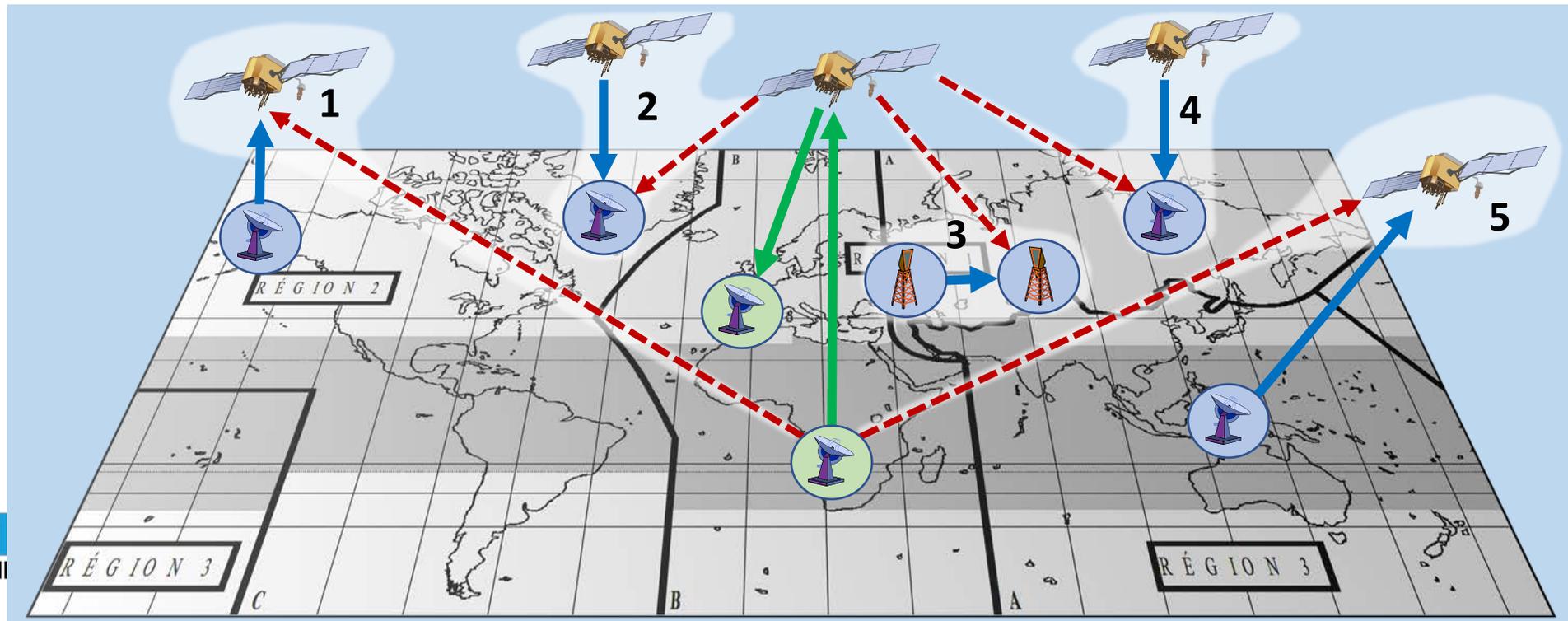
# Tec. examination: Interference scenario & criteria

Incoming assignments			Existing assignments						Cases
Special Section	Type	Region	Type	Region	Identification provision	Interference Criteria	RR (AP30A)	BR Software	
AP30-30A/E	Feeder-link to BSS	2	Feeder-link Plan	1 & 3	§ 4.2.2 a)	$\Delta T/T$	Annex 1 Section 5	GIBC/AP8	1
			Feeder-link List & Pending	1 & 3	§ 4.2.2 b)				
			Feeder-link Plan & Pending	2	§ 4.2.2 c)	OEPM	An. 1 Sect. 3	MSPACE	2
			Article 2A	All	§ 4.1.1 d) (ref.2A.1.3)	$\Delta T/T$	Annex 1 Section 6	GIBC/AP8	1,2



# Tec. examination: Interference scenario & criteria

Incoming assignments			Existing assignments					Cases
Special Section	Type	Trans.	Type	Identification provision	Interference Criteria	RR	BR Software	
AP30-30A/F/C	Space Operation Functions	Down	BSS Plan	AP30#7.1	PFD	An.4	GIBC/PFD (space)	2, 4
			Non-planned (downlink)	9.7	Coord. Arc	AP5	GIBC/AP8	2, 4
			Article 2A (downlink)	9.7	Coord. Arc	AP5	GIBC/AP8	2, 4
			Terrestrial services	§ 4.1.1 d) / § 4.2.3 d)	PFD	An.1 Sect.4	GIBC/PFD (terrest.)	3
		Up	Feeder-link Plan	AP30A#7.1	$\Delta T/T$	An.4 Sect.1	GIBC/AP8	1, 5
			Non-planned (uplink)	9.7	Coord. Arc	AP5	GIBC/AP8	1, 5
			Article 2A (uplink)	9.7	Coord. Arc	AP5	GIBC/AP8	1, 5



# Identification of Plan assignments

- My Administration does not have any satellite network in operation or planned, should I continue reading this presentation?

Incoming assignments			Existing assignments (Plan assignments affected)					
Special Section	Type	Region	Type	Region	Identification provision	Interference Criteria	RR	BR Software
AP30/E	BSS	1 & 3	BSS Plan	1 & 3	§ 4.1.1 a)	EPM, PFD, Orbital separation	Annex 1 Section 1	MSPACE
			BSS Plan	2	§ 4.1.1 c)	PFD mask	Annex 1 Section 3	GIBC/PFD (space)
AP30A/E	Feeder-link to BSS	1 & 3	Feeder-link Plan	1 & 3	§ 4.1.1 a)	EPM, Orbital separation	Annex 1 Section 4	MSPACE
			Feeder-link Plan	2	§ 4.1.1 c)	$\Delta T/T$	Annex 1 Section 5	GIBC/AP8
AP30-30A/E	BSS	2	BSS Plan	1	§ 4.2.3 a)	PFD mask	Annex 1 Section 3	GIBC/PFD (space)
			BSS Plan	2	§ 4.2.3 c)	OEPM	Annex 1 Section 2	MSPACE
	Feeder-link to BSS		Feeder-link Plan	1 & 3	§ 4.2.2 a)	$\Delta T/T$	Annex 1 Section 5	GIBC/AP8
			Feeder-link Plan	2	§ 4.2.2 c)	OEPM	Annex 1 Section 3	MSPACE
AP30-30A/F/C	Down	All	BSS Plan	All	AP30#7.1	PFD	Annex 4	GIBC/PFD (space)
	Up		Feeder-link Plan		AP30A#7.1	$\Delta T/T$	Annex 4 Section 1	GIBC/AP8

- ✓ **YES!** Radio Regulations reserve a portion of Orbit-Spectrum for every ITU state member in form of **Plan assignments/allotments** for future use
- ✓ Plan assignments/allotments are **taken into consideration for interference calculation**
- ✓ AP30/30A frequency bands are also allocated to **Terrestrial Services** and **could be interfered**

## Technical examination

## Identification of Plan assignments

**Annex 1:** How to read examination results

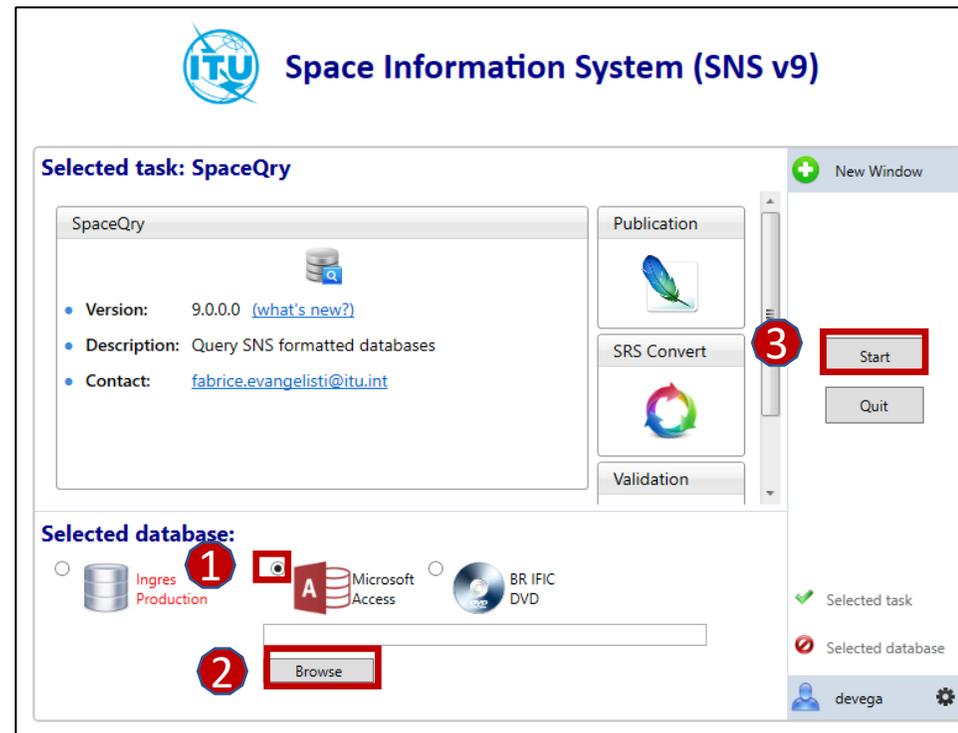
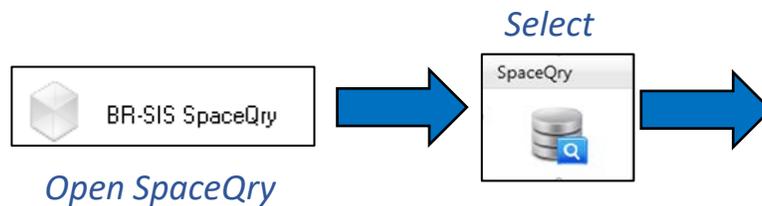
**Annex 2:** How to know if my Administration is affected

**Annex 3:** Exercise: detect identification with SpaceQry

# Identification of Plan assignments: Plan characteristics

- How to consult the characteristics of your Plan assignments?

- SpaceQry



*Connect to the latest SPS\_ALL database published in the BR IFIC*

# Identification of Plan assignments: Plan characteristics

- How to consult the characteristics of your Plan assignments?

- SpaceQry

- 3 Write the name of your Plan assignment name and click on "Search". Plan assignment names can be found in:
  - Administration in Regions 1 & 3: Article 11 of Appendix 30 and Article 9A of Appendix 30A
  - Administration in Region 2: Article 10 of Appendix 30 and Article 9 of Appendix 30A

1

2

**Regions 1 & 3: AP30 or AP30A will be displayed**  
**Region 2: AP30 and AP30A will be displayed**

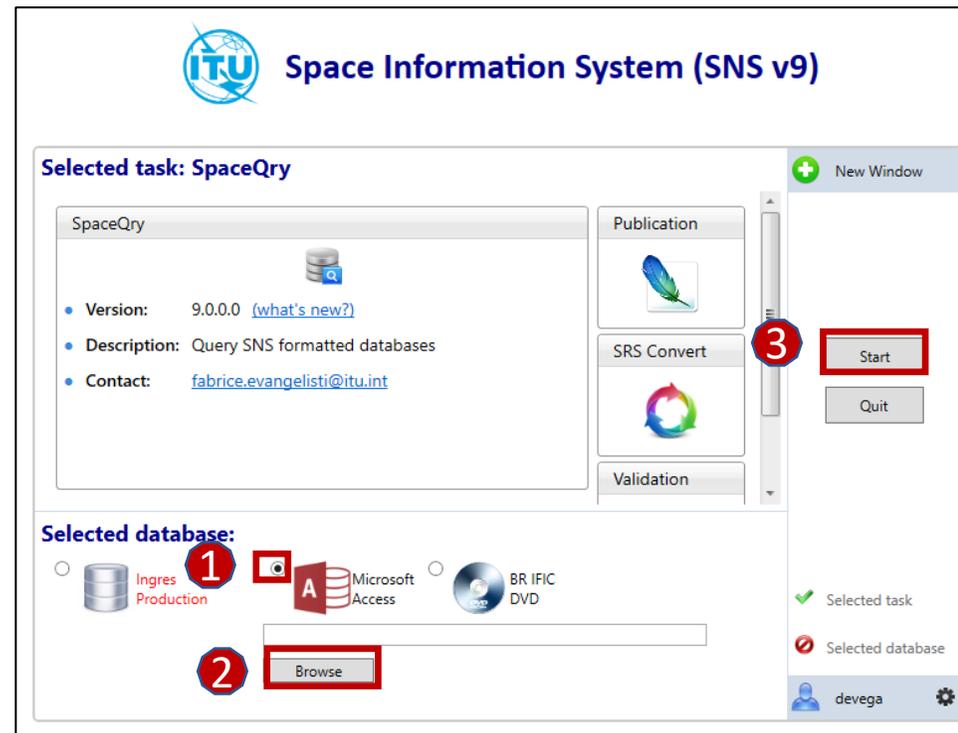
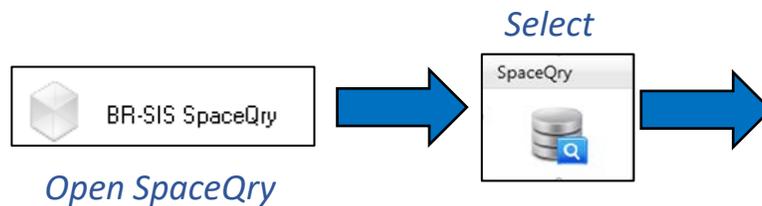
Quick-AP30 Quick-AP30A

Results: 1 row found in SPS\_ALL\_IFIC2931.mdb

prov	adm	ntc_id	sat_name	Long	Beam	SGain	SGain_x	f_steer	S_pattern	E_R	grp_id	noise_t	SA_no	plan_id	P_type	P_Ang	Channel No
	CLM	86550102	CLM00001	-103.2	E001	35.53			R123SS	R	281	1500		30_2	CR		1, 3, 5, 7, 9, 11, 13, 15, 17, 19, 21, 23, 25, 27, 29, 31

# Identification of Plan assignments: Reference situation

- How to consult the reference situation of Plan assignments?
  - SpaceQry

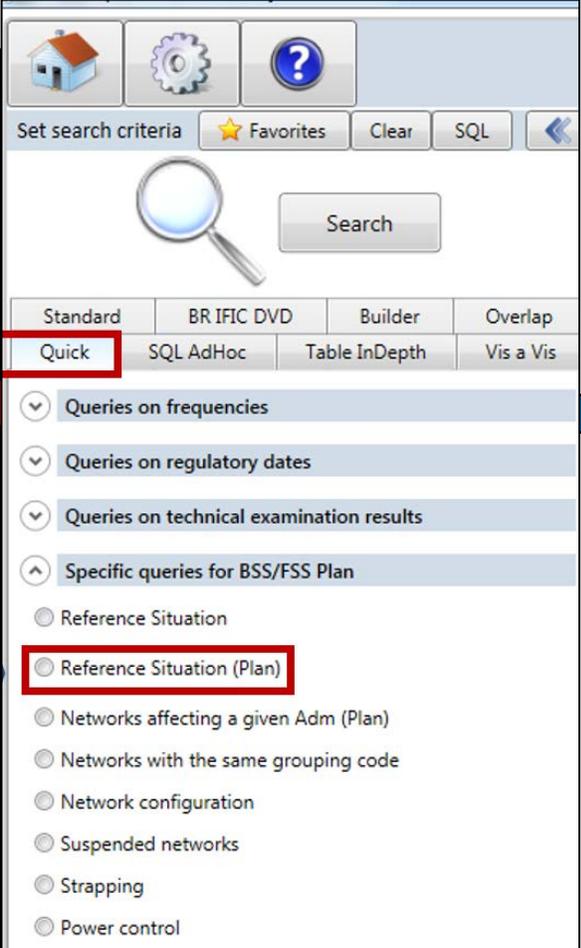


*Connect to the latest SPS\_ALL  
database published in the BR IFIC*

# Identification of Plan assignments: Reference situation

- How to consult the reference situation for Plan assignments?

- SpaceQry



1

2

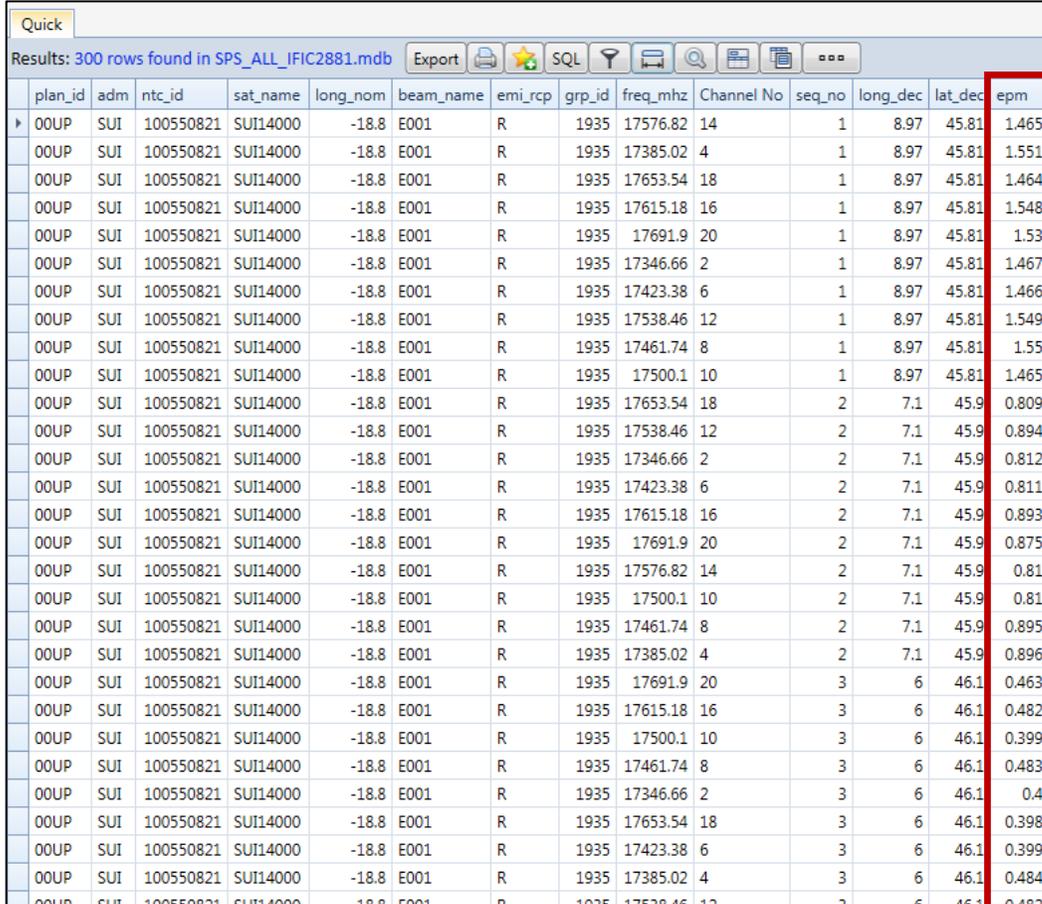
Standard BR IFIC DVD Builder Overlap  
Quick SQL AdHoc Table InDepth Vis a Vis

Queries on frequencies  
Queries on regulatory dates  
Queries on technical examination results  
Specific queries for BSS/FSS Plan  
Reference Situation  
Reference Situation (Plan)  
Networks affecting a given Adm (Plan)  
Networks with the same grouping code  
Network configuration  
Suspended networks  
Strapping  
Power control

Search

Set search criteria Favorites Clear SQL

- 3 Write the name of your Administration and click on "Search"



Quick

Results: 300 rows found in SPS\_ALL\_IFIC2881.mdb

plan_id	adm	ntc_id	sat_name	long_nom	beam_name	emi_rcp	grp_id	freq_mhz	Channel No	seq_no	long_dec	lat_dec	epm
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17576.82	14	1	8.97	45.81	1.465
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17385.02	4	1	8.97	45.81	1.551
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17653.54	18	1	8.97	45.81	1.464
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17615.18	16	1	8.97	45.81	1.548
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17691.9	20	1	8.97	45.81	1.53
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17346.66	2	1	8.97	45.81	1.467
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17423.38	6	1	8.97	45.81	1.466
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17538.46	12	1	8.97	45.81	1.549
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17461.74	8	1	8.97	45.81	1.55
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17500.1	10	1	8.97	45.81	1.465
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17653.54	18	2	7.1	45.9	0.809
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17538.46	12	2	7.1	45.9	0.894
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17346.66	2	2	7.1	45.9	0.812
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17423.38	6	2	7.1	45.9	0.811
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17615.18	16	2	7.1	45.9	0.893
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17691.9	20	2	7.1	45.9	0.875
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17576.82	14	2	7.1	45.9	0.81
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17500.1	10	2	7.1	45.9	0.81
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17461.74	8	2	7.1	45.9	0.895
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17385.02	4	2	7.1	45.9	0.896
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17691.9	20	3	6	46.1	0.463
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17615.18	16	3	6	46.1	0.482
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17500.1	10	3	6	46.1	0.399
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17461.74	8	3	6	46.1	0.483
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17346.66	2	3	6	46.1	0.4
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17653.54	18	3	6	46.1	0.398
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17423.38	6	3	6	46.1	0.399
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17385.02	4	3	6	46.1	0.484
00UP	SUI	100550821	SUI14000	-18.8	E001	R	1935	17538.46	12	3	6	46.1	0.482

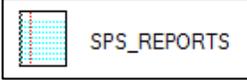
# Thank you!

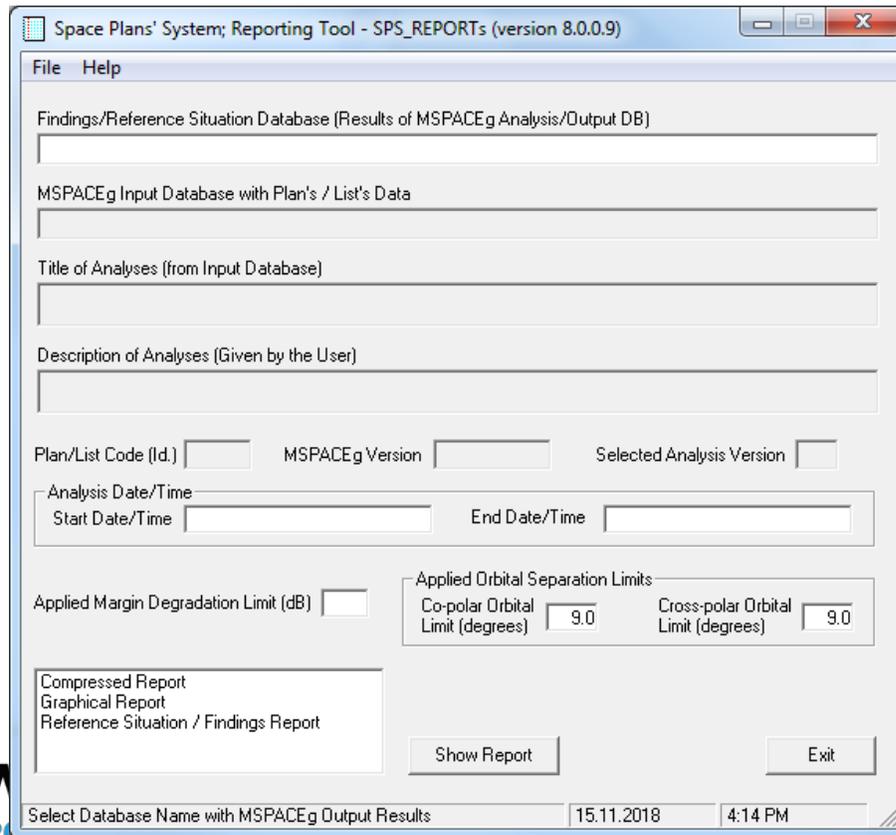
ITU – Radiocommunication Bureau

Questions to [brmail@itu.int](mailto:brmail@itu.int) or [alvaro.devega@itu.int](mailto:alvaro.devega@itu.int)



# Annex 1 - How to read examination results: MSPACE

- Run MSPACE or open database with SPS\_Reports 
  - Database published in the BR IFIC under \\Databases\AP30\_30A\TEX\_Results
    - **Ntc\_id\_sat\_name\_mspace\_results.mdb**



- Compressed Report
  - ✓ Summary of networks affected
- Graphical Report
  - ✓ Test points affected
- Reference Situation/Findings Report
  - ✓ Detailed Report
  - ✓ Beams affected
  - ✓ Test-points affected
  - ✓ Channels affected

# Annex 1 - How to read examination results: MSPACE

Reference Situation / Calculated Margin Report (Query System)

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

Administrations: G

Longitude: -178

Nominal degrees: DECEM66

Beam Names: 1

Channels: AFG\_100

Available Values: G, -178, DECEM66, 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 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])

**Channels**

**Original EPM**

**Calculated EPM**

**PFD excess**

**Test-points**

		Test Points' Coordinates (Longitude/Latitude) degrees																		
Adm.	Orb.Pos.	Beam Name	Ch.	TP 1 Ref.Sit PFDexc.	TP 2 Ref.Sit PFDexc.	TP 3 Ref.Sit PFDexc.	TP 4 Ref.Sit PFDexc.	TP 5 Ref.Sit PFDexc.	TP 6 Ref.Sit PFDexc.	TP 7 Ref.Sit PFDexc.	TP 8 Ref.Sit PFDexc.	TP 9 Ref.Sit PFDexc.	TP 10 Ref.Sit PFDexc.	TP 11 Ref.Sit PFDexc.	TP 12 Ref.Sit PFDexc.	TP 13 Ref.Sit PFDexc.	TP 14 Ref.Sit PFDexc.	TP 15 Ref.Sit PFDexc.	TP 16 Ref.Sit PFDexc.	TP 17 Ref.Sit PFDexc.
		Sat.Network Id.: USAT-G14 148E		132.5500*	165.7900*	143.5700*	101.8600*	113.7000*	99.3900*	125.5400*	108.4000*	144.7100*	145.6200*	77.4800*	120.9500*	99.5800*	120.9500*	90.2000*	81.6900*	77.8300*
				-29.9200*	-21.6700*	-5.8400*	-1.9600*	-1.7800*	1.9400*	7.2300*	12.3600*	13.3700*	14.9900*	16.4200*	16.9500*	19.1600*	23.4900*	24.5500*	24.8000*	31.0900*
G	148.00	10035868	1	0.488	8.053	5.031	9.717	7.749	11.387	11.239	14.788	17.427	17.851	18.058	16.693	18.690	19.228	20.789	20.826	21.7
				-1.693	1.465	0.869	1.037	1.152	1.114	2.068	1.712	2.754	2.750	0.267	2.209	1.359	2.161	0.867	0.434	0.2
				9.438	9.585	9.730	9.149	9.383	9.096	9.560	9.256	9.696	9.687	8.579	9.442	9.048	9.385	8.828	8.649	8.5
G	148.00	10035868	5	-0.101	7.057	4.378	9.613	7.647	11.243	10.967	14.355	15.370	15.496	17.310	15.553	17.721	16.986	18.949	19.4	19.4
				-2.983	-0.523	-0.869	-0.806	-0.634	-0.780	0.030	-0.329	0.484	0.473	-1.531	0.057	-0.649	-0.003	-1.064	-1.5	-1.5
				9.438	9.585	9.730	9.149	9.383	9.096	9.560	9.256	9.696	9.687	8.579	9.442	9.048	9.385	8.828	8.649	8.5
G	148.00	10035868	9	-0.098	7.057	4.378	9.613	7.647	11.243	10.967	14.355	15.370	15.496	17.310	15.553	17.721	16.986	18.949	19.035	19.4
				-2.982	-0.523	-0.869	-0.806	-0.634	-0.780	0.030	-0.329	0.484	0.473	-1.531	0.057	-0.649	-0.003	-1.064	-1.424	-1.5
				9.438	9.585	9.730	9.149	9.383	9.096	9.560	9.256	9.696	9.687	8.579	9.442	9.048	9.385	8.828	8.649	8.5
G	148.00	10035868	13	4.575	9.808	12.637	22.684	21.492	22.631	19.568	20.936	16.631	16.306	21.666	18.609	20.832	18.011	20.649	20.813	20.3
				-1.182	-0.120	0.405	-0.411	0.038	-0.516	0.354	-0.205	0.526	0.500	-1.491	0.130	-0.610	0.019	-1.047	-1.409	-1.5
				9.438	9.585	9.730	9.149	9.383	9.096	9.560	9.256	9.696	9.687	8.579	9.442	9.048	9.385	8.828	8.649	8.5
G	148.00	10035868	17	4.752	9.810	18.795	23.168	22.685	22.881	19.904	21.153	16.640	16.314	21.703	18.838	20.858	18.074	20.676	20.842	20.3
				-1.136	-0.120	0.615	-0.409	0.046	-0.515	0.358	-0.203	0.526	0.501	-1.491	0.134	-0.609	0.020	-1.047	-1.408	-1.5
				9.438	9.585	9.730	9.149	9.383	9.096	9.560	9.256	9.696	9.687	8.579	9.442	9.048	9.385	8.828	8.649	8.5
G	148.00	10035868	21	4.752	9.810	18.795	23.168	22.685	22.881	19.904	21.153	16.640	16.314	21.703	18.838	20.858	18.074	20.676	20.842	20.3
				-1.136	-0.120	0.615	-0.409	0.046	-0.515	0.358	-0.203	0.526	0.501	-1.491	0.134	-0.609	0.020	-1.047	-1.408	-1.5
				9.438	9.585	9.730	9.149	9.383	9.096	9.560	9.256	9.696	9.687	8.579	9.442	9.048	9.385	8.828	8.649	8.5
		Sat.Network Id.: USAT-G14 148E		172.8000*	176.2300*	138.7300*	178.0000*	166.9200*	107.4100*	139.6800*	114.8800*	113.7000*	101.6900*	99.0400*	77.3000*	121.3000*	105.0500*	94.4400*	77.3000*	127.6600*
				-42.1400*	-39.2600*	-25.2500*	-17.8700*	-15.3700*	-6.9200*	-4.0800*	-0.0900*	2.6400*	3.7000*	12.7100*	20.4900*	24.5500*	27.3800*	27.7300*	29.1400*	36.0400*
G	148.00	10035869	6	12.886	14.193	2.020	16.633	9.970	8.906	6.481	11.403	12.676	14.830	17.841	19.152	16.650	18.349	18.883	19.118	11.8
				-0.552	-0.482	-1.907	0.001	-0.045	-0.687	-0.356	-0.205	-0.169	-0.531	-0.616	-1.521	-0.015	-0.531	-0.923	-1.542	-0.3
				9.233	9.254	9.546	9.503	9.636	9.256	9.713	9.405	9.382	9.144	9.066	8.567	9.379	9.095	8.894	8.544	9.3
G	148.00	10035869	10	12.886	14.193	2.020	16.633	9.970	8.906	6.481	11.403	12.676	14.830	17.841	19.152	16.650	18.349	18.883	19.118	11.8
				-0.552	-0.482	-1.907	0.001	-0.045	-0.687	-0.356	-0.205	-0.169	-0.531	-0.616	-1.521	-0.015	-0.531	-0.923	-1.542	-0.3
				9.233	9.254	9.546	9.503	9.636	9.256	9.713	9.405	9.382	9.144	9.066	8.567	9.379	9.095	8.894	8.544	9.3
G	148.00	10035869	14	22.625	22.288	4.805	17.715	11.109	12.833	19.343	20.919	21.063	21.648	20.755	20.386	17.024	18.706	19.308	19.574	12.0
				-0.368	-0.351	-0.983	0.026	0.070	-0.394	0.608	0.076	0.036	-0.425	-0.580	-1.510	-0.006	-0.525	-0.918	-1.538	-0.3
				9.233	9.254	9.546	9.503	9.636	9.256	9.713	9.405	9.382	9.144	9.066	8.567	9.379	9.095	8.894	8.544	9.3

155 rows displayed. Be patient...



# Annex 1 - How to read examination results: GIBC/PFD (terrest.)

- Run GIBC/PFD or open text file results 
  - Text file published in the BR IFIC under \\Databases\AP30\_30A\TEX\_Results
    - AP30\_sat\_name\_PFD\_results.txt

SPACE STATION PFD VALUES WILL BE CHECKED AGAINST COORDINATION LIMITS ONLY

§

SNS	PFD EXAMINATION	REQUESTED BY	DATE	TIME	PAGE
G	INTELSAT KUEXT 122.9W	phamviet	12/01/18	22:23:23	0001
	122.90W 0.10 0.10		13.01.17		B 117.555002
CARIBB	37.00 DB				117.555002
EV	24000 KHZ DP 13.01.17				001.021345
12.22400 G	24000 KHZ 24M0G7W-- 23.80 DBW			-50.00 DBW/HZ	-50.00 DBW/HZ (NBW) A- 0001
(27) AP30 AN1 SECT 4	BROADCASTING-SATELLITE				REF. BW 0.004MHZ
ALL WORLD	059W3827 13N1001 BRB			37.00 -139.97	1.68 -141.64 N-
ATG	0.94 BRB 1.68 DMA 0.94 F /BLM 0.48 F /GLP 1.21 F /MAF 0.40 F /MRT 1.17				
HOL/BES	0.40 HOL/SXM 0.40 KNA 0.57 LCA 1.03 VCT 0.91				
12.25316 G	24000 KHZ 24M0G7W-- 23.80 DBW			-50.00 DBW/HZ	-50.00 DBW/HZ (NBW) A- 0002
(27) AP30 AN1 SECT 4	BROADCASTING-SATELLITE				REF. BW 0.004MHZ
ALL WORLD	061W0304 16N1952 GLP			37.00 -139.94	1.21 -141.15 N-
DMA	0.94 F /BLM 0.48 F /GLP 1.21 F /MAF 0.40 F /MRT 1.17			HOL/BES 0.40	HOL/SXM 0.40
KNA	0.57 LCA 1.03 TRD 1.14 VCT 0.91				

notifying administration → G

incoming network → INTELSAT KUEXT 122.9W

beam name → CARIBB

beam gain → 37.00 DB

Power density → -50.00 DBW/HZ

ntc\_id of incoming network → 117.555002

grp\_id analysed → 001.021345

frequency band → 12.22400 G

Potentially affected administration → KNA

PFD excess → 0.57

# Annex 1 - How to read examination results: GIBC/PFD (space)

- Run GIBC/PFD (space) and open text file results 
- PXT\_LST

notifying administration      incoming network      Satellite gain      Power density      Bandwidth      frequency band      ntc\_id of incoming network      grp\_id analysed

```

EXI DOWN-LINK IS AFFECTED
I S USA USABSS-34 31.50W 0.10 0.10 12.283700 G 33000 K 13.04.18 B110.552006/000.018617/0001
TR1 EB L 27MOG7W-- 21.30 DBW -53.00 DBW/HZ 23.76 DB -53.00 DBW/HZ 2D:13.04.18
E S G BERBER02 31.00W 0.10 0.10 12.282320 G 24000 K 30.10.86 A B086.550040/000.000142/0002
E02 EB CR R123SS 46.39 DB -63.80 DBW/HZ 600.0 KHZ(DEF) 2D:30.10.86
E E G TESTPOINT 2 -64.6800 32.3300 R2RES 40.24 DB
AP30 AN1 SECT 3 BROADCASTING-SATELLITE -64.6800 32.3300 3.76 -137.51 7.47 -144.98 A30#A53.1
REGION 2
    
```

affected administration      affected network      Coordinates used for the calculation      Calculated PFD      PFD Excess      PFD Limit      grp\_id affected analysed      ntc\_id of affected network

# Annex 1 - How to read examination results: GIBC/AP8

## ➤ Run GIBC/Appendix 8 and open file results

- *AP8\_RESULTS.rtf*

Appendix 8 report for ntc\_id:112000001

**Analysis details**

---

APPENDIX 8 ANALYSIS FINISHED OK

Started at: 15.10.2020 5:45:47 PM Finished at: 15.10.2020 5:45:48 PM Exec time: 0s  
Production: Test vrs Run by: devega  
Version: C:\Program Files (x86)\ITU\BR\_Space\_v9.0\Gibc\AP8

---

ANALYSIS DETAILS

Ntc id: 112000001 Exi id: 0 9.41: N  
Existing Adm: none Existing Ntwk: none Date before: none

---

DATABASE DETAILS

SRS Database: C:\DATA\BR Seminar\ITSO-20\_Colombia\Modulo2\Ejercicio\Ap8\_ejercicio.mdb  
SRS Additional: none  
Results db:  
C:\Users\devega\ITU\BR\_SPACE\_v9.0\TEX\_RESULTS\112000001\AP8\_201015174544\AP8\_RESULTS.MDB

**Details of the interfering case**

---

INCOMING NETWORK DETAILS

Admin: NOR Sat name: TESTSAT-2 Longitude nom: 40  
Date of rcv: 23.10.2012 Status: 50 Notif rsn: C  
Action code: A Target ntc id: Plan id:

---

SUMMARY FOR PROVISION 9.7 T (DELTA T/T METHOD)

LIST OF POTENTIALLY AFFECTED ADMINISTRATIONS: LUX

R BEAM1R 000000552 29GHz LUX

**Summary of the Analysis**

---

AFFECTED NETWORKS UNDER 9.7-CI T (DELTA T/T METHOD)

LUX 109000001 TESTSAT-1 34.00 R

---

NO ERROR MESSAGES

# Annex 2 - How to identify if my Administration is identified as potentially affected?

## Navigating in the DVD-BR IFIC

### Main steps:

- a. Insert  in the user's computer
- b. Click on BR IFIC Publications
- c. Click on Special Sections
- d. Open each Special Section subject to comments published in the BR IFIC  
**Special Section (PDF format)** 
- e. Use the Adobe Acrobat "Find" tool to search for the 3 digits abbreviation of the subject administration
- f. Note the name of the **affecting network** and the **provision number**

# Annex 2 - How to identify if my Administration is identified as potentially affected?

## Navigating in the DVD-BR IFIC

BR IFIC 2723 International Frequency Information Circular (Space Services) 10.07.2012

1 **BR IFIC Publications**

- Databases
- As received (Res.55)
- Preface
- Cost Recovery
- BR Software
- BR Circular Letters

2 **Special Sections**

- ALL --
- AP30-30A/E
- AP30/E
- AP30A/E
- AP30B/A6A
- AP30B/A6B
- API/A

3 **BR IFIC PUBLICATIONS – TABLE OF CONTENTS**

SPECIAL SECTION / PART	PLAN PART	RESPONSIBLE ADMINISTRATION		NAME OF THE SPACE STATION	ORB. POS.	NAME OF THE ASSOCIATED EARTH STATION	IDENTIFICATION NUMBER
		ADM.	INTERG. ORG.				
AP30B/A6A/220		S		SIRIUS-30B-5E-5	5		112559007

# Annex 2 - How to identify if my Administration is identified as potentially affected?

## Navigating in the DVD-BR IFIC

AP 30B-A6a0220.pdf - Adobe Reader

Fichier Edition Affichage Fenêtre Aide

1 / 100 58.2%

Outils Commentaire

SUI

4

UNION INTERNATIONALE DES TÉLÉCOMMUNICATIONS  
BUREAU DES RADIOCOMMUNICATIONS

INTERNATIONAL TELECOMMUNICATION UNION  
RADIOCOMMUNICATION BUREAU

UNIÓN INTERNACIONAL DE TELECOMUNICACIONES  
OFICINA DE RADIOCOMUNICACIONES

RESEAU À SATELLITE  
SATELLITE NETWORK  
RED DE SATELITE

SIRIUS-30B-5E-5

SECTION SPÉCIALE N°  
SPECIAL SECTION No.  
SECCIÓN ESPECIAL N.º

AP30B/A6A/220

ADM. RESPONSABLE  
RESPONSABLE ADM.  
ADM. RESPONSABLE

S

LONGITUDE NOMINALE  
NOMINAL LONGITUDE  
LONGITUD NOMINAL

5 E

BR IFIC / DATE  
BR IFIC / DATE  
BR IFIC / FECHA

2723 / 10.07.2012

NOTIFIÉ AU NOM DE  
NOTIFIED ON BEHALF OF  
NOTIFICADA EN NOMBRE DE

NUMÉRO D'IDENTIFICATION  
IDENTIFICATION NUMBER  
NÚMERO DE IDENTIFICACIÓN

112559007

RENSEIGNEMENTS REÇUS PAR LE BUREAU LE / INFORMATION RECEIVED BY THE BUREAU ON / INFORMACIÓN RECIBIDA POR LA OFICINA EL

23.01.2012

Coordinations	Notifying adm.	Inter. sat. org.	Status of identified network	A1b Plan beam identification	Id. no.	Orbital long.	Max. degradation
App.30B, Art.6, § 6.5 - Annexe 4 App.30B, Art.6, § 6.5 - Annex 4 Ap.30B, Art.6, § 6.5 - Anexo 4 附录30B, 第6条, 第6.5段- 附件4 Пр. 30B, Ст. 6, п. 6.5 – Дополнение 4 الذييل 30B, المادة 6, الفقرة 5.6 – الملحق 4							
§2.1 (6/4 GHz)	ALB		Allotment	ALB00000	90558006	4.13 E	15.705
	CME		Allotment	CME00000	90558053	7.98 E	8.014
	CTI	RAS	List	RASCOM-1F	103559025	2.9 E	7.842
			List	RASCOM-2F	102559002	2.9 E	4.842
	CYP		Allotment	CYP00000	90558062	0.5 E	2.450
	NOR		Allotment	NOR00000	90558154	0.8 W	4.270
	SUI		Allotment	SUI00000	90558192	9.45 E	4.393
TUN		Allotment	TUN00000	90558202	5.74 E	15.220	
TUR		Allotment	TUR00000	90558203	8.5 E	6.332	
§2.1 (11/10-11 GHz)	ATR		Allotment	ATR00000	90558006	4.13 E	15.018

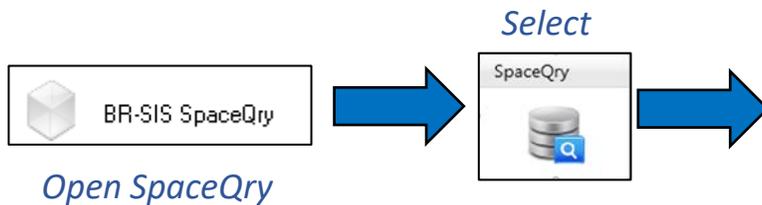
5

Commentaire

s de satellite afectadas  
أو الشب

# Annex 2 - How to identify if my Administration is identified as potentially affected?

## Using BR-SIS SpaceQry



ITU Space Information System (SNS v9)

Selected task: SpaceQry

SpaceQry

- Version: 9.0.0.0 ([what's new?](#))
- Description: Query SNS formatted databases
- Contact: [fabrice.evangelisti@itu.int](mailto:fabrice.evangelisti@itu.int)

Selected database:

1 Ingres Production

2 Browse

3 Start

Quit

New Window

Publication

SRS Convert

Validation

Selected task

Selected database

devega

*Connect to the latest SPS\_ALL database published in the BR IFIC*

# Annex 2 - How to identify if my Administration is identified as potentially affected?

## Using BR-SIS SpaceQry

ITU-BR Space Information System v8.0.0.0

Set search criteria Favorites Clear

Search

Quick SQL AdHoc Table InDepth Vis a Vis  
Standar **1** BR IFIC DVD Builder Overlap

BR IFIC List of queries to retrieve basic information from the SNS formatted databases available in the BR IFIC DVD.

Show only the latest BR IFIC info. ⚠ **4**

Statistics on Publications

Statistics on Satellites / Nominal Longitude

My satellite networks

Networks interfering with my Administration ⚠

**2**  Planned bands networks interfering with my Admin. ⚠

Select your Adm. **3** SUI Org.

BR IFIC BR IFIC BR IFIC BR IFIC

Results: 1 row found in SPS\_ALL\_IFIC2832.mdb Export SQL

ntc_id	wi...	stn_name	coord_prov	agree_st	adm	ntwk_org
▼ sat_name: EGYNILE2-BSS						
114552010	2783		A30#4.1.1A	R	SUI	
114554010	2783		A30A#4.1.1A7	R	SUI	

- *Identifications concerning Special Sections of planned services*
- *Only networks contained in the connected database are displayed*
  - *SPS\_ALL for: AP30/E, AP30/E and AP30-30A/E*

# Annex 2 - How to identify if my Administration is identified as potentially affected?

## Using BR-SIS SpaceQry

The screenshot shows the ITU-BR Space Information System v8.0.0.0 interface. The search criteria are set to 'BR IFIC'. The results table shows two rows found in SPS\_ALL\_IFIC2832.mdb:

ntc_id	wic_no	stn_name	coord_prov	agree_st	adm	ntwk_org
▼ sat_name: B-SAT-3H TTC						
115556008	2819		A30#4.2.3D	I	SUI	
▼ sat_name: F-SAT-T-E-76E						
109556016	2657		A30#4.1.1D	N	SUI	

Numbered callouts in the screenshot indicate the following steps:

- 1: Select 'BR IFIC DVD' in the search criteria.
- 2: Select 'Networks interfering with my Administration' in the search criteria.
- 3: Select 'SUI' in the 'Select your Adm.' dropdown.
- 4: Check 'Show only the latest BR IFIC info.' checkbox.

- *Identifications concerning Special Sections of non-planned services and Art.2A of Appendices 30 and 30A*
- *Only networks contained in the connected database are displayed*
  - *SPS\_ALL for: AP30-30A/F/C*

# Annex 2 - How to identify if my Administration is identified as potentially affected?

## Examining the SPS\_ALL database

*\Databases\AP30\_30A*

For Art.4 of Appendices 30 and 30A:

- AP30/E
- AP30A/E
- AP30-30A/E



Name	Type
TEX_Results	File folder
readme.txt	Text Document
SpPlans_A.pdf	Adobe Acrobat D...
SpPlans_C.pdf	Adobe Acrobat D...
SpPlans_E.pdf	Adobe Acrobat D...
SpPlans_F.pdf	Adobe Acrobat D...
SpPlans_R.pdf	Adobe Acrobat D...
SpPlans_S.pdf	Adobe Acrobat D...
SPS_ALL_IFIC2832.mdb	Microsoft Access ...

Provision

Number of BR IFIC where the incoming satellite network was published

1

2

ntc_id	coord_prov	agree_st	wic_no	seq_no	coord_st	adm	ntwk_org	ctry
113552016	A30#4.1.1D	N	2751	50		SUI		
113552030	A30#4.1.1A	R	2762	22		SUI		
113554030	A30A#4.1.1A7	R	2762	6		SUI		
113555004	A30#4.2.3D	R	2757	60		SUI		
114552002	A30#4.1.1D	N	2769	46		SUI		
114552004	A30#4.1.1D	N	2770	31		SUI		
114552008	A30#4.1.1D	N	2778	44		SUI		
114552010	A30#4.1.1A	R	2783	21		SUI		
114552020	A30#4.1.1A	R	2791	14		SUI		
114554010	A30A#4.1.1A7	R	2783	8		SUI		
115550019	A30#4.1.1A	I	2819	20		SUI		
115550019	A30A#4.1.1A7	I	2819	5		SUI		

Notice of the incoming satellite network

Coordination status (see preface)

Potentially affected administration

3

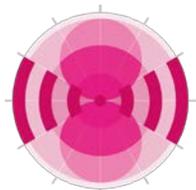
4

ntc_id	coord_prov	agree_st	aff_ntc_id	adm	ntwk_org	ctry	sat_name	long_nom	ntf_rsn	coord_st	st_aff	f_cause	f_rec
113555004	A30#4.2.3A	I	100550190	SUI			SVK14401	-12.8 B		50			R
113550004	A30#4.2.3A	I	100550191	SUI			SVK14402	-12.8 B		50			R

Notice of the incoming satellite network

Notice of the existing satellite network

Potentially affected network



# Annex 2 - How to identify if my Administration is identified as potentially affected?

## Examining the SPS\_ALL database

For Art.2A of Appendices 30 and 30A:

➤ AP30-30/A/F/C

\\Databases\AP30\_30A

Name	Type
TEX_Results	File folder
readme.txt	Text Document
SpPlans_A.pdf	Adobe Acrobat D...
SpPlans_C.pdf	Adobe Acrobat D...
SpPlans_E.pdf	Adobe Acrobat D...
SpPlans_F.pdf	Adobe Acrobat D...
SpPlans_R.pdf	Adobe Acrobat D...
SpPlans_S.pdf	Adobe Acrobat D...
SPS_ALL_IFIC2832.mdb	Microsoft Access ...

SPS\_ALL\_IFICXXXX.MDB

Provision

grp_id	coord_prov	agree_st	seq_no	coord_st	adm	ntwk_org	ctry
1016638	A30#4.2.3D	I	97	SUI			
1016639	A30#4.2.3D	I	97	SUI			
1016640	A30#4.2.3D	I	97	SUI			
1016641	A30#4.2.3D	I	97	SUI			

grp_id	ntc_id	emi_rcp	beam_name	sr_type	page_no	act_code	adm_resp	bdwidth
1016638	115556008	E	GBLRHIG				A	
1016639	115556008	E	GBLRHIG				A	
1016640	115556008	E	GBLRHIG				A	
1016641	115556008	E	GBLRHIG				A	

ntc_id	sat_name	long_nom	tol_east	tol_west	inclin_exc	f_active
115556008	B-SAT-3H TTC	-64.2	0.05	0.05	0.05	A

Notice of the incoming satellite network

Name of the incoming satellite network

Coordination status (see preface)

Potentially affected administration

# Annex 3 - Exercise: Detect identification with SpaceQry

In this exercise, you will play the role of administration “TUN”

## FIRST PART – Detect identification with SpaceQry

1. **Open SpaceQry**
2. **Select a database (Microsoft access)**
  1. Use SPS\_ALL\_IFIC2874.mdb from the folder of the exercise
  2. Click “Start”
3. **Go to tab “BR IFIC DVD”**
4. **Activate flag “Show only the latest BR IFIC info” and Select “Planned bands networks interfering with my Admin.”**
5. **Type, the name of administration “TUN” and click on “Search”**
6. **For each interfering network, open the list of identifications**
7. **Identify, according to the coordination provision (coord\_prov), which kind of potential interference would be received**

## SECOND PART – Detect identification with Special Section

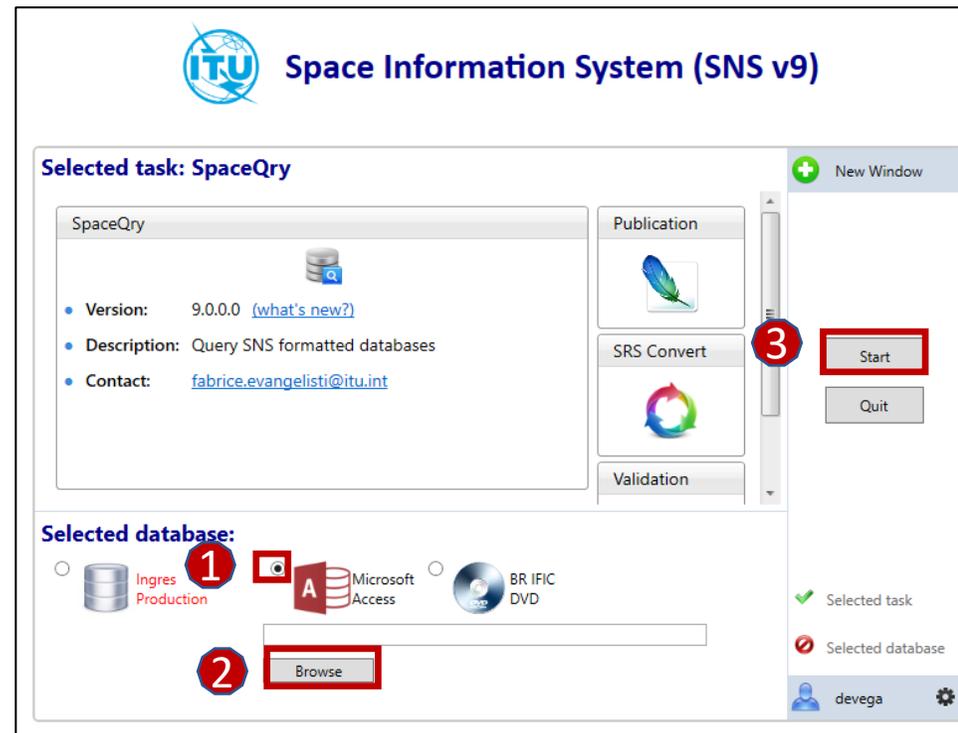
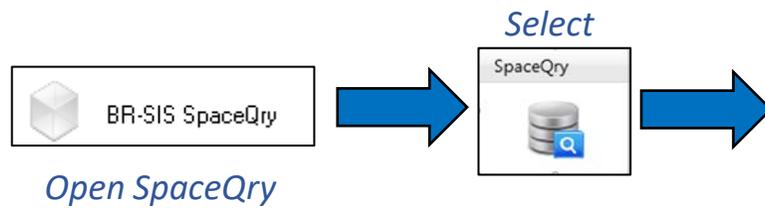
1. **Open Special Section AP30/E/795 annexed to BR IFIC 2874 related to NSS-BSS G2 22W network**
  1. Use 2874-AP30-AP30e0795.pdf from the folder of the exercise
2. **Search your administration in the pdf (Edit -> Find, search for code “TUN”)**
3. **Identify, according to the coordination provision (coord\_prov), which kind of potential interference would be received**

## THIRD PART – Read MSPACE results published in BR IFIC

1. **Open SPS\_REPORTS, click on File -> Open, and connect to the MSPACE results database**
  1. Use 117552024\_NSS-BSS G2 22W\_mspace\_results.mdb from the folder of the exercise
2. **Select Plan\_id = 00DN and click on “OK”**
3. **Open all “Compressed”, “Graphical” and “Reference Situation” reports (select and click “Show Report”)**
4. **In the Reference situation Report, type “TUN” in “Administrations”, activate flag “Only affected beams / channels to be shown” and click on “Retrieve Ref.Sit / Margin”**
5. **Identify which channels and test-points have been identified as affected (distinguish between EPM, PFD or EPM/PFD affected)**



# Annex 3 : Exercise 1<sup>st</sup> PART Step-by-step



Open SPS\_ALL\_IFIC2874.mdb

# Annex 3 : Exercise 1<sup>st</sup> PART Step-by-step

The screenshot shows the ITU-BR Space Information System v8.0.1.8 interface. The search criteria are set to 'BR IFIC'. The search results show 3 rows found in SPS\_ALL\_IFIC2874.mdb. The results table is as follows:

ntc_j	wic_no	stn_name	coord_prov	agree_st	adm	ntwk_org
▼ sat_name: F-SAT-BSS-116W						
117555006	2874		A30#4.2.3D	I	TUN	
▼ sat_name: NSS-BSS G2 22W						
117552024	2874		A30#4.1.1A	I	TUN	
▼ sat_name: QATARSAT-BSS-64 SE						
117554019	2874		A30A#4.1.1D	I	TUN	

Annotations in the image include:

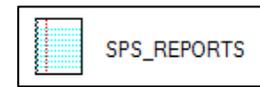
- 1: BR IFIC DVD button
- 2: Show only the latest BR IFIC info. checkbox
- 3: Planned bands networks interfering with my Admin. checkbox
- 4: TUN dropdown menu
- 5: Search button
- 6: ntc\_j column header
- 7: A30#4.1.1D value

*Identify which kind of potential interference could be received*



# Annex 3 : Exercise 3<sup>rd</sup> PART Step-by-step

Open database 11752024\_NSS-BSS G2 22W\_mspace\_results.mdb



Open SPS\_REPORTS

1

Space Plans' System; Reporting Tool - SPS\_REPORTS (version 9.0.0.8)

File Help

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

MSPAGE 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.) MSPAGE Version Selected Analysis Version

Analysis Date/Time

Start Date/Time End Date/Time

Applied Margin Degradation Limit (dB)

Applied Orbital Separation Limits

Co-polar Orbital Limit (degrees) 9.0 Cross-polar Orbital Limit (degrees) 9.0

Compressed Report  
Graphical Report  
Reference Situation / Findings Report

Show Report

Exit

Select Database Name with MSPAGE Output Results 05.11.2020 11:52 AM

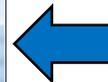
Select Plan/List which you want to analyse...

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 MSPAGE ASCII Input File	Analysis Description by the User
1	00DN		NSS-BSS G2 22W

OK Cancel

2



3

Select the three types of reports and click on "Show Report"

# Annex 3 : Exercise 3<sup>rd</sup> PART Step-by-step

"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			
			Identified Channels	Excess	Chan. where Degrad. >0.45	Degrac	Affected Channels	Excess	Degrac	
RUS	-16.00	10039776	40	3.14	40		3.145	40	3.14	3.145
		10039777					3.376			3.376
TUN	-25.20	TUN15000	27,29,31,33,35,37,39	14.39	27,29,31,33,35,37,39	1.738	27,29,31,33,35,37,39	14.39	1.738	
		TUN27200	33,37	14.57	33,37	0.992	33,37	14.57	0.992	
UAE	-20.00	10029989	25,27,29,31,33,35,37,39	23.82	27,29,31,33,35,37,39	2.157	27,29,31,33,35,37,39	23.82	2.157	
		10029990	26,28,30,32,34,36,38,40		2.158	26,28,30,32,34,36,38,40	2.158			
		10029991	25,27,29,31,33,35,37,39	24.04	27,29,31,33,35,37,39	2.582	27,29,31,33,35,37,39	24.04	2.582	
		10029992	26,28,30,32,34,36,38,40		2.593	26,28,30,32,34,36,38,40	2.593			
		10029993	25,27,29,31,33,35,37,39	23.82	27,29,31,33,35,37,39	2.101	27,29,31,33,35,37,39	23.82	2.101	
		10029994	26,28,30,32,34,36,38,40		2.102	26,28,30,32,34,36,38,40	2.102			
		10029995	25,27,29,31,33,35,37,39	24.04	27,29,31,33,35,37,39	2.582	27,29,31,33,35,37,39	24.04	2.582	
		10029996	26,28,30,32,34,36,38,40		2.593	26,28,30,32,34,36,38,40	2.593			
		10029997	26,28,30,32,34,36,38,40	24.19	26,28,30,32,34,36,38,40	4.250	26,28,30,32,34,36,38,40	24.19	4.250	
		10029998	25,27,29,31,33,35,37,39		3.943	27,29,31,33,35,37,39	3.943			
		10029999	26,28,30,32,34,36,38,40	24.12	26,28,30,32,34,36,38,40	1.397	26,28,30,32,34,36,38,40	24.12	1.397	
		10030000	25,27,29,31,33,35,37,39		1.398	27,29,31,33,35,37,39	1.398			
		10030001	26,28,30,32,34,36,38,40	24.19	26,28,30,32,34,36,38,40	4.250	26,28,30,32,34,36,38,40	24.19	4.250	
		10030002	25,27,29,31,33,35,37,39		3.943	27,29,31,33,35,37,39	3.943			
10030003	26,28,30,32,34,36,38,40	24.12	26,28,30,32,34,36,38,40	1.397	26,28,30,32,34,36,38,40	24.12	1.397			
10030004	25,27,29,31,33,35,37,39		1.398	27,29,31,33,35,37,39	1.398					

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

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

# Annex 3 : Exercise 3<sup>rd</sup> PART Step-by-step

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

- File** menu: Find Test Points Belonging to Listed Administrations, Satellites, Beams, Channels
- Criteria Used for Graphical Report/Query** (an empty box means any value)
- Administrations**: TUN (highlighted with a red box and a circled '1')
- Network Id.(s)**: (empty)
- Beam Names**: (empty)
- Channels**: (empty)
- Available Values** (orange box):
  - TUN (selected)
  - AFG\_100
  - DECM66
  - 1
- Instructions**: Select or type criteria values. Delete unnecessary values on the left.
- Map**: A map of the Mediterranean region with a grid. Red 'x' symbols mark test points. A red box and circled '2' highlight the **Run Query** button.
- Buttons**: Copy Map, Run Query (highlighted), Plot Affected Test Points only (checkbox).
- Status Bar**: Done... You may prepare and run a new query.

