RPC
TELECOMMUNICATIONS

RPC Telecommunications Limited
Lion House Market Place
Hadleigh Ipswich
Suffolk IP7 5DN
England

Tel: +44 1473 828440 **Fax: +44 1473 828441**

Sat-Coord Software Suite Description

Introduction

RPC Telecommunications Ltd (RPC) has developed a 'commercial-off-the-shelf' (COTS) software tool called "Sat-Coord" to assist in the frequency coordination process for satellite networks under the procedures of the International Telecommunications Union's Radio Regulations.

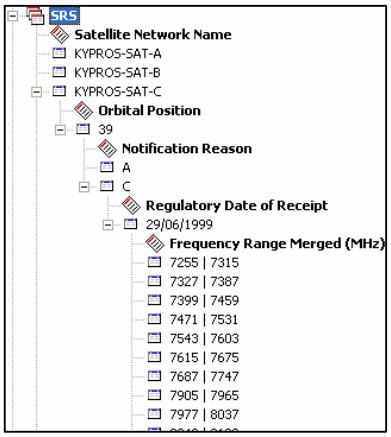
Sat-Coord is essentially a sophisticated browser for ITU Radiocommunication Bureau (BR) Space Services Department (SSD) database files such as (but not limited to) the Space Radiocommunications Systems (SRS) / Space Networks Systems (SNS) database (as published on the ITU SRS CD-ROM) and the BR International Frequency Information Circulars (IFICs).

Sat-Coord allows a user to Interrogate and retrieve information contained in these ITU SSD database files effortlessly providing the user with the ability to perform complicated search criteria to get the results needed for the frequency coordination process and prepare the complex technical documentation required for bi- and multilateral frequency coordination proposals.

Using Sat-Coord to perform searches of the ITU SNS database

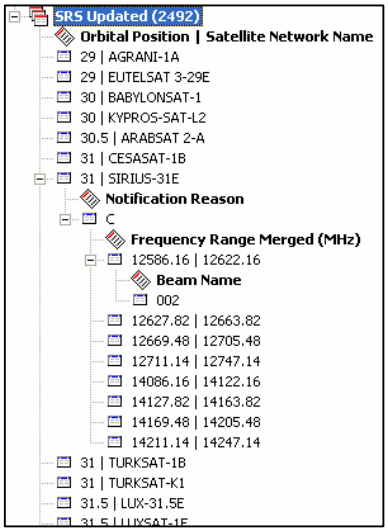
In order to best describe the features that Sat-Coord offers, a few examples of searches which can be performed with the software are shown.

In the example shown to the right, the satellite network filing KYPROS-SAT-C has been examined, and notification reason, date of protection and frequency information retrieved.



Such a search can be useful to either quickly identify the bands filed for a particular network to be coordinated, or the priority status of a filing, or even the parts of a filing which have an unfavourable finding.

It can be quickly seen here which bands KYPROS-SAT-C has filed for coordination, and the date-of-protection (2D-date) status of the filings.



In the next example, on the left, a much more complex search has been performed.

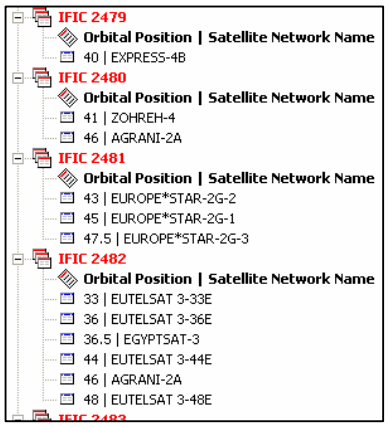
The SRS database has been searched for all networks with which coordination might be required from KYPROS-SAT-C in the Ku-Band.

KYPROS-SAT-C has filed the orbital location of 39°E, and filed Ku-Band with a date of protection of 29/06/1999.

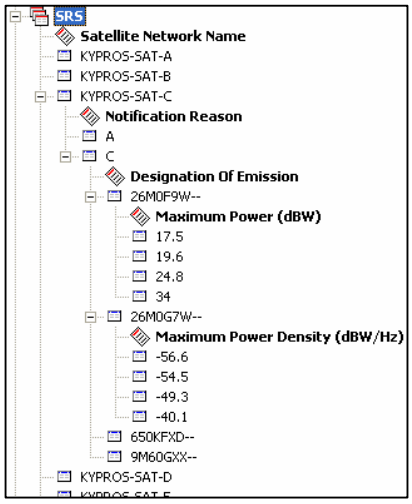
In order to find such networks, the SRS was searched for all networks with an orbital position of between 29°E - 49°E, filed in the Ku-Band and with a date of protection of prior to 29/06/1999.

The orbital position and network name of any matching networks was found. One of these networks, SIRIUS-31E, was then examined for notification reason, frequency information and beam information.

In the next small example (right), a similar search was performed, but this time on IFIC database files, and without the date of protection criteria. Using such a search, we can quickly identify any new networks filed which have the ability to cause KYPROS-SAT-C interference.



As can be seen, one network was identified on IFIC2479, two networks on IFIC2480, three networks on IFIC2481 and six networks on IFIC2482. Letters can then be sent to these administrations to ensure that Cyprus do not lose status in relation to these filings.



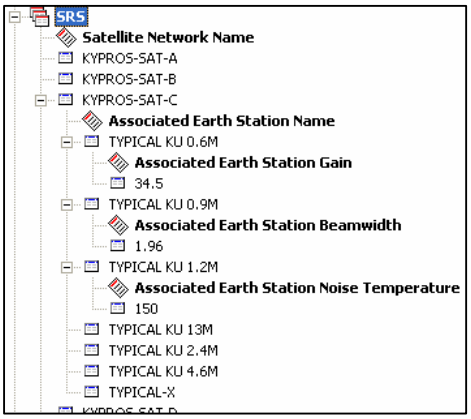
Sat-Coord can also be used to retrieve emission information.

In the example to the left, KYPROS-SAT-C is examined for the carriers filed and the maximum power and maximum PSD of some of these carriers.

Emission information can be retrieved in order to calculate C/I values for example.

In the last example, to the right, another feature of Sat-Coord has been used.

Earth Station information can also be retrieved. In this example, the Earth Stations associated with KYPROS-SAT-C have been found. These can then be further investigated, and information such as gain, beamwidth or noise temperature can be found.



Sat-Coord is used as a front end to launch the other modules of the frequency coordination suite. Any of the other tools can be launched from any point in Sat-Coord, allowing a user to retrieve exactly the information that they need. The other modules include MSMI, Transponder, C/I Interference Analysis Tool, and other Custom Reports.

MSMI (Most-Sensitive Most-Interfering Carrier) Analysis

Sat-Coord can perform an MSMI analysis to find the subset of the most interfering and most sensitive carriers for any user-specified set of data that may then be used in carrier to interference analysis.

Finding the most interfering and most sensitive carriers is an important process in order to reduce the workload during a coordination meeting. Some networks have thousands of combinations of carrier types, powers and gains. In order to ensure that our carriers are fully protected, we need to compare our most sensitive carriers against the most interfering carriers of the other network. In the same way, we can calculate the most interference our networks can cause to opposing networks by comparing our most interfering carriers with the most sensitive carriers of the other network.

Sat-Coord finds the most interfering and most sensitive carriers of differing carrier types - narrow band digital, wide band digital, FMTV, FDM, and TT&C - in order to allow maximum flexibility in the coordination meeting environment.

Carrier code, type, powers and gain information is retrieved for each of the user selected networks and the results are output to either text or csv format.

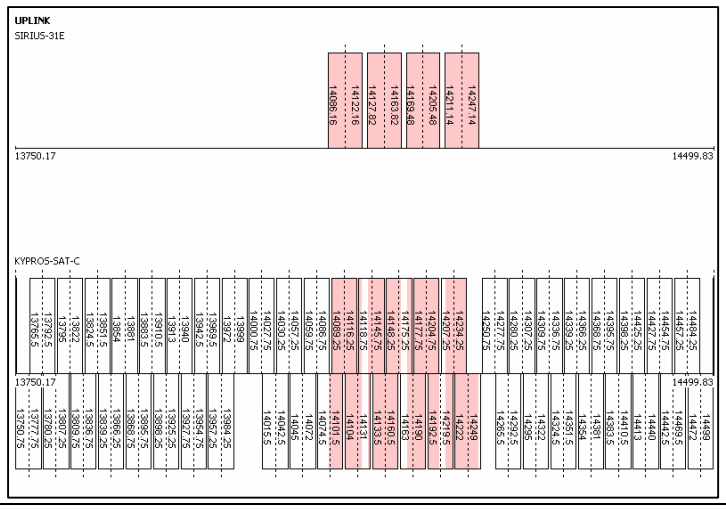
An example of an MSMI output for KYPROS-SAT-C in the Ku-Band is shown below:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Network	Direction	Ntf Rsn	Freq Band	Priority Date	Carrier Type	Type	Beam	TV?	Type	Ba	Bp/Bo	Gs	D	Ge	SLL	T	Max Power	Min Power
2	KYPROS-SAT-C	Downlink	C	Ku-Band	29/06/1999	2 WB Digital	0 MI (off)	KTE	N	26M0G7W--	26000	25703.9	34.5	0	46.7	32	150	17.5	13.5
3	KYPROS-SAT-C	Downlink	C	Ku-Band	29/06/1999	2 WB Digital	0 MS (off)	KTM	N	26M0G7W--	26000	26000	31.5	0	34.5	38.6	150	19.6	15.6
4	KYPROS-SAT-C	Downlink	C	Ku-Band	29/06/1999	2 WB Digital	1 MI (on)	KTE	N	26M0G7W--	26000	25703.9	34.5	0	46.7	32	150	17.5	13.5
5	KYPROS-SAT-C	Downlink	C	Ku-Band	29/06/1999	2 WB Digital	1 MS (on)	KTM	N	26M0G7W--	26000	26000	31.5	0	40.7	35.5	150	19.6	15.6
6	KYPROS-SAT-C	Downlink	C	Ku-Band	29/06/1999	3 FM/TV	0 MI (off)	KTE	N	26M0F9W--	26000	5011.8	34.5	0	46.7	32	150	17.5	13.5
7	KYPROS-SAT-C	Downlink	C	Ku-Band	29/06/1999	3 FM/TV	0 MS (off)	KTM	Y	26M0F9W--	26000	26000	31.5	0	34.5	38.6	150	19.6	15.6
8	KYPROS-SAT-C	Downlink	C	Ku-Band	29/06/1999	3 FM/TV	1 MI (on)	KTE	N	26M0F9W--	26000	5011.8	34.5	0	46.7	32	150	17.5	13.5
9	KYPROS-SAT-C	Downlink	C	Ku-Band	29/06/1999	3 FM/TV	1 MS (on)	KTM	Y	26M0F9W--	26000	26000	31.5	0	40.7	35.5	150	19.6	15.6
10	KYPROS-SAT-C	Uplink	C	Ku-Band	29/06/1999	2 WB Digital	0 MI (off)	KRG	N	26M0G7W--	26000	25703.9	30.4	0	54.5	29	600	34	14
11	KYPROS-SAT-C	Uplink	C	Ku-Band	29/06/1999	2 WB Digital	0 MS (off)	KRG	N	26M0G7W--	26000	26000	30.4	0	63.7	29	600	24.8	4.8
12	KYPROS-SAT-C	Uplink	C	Ku-Band	29/06/1999	2 WB Digital	1 MI (on)	KRG	N	26M0G7W--	26000	25703.9	30.4	0	54.5	29	600	34	14
13	KYPROS-SAT-C	Uplink	C	Ku-Band	29/06/1999	2 WB Digital	1 MS (on)	KRG	N	26M0G7W--	26000	26000	30.4	0	63.7	29	600	24.8	4.8
14	KYPROS-SAT-C	Uplink	C	Ku-Band	29/06/1999	3 FM/TV	0 MI (off)	KRG	N	26M0F9W--	26000	5011.8	30.4	0	54.5	29	600	34	14
15	KYPROS-SAT-C	Uplink	C	Ku-Band	29/06/1999	3 FM/TV	0 MS (off)	KRG	Y	26M0F9W--	26000	26000	30.4	0	54.5	29	600	34	14
16	KYPROS-SAT-C	Uplink	C	Ku-Band	29/06/1999	3 FM/TV	1 MI (on)	KRG	N	26M0F9W--	26000	5011.8	30.4	0	54.5	29	600	34	14
17	KYPROS-SAT-C	Uplink	C	Ku-Band	29/06/1999	3 FM/TV	1 MS (on)	KRG	Y	26M0F9W--	26000	26000	30.4	0	54.5	29	600	34	14
18	KYPROS-SAT-C	Uplink	C	Ku-Band	29/06/1999	5 TT&C	0 MI (off)	KRG	N	650KFXD--	650	645.6	30.4	0	63.7	29	600	29.8	-5.2
19	KYPROS-SAT-C	Uplink	C	Ku-Band	29/06/1999	5 TT&C	0 MS (off)	KRG	N	650KFXD--	650	650	30.4	0	63.7	29	600	29.8	-5.2
20	KYPROS-SAT-C	Uplink	C	Ku-Band	29/06/1999	5 TT&C	1 MI (on)	KRG	N	650KFXD--	650	645.6	30.4	0	63.7	29	600	29.8	-5.2
21	KYPROS-SAT-C	Uplink	C	Ku-Band	29/06/1999	5 TT&C	1 MS (on)	KRG	N	650KFXD--	650	650	30.4	0	63.7	29	600	29.8	-5.2

Transponder graphing

Sat-Coord produces graphical transponder frequency plans for user-specified satellite networks and thus allows a very rapid identification of the frequency overlaps between networks.

During a frequency coordination meeting it is important that one is fully aware of the frequency bands each network has filed, in order to understand where coordination needs to take place, and also to make sure that the relevant carriers and beams are taken into account.



Above and to the right is an example of a transponder plot.

The networks SIRIUS-31E and KYPROS-SAT-C are compared in the Ku-Band uplink.

Any frequency overlaps can be quickly identified.

C/I Interference Analysis

This Excel-based part of Sat-Coord supports the satellite network frequency coordination process by calculating matrices of inter-system interference and margin, for any user-specified pair of satellite networks.

These charts allow identification of interference, and allow real time re-calculations during coordination meetings in order to try to overcome these interference problems.

In the example to the right, the inter-system interference between SIRIUS-31E (31°E) and KYPROS-SAT-C (39°E) has been found in the Ku-Band Uplink.

The first diagram shows the C/I values between the most interfering and most sensitive carriers.

	A	B	C	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE
1	**Ku-Band Uplink**															
4					KYPROS-SAT-C Network Carriers											
5					PSD?	TV?	PSD?	TV?	PSD?	TV?	PSD?	TV?	PSD?	TV?	PSD?	TV?
6					N	N	N	N	N	Y	N	Y	N	N	N	N
7			Carrier	Type	26M0G7W	26M0G7W	26M0G7W	26M0G7W	26M0F9W	26M0F9W	26M0F9W	26M0F9W	650KFXD-	650KFXD-	650KFXD-	650KFXD
23		TV?	Type	C/N (dB)	37.6	17.6	37.6	17.6	44.7	17.6	44.7	17.6	58.6	23.6	58.6	23.6
24		N	64K0G1D--	28.4		33.3		33.3		33.3		33.3		39.4		39.4
25		N	64K0G1D--	26.7	29.2		29.2		22.1		22.1		17.4		17.4	
26	SIRIUS-31E	N	64K0G1D--	28.4		33.3		33.3		33.3		33.3		39.4		39.4
27	Network	N	64K0G1D--	26.7	29.2		29.2		22.1		22.1		17.4		17.4	
28	Carriers	N	5M85G1F--	30.0		37.2		37.2		37.2		37.2		42.2		42.2
29		N	5M85G1F--	29.0	31.5		31.5		25.0		25.0		19.7		19.7	
30		N	36M0G7W--	33.7		39.2		39.2		39.2		39.2		45.2		45.2
31		N	5M85G1F--	29.0	31.5		31.5		25.0		25.0		19.7		19.7	
32		N	36M0F3F--	42.2		38.8		38.8		38.8		38.8		36.7		36.7
33		Y	36M0F3F--	32.6	35.1		35.1		35.1		35.1		23.3		23.3	
34		N	36M0F3F--	42.2		38.8		38.8		38.8		38.8		36.7		36.7
35		Y	36M0F3F--	32.6	35.1		35.1		35.1		35.1		23.3		23.3	

	A	B	C	S	T	U	V	W	X	Y	Z	AA	AB	AC	AD	AE
1	**Ku-Band Uplink**															
4					KYPROS-SAT-C Network Carriers											
5					PSD?	TV?	PSD?	TV?	PSD?	TV?	PSD?	TV?	PSD?	TV?	PSD?	TV?
6					N	N	N	N	N	Y	N	Y	N	N	N	N
7			Carrier	Type	26M0G7W	26M0G7W	26M0G7W	26M0G7W	26M0F9W	26M0F9W	26M0F9W	26M0F9W	650KFXD-	650KFXD-	650KFXD-	650KFXD
23		TV?	Type	C/N (dB)	37.6	17.6	37.6	17.6	44.7	17.6	44.7	17.6	58.6	23.6	58.6	23.6
24		N	64K0G1D--	28.4		3.6		3.6		1.8		1.8		6.1		6.1
25		N	64K0G1D--	26.7	(9.7)		(9.7)		(22.9)		(22.9)		(21.5)		(21.5)	
26	SIRIUS-31E	N	64K0G1D--	28.4		3.6		3.6		1.8		1.8		6.1		6.1
27	Network	N	64K0G1D--	26.7	(9.7)		(9.7)		(22.9)		(22.9)		(21.5)		(21.5)	
28	Carriers	N	5M85G1F--	30.0		7.4		7.4		5.6		5.6		8.9		8.9
29		N	5M85G1F--	29.0	(9.7)		(9.7)		(16.2)		(16.2)		(21.5)		(21.5)	
30		N	36M0G7W--	33.7		9.4		9.4		7.6		7.6		11.9		11.9
31		N	5M85G1F--	29.0	(9.7)		(9.7)		(16.2)		(16.2)		(21.5)		(21.5)	
32		N	36M0F3F--	42.2		9.1		9.1		7.3		7.3		3.4		3.4
33		Y	36M0F3F--	32.6	(11.5)		(11.5)		(11.5)		(11.5)		(23.3)		(23.3)	
34		N	36M0F3F--	42.2		9.1		9.1		7.3		7.3		3.4		3.4
35		Y	36M0F3F--	32.6	(11.5)		(11.5)		(11.5)		(11.5)		(23.3)		(23.3)	

The second diagram shows the C/I margin between the most sensitive and most interfering carriers.

From the diagram areas of negative margin can be found, and worked on during the meeting to try and reduce them as much as possible.

The methodology of the Sat-Coord C/I analysis is based on ITU-R recommendations S.740, S.741, S.483, S.671, S.466, S.735, S.465, S.580 and S.523.

Custom Reports

Sat-Coord also allows for the construction of custom reports, which will retrieve any user defined set of fields to a either a text or csv file. Two examples of these reports are used frequently during frequency coordination preparation and during the meeting.

The first of these is the Carrier Summary Analysis. This produces a comprehensive carrier summary of any satellite network in an ITU format database.

During a frequency coordination meeting, sometimes the other side may well be performing C/I calculations on carriers which are different to those identified by the MSMI tool. In order to quickly check or compare results, the Carrier Summary Analysis is used to find carrier information for any carrier a network has filed. The carrier information can then be quickly fed into the C/I Interference Analysis Tool in order to calculate C/I or C/N values.

Below is an example of the start of a Carrier Summary Analysis for KYPROS-SAT-C:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S
1	Satellite Network Name	Regulatory Date of Receipt	Frequency Band	Frequency Range Merged (MHz)	Frequency Range Merged (MHz)	Emission Direction	Designation Of Emission	Maximum Power (dBW)	Maximum Power Density (dBW/Hz)	Minimum Power (dBW)	Minimum Power Density (dBW/Hz)	C/N	Associated Earth Station Name	Associated Earth Station Gain	Associated Earth Station Radiation Pattern	Beam Name	Maximum Isotropic Gain	Satellite Noise Temperature	Associated Earth Station Noise Temperature
2	KYPROS-SAT-C	29/06/1999	X-Band	7265	7315	E	9M60G1X--	3.2	-66.6	-2.8	-72.6	23.5	TYPICAL-X	51.6	REC-580	TX	35	(none)	230
3	KYPROS-SAT-C	29/06/1999	X-Band	7327	7387	E	9M60G1X--	3.2	-66.6	-2.8	-72.6	23.5	TYPICAL-X	51.6	REC-580	TX	35	(none)	230
4	KYPROS-SAT-C	29/06/1999	X-Band	7399	7459	E	9M60G1X--	3.2	-66.6	-2.8	-72.6	23.5	TYPICAL-X	51.6	REC-580	TX	35	(none)	230
5	KYPROS-SAT-C	29/06/1999	X-Band	7471	7531	E	9M60G1X--	3.2	-66.6	-2.8	-72.6	23.5	TYPICAL-X	51.6	REC-580	TX	35	(none)	230
6	KYPROS-SAT-C	29/06/1999	X-Band	7543	7603	E	9M60G1X--	3.2	-66.6	-2.8	-72.6	23.5	TYPICAL-X	51.6	REC-580	TX	35	(none)	230
7	KYPROS-SAT-C	29/06/1999	X-Band	7615	7675	E	9M60G1X--	3.2	-66.6	-2.8	-72.6	23.5	TYPICAL-X	51.6	REC-580	TX	35	(none)	230
8	KYPROS-SAT-C	29/06/1999	X-Band	7687	7747	E	9M60G1X--	3.2	-66.6	-2.8	-72.6	23.5	TYPICAL-X	51.6	REC-580	TX	35	(none)	230
9	KYPROS-SAT-C	29/06/1999	Ku-Band	10950.75	11199	E	26M0F9V--	17.5	-49.5	13.5	-53.5	18.2	TYPICAL KU 0.6M	34.5	REC-580	KTE	34.5	(none)	(none)
10	KYPROS-SAT-C	29/06/1999	Ku-Band	10950.75	11199	E	26M0F9V--	19.6	-47.4	15.6	-51.4	18.2	TYPICAL KU 0.6M	34.5	REC-580	KTM	31.5	(none)	(none)
11	KYPROS-SAT-C	29/06/1999	Ku-Band	10950.75	11199	E	26M0G7V--	17.5	-56.6	13.5	-60.6	18.2	TYPICAL KU 0.6M	34.5	REC-580	KTE	34.5	(none)	(none)
12	KYPROS-SAT-C	29/06/1999	Ku-Band	10950.75	11199	E	26M0G7V--	19.6	-54.5	15.6	-58.5	13.4	TYPICAL KU 0.6M	34.5	REC-580	KTM	31.5	(none)	(none)
13	KYPROS-SAT-C	29/06/1999	Ku-Band	10950.75	11199	E	26M0F9V--	17.5	-49.5	13.5	-53.5	18.2	TYPICAL KU 0.9M	38.2	REC-580	KTE	34.5	(none)	(none)
14	KYPROS-SAT-C	29/06/1999	Ku-Band	10950.75	11199	E	26M0F9V--	19.6	-47.4	15.6	-51.4	18.2	TYPICAL KU 0.9M	38.2	REC-580	KTM	31.5	(none)	(none)
15	KYPROS-SAT-C	29/06/1999	Ku-Band	10950.75	11199	E	26M0G7V--	17.5	-56.6	13.5	-60.6	18.2	TYPICAL KU 0.9M	38.2	REC-580	KTE	34.5	(none)	(none)
16	KYPROS-SAT-C	29/06/1999	Ku-Band	10950.75	11199	E	26M0G7V--	19.6	-54.5	15.6	-58.5	13.4	TYPICAL KU 0.9M	38.2	REC-580	KTM	31.5	(none)	150
17	KYPROS-SAT-C	29/06/1999	Ku-Band	10950.75	11199	E	26M0F9V--	17.5	-49.5	13.5	-53.5	18.2	TYPICAL KU 1.2M	40.7	REC-580	KTE	34.5	(none)	150
18	KYPROS-SAT-C	29/06/1999	Ku-Band	10950.75	11199	E	26M0F9V--	19.6	-47.4	15.6	-51.4	18.2	TYPICAL KU 1.2M	40.7	REC-580	KTM	31.5	(none)	150
19	KYPROS-SAT-C	29/06/1999	Ku-Band	10950.75	11199	E	26M0G7V--	17.5	-56.6	13.5	-60.6	18.2	TYPICAL KU 1.2M	40.7	REC-580	KTE	34.5	(none)	150
20	KYPROS-SAT-C	29/06/1999	Ku-Band	10950.75	11199	E	26M0G7V--	19.6	-54.5	15.6	-58.5	13.4	TYPICAL KU 1.2M	40.7	REC-580	KTM	31.5	(none)	150
21	KYPROS-SAT-C	29/06/1999	Ku-Band	10950.75	11199	E	26M0F9V--	17.5	-49.5	13.5	-53.5	18.2	TYPICAL KU 2.4M	46.7	REC-580	KTE	34.5	(none)	150
22	KYPROS-SAT-C	29/06/1999	Ku-Band	10950.75	11199	E	26M0F9V--	19.6	-47.4	15.6	-51.4	18.2	TYPICAL KU 2.4M	46.7	REC-580	KTM	31.5	(none)	150
23	KYPROS-SAT-C	29/06/1999	Ku-Band	10950.75	11199	E	26M0G7V--	17.5	-56.6	13.5	-60.6	18.2	TYPICAL KU 2.4M	46.7	REC-580	KTE	34.5	(none)	150
24	KYPROS-SAT-C	29/06/1999	Ku-Band	10950.75	11199	E	26M0G7V--	19.6	-54.5	15.6	-58.5	13.4	TYPICAL KU 2.4M	46.7	REC-580	KTM	31.5	(none)	150
25	KYPROS-SAT-C	29/06/1999	Ku-Band	11450.75	11699	E	26M0F9V--	17.5	-49.5	13.5	-53.5	18.2	TYPICAL KU 0.6M	34.5	REC-580	KTE	34.5	(none)	150
26	KYPROS-SAT-C	29/06/1999	Ku-Band	11450.75	11699	E	26M0F9V--	19.6	-47.4	15.6	-51.4	18.2	TYPICAL KU 0.6M	34.5	REC-580	KTM	31.5	(none)	150
27	KYPROS-SAT-C	29/06/1999	Ku-Band	11450.75	11699	E	26M0G7V--	17.5	-56.6	13.5	-60.6	18.2	TYPICAL KU 0.6M	34.5	REC-580	KTE	34.5	(none)	150
28	KYPROS-SAT-C	29/06/1999	Ku-Band	11450.75	11699	E	26M0G7V--	19.6	-54.5	15.6	-58.5	13.4	TYPICAL KU 0.6M	34.5	REC-580	KTM	31.5	(none)	150
29	KYPROS-SAT-C	29/06/1999	Ku-Band	11450.75	11699	E	26M0F9V--	17.5	-49.5	13.5	-53.5	18.2	TYPICAL KU 0.9M	38.2	REC-580	KTE	34.5	(none)	150
30	KYPROS-SAT-C	29/06/1999	Ku-Band	11450.75	11699	E	26M0F9V--	19.6	-47.4	15.6	-51.4	18.2	TYPICAL KU 0.9M	38.2	REC-580	KTM	31.5	(none)	150
31	KYPROS-SAT-C	29/06/1999	Ku-Band	11450.75	11699	E	26M0G7V--	17.5	-56.6	13.5	-60.6	18.2	TYPICAL KU 0.9M	38.2	REC-580	KTE	34.5	(none)	150
32	KYPROS-SAT-C	29/06/1999	Ku-Band	11450.75	11699	E	26M0G7V--	19.6	-54.5	15.6	-58.5	13.4	TYPICAL KU 0.9M	38.2	REC-580	KTM	31.5	(none)	150
33	KYPROS-SAT-C	29/06/1999	Ku-Band	11450.75	11699	E	26M0F9V--	17.5	-49.5	13.5	-53.5	18.2	TYPICAL KU 1.2M	40.7	REC-580	KTE	34.5	(none)	150
34	KYPROS-SAT-C	29/06/1999	Ku-Band	11450.75	11699	E	26M0F9V--	19.6	-47.4	15.6	-51.4	18.2	TYPICAL KU 1.2M	40.7	REC-580	KTM	31.5	(none)	150
35	KYPROS-SAT-C	29/06/1999	Ku-Band	11450.75	11699	E	26M0G7V--	17.5	-56.6	13.5	-60.6	18.2	TYPICAL KU 1.2M	40.7	REC-580	KTE	34.5	(none)	150
36	KYPROS-SAT-C	29/06/1999	Ku-Band	11450.75	11699	E	26M0G7V--	19.6	-54.5	15.6	-58.5	13.4	TYPICAL KU 1.2M	40.7	REC-580	KTM	31.5	(none)	150
37	KYPROS-SAT-C	29/06/1999	Ku-Band	11450.75	11699	E	26M0F9V--	17.5	-49.5	13.5	-53.5	18.2	TYPICAL KU 2.4M	46.7	REC-580	KTE	34.5	(none)	150
38	KYPROS-SAT-C	29/06/1999	Ku-Band	11450.75	11699	E	26M0F9V--	19.6	-47.4	15.6	-51.4	18.2	TYPICAL KU 2.4M	46.7	REC-580	KTM	31.5	(none)	150
39	KYPROS-SAT-C	29/06/1999	Ku-Band	11450.75	11699	E	26M0G7V--	17.5	-56.6	13.5	-60.6	18.2	TYPICAL KU 2.4M	46.7	REC-580	KTE	34.5	(none)	150
40	KYPROS-SAT-C	29/06/1999	Ku-Band	11450.75	11699	E	26M0G7V--	19.6	-54.5	15.6	-58.5	13.4	TYPICAL KU 2.4M	46.7	REC-580	KTM	31.5	(none)	150

The second custom report commonly used is the Satellite Network Coordination Priority Analysis. This provides a priority date analysis for any user-defined set of data. This allows quick reference to any priority date issues, and is particularly useful for mixed priority coordination meetings.

During a coordination meeting, it is very important to be aware of the relevant priority dates of each network in order to avoid accidentally giving ground to lower priority networks. (Note that the priority is determined by the date of receipt of the complete ApS4/II (was AP3/II) data, i.e. the “2D” field in the ITU databases, called the “date of protection”.)

The Priority Analysis finds network, priority and frequency information for every network chosen. An example of the beginning of a Priority Analysis for the administration of Cyprus is shown to the right.

Importantly, the results are sorted by date of protection (2D date) so that it can quickly be seen which filings have priority over other filings.

	A	B	C	D	E	F	G	H	I	J
1	Satellite Network Name	Notification Reason	Orbital Position	Administration	Intergovernmental Organisation	Regulatory Date of Receipt	Beam Name	Frequency Range Merged (MHz)	Frequency Range Merged (MHz)	Frequency Band
2	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	TLS	1525	1559	L-Band
3	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	RLS	1626.5	1660.5	L-Band
4	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	TCN	3427	3545	C-Band
5	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	TCS	3427	3545	C-Band
6	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	TCN	3582.9	3613.1	C-Band
7	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	TCS	3582.9	3613.1	C-Band
8	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	TCN	3727	3845	C-Band
9	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	TCS	3727	3845	C-Band
10	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	TCN	3882.9	3913.1	C-Band
11	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	TCS	3882.9	3913.1	C-Band
12	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	TCN	3977	4095	C-Band
13	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	TCS	3977	4095	C-Band
14	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	TCN	4132.9	4163.1	C-Band
15	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	TCS	4132.9	4163.1	C-Band
16	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	RCN	5752	5870	C-Band
17	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	RCS	5752	5870	C-Band
18	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	RCN	5907.9	5938.1	C-Band
19	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	RCS	5907.9	5938.1	C-Band
20	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	RCN	6002	6120	C-Band
21	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	RCS	6002	6120	C-Band
22	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	RCN	6157.9	6188.1	C-Band
23	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	RCS	6157.9	6188.1	C-Band
24	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	RCN	6252	6370	C-Band
25	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	RCS	6252	6370	C-Band
26	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	RCN	6407.9	6438.1	C-Band
27	KYPROS-SAT-L1	C	27.5	CYP	(none)	12/11/1997	RCS	6407.9	6438.1	C-Band