

Finding new channels – compatibility analysis

Overview

- Tools to be used
- Frequency band and TV channels
- Procedure diagram
- Example

Tools to be used



TerRaQ

TerRaNotices

GE06Calc

eBCD 2.0
Broadcasting Online

eQry ePub
eTools **myAdmin**

WISFAT

Frequency band and TV channels

- ✓ **Frequency band: 470 – 694 MHz**
- ✓ **TV channels: 21 – 48**
- ✓ **TV channel 69 – special case (flexible channels).**

Channel numbering and channel boundaries

DVB-T channel arrangement in Bands IV and V

(Extract from Table A.3.1-2 of the GE-06 Agreement)

Channel number	Channel boundaries (MHz)		Assigned frequency (MHz)
Band IV			
21	470	478	474
22	478	486	482
23	486	494	490
24	494	502	498
25	502	510	506
26	510	510	514
27	518	526	522
28	526	534	530
29	534	542	538
30	542	550	546
31	550	558	554
32	558	566	562
33	566	574	570
34	574	582	578
Band V			
35	582	590	586
36	590	598	594
37	598	606	602
38	606	614	610
39	614	622	618
40	622	630	626
41	630	638	634
42	638	646	642
43	646	654	650
44	654	662	658
45	662	670	666
46	670	678	674
47	678	686	682
48	686	694	690
...
69	854	862	858

Find a channel process diagram

(see also Doc. INFO-3)



Starting from GE06 Calc... (example)

- ✓ Launch GE06 Calc
- ✓ File -> Open compatibility results file (.mdb file)
- ✓ View -> Channel distribution statistics
- ✓ Check appropriate boxes and set the default margin
- ✓ Select Administration and click Refresh
- ✓ Select item of interest and click on the blue number
- ✓ List of requirements will appear
- ✓ Select the appropriate requirement and click on it

The screenshot shows the GE06 Calc software interface. At the top, there is a menu bar with options like File, Edit, View, Tools, Preferences, Window, and Help. Below the menu is a toolbar with icons for Save, Open, Print, and others. The main window has two tabs: 'Channel Distribution Statistics' and 'Channel Distribution Details'. The 'Channel Distribution Statistics' tab is active, showing a table with columns for 'Submitted', 'No assignable channel or frequency block', and 'Having an assignable channel or frequency block'. The 'Having an assignable channel or frequency block' column contains several blue numbers (e.g., 80, 0, 24, 6) which are circled in red. The 'Channel Distribution Details' tab shows a detailed list of assignments with columns for No, Adm, Geo, Adm Ref Id, Not.Type, Site/Allot Name, SFN Id, Ch/block, and Avail. Ch/block. This list also contains many blue numbers, some of which are circled in red. The bottom of the screen shows the Windows taskbar with various pinned icons and the system tray.

Setting the defaults (example)

- 1 Click on Digital Interferers tag
- 2 Click on Headings toolbar
- 3 In the pop-up window set the desired Column Preferences
- 4 Set them as default and click OK
- Repeat the same procedure for Digital Affected

1 Digital Interferers

2 Map of UAE showing channel assignments.

3 Column Preferences dialog box. The 'Set as default' button is circled in red.

4 Column Preferences dialog box with the 'Set as default' button highlighted.

The screenshot shows a software interface for channel distribution analysis in the UAE. It includes a main window for 'Channel Distribution Statistics' and a detailed 'Channel Distribution Details' table. A map of the UAE is overlaid with channel assignments. A 'Column Preferences' dialog box is open, allowing users to sort and filter data by various parameters like Ch/block, Margin (dB), Admin, Site/Allot Name, and more. Buttons for 'OK' and 'Cancel' are visible at the bottom of the dialog.

No	Adm	Geo	Adm Ref Id	Not.Type	Site/Allot Name	SFN Id	Ch/block	Avail. Ch/block
62	UAE	UAE	BR1_SHJ026	GT1	SHARJAH STUDIOS	BR1_SHJ0064	21-26.28-34.36-40.42-48	21.25.27.29.31.35.37-38
63	UAE	UAE	BR1_UAE 064	GT1	SHUNNAYN	BR1_HABV00	21-44.46-47	21.25.27.29.31.35.37-38
64	UAE	UAE	BR1_APPR0003	GT1	TARIF	BR1_JDV000	21-44.46-47	21.25.27.29.31.35.37-38
65	UAE	UAE	BR1_UAE 113	GT1	TARIF	BR1_HABV00	21-44.46-47	21.25.27.29.31.35.37-38
66	UAE	UAE	BR1_UAE 098	GT1	TARIF	BR1_HABV00	21-44.46-47	21.25.27.29.31.35.37-38
67	UAE	UAE	BR1_2174	GT1	UAQ2	BR1_RAKV00	22-23.25-26.28-36.38-48	25.31.35.38.41.45
68	UAE	UAE	BR1_2164	GT1	UAQ2	BR1_NEV-6	22-23.25-26.28-36.38-48	25.31.35.38.41.45
69	UAE	UAE	BR1_2184	GT1	UAQ2	BR1_NEV-8	22-23.25-26.28-36.38-48	25.31.35.38.41.45
70	UAE	UAE	BR1_APPR0010	GT1	UMM AL QUWAIN	BR1_RAKV00	22-23.25-26.28-36.38-48	25.31.35.38.41.45
71	UAE	UAE	BR3_UAE 081	GT1	UMM AL QUWAIN		21-44.46-48	21.25.27.29.31.33.35.37
72	UAE	UAE	BR2_UAE 081	GT1	UMM AL QUWAIN		21-44.46-48	21.25.27.29.31.33.35.37
73	UAE	UAE	BR1_UAE 081	GT1	UMM AL QUWAIN		21-44.46-48	21.25.27.29.31.33.35.37
74	UAE	UAE	BR1_UAE 025	GT1	ZIRKU	BR1_DASV00	21-34.36-48	21.25.27.29.31.37-38

Example 1: List of interferers on ch. 31

Channel Distribution Statistics

Administration UAE Refresh

Show assignable channels or freq. blocks if the maximum acceptable margin (dB) is: 4

Show assignable channels or freq. blocks if ignoring incompatibilities between requirements where one or both has/have a range of available freq.

Ignore self incompatibilities Do not consider interference to the wanted requirement

The agreements submitted in the <COORD> section are always taken into account!

Submitted	No available channel or frequency block	No assignable channel or frequency block	Having an assignable chan or a frequency block
Assignments 20	0	14	6
Allotments 6	0	6	0
Total 26	0	20	6

Channel Distribution Details - Digital assignments with no assignable channel or frequency block

No	Adm	Geo	Adm Ref Id	NotType	Site/Allot Name	SFN Id	Ch/block	Avail. Ch/block
1	UAE	UAE	BR1_UAE 019	GT1	DIBBA		21,23-48	21,25,31,38,41,45
2	UAE	UAE	BR2_UAE 072	GT1	FUJAIRAH		21-39,41-48	21-22,25,27-28,30-31,33,35-36,38,4
3	UAE	UAE	BR1_UAE 072	GT1	FUJAIRAH		21-39,41-48	21-22,25,27-28,30-31,33,35-36,38,4
4	UAE	UAE	BR3_UAE 087	GT1	LIWA LAHMAZI		21-48	21-25,27-48
5	UAE	UAE	BR4_UAE 087	GT1	LIWA LAHMAZI		21-48	21-25,27-48
6	UAE	UAE	BR2_UAE 087	GT1	LIWA LAHMAZI		21-48	21-25,27-48
7	UAE	UAE	BR1_UAE 087	GT1	LIWA LAHMAZI		21-48	21-25,27-48
8	UAE	UAE	BR2_UAE 022	GT1	LIWA SHAMKHAT		21,23-28,30-48	21,23-25,27-28,30-48
9	UAE	UAE	BR1_UAE 022	GT1	LIWA SHAMKHAT		21,23-28,30-48	21,23-25,27-28,30-48
10	UAE	UAE	BR2_SHJ021	GT1	SHARJAH DHAI		22-45,47-48	22,25,27-28,30-31,33,35-36,38,40-4
11	UAE	UAE	BR1_SHJ021	GT1	SHARJAH KALBA		22-45,47-48	22,25,27-28,30-31,33,35-36,38,40-4
12	UAE	UAE	BR3_UAE 081	GT1	UMM ALQUWAIN		21-44,46-48	21,25,27,29,31,33,35,37-38,41-42,4
13	UAE	UAE	BR2_UAE 081	GT1	UMM ALQUWAIN		21-44,46-48	21,25,27,29,31,33,35,37-38,41-42,4
14	UAE	UAE	BR1_UAE 081	GT1	UMM ALQUWAIN		21-44,46-48	21,25,27,29,31,33,35,37-38,41-42,4

General Analysis Results

Administration UAE

Administration Unique Identifier: BR3_UAE 081

Site/Allotment Name: UMM ALQUWAIN

Show multi-channel reqs.

Geographical area: UAE

Notice Type: GT1

Not linked

Acceptable Channel/Frequency Block: 21-44,46-48

Available Channel/Frequency Block: 21,25,27,29,31,33,35,37-38,41-42,48

Assigned Channel/Frequency Block:

Digital Interferers

No	Adm	Geo	NotT	Adm Ref Id	Site/Allot Name	SFN Id	Allot Adm Ref I	Ch/block	Avail. Ch/block	Assigned ch/bl	8BH (dBW)	8BV (dBW)	Wanted chann	Interf. channel	Distance (km)	CNFS (dB(uV))	Margin (dB)	Relation
21	UAE	UAE	DT1	SHJ015	SHARJAH DHAI	SJHV27	27	27	27	27	37 27	27	27	32.2	87.6	13.89	Interfere	
22	UAE	UAE	DT1	SHJ016	SHARJAH JABAL BUHAY	SJHV27	27	27	27	27	37 27	27	27	60	86.1	12.44	Interfere	
23	UAE	UAE	DT1	SHJ019	SHARJAH STUDIOS	SJHV27	27	27	27	27	33 27	27	27	23.6	85.4	11.8	Interfere	
24	UAE	UAE	DT1	UAE 095	TAS EARTH STATION	SJHV27	27	27	27	27	35 27	27	27	83.7	80.2	7.17	Interfere	
25	UAE	UAE	DT1	UAE 094	FALAJ AL MUALLAA	SJHV27	27	27	27	27	34 27	27	27	24	76.6	4.57	Interfere	
26	UAE	UAE	DT2	ALLT03	ABU DHABI	SJHV27	29	29	29	29	29 29	29	29	167	84.6	11.02	Interfere	
27	UAE	UAE	DT1	2136	JEBEL HATTA		29	29	29	29	30 29	29	29	93.1	82.7	5.35	Interfere	
28	UAE	UAE	DT1	2431	FUJAIRAH-2	ECV03	31	31	31	31	33 31	31	31	71.9	69.4	1.31	Interfere	
29	UAE	UAE	DT1	SHJ003	SHARJAH DHAI	BUHYS25	35	35	35	35	37 35	35	35	32.2	95.4	21.54	Interfere	
30	UAE	UAE	DT1	SHJ002	SHARJAH JABAL BUHAY	BUHYS25	35	35	35	35	37 35	35	35	11.6	95.9	19.03	Interfere	
31	UAE	UAE	DT1	SHJ004	SHARJAH STUDIOS	BUHYS25	35	35	35	35	37 35	35	35	23.6	89.3	15.51	Interfere	

Example 1 (cont'd): List of affected on ch. 31

[C:\ASMG_exercise\FullIteration_testGEO6_out.mdb] GE06 Calc

File Edit View Tools Preferences Window Help

Channel Distribution Statistics

Administration UAE Refresh

Show assignable channels or freq. blocks if the maximum acceptable margin (dB) is: 4

Show assignable channels or freq. blocks if ignoring incompatibilities between requirements where one or both has/have a range of available freq.

Ignore self incompatibilities Do not consider interference to the wanted requirement

The agreements submitted in the <COORD> section are always taken into account!

Channel Distribution Statistics

Submitted	No available channel or frequency block	No assignable channel or frequency block	Having an assignable chan or a frequency block
Assignments	20	0	14
Allotments	6	0	6
Total	26	0	20
			6

Channel Distribution Details - Digital assignments with no assignable channel or frequency block

UHF Channel Distribution VHF Channel Distribution

No.	Adm	Geo	Adm Ref Id	Not.Type	Site/Allot Name	SFN Id	Ch/block	Avail. Ch/block
1	UAE	BR1_UAE 019	GT1		DIBBA		21,23-48	21,25,31,38,41,45
2	UAE	BR2_UAE 072	GT1		FUJAIRAH		21-39,41-48	21-22,25,27-28,30-31,33,35-36,38,4
3	UAE	BR1_UAE 072	GT1		FUJAIRAH		21-39,41-48	21-22,25,27-28,30-31,33,35-36,38,4
4	UAE	BR3_UAE 087	GT1		LIWA LAHMAZI		21-48	21-25,27-48
5	UAE	BR4_UAE 087	GT1		LIWA LAHMAZI		21-48	21-25,27-48
6	UAE	BR2_UAE 087	GT1		LIWA LAHMAZI		21-48	21-25,27-48
7	UAE	BR1_UAE 087	GT1		LIWA LAHMAZI		21-48	21-25,27-48
8	UAE	BR2_UAE 022	GT1		LIWA SHAMKHAT		21,23-28,30-48	21,23-25,27-28,30-31,33,35-36,38,40-4
9	UAE	BR1_UAE 022	GT1		LIWA SHAMKHAT		21,23-28,30-48	21,23-25,27-28,30-48
10	UAE	BR2_SHJ021	GT1				22-45,47-48	22,25,27-28,30-31,33,35-36,38,40-4
11	UAE	BR1_SHJ021	GT1		SHARJAH KALBA		22-45,47-48	22,25,27-28,30-31,33,35-36,38,40-4
12	UAE	BR3_UAE 081	GT1		UMM ALQUWAIN		21-44,46-48	21,25,27,29,31,33,35,37-38,41-42,48
13	UAE	BR2_UAE 081	GT1		UMM ALQUWAIN		21-44,46-48	21,25,27,29,31,33,35,37-38,41-42,48
14	UAE	BR1_UAE 081	GT1		UMM ALQUWAIN		21-44,46-48	21,25,27,29,31,33,35,37-38,41-42,48

General Analysis Results

Administration UAE

Administration Unique Identifier: BR3_UAE 081

Site/Allotment Name: UMM ALQUWAIN

Show multi-channel reqs.

Geographical area: UAE

Notice Type: GT1

Not linked

Acceptable Channel/Frequency Block: 21-44,46-48

Available Channel/Frequency Block: 21,25,27,29,31,33,35,37-38,41-42,48

Assigned Channel/Frequency Block:

Digital Interferers Digital Affected

No.	Adm	Geo	Not.T	Adm Ref Id	Site/Allot Name	SFN Id	Allot Adm Ref I	Ch/block	Avail. Ch/block	Assigned Ch/bl	8BH (dBw)	BBV (dBw) / Wanted Chann	Interf. Channel	Distance (km)	CNFS (dB(uV))	Margin (dB) Relativ
70	IRN	DT1	IRN_D840961B	KUH HALWA		28	28	28	30	28	28	71.6	59.3	3.36	Interfer	
71	QAT	DT1	QAT11/MDT1-1	AL WAKRA		29	29	29	30	30	30	409.8	52.8	2.33	Interfer	
72	IRN	DT1	IRN_D840293C	HENGAM		30	30	30	30	30	30	135.3	61.1	13.16	Interfer	
73	IRN	DT1	IRN_D843711D	KISH		30	30	30	25	30	30	198.7	64.4	10.39	Interfer	
74	UAE	DT1	UAE_110	ALSIDRA	ADSFN4	31	31	31	34	31	31	100.9	55.5	3.48	Interfer	
75	UAE	DT1	2433	DIBBA-2	ECV03	31	31	31	33	31	31	57	75.1	2.54	Interfer	
76	IRN	DT1	IRN_D840960B	FORDOOR		32	32	32	30	32	32	110.2	59	14.47	Interfer	
77	IRN	DT1	IRN_D843712B	KISH		32	32	32	25	32	32	202.9	64.6	10.28	Interfer	
78	IRN	DT1	IRN_D841133C	JONAH		32	32	32	37	32	32	174.3	64.3	10.02	Interfer	
79	IRN	DT1	IRN_D840971B	SIRI		32	32	32	36	32	32	142.1	61.3	5.19	Interfer	
80	IRN	DT1	IRN_D840960B	KUH HALWA		32	32	32	30	32	32	71.4	59.9	3.32	Interfer	

Example 1 (cont'd): Assigning channel 31 instead of ch. 69 using TerRaNotices and applying the same steps for 2 other notices assigning ch. 42 and 48

TerRaNotices 1.2 (PROD) - [UAE_cleared_UMM_31_42_48.txt - GT1]

Notice browser

Notice type	Description
UAE_cleared_UM...	UAE
GT1 ADD	BR1_UAE 019
GT1 ADD	BR1_UAE 072
GT1 ADD	BR2_UAE 072
GT1 ADD	BR1_2136
GT1 ADD	BR2_2136
GT1 ADD	BR3_2136
GT1 ADD	BR1_UAE 087
GT1 ADD	BR2_UAE 087
GT1 ADD	BR3_UAE 087
GT1 ADD	BR4_UAE 087
GT1 ADD	BR1_UAE 026
GT1 ADD	BR2_UAE 026
GT1 ADD	BR3_UAE 026
GT1 ADD	BR1_UAE 022
GT1 ADD	BR2_UAE 022
GT1 ADD	BR1_SHJ021
GT1 ADD	BR1_UAE 081
GT1 ADD	BR1_UAE 081
GT1 ADD	BR2_UAE 081
GT1 ADD	BR3_UAE 081
GT2 ADD	BR1_ALLT01
GT2 ADD	BR2_ALLT01
GT2 ADD	BR3_ALLT01
GT2 ADD	BR4_ALLT01
GT2 ADD	BR1_ALLT03
GT2 ADD	BR2_ALLT03

ID1/ Assignment's unique identifier: BR1_UAE 081

ID3/ Unique identifier of the corresponding plan assignment:

Fragment

<input checked="" type="radio"/> Article 11	<input type="checkbox"/> E / Resubmission	<input type="checkbox"/> Apply 4.1.2.5 procedure
<input checked="" type="radio"/> GE06D	<input type="radio"/> Addition	<input type="radio"/> Modification

Assignment characteristics | **Antenna characteristics**

Station information

4A/ Antenna site name: UMM ALQUWAIN

4B/ Geographic area: UAE

4C/Longitude: 55° 39' 51" E

Latitude: 25° 31' 29" N

9EA/ Altitude of site above sea level: 40 m

3A1/ Call sign:

1A/ Assigned frequency: 554 MHz

9D/ Polarization: V

BBH/ Horizontal e.r.p.: dBW

7H/ Reference planning configuration: RPC2

8BT/ Maximum e.r.p. at Beam tilt angle: dBW

9B/ Vertical e.r.p.: 34.8 dBW

7K/ Receive mode: 7C1 / TV System

9S/ Beam tilt angle: Deg

Antenna characteristics

9F/ Antenna directivity: 9EB/ Maximum Effective Antenna Height: 160 m

9E/ Height of Antenna Above Ground Level: 125 m

Digital plan entry parameters

DEC/ Plan entry: 1 / Standalone

DAC/ Assign. code: SYNC / SFN id

Associated allotment:

ID2/ Unique identifier: SFN id

Coordination

11C/ Signed commitment

2E/ Expiry date

11D/ Plan remark conditions met

Coordination successfully completed with the following administrations

Available administrations: AFG, AFS, AGL, ALB, ALG

Selected administrations: (empty)

13C/ Notified remarks

System Taskbar

EN 16:36 05/05/2014

Example 1 (cont'd)

- ✓ Validate and save the notice file
- ✓ Browse and upload it together with the notice files of neighboring countries to eBCD web-portal - eTools: <https://www.itu.int/ITU-R/eBCD/MemberPages/eCalculations.aspx>
- ✓ Complete Submission

The screenshot shows the ITU eTools web interface for eCalculations. At the top, there's a navigation bar with links for eQry, ePub, eTools (which is currently selected), myAdmin, eBCD, and Logout. Below the navigation is a banner with the ITU logo and three images of people using mobile phones. The main content area has tabs for eBCD statistics, Calculations on-demand, eCalculations Utility (which is selected), SRTM3, and Utilities. A sub-header says "eTools Disclaimer" and "The processing system is currently ONLINE: 6 processes available". Below this, a dropdown menu shows "GE06" and "GE06D ASMG Compatibility Analyse". A red circle highlights the "GE06D ASMG Compatibility Analyse" option. A second red circle highlights the "Complete Submission" button below it. A third red circle highlights a table showing the number of notices for each member country:

Adm	E-notice file	Number of Notices
ARS	ARS_cleared.txt	290
OMA	OMA_1_cleared1.txt	27
QAT	QAT.txt	55
UAE	UAE_cleared_UMM_31_42_48.txt	26

At the bottom of the page, there's a footer with links for Top, Feedback, Contact Us, Copyright © ITU 2014 All Rights Reserved, and Contact for this page : Webmaster. It also shows the date Generated : 2014-05-05. The status bar at the very bottom shows the URL http://web.itu.int/ITU-R/eBCD/MemberPages/eCalculations.aspx, the Windows taskbar with various icons, and the system tray.

Example 1 (cont'd)

- ✓ Label your job and click Submit

The screenshot shows the ITU eTools interface for the GE06D ASMG Compatibility Analyse. At the top, there's a navigation bar with links for eQry, ePub, eTools (which is selected), myAdmin, eBCD, and Logout. Below the navigation is a banner with the ITU logo and three small images. The main content area has tabs for eBCD statistics, Calculations on-demand, eCalculations Utility (selected), SRTM3, and Utilities. A message indicates 6 processes available. A dropdown menu shows 'GE06' and 'GE06D ASMG Compatibility Analyse'. A 'Back to calculation history' link is present. Below, a form asks 'Please label your submission' with a text input containing 'test UAE' and a 'Submit' button. A table lists notices by Adm (ARS, OMA, QAT, UAE) and their corresponding E-notice files and numbers of notices. At the bottom, a footer provides copyright information and a date of 05/05/2014.

Please label your submission:

Adm	E-notice file	Number of Notices
ARS	ARS_cleared.txt	290
OMA	OMA_1_cleared1.txt	27
QAT	QAT.txt	55
UAE	UAE_cleared UMM_31_42_48.txt	26

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Contact for this page : Webmaster
Generated : 2014-05-05

Example 1 (cont'd)

- ✓ Wait for results

The screenshot shows the eTools interface for the International Telecommunication Union (ITU). The top navigation bar includes links for eQry, ePub, eTools, myAdmin, eBCD, and Logout. Below the navigation is a banner featuring the ITU logo and three small images related to telecommunications. The main content area is titled "eTools" and displays "eBCD statistics" and "Calculations on-demand". A sub-menu bar below the title includes "eCalculations Utility", "SRTM3", and "Utilities". The main content area shows a "Jobs History for user: sestacov". A table titled "Test Packages: click to hide all" lists one job entry:

Job id	Job Name	Job Status	Job Type	Date of Request	Date of Start Run	Date of Completion	Process	Elapsed Time (minutes)
1049	test_UAE	Success	Art4_Consistency_ServerASMG	5/5/2014 3:35:18 PM	5/5/2014 3:59:50 PM	5/5/2014 4:05:16 PM	DR-GE06-2_4	30

Below the table, there is a "Job summary" section with a "Share" button. Further down are sections for "Job Input" and "Job Output". The "Job Input" section contains a table of notices:

Admin	E-notice file	Number of Notices
ARS	ARS_cleared.txt	290
OMA	OMA_1_cleared1.txt	27
QAT	QAT.txt	55
UAE	UAE_cleared_UMM_31_42_48.txt	26

The "Job Output" section includes a "Download results" link. The bottom of the window shows a standard Windows taskbar with icons for File Explorer, Internet Explorer, Task View, File History, Task Scheduler, Task Manager, Word, and PowerPoint.

- ✓ Download the results file and unzip it
- ✓ Launch GE06Calc and open saved .mdb file to view the results

Example 1 (cont'd): List of interferers on ch. 31

[C:\ASMG_exercise\ARS_OMA_QAT_UAE4 countries_testGEO6_out.mdb] GE06 Calc

File Edit View Tools Preferences Window Help

Channel Distribution Statistics

Administration UAE Refresh

Show assignable channels or freq. blocks if the maximum acceptable margin (dB) is: 4

Show assignable channels or freq. blocks if ignoring incompatibilities between requirements where one or both has/have a range of available freq

Ignore self incompatibilities Do not consider interference to the wanted requirement

The agreements submitted in the <COORD> section are always taken into account!

Channel Distribution Statistics

	Submitted	No available channel or frequency block	No assignable channel or frequency block	Having an assignable channel or a frequency block
Assignments	20	0	14	6
Allotments	6	0	6	0
Total	26	0	20	6

UHF Channel Distribution - Digital assignments with no assignable channel or frequency block

No	Adm	Geo Area	Adm Ref Id	Not.Type	Site/Allot Name	SFN Id	Ch/block	Avail. Ch/block	As
1	UAE	UAE	BR1_UAE 019	GT1	DIBBA		21,23-48	21,25,31,38,41,45	
2	UAE	UAE	BR2_UAE 072	GT1	FUJAIRAH		21-39,41-48	21-22,25,27-28,30-	
3	UAE	UAE	BR1_UAE 072	GT1	FUJAIRAH		21-39,41-48	21-22,25,27-28,30-	
4	UAE	UAE	BR3_UAE 087	GT1	LIWA LAHMAZI		21-48	21-25,27-48	
5	UAE	UAE	BR4_UAE 087	GT1	LIWA LAHMAZI		21-48	21-25,27-48	
6	UAE	UAE	BR2_UAE 087	GT1	LIWA LAHMAZI		21-48	21-25,27-48	
7	UAE	UAE	BR1_UAE 087	GT1	LIWA LAHMAZI		21-48	21-25,27-48	
8	UAE	UAE	BR2_UAE 022	GT1	LIVA SHAMKHAT		21,23-28,30-48	21,23-25,27-28,30-	
9	UAE	UAE	BR1_UAE 022	GT1	LIVA SHAMKHAT		21,23-28,30-48	21,23-25,27-28,30-	
10	UAE	UAE	BR2_SHJ021	GT1	SHARJAH KALBA		22-45,47-48	22,25,27-28,30-31,	
11	UAE	UAE	BR1_SHJ021	GT1	SHARJAH KALBA		22-45,47-48	22,25,27-28,30-31,	
12	UAE	UAE	BR3_UAE 081	GT1	UMM ALQUWAIN		42	42	
13	UAE	UAE	BR2_UAE 081	GT1	UMM ALQUWAIN		48	48	
14	UAE	UAE	BR1_UAE 081	GT1	UMM ALQUWAIN		31	31	

General Analysis Results

Administration UAE

Administration Unique Identifier: BR1_UAE 081

Site/Allotment Name: UMM ALQUWAIN

Show multi-channel reqs:

Geographical area: UAE

Notice Type: GT1

Not linked

Acceptable Channel/Frequency Block: 31

Available Channel/Frequency Block: 31

Assigned Channel/Frequency Block: 31

Digital Interferers

No	Adm	Geo	Not.T	Adm Ref Id	Site/Allot Name	SFN Id	Allot Adm Ref I	Ch/block	Avail. Ch/block	Assigned ch/bl	8BH (dBW)	8BV (dBW)	Wanted chann	Interf. channel	Distance (km)	CNFS (dB/uV)	Margin (dB)	Relation
1	UAE	UAE	GT2	BR2_ALLT03	ABU DHABI 2	BR2_ALLT03		21-28,30-41,43	21,25,27,31,35				31	31		149.4	83.2	7.99 Interference
2	UAE	UAE	GT2	BR1_ALLT03	ABU DHABI 2	BR1_ALLT03		21-28,30-41,43	21,25,27,31,35				31	31		149.4	83.2	7.99 Interference
3	UAE	UAE	GT1	BR3_2136	JEBEL HATTA			21-28,30-48	21-25,27,30-31				30	31		93.6	82.3	7.25 Interference
4	UAE	UAE	GT1	BR2_2136	JEBEL HATTA			21-28,30-48	21-25,27,30-31				30	31		93.6	82.3	7.25 Interference
5	UAE	UAE	GT1	BR1_2136	JEBEL HATTA			21-28,30-48	21-25,27,30-31				30	31		93.6	82.3	7.25 Interference

Example 1 (cont'd): List of affected on ch. 31

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File Edit View Tools Preferences Window Help

Channel Distribution Statistics

Administration UAE Refresh

Show assignable channels or freq. blocks if the maximum acceptable margin (dB) is: 4

Show assignable channels or freq. blocks if ignoring incompatibilities between requirements where one or both has/have a range of available freq

Ignore self incompatibilities Do not consider interference to the wanted requirement

The agreements submitted in the <COORD> section are always taken into account!

Channel Distribution Statistics

	Submitted	No available channel or frequency block	No assignable channel or frequency block	Having an assignable channel or a frequency block
Assignments	20	0	14	6
Allotments	6	0	6	0
Total	26	0	20	6

Channel Distribution Details - Digital assignments with no assignable channel or frequency block

UHF Channel Distribution VHF Channel Distribution

No	Adm	Geo Area	Adm Ref Id	Not Type	Site/Allot Name	SFN Id	Ch/block	Avail. Ch/block	As
1	UAE	UAE	BR1_UAE_019	GT1	DIBBA		21,23-48	21,25,31,38,41,45	
2	UAE	UAE	BR2_UAE_072	GT1	FUJAIRAH		21-39,41-48	21-22,25,27-28,30-	
3	UAE	UAE	BR1_UAE_072	GT1	FUJAIRAH		21-39,41-48	21-22,25,27-28,30-	
4	UAE	UAE	BR3_UAE_087	GT1	LIWA LAHMAZI		21-48	21-25,27-48	
5	UAE	UAE	BR4_UAE_087	GT1	LIWA LAHMAZI		21-48	21-25,27-48	
6	UAE	UAE	BR2_UAE_087	GT1	LIWA LAHMAZI		21-48	21-25,27-48	
7	UAE	UAE	BR1_UAE_087	GT1	LIWA LAHMAZI		21-48	21-25,27-48	
8	UAE	UAE	BR2_UAE_022	GT1	LIWA SHAMKHAT		21,23-28,30-48	21,23-25,27-28,30-	
9	UAE	UAE	BR1_UAE_022	GT1	LIWA SHAMKHAT		21,23-28,30-48	21,23-25,27-28,30-	
10	UAE	UAE	BR2_SHJ021	GT1	SHARJAH KALBA		22-45,47-48	22,25,27-28,30-31,	
11	UAE	UAE	BR1_SHJ021	GT1	SHARJAH KALBA		22-45,47-48	22,25,27-28,30-31,	
12	UAE	UAE	BR3_UAE_081	GT1	UMM ALQUWAIN		42	42	
13	UAE	UAE	BR2_UAE_081	GT1	UMM ALQUWAIN		48	48	
14	UAE	UAE	BR1_UAE_081	GT1	UMM ALQUWAIN		31	31	

General Analysis Results

Administration UAE

Administration Unique Identifier: BR1_UAE_081

Site/Allotment Name: UMM ALQUWAIN

Show multi-channel reqs.

Details Colours Frequencies Symbols

Geographical area: UAE

Notice Type: GT1

Not linked

Acceptable Channel/Frequency Block: 31

Available Channel/Frequency Block: 31

Assigned Channel/Frequency Block: 31

Digital Interferers Digital Affected

No	Adm	Geo	Not T	Adm Ref Id	Site/Allot Name	SFN Id	Allot Adm Ref Id	Ch/block	Avail. Ch/block	Assigned Ch/bl	8BH (dBW)	8BW (dBW)	Wanted Chann	Interf. Channel	Distance (km)	CNFS (dB/uV)	Margin (dB)	Relatio	
5	QAT	QAT	GT1	BR2_QAT/11/M	AL WAKRA			21-26,28,30-48	21,23-25,31,35	24	31	31		410.3	52.3	2.57	Interfer		
6	QAT	QAT	GT1	BR1_QAT/11/M	AL WAKRA			21-26,28,30-48	21,23-25,31,35	24	31	31		410.3	52.3	2.57	Interfer		
7	QAT	QAT	GT1	BR3_QAT/11/M	AL KHOR			21-44,46-48	21,23-25,27,31	24	31	31		418	49.3	1.47	Interfer		
8	QAT	QAT	GT1	BR2_QAT/11/M	AL KHOR			21-44,46-48	21,23-25,27,31	24	31	31		418	49.3	1.47	Interfer		
9	QAT	QAT	GT1	BR1_QAT/11/M	AL KHOR			21-44,46-48	21,23-25,27,31	24	31	31		418	49.3	1.47	Interfer		
10	QAT	QAT	GT1	BR3_QAT/11/M	SUDANTHEEL			21-48	21-25,27-35,37					466	57	5.31	Interfer		
11	QAT	QAT	GT1	BR4_QAT/11/M	SUDANTHEEL			21-48	21-25,27-35,37	24	31	31		466	57	5.31	Interfer		
12	QAT	QAT	GT1	BR1_QAT/11/M	SUDANTHEEL			21-48	21-25,27-35,37	24	31	31		466	57	5.31	Interfer		
13	QAT	QAT	GT1	BR2_QAT/11/M	SUDANTHEEL			21-48	21-25,27-35,37	24	31	31		466	57	5.31	Interfer		
14	QAT	QAT	GT1	BR1_89104982	MARKHIYAH			22-36,38-41,43	23-25,27,31,35	24	31	31		417.2	50.2	1.72	Interfer		
15	UAE	UAE	DT1	UAE 110	AL SIDRA	ADSFN4		31	31	31		34	31	31	100.9	55.7	3.59	Interfer	
16	UAE	UAE	DT1	2433	DIBBA-2	ECV03		31	31	31			33	31	31	57	75.2	2.64	Interfer

Example 1 (cont'd)

- ✓ Tick the box - Show assignable channels or frequency block if ignoring incompatibilities... and click Refresh

[C:\ASMG_exercise\iteration1\Results_iteration1_out.mdb] GE06 Calc

File Edit View Tools Preferences Window Help

Channel Distribution Statistics

Administration UAE Refresh

Show assignable channels or freq. blocks if the maximum acceptable margin (dB) is: 4

Show assignable channels or freq. blocks if ignoring incompatibilities between requirements where one or both has/have a range of available frequencies

Ignore self incompatibilities Do not consider interference to the wanted requirement

The agreements submitted in the <COORD> section are always taken into account!

	Submitted	No available channel or frequency block	No assignable channel or frequency block	Having an assignable channel or a frequency block
Assignments	80	0	43	37
Allotments	6	0	6	0
Total	86	0	49	37

Channel Distribution Details - Digital assignments with an assignable channel or frequency block

UHF Channel Distribution VHF Channel Distribution

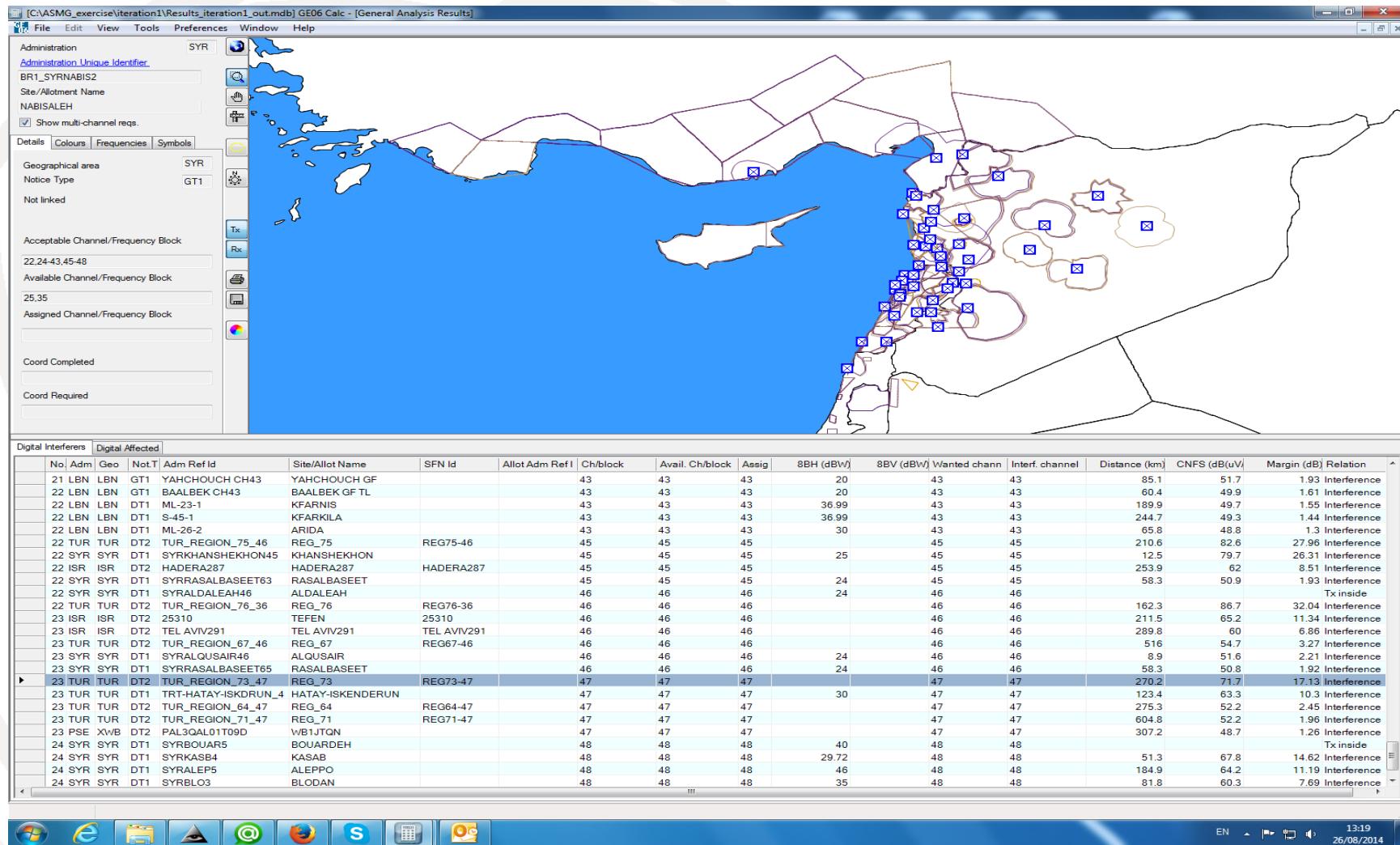
No.	Adm	Geo Area	Adm Ref Id	Not.Type	Site/Allot Name	SFN Id	Ch/block	Avail. Ch/block	Assignable Ch/block
28	UAE	BR1_UAE 038	GT1	MUNIEF	BR1_JDV003	21-44,46-47	21,25,27,29,31	41	
29	UAE	BR1_UAE 044	GT1	QURIEN ALEISH	BR1_JDV003	21-44,46-47	21,25,27,29,31	41	
30	UAE	BR1_2323	GT1	RAMAH	BR1_AANV02	21-39,41-48	21-39,41-48	22-23,25-26,28,32-33,38,46,	
31	UAE	BR2_SHJ021	GT1	SHARJAH KALBA		22-45,47-48	22,25,27-28,30	28	
32	UAE	BR1_SHJ021	GT1	SHARJAH KALBA		22-45,47-48	22,25,27-28,30	28	
33	UAE	BR1_AH1005	GT1	TARIF	BRT_JDV003	21-44,46-47	21,25,27,29,31	41	
34	UAE	BR3_UAE 081	GT1	UMM ALQUWAIN		21-44,46-48	21,25,27,29,31	31,42,48	
35	UAE	BR2_UAE 081	GT1	UMM ALQUWAIN		21-44,46-48	21,25,27,29,31	31,42,48	
36	UAE	BR1_UAE 081	GT1	UMM ALQUWAIN		21-44,46-48	21,25,27,29,31	31,42,48	
37	UAE	BR1_UAE 095	GT1	ZIRKU	BR1_DASV00	21-24,26-49	21,22,25,27,29-23,25,41		

Gen...

EN 13:27
17/05/2014

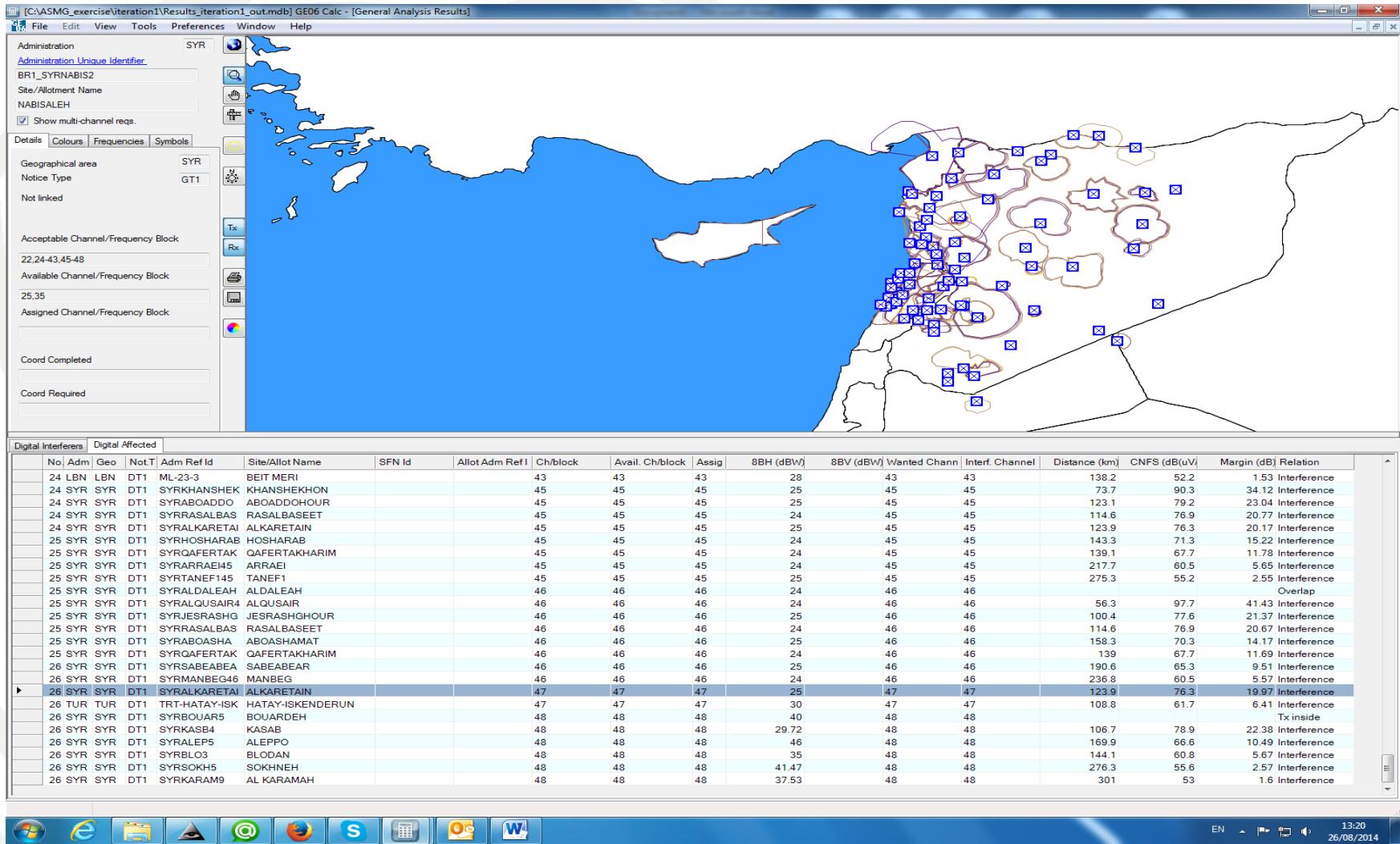
Example 2 (step 1)

NABISALEH (ch 69, 43 dBW, Heff max = 814 m, Pol. H, Directional antenna): List of interferers



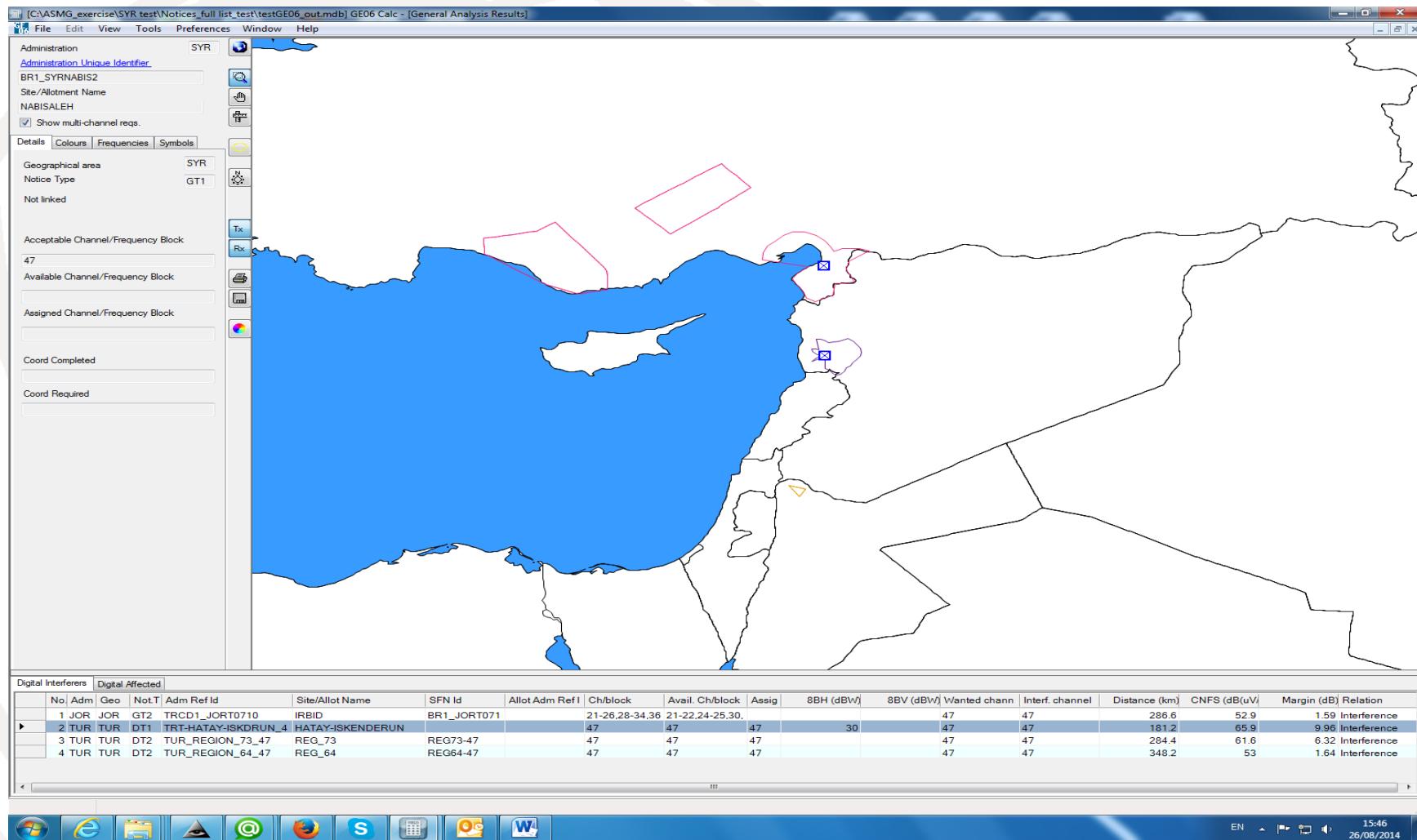
Example 2 (step 1)

NABISALEH (ch 69, 43 dBW, Heff max = 814 m, Pol. H, Directional antenna): List of affected



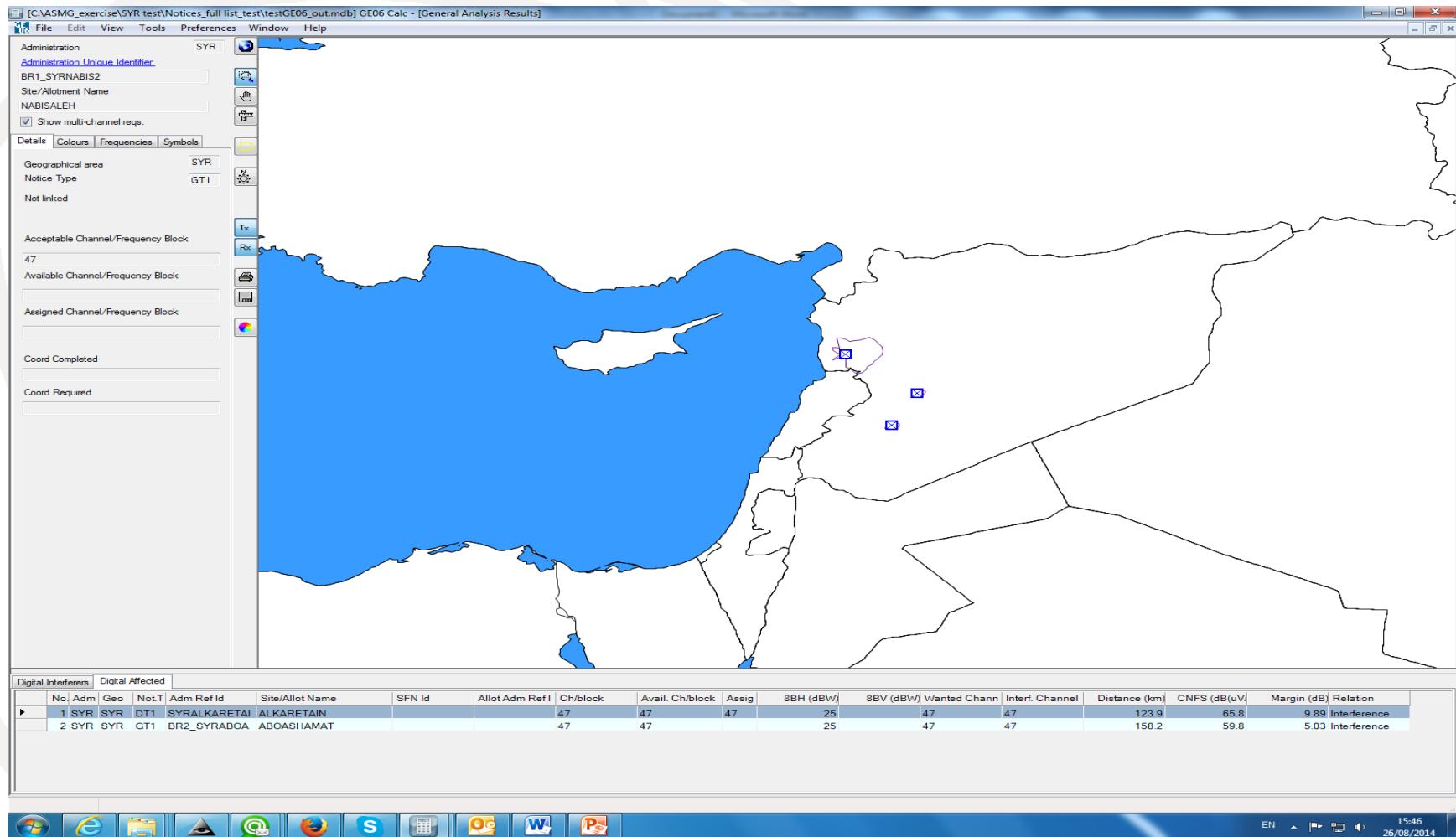
Example 2 (step 2)

NABISALEH (ch 47, 33 dBW, Heff max = 814 m, Pol. H, Directional antenna): List of interferers



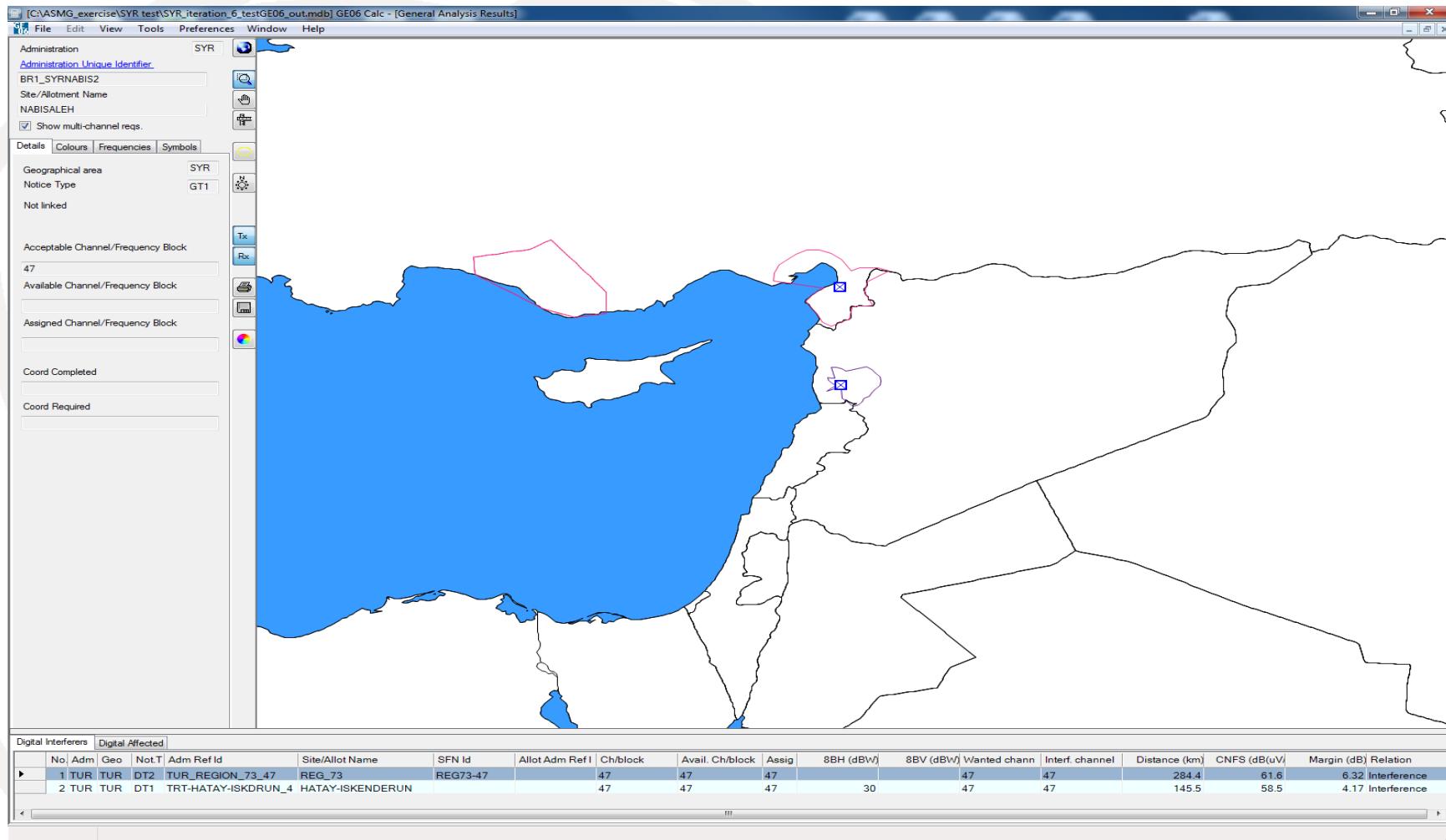
Example 2 (step 2)

NABISALEH (ch 47, 33 dBW, Heff max = 814 m, Pol. H, Directional antenna): List of affected



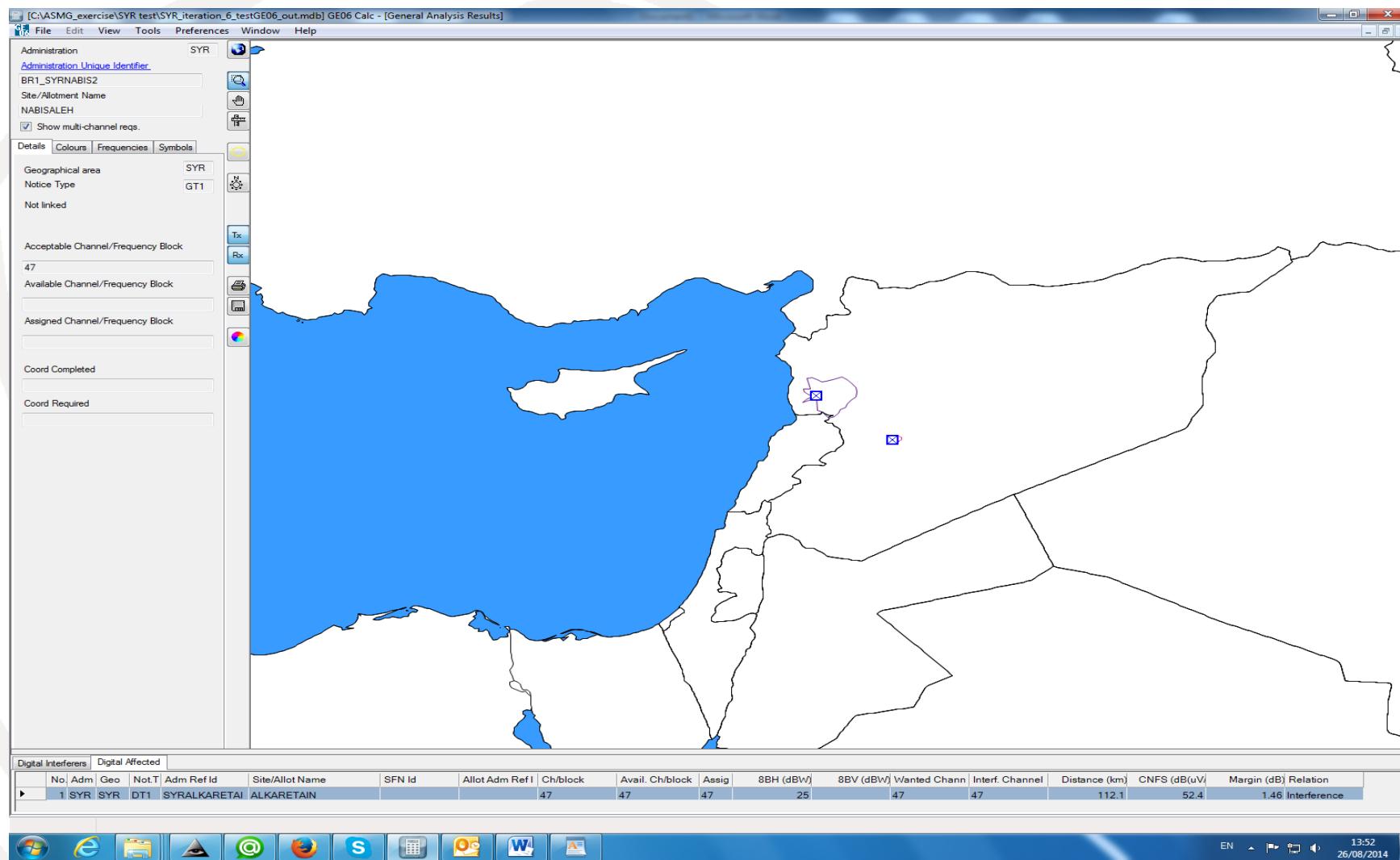
Example 2 (step 3)

NABISALEH (ch 47, 33 dBW, Heff max = 814 m, Pol. V, Directional antenna): List of interferers



Example (step 3)

NABISALEH (ch 47, 33 dBW, Heff max = 814 m, Pol. V, Directional antenna): List of affected



Example 2 (conclusions)

NABISALEH (Heff max = 814 m, Directional antenna)

Step	Channel	Power, dBW	Polarisation	The highest Interferer (Adm)	The most affected (Adm)
1	69	43	H	17.13 (TUR)	19.97 (SYR)
2	47	33	H	9.96 (TUR)	9.89 (SYR)
3	47	33	V	6.32 (TUR)	1.46 (SYR)

Thank you for your attention!

Questions?

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