Initial preparation of the requirements

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Agenda

- Background – The basis for our work

- The preparation of the file containing the *requirements*

- The link between the files considered by the iterations and the Plan data - Additions, Modifications & Suppressions

- The software tools to be used during the Frequency Coordination process.

- The ITU/ASMG Frequency coordination web portal

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The basis of our work

- *Step 1 : the process takes into consideration the stations in the Plan*
  - The Plan Assignments/ Allotments (RECORDED)
  - the proposed modifications (Not yet RECORDED)

- *Step 2 : The frequency channels to be considered in the UHF band*
  - Channels 21 to 48
  - Channels 49 to 69 could be released

The basis of our work

- ## *Step 2 : Example*

UAE	RECORDED	1	LIWA SHAMKHAT	22
UAE	RECORDED	1	LIWA SHAMKHAT	25
UAE	RECORDED	1	LIWA SHAMKHAT	29
UAE	RECORDED	1	LIWA SHAMKHAT	53

Channel discarded in the coordination process

- ## *Step 3 : The Plan Entries*

  - Plan Entry 1 : Standalone Assignments
  - Plan Entry 2: SFN Linked Assignments
    - All the requirements part of an SFN are linked by the same SFN Identifier

The basis of our work

- **Step 3 : the Plan Entries**
  - **Plan Entry 3 :** Allotments and converted assignments stemming from the allotment
  - **Plan Entry 4 :** Allotment with linked assignment(s) and SFN id.
- **Step 4 : The Notice types**
  - GT1 for Assignments
  - GT2 for Allotments

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The preparation of the requirement file

- **The BR assumptions**:
  - 4 layers per transmitter site/allotment
    - Note: 2 km tolerance considered between 2 transmitters.

  - *No* change in the technical characteristics

Adm	PE	Site/Allot Name	TV Channel/Freq Block
UAE	1	LIWA SHAMKHAT	22
UAE	1	LIWA SHAMKHAT	25
UAE	1	LIWA SHAMKHAT	29
UAE	1	LIWA SHAMKHAT	33

⇐ 3 layers

The preparation of the requirement file cont'd

- *Identification of the BR generated requirements/notices*
  - BR prefix (BRx_) followed by ID in the Plan
  - Administration reference Id, Allotment Id, SFN Id start with BR1_, BR2_... up to BR4_ (depending on the number of layers to be generated)
    - Example: *SFN Id AJMV001 in the Plan, 3 layers generated:* BR1_ *AJMV001,* BR2_ *AJMV001,* BR3_ *AJMV001*

The preparation of the requirement file cont'd

- *Consideration of flexible channels*
  - *The compatibility examination software treats Channel 69 (i.e. frequency 858 MHz) as a flexible channel as opposed to fixed channels*
  - *For the requirements having an assigned frequency of 858 MHz, the band (channels 21-48) is scanned to identify possible assignable channels.*

- **The BR assumptions** :
  - Plan Entry 3
    - <u>ONLY Allotments considered</u>. The Converted Assignments stemming from the PE 3 allotments are not taken into account.
  - PE 2 SFN's & PE 4 allotments with linked assignments and a SFN identifier
    - Example *SFN Id AJMV001*:

Adm	PE	Site/Allot Name	TV Channel/Freq Block
UAE	2	AL HASA	21
UAE	2	DUBAI	21
UAE	2	LIHBAB	21
UAE	2	UAQ2	21
UAE	2	UMM AL QUWAIN	21
UAE	2	AL KHAN	21
UAE	2	AJMAN	21

Prepare requirements for 3 additional SFNs
Plan review: The 3 additional SFNs

Plan Entry 2 SFNs - A possible scenario
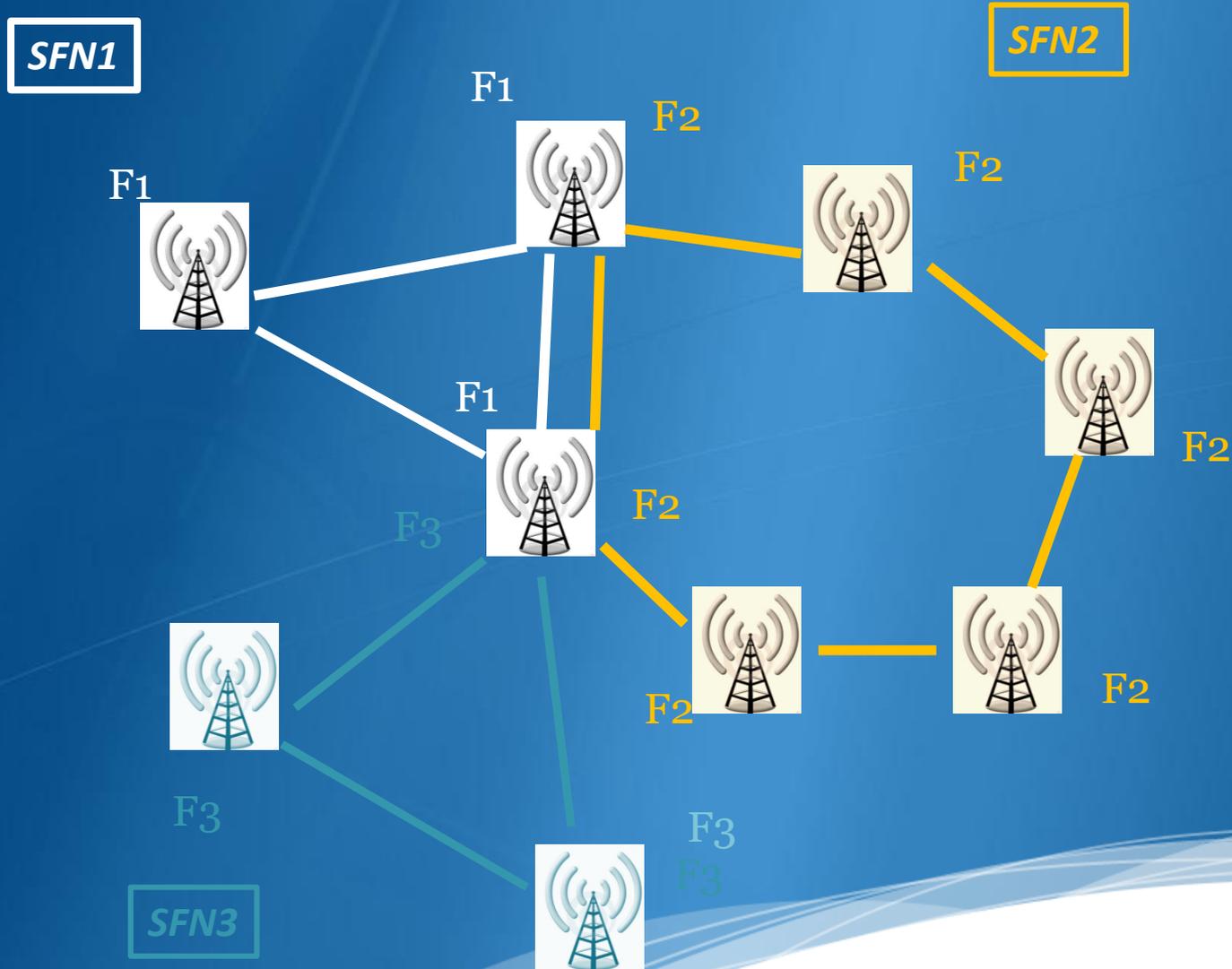
The preparation of the requirement file cont'd

- ***The BR assumptions*** :
  - Plan Entry 2 SFNs where assigning 4 layers is not <u>obvious</u>
    - Consider the SFNs recorded in the Plan above channel 48 and add them to the list of requirements with flexible channels

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Link between iterations & Plan data

- The iterations are a separate, independent process
- The files sent to the iterations should contain *all* the requirements
- The iterations consider all the entries in the Plan for the sandbox below channel 48
- The neighboring countries outside the sandbox are also considered
- The BR generated notices are ADDITIONS
- For the future iterations, any Administration can decide to SUPPRESS or MODIFY the Plan Assignments/Notices in the iteration files.

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Software tools for compatibility studies

- Create notices (*TerRaNotices*)

- Run compatibility calculations (*eTools*)

- Analyse results (*GE06Calc*)

The software tools to be used during the *Frequency Coordination* process

1 - *BRIFIC*

BR Terrestrial database *TerRaBase*
TerRaNotices (Notice generation & validation)
TerRaQ for queries (linked to *TerRaNotices*)

3 - *GE06Calc*

2 - *eBCD*

TIES users

Submit your file to the web on *eTools* to the ASMG compatibility Analyses :

Please select the calculation type

| GE06 | ⌄ | GE06D ASMG Compatibility Analyse ⌄ |

New Calculation

The BRIFIC

The BRIFIC

Enable Macros in Access – See doc. INFO 8
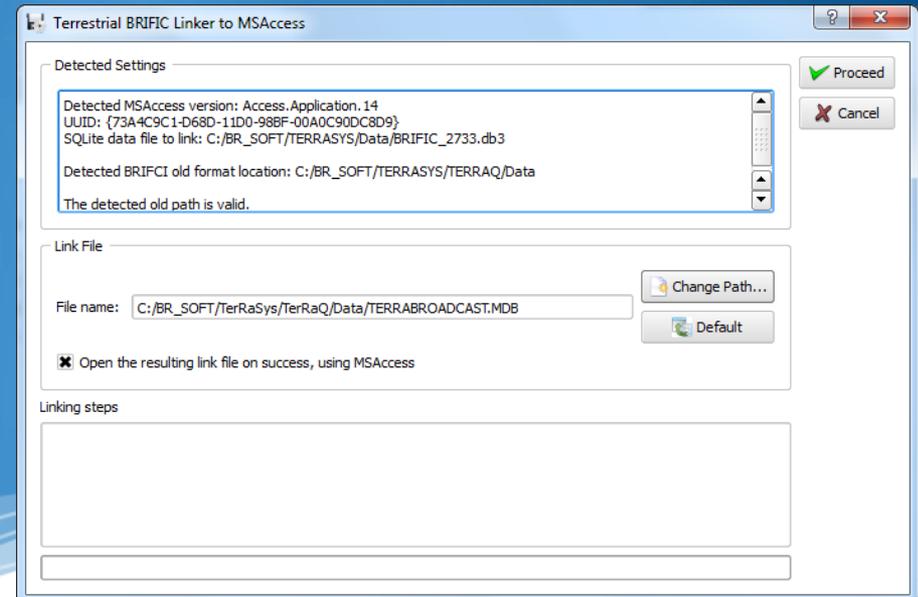
Terrestrial BR IFIC Format Converter: TerRaQ "*external Tools "m*enu item

In order to enable existing *GE06Calc* (MS Access) to access the data in the BR IFIC database (SQLite), a format converter is also provided.

This application is able to provide a quick Microsoft Access "*bridge*" to access the data stored in SQLite format.

See "**How to run GE06Calc with the new BRIFIC.docx**"

Direct Access from BCD Portal

http://www.itu.int/ITU-R/terrestrial/broadcast/index.html

eBCD overview

- A TIES Account is necessary.

  http://www.itu.int/en/membership/Pages/default.aspx

myAdmin — "My own office @ ITU: opening ~24/7"
BR DB — Daily copy

ePub — "Special Sections, the publication day!"
BR DB — Snapshot

eTools — "My test calculations on-demand"
BR DB — Weekly copy

eQry — "Fast search on Plans and MIFR"
BR DB — Daily copy

"Online search on Plans and MIFR"

eQry

Read-Only copy of BR Database (Updated daily)

GE06 ST61 GE75 MIFR (FMTV)
GE89 RJ81
GE84
GE06L HF (Coming Soon)

Search by:

Administration	Geographic Area
Frequency	Date of Receipt
Administration Unique Identifier	BR Identification Number

Status (Recorded/Published)

eTools: e-notice submission

eTools

Upload e-notices

- One file per administration on the same submission

Complete submission

Validate your e-notice files

- Please use BR dedicated software tools for validation!
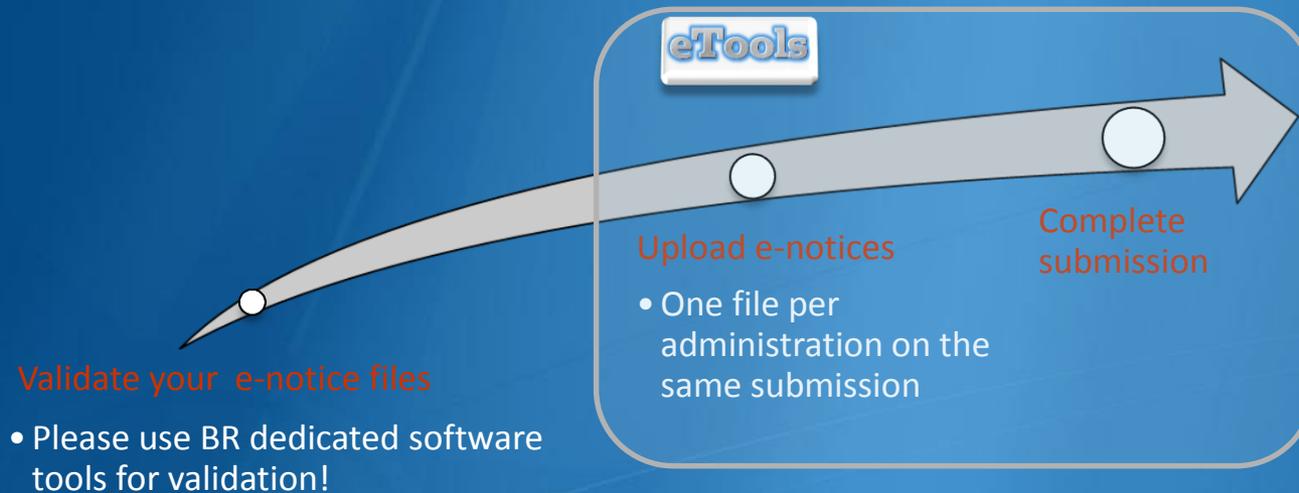
The ITU distributed processing infrastructure will treat your test submission and inform you at completion!

Check your TIES account!

yourTIESname@ties.itu.int

eTools - Important

- Please make sure that the notice files to be examined for compatibility analysis have been **validated** by software tools on the **BRIFIC** such as *TerRaNotices*, before submitting them *eTools*

eTools: e-notice submission to the compatibility analysis

http://www.itu.int/ITU-R/eBCD/MemberPages/eCalculations.aspx?

eTools: job processing

Pending → Process → Success — Failed

Job Id	Job Name	Job Status	Job Type	Date of Request	Date of Start Run	Date of Completion	Process	Elapsed Time (minutes)
11943	BHR_KWT_OMA_QAT_UAE	Success	Art4_Compatibility_ServerASMG	4/30/2014 10:11:25 AM	4/30/2014 10:25:41 AM	4/30/2014 10:30:12 AM	BR-GE06-2_4	19
12080	Full_iteration_1bis	Success	Art4_Compatibility_ServerASMG	5/7/2014 5:29:36 PM	5/8/2014 2:09:16 AM	5/8/2014 2:41:29 AM	BR-GE06-2_5	552
12079	Full_iteration_1	Failed	Art4_Compatibility_ServerASMG	5/7/2014 5:15:18 PM	5/7/2014 5:15:24 PM	5/7/2014 5:21:35 PM	BR-GE06-2_4	6

eTools – Download Results

Test Packages 12080: click to show all

Job summary   Delete   Share

job id	job name	job status
12080	Full_iteration_1bis	Success

Job Input

Adm	E-notice file	Number of Notices
ALG	ALG.txt	170
ARS	ARS.txt	290
BHR	BHR.txt	104
EGY	EGY.txt	512

Job Output

Download results

Do you want to open or save **results_degert_12080_hdawlxv91unvipd.mdb.zip** (154 MB) from **br-ge06-2.itu.int**?

Open   Save ▼

Save
Save as
Save and open

Results is an MS Access mdb file for download to be visualized with GE06Calc.

GE06Calc : Important

- GE06Calc is intended to be an easy-to-use tool for administrations
  - Display in details the compatibility analysis results
  - unofficially examine the conformity of notices with respect to the GE06 Plan before sending them to the BR.
- To be able to benefit from GE06Calc features, please **first install the BRIFIC** (Terrestrial) DVD applications and database on your PC.
- Examinations are performed taking into account the GE06 Plan and MIFR data on the BRIFIC DVD.

GE06Calc Software Tool

- PC-based application for unofficial examinations to the GE06 Digital Plan

- Web-based installation from:
  ITU-R->Terrestrial->Broadcasting->Software->GE06Calc
  http://www.itu.int/ITU-R/terrestrial/broadcast/software/ge06calc/

- Automatic updates (checking for updates is performed only if and when the application is started)

GE06Calc - Features

- *run conformity examination* in case of conversion of an allotment into assignments.

- *read the results file* *created through the use of the 'compatibility analysis tool' of the Web application* **eBCD**.

GE06Calc – Usage to read the compatibility analysis

1. Open compatibility analysis file (saved from eTools)
2. Select option to read the results
3. Analyse the results, reduce incompatibilities and coordinate.
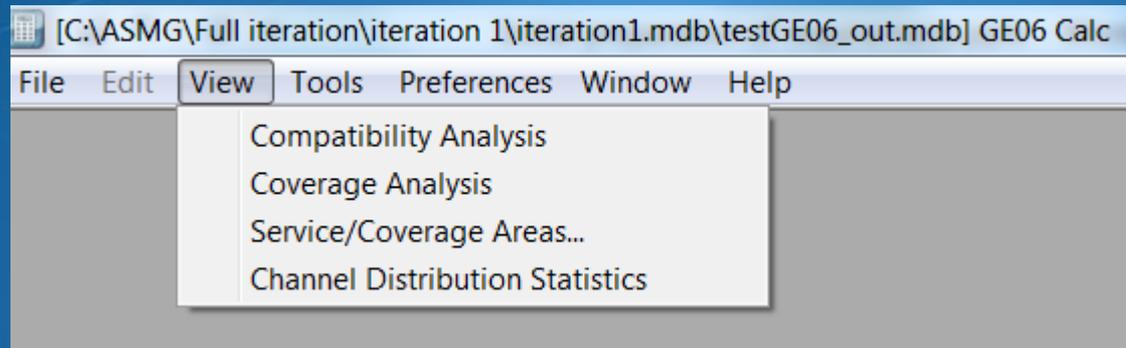
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Broadcasting Services
Our Bands
MIFR
Plans ▶
HFBC ▶
Forum
FAQ
On-line services/Software
Reference documents

ITU Sectors | Newsroom | Events | Publications | Statistics | About ITU

Broadcasting Services Division

Broadcasting Services Division (BCD) examines notices and submissions for frequency assignments concerning television and sound broadcasting terrestrial services in all broadcasting bands (LF, MF, HF, VHF and UHF) and provides assistance to administrations with respect to the technical, regulatory and administrative procedures applicable to the planning of terrestrial broadcasting services.

Its main activities include:

- Examining proposed modifications to the frequency Plans with respect to their impact on other administrations in accordance with the procedures specified in the Regional Agreements.
- Examining proposed notifications for recording in the Master International Frequency Register (MIFR) in accordance with the Radio Regulations and associated Regional Agreements.
- Examining the compatibility analysis for HF broadcasting requirements submitted for inclusion in the seasonal schedules in accordance with Article 12 of the radio Regulations.
- Providing assistance and training to administrations in the application of relevant provisions of the Radio Regulations and Regional Agreements.
- Developing technical software that assist administrations in the planning and coordinating of terrestrial broadcasting services.

Contact: brbcd@itu.int

In focus!

ASMG GE06 Frequency coordination

- Arab Spectrum Management Group (ASMG) GE06 Frequency Coordination Meetings

Broadcasting Databases

eBCD

- Broadcasting data only a few clicks away!

Direct Access from ASMG web page

Arab Spectrum Management Group (ASMG) GE06 Frequency Coordination Meetings

The aim of this activity is to assist the ASMG ITU Member States in coordinating the necessary modifications to the GE06 Digital Plan, in order to ensure the availability for each country in the region, on an equitable basis, of the spectrum resources required to support at least four TV multiplexes with national coverage, in addition to the frequency assignments or allotments already recorded in the GE06 Digital Plan, in the band 470-694 MHz.

This activity is intended to enable the concerned administrations to successfully apply the relevant procedures of the GE06 Agreement and the Radio Regulations in order to modify the GE06 Digital Plan and bring in service their frequency assignments to the broadcasting and mobile services in the UHF band without harmful interference.

Submissions to modify the Plan GE06 should be sent through WISFAT.

Planning Tools

- **eTools** - runs compatibility calculations and other routines.
- **GE06Calc** - view compatibility results (output of eTools).
- **SRTM3** - effective antenna heights calculator, also available in TerRaNotices.

Relevant coordination meetings

- Digital Terrestrial TV in UHF Bands & Digital Dividend, Dubai, United Arab Emirates, 18-20 May 2014 more ▶

Documents

- Information documents... more ▶
- Presentations and exercises... more ▶

Iteration statistics

- Iterations history

ASMG GE06 Planning area

Thank you
Merci beaucoup