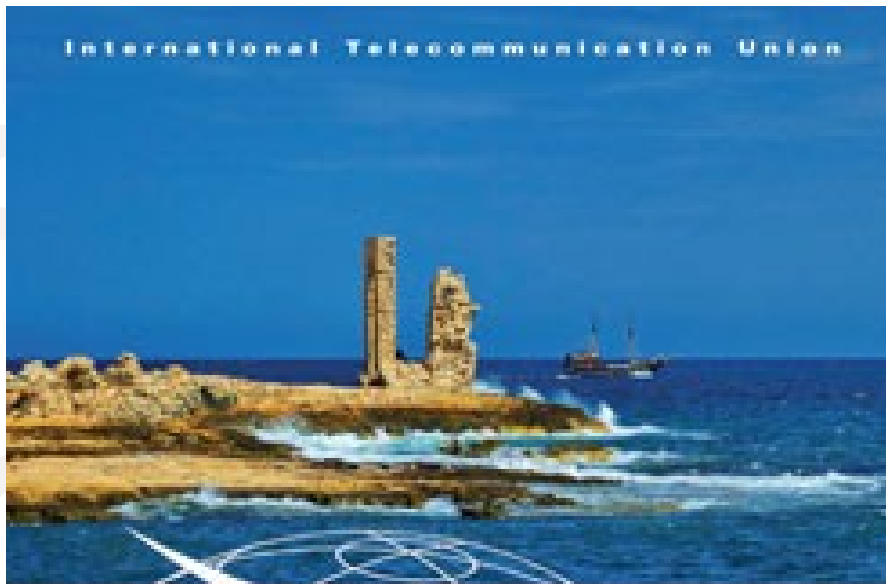


International Telecommunication Union



REGIONAL
RADIOCOMMUNICATION
SEMINAR FOR ARAB COUNTRIES 2013

**Tunis, Tunisia
9-13 December 2013**

www.itu.int/go/ITU-R/seminars



Overview



Introduction: definitions



Part 1 - “Data content” point of view:

- ❖ The IFL
- ❖ The MIFR and The Plans
- ❖ The Preface to the BR IFIC
- ❖ Information Documents



Part 2 - “Software” point of view:

- ❖ The organization of the Database
- ❖ New format of the BR IFIC DVD
- ❖ Analyzing and querying the Content of the BR IFIC
- ❖ TerRaQ - Advanced Features

Overview

- **Part 3 - Installation & Configuration**
- **Part 4 - The BR IFIC On the WEB**
- **Conclusions**

Part 1 – Definitions and Data Content

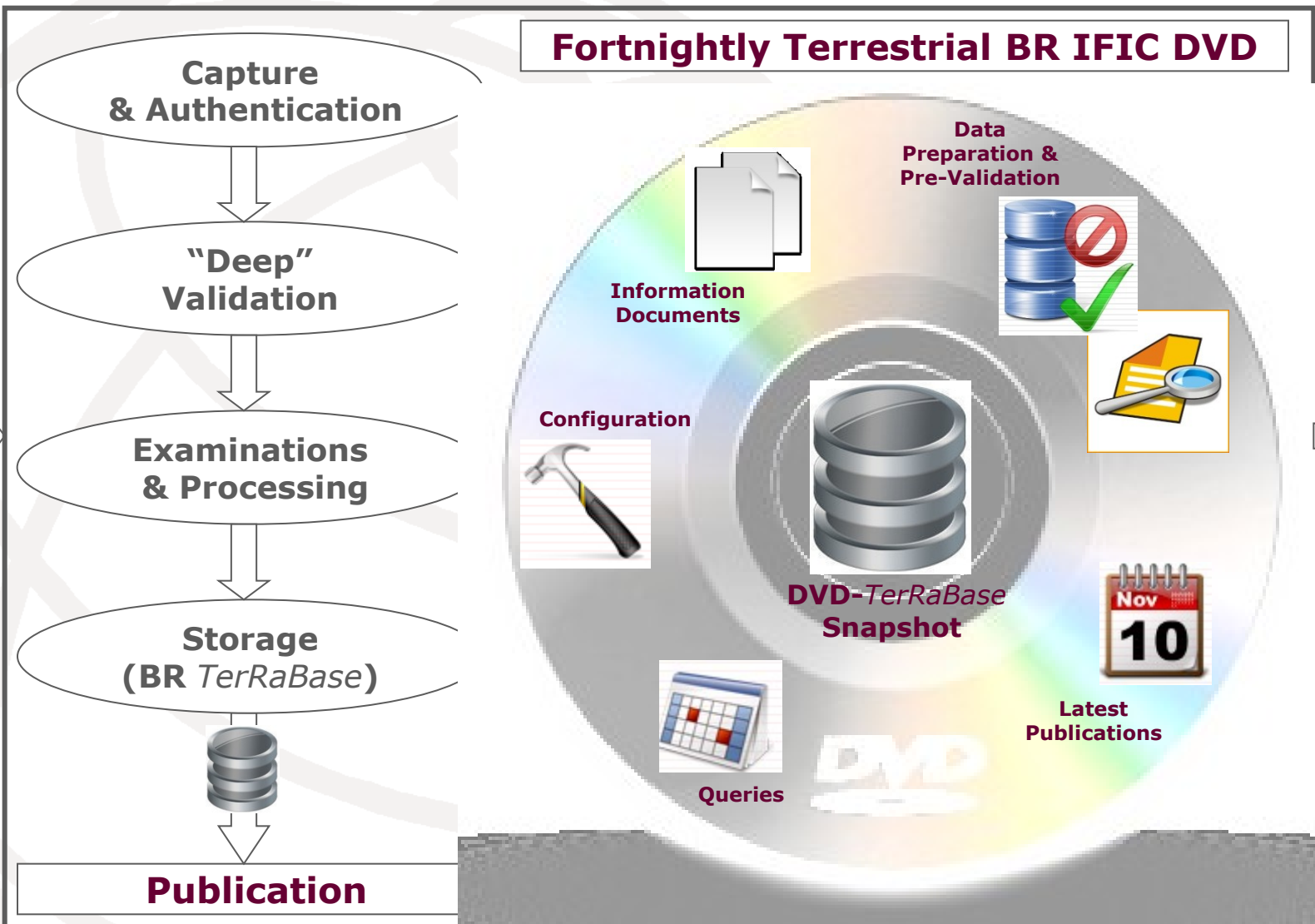
What is the BR IFIC?

- **The BR International Frequency Information Circular (BR IFIC) is a service publication published every two weeks by the Radiocommunication Bureau in accordance with Article 20 of the Radio Regulations (RR 20.1 to RR 20.6 and RR 20.15).**
- **The purpose of the BR IFIC is to provide information on the frequency assignments/allotments submitted by Administrations to the Radiocommunication Bureau for recording in the Master International Frequency Register (MIFR) and various regional or worldwide Agreements/Plans.**
- **Given the volume of the data it contains, the BR IFIC is published in two parts: one for terrestrial services, the other for space services. The BR IFIC (Terrestrial Services) is issued on DVD-ROM in the six official languages of the Union: Arabic, Chinese, English, French, Russian and Spanish.**
- **A free copy is sent to the Administration of every Member State**

Producing the BR IFIC (Terrestrial Services)

Notifications From Administrations

Tools & Information To Administrations



The Data Content on the BR IFIC

➤ **The BR IFIC DVD-*TerRaBase* snapshot contains**

- **The International Frequency List (IFL)**
- **The Master International Frequency Register (MIFR)**
- **The frequency assignment/allotment Plans for terrestrial services**
- **The notices under treatment, having reached an appropriate publication stage:**
 - ▶ **in accordance with RR Article 11, for updating the MIFR**
 - ▶ **pursuant to various agreements, for updating the Plans**



The International Frequency List (IFL)

Particulars of frequency assignments
Recorded in the Master International
Frequency Register

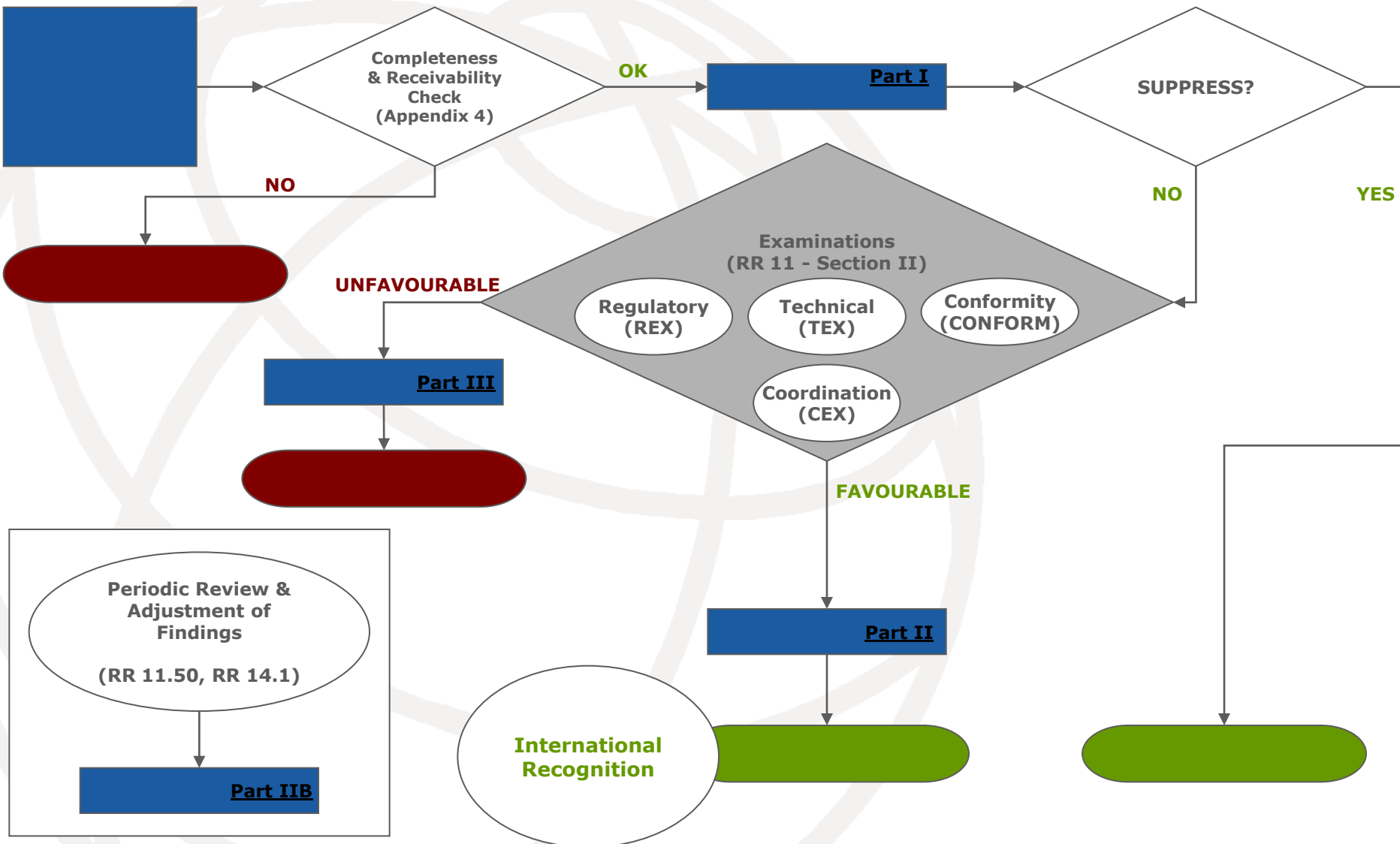
Frequencies (e.g. 2 182 kHz)
prescribed by the Radio
Regulations for common use
by certain services

Allotments in the Plans included
in Appendices 25, 26 and 27 to
the Radio Regulations

The MIFR and related procedures

- **The MIFR contains the complete characteristics of frequency assignments notified to the BR and recorded in accordance with the provisions of the Radio Regulations.**
 - Any assignment liable to cause interference to existing or planned stations of another country or liable to receive interference from any such stations must be notified to the Bureau in order to be recorded in the MIFR and thus benefits from the **right to international recognition**.
 - The Bureau maintains and updates the MIFR, based on the **notifications** received from the Administrations, in accordance with the procedures and provisions of **Article 11 of the RR**. Notifications can have the following purposes (called Intent): **ADD** (addition of a new assignment), **MOD** (modifications to the characteristics of an already recorded assignment) and **SUPPRESS** (suppression of an already recorded assignment).
 - The Bureau examines the received notifications, both from their **"data completeness"** point of view (Appendix 4 to the RR) and their **"conformity"** to the provisions of the RR point of view, based on the frequency band and category of service concerned. The Bureau formulates the appropriate **findings**.
 - The Bureau publishes the resulting relevant information in the **appropriate Parts of the BR IFIC** (I, II, IIB and III), thus reflecting the maintained and updated status of the MIFR.
 - The Bureau periodically reviews the MIFR with the aim of maintaining or improving its accuracy, with particular emphasis on the **review of the findings** so as to adjust them to the changing allocation situation after each conference.

The MIFR and related procedures



The MIFR and related procedures

Section II – Examination of notices and recording of frequency assignments in the Master Register

11.27 Notices not containing those characteristics specified in Appendix 4 as mandatory or required shall be returned with comments to help the notifying administration to complete and resubmit them, unless the information not provided is immediately forthcoming in response to an inquiry by the Bureau.

11.28 Complete notices shall be marked by the Bureau with their date of receipt and shall be examined in the date order of their receipt. On receipt of a complete notice the Bureau shall, within no more than two months, publish its contents, with any diagrams and maps and the date of receipt, in the BR IFIC which shall constitute the acknowledgement to the notifying administration of receipt of its notice. When the Bureau is not in a position to comply with the time limit referred to above, it shall periodically so inform the administrations, giving the reasons therefor.

11.29 The Bureau shall not postpone the formulation of a finding on a complete notice unless it lacks sufficient data to reach a conclusion thereon. Moreover, the Bureau shall not act upon any notice having a technical bearing on an earlier notice which is still under consideration by the Bureau until it has reached a finding with respect to the earlier notice.

11.30 Each notice shall be examined:

11.31 a) with respect to its [redacted] and the other provisions¹² of these Regulations, except those relating to conformity with the procedures for obtaining coordination or the probability of harmful interference, or those relating to conformity with a plan, as appropriate, which are the subject of the following sub-paragraphs;¹³

¹¹ **11.31.1** Conformity with the Table of Frequency Allocations implies the successful application of No. 9.21, when necessary. However, the recording of the assignment with respect to those objecting administration(s) whose agreement(s) have not been obtained will be with a favourable finding, subject to the condition that the assignment in question shall not cause harmful interference to nor claim protection from the service(s) of the objecting administration(s) from which the agreement was sought. With respect to the administration(s) which have not objected under No. 9.21, the recording of the assignment shall also be made with a favourable finding. (WRC-03)

¹² **11.31.2** The “other provisions” shall be identified and included in the Rules of Procedure.

¹³ **11.31.3** Notices relating to radio astronomy stations are examined with respect to No. 11.31 only.

11.32 b) with respect to its [redacted] with other administrations applicable to the radiocommunication service and the frequency band concerned; or

11.32A c) with respect to the probability of harmful interference that may be caused to or by assignments recorded with a favourable finding under Nos. 11.36 and 11.37 or 11.38, or recorded in application of No. 11.41, or published under Nos. 9.38 or 9.58 but not yet notified, as appropriate, for those cases for which the notifying administration states that the procedure for coordination under Nos. 9.7, 9.7A, 9.7B, 9.11, 9.12, 9.12A, 9.13 or 9.14, could not be successfully completed (see also No. 9.65);¹⁴ or (WRC-2000)

11.33 d) with respect to the probability of harmful interference that may be caused to or by other assignments recorded with a favourable finding in application of Nos. 11.36 and 11.37 or 11.38 or in application of No. 11.41, as appropriate, for those cases for which the notifying administration states that the procedure for coordination or prior agreement under Nos. 9.15¹⁵, 9.16¹⁵, 9.17¹⁵, 9.17A or 9.18¹⁵ could not be successfully completed (see also No. 9.65);¹⁶ or (WRC-2000)

11.34 e) where appropriate, with respect to its [redacted] allotment or assignment plan and the associated provisions.

11.35 In cases where the Bureau is not in a position to conduct the examination under No. 11.32A or 11.33, the Bureau shall immediately inform the notifying administration, which may then resubmit its notice under No. 11.41, under the assumption that the finding under No. 11.32A or 11.33 is unfavourable. (WRC-2000)

11.36 When the examination with respect to No. 11.31 leads to a favourable finding, the assignment shall be recorded in the Master Register or examined further with respect to Nos. 11.32 to 11.34, as appropriate. When the finding with respect to No. 11.31 is unfavourable, the assignment shall be recorded in the Master Register for information purposes and subject to application of No. 8.5, only if the administration undertakes that it will be operated in accordance with No. 4.4; otherwise the notice shall be returned with an indication of the appropriate action.

The MIFR and related procedures

➤ **In summary, the MIFR is maintained by the BR under RR 11, based on the information published on the BR IFIC:**

- **Part I**: Complete notices, received for new frequency assignments or modifications/deletions of frequency assignments already recorded in the MIFR. This Part I is to be considered as the acknowledgement of receipt of the published information.
- **Part II**: Notices and associated FAVOURABLE findings, resulting from the examinations effected by the BR, following which the assignment is recorded in the MIFR.
- **Part III**: Notices and associated UNFAVOURABLE findings, resulting from the examinations effected by the BR, following which the notice is returned to the notifying administration and the assignment is not recorded in the MIFR.

The findings are formulated by the BR with respect to:

- ✓ Conformity with the Convention, the TFA and other provisions (RR 11.31)
 - ✓ Application of a coordination procedure (RR 11.32)
 - ✓ Probability of harmful interference (RR 11.33)
 - ✓ Conformity with a frequency assignment or allotment Plan (RR 11.34)
-
- **Part IIB**: Frequency assignments already recorded in the MIFR, the findings in respect of which have been reviewed by the BR, pursuant RR 14.1.

The Plans (Terrestrial Services)

Worldwide Agreements

- ❖ RR Appendix 25 Allotment Plan
- ❖ RR Appendix 26 Allotment Plan
- ❖ RR Appendix 27 Allotment Plan

Regional Agreements

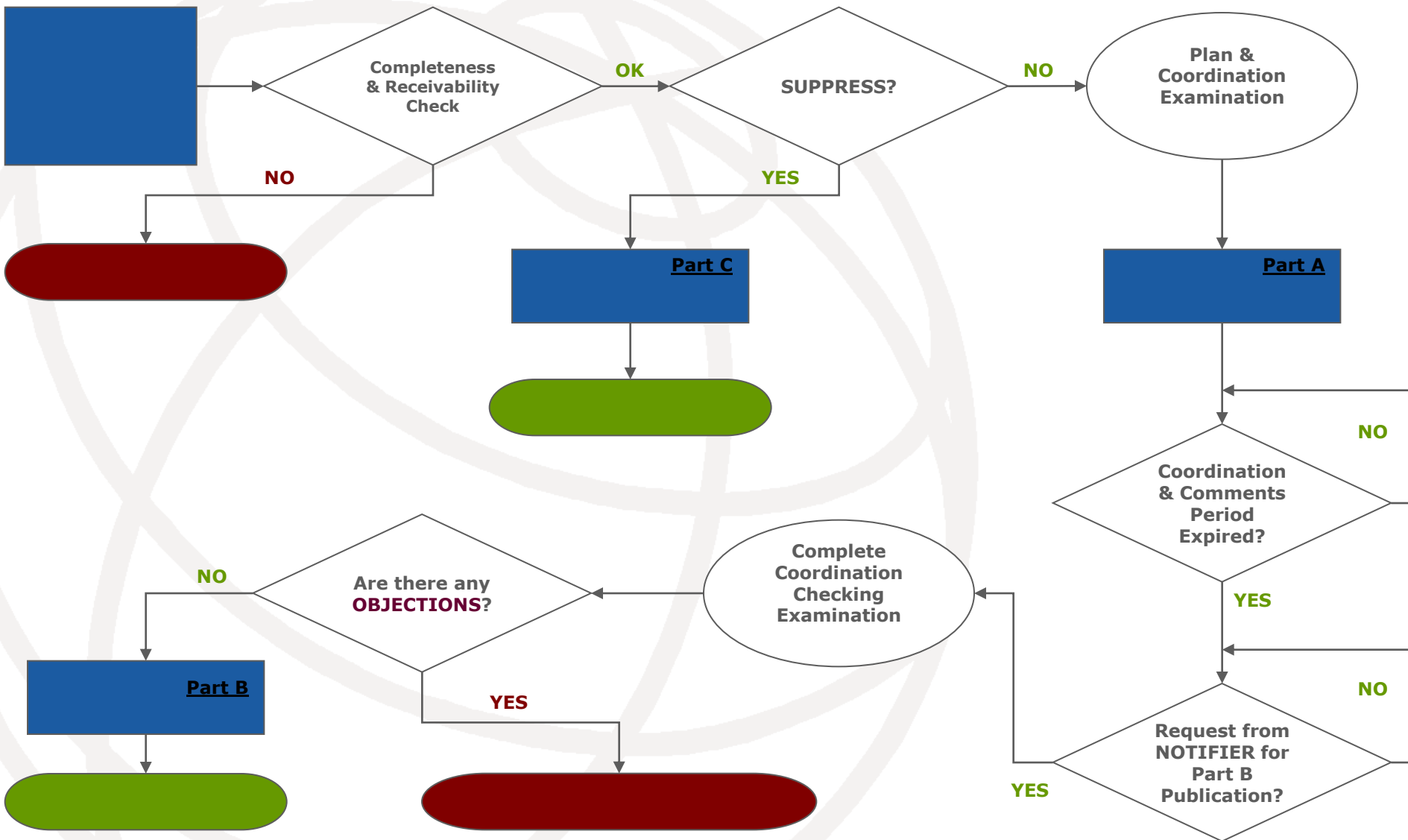
- ❖ VHF/UHF BC/BT ST61, GE84, GE89, GE06
- ❖ LF/MF BC GE75 , RJ81, RJ88
- ❖ Maritime / Aeronautical GE85M, GE85N

- In General, every Agreement is subject to a **detailed procedure for modifying** the associated Plan. This is described in the corresponding Agreement.
- Usually, for Regional Agreements, this procedure is contained in **Article 4** of the agreement concerned. **Article 5** usually contains the notification procedure associated with the “bringing into use” of a planned frequency assignment into the MIFR.
- For Worldwide Agreements, this procedure is contained in the **corresponding RR Appendix**.
- The BR maintains and publishes on the BR IFIC an up to date copy of every Plan associated with a given Agreement.

The Plans (Terrestrial Services)

- **The BR maintains and updates the various Plans, and publishes the corresponding information on the BR IFIC, in the appropriate Special Section associated with the relevant Plan.**
 - Requests for modification of the various Plans are **notified** by the Administrations to the Bureau, in accordance with the procedure and provisions applicable to the relevant Plan. Notifications can have the following purposes (called Intent): **ADD** (addition of a new assignment/allotment to the Plan), **MOD** (modifications to the characteristics of an already recorded assignment/allotment in the Plan) and **SUPPRESS** (suppression of an already recorded assignment/allotment in the Plan).
 - The Bureau examines the received notifications, both regarding their “**data completeness**” and their “**conformity**” to the provisions of the relevant agreement. The Bureau also determines the **needs for coordination** with any eventually affected country.
 - The Bureau publishes the resulting relevant information in the **appropriate Parts** (A, B and C) **of the appropriate Special Section of the BR IFIC**, thus reflecting the maintained and updated status of the concerned Plan.
 - The Bureau proceeds with any relevant actions related to the modified Plan. This may include, for instance,
 - ▶ Technical calculations of reference situations
 - ▶ Review of some assignments recorded in the MIFR, if applicable, in order to re-assess their findings with respect to their conformity after the Plan is modified
 - ▶ Etc.

The Plans (Terrestrial Services)



The Plans (Terrestrial Services)

➤ In summary, the BR maintains the various Plans associated with various Agreements, based on the information published on the BR IFIC in the appropriate **Special Section** corresponding to every Agreement :

- **Part A**: Particulars of proposed modifications to the Plan: complete notices, ***notified*** and received for new frequency assignments/allotments or modifications/deletions of frequency assignments/allotments already recorded in the Plan.

This Part A of the Special Section also usually contains relevant ***coordination information***, both as determined by the Bureau's examinations (COORD REQUIRED) and as stated by the Notifying Administration at notification time (COORD COMPLETED, with source NOTIFIER).

The ***date of publication*** of the BR IFIC containing the Part A of the Special Section constitutes the ***starting date*** for the comment/coordination period (Agreement specific).

- **Part B**: At the end of the comment period, ***if there are NO OBJECTIONS*** and ***if the Notifying Administration requested*** the Bureau to do so, this Part B contains the particular of the modifications to the Plan (ADD, MOD) on which agreement has been reached and following which the new or modified assignments/allotments will be ***recorded in the Plan***.

- **Part C**: Particulars of assignments/allotments in the Plan which have been cancelled.

The Preface to the BR IFIC

- **The Preface describes the contents of the BR IFIC. As the BR IFIC is published in two parts (Space and Terrestrial), the Preface is also published in two parts.**
- The Preface to the BR IFIC (Terrestrial Services) explains the meanings of the abbreviations, symbols and coded remarks used in the BR IFIC.
- The Preface is updated regularly by the Bureau and published in the BR IFIC and on the ITU website at the following URL:
http://www.itu.int/ITU-R/publications/brific-ter/preface/PREFACE_EN.PDF
- It is available in PDF format in the six official languages of the ITU.
- In practical terms, all the information published in the Preface is updated solely by the Bureau.
- Nevertheless, regarding the addresses of the Administrations and the list of operating agencies (Tables 12A/12B, section 3 of Chapter IV), it is essential that the Administrations check this information and inform the Bureau regularly about any changes that have taken place.

The Preface to the BR IFIC

Symbol	Geographical Area	12B Code	Address of the Administration(s)
ALG	Algeria	A	MINISTERE DE LA POSTE ET DES TECHNOLOGIES DE L'INFORMATION ET DE LA COMMUNICATION 04 - BOULEVARD KRIM BELKACEM - 16000 ALGER ALGERIE
	Algérie	B	AGENCE NATIONALE DES FREQUENCES 04 - BOULEVARD KRIM BELKACEM - 16000 ALGER ALGERIE
	Argelia		
		12A Code	Operating Agencies
		003	DEFENSE NATIONALE
		004	AVIATION CIVILE
		005	METEOROLOGIE NATIONALE

Symbol	Geographical Area	12B Code	Address of the Administration(s)
TUN	Tunisia	A	AGENCE NATIONALE DES FREQUENCES 12, RUE D'ANGLETERRE 1000 TUNIS
	Tunisie		TUNISIE
	Túnez		TUNISIE
		12A Code	Operating Agencies
		001	DEFENSE NATIONALE
		002	MARINE NATIONALE
		003	AVIATION MILITAIRE
		004	AVIATION CIVILE
		005	SERVICE DE SECURITE
		006	DIRECTION GENERALE DES TELECOMMUNICACIONES AVRIL, 1938 TUNIS, GENTEL TUNIS
		007	INSTITUT NATIONAL DE LA METEOROLOGIE
		008	SERVICE DES PHARES ET BALISES

CHAPTER IV SECTION 6

6. TABLE 'CLASS OF STATION'

Symbol	Description
AL	Aeronautical radionavigation land station (transmitting station in the aeronautical radionavigation service)
AM	Aeronautical radionavigation mobile station (receiving station in the aeronautical radionavigation service)
AT	Amateur station
BC	Broadcasting station, sound
BT	Broadcasting station, television
FA	Aeronautical station (transmitting station in the aeronautical mobile service)
FB	Base station (transmitting station in the land mobile service)
FC	Coast station (transmitting station in the maritime mobile service)

CHAPTER IV SECTION 9

9. TABLES WITH DATA ELEMENTS SPECIFIC TO THE BROADCASTING SERVICE

9.1 TABLE 'TELEVISION SYSTEMS' (See Note 9.1)

tran_sys	Analogue or digital	bdwidth kHz	freqassgn above_vccarr	freq_scar above_vccarr	freq_line kHz
B	Analogue	7 000	2.25	5.5	15 625
B1	Analogue	8 000	2.75	5.5	15 625
D	Analogue	8 000	2.75	6.5	15 625
D1	Analogue	8 000	2.75	6.5	15 625
G	Analogue	8 000	2.75	5.5	15 625
H	Analogue	8 000	2.75	5.5	15 625
I	Analogue	8 000	2.75	5.9996	15 625
K	Analogue	8 000	2.75	6.5	15 625
K1	Analogue	8 000	2.75	6.5	15 625
L	Analogue	8 000	2.75	6.5	15 625
L1	Analogue	8 000	-2.75	-6.5	15 625
M	Analogue	8 000	1.75	4.5	15 750
N	Analogue	8 000	1.75	4.5	15 625
T0	Digital	7 000	NA*	NA*	NA*
T1	Digital	8 000	NA*	NA*	NA*
T2	Digital	6 000	NA*	NA*	NA*

* NA : Not applicable

Note 9.1: Systems T0, T1 and T2 are not to be used in the context of the GEO6 Agreement.

9.2 TABLE 'DVB-T system variants and net bit rate values (Mbit/s)'

System variant designator	Modulation	Code rate	Net bit rate (Mbit/s) For different guard intervals (GI)			
			GI = 1/4	GI = 1/8	GI = 1/16	GI = 1/32
8 MHz variants						
A1	QPSK	1/2	4.98	5.53	5.85	6.03
A2	QPSK	2/3	6.64	7.37	7.81	8.04
A3	QPSK	3/4	7.46	8.29	8.78	9.05
A5	QPSK	5/6	8.29	9.22	9.76	10.05
A7	QPSK	7/8	8.71	9.68	10.25	10.58

Information Documents

➤ **The BR IFIC DVD contains a set of various information documents, associated with the “current BR IFIC number”, which the BR uses to communicate various information to the intention of the Administrations.**

➤ The “ReadMe” information document (PDF) contains:

Statistics & information about notices processed for publication in Parts I, II and III of the BR IFIC (Submissions under Article 11 procedure).

Statistics & information about notices processed for Publication in Special Sections (Submissions under plan modification procedures).

Information about request for agreement, in accordance with the procedure of Article 9 of the Radio Regulations, for the use of a frequency assignment.

Information about the Preface to the BR IFIC.

Any other useful information for users.

Information Documents

INTERNATIONAL TELECOMMUNICATION UNION
Radiocommunication Bureau



Information Note - BR IFIC 2744

1) Article 11 procedure

• Number of Notices per BR IFIC Part

Part I	Part II	Part III	Total
12637	5317	22	17976

2) Plan modification procedure

• Notices published in Special Section GE84/209

Part A	Part B	Part C	Total
135	216	3	354

• Special Section GE06L/12

1 Assignment to other terrestrial primary services in GE06 planning area and bands published in Part B of Special Section GE06L/12.

3) Article 9 procedures

BR IFIC No. 2744 contains Special Section RR9.21/D/401 in PDF format which is accessible through "Latest Publication" section of the "BR IFIC Contents" in the startup screen of the BR IFIC DVD menu.

4) Software tools

BR IFIC Installation: If you encounter any problem during installation and usage of the BR IFIC DVDs, please consult the document located at:
<http://www.itu.int/ITU-R/terrestrial/docs/briffo/files/informationNote/InstallationBRIFIC.PDF>

Using the BR IFIC with other BR tools: If you would like to use other BR tools (namely G84PLN and GE06Cal soft) with the new format of the BR IFIC, please consult the document located at:
http://www.itu.int/ITU-R/terrestrial/docs/briffo/files/informationNote/BR_IFIC_and_other_BR_tools.pdf

In case of further need of clarification and/or assistance, please contact brpr@itu.int.



Part 2 – “Software” point of view

The Database Organization on the BR IFIC

➤ **The BR IFIC DVD Terrestrial Radiocommunication Database (*TerRaBase*) is organized in three portions, also called “Services”:**

- **The FM/TV Broadcasting Service Portion**

sound and television broadcasting in the VHF/UHF bands

- **The LF/MF Broadcasting Service Portion**

sound broadcasting in the LF and MF bands

- **The FXM Service Portion**

fixed and mobile services

➤ **From a “Processing Status” point of view, each portion is composed of two parts (or “Containers”):**

- **The “Recorded Part” Container**

Common frequencies and assignments/allotments Recorded in the MIFR and the Plans associated with the service

- **The “In Process Part” Container**

Pending notices, proposing to update the MIFR or the Plans associated with the service. This piece is usually known as the **TIP** (**T**ransactions **I**n **P**rogress).

The Transactions In Progress (TIP)

MIFR

- Submissions received by the BR under the Article 11 procedure for updating of the Master Register.
- Notices ADD/MOD published in Part I and awaiting examination.
- **They will be in TIP and visible in each BR IFIC until their final publication (Part II or III).**
- Notices SUPPRESS published in Part I as an acknowledgement of receipt.

Plans

- Submissions received by the BR under the Plan modification procedure for updating of the pertinent Plan.
- Notices ADD/MOD, published in the Special Section Part A and awaiting coordination.
- **They will be in TIP and visible in each BR IFIC until their final publication (Part B).**
- Notices SUPPRESS, published in the Special Section Part C, as an acknowledgement of receipt.

The FM/TV Broadcasting Service

➤ **The FM/TV part contains all notices in process and assignments/allotments concerning the sound and television broadcasting service in the VHF and UHF bands.**

It includes the following “Fragments”:

- ➔ **ART 11** - Assignments recorded in the **MIFR** and notices submitted under RR Article 11.
- ➔ **ST61** - Plan for the European Broadcasting Area (Stockholm, 1961) (the ST61 Agreement continues to regulate the use of bands 47 - 68 MHz, 87.5 - 100 MHz and 162 - 170 MHz by the broadcasting service).
- ➔ **GE84** - Plan for the use of the band 87.5 - 108 MHz for FM sound broadcasting (Geneva, 1984) (Region 1 and part of Region 3).
- ➔ **GE89** - Plan for the VHF/UHF television service in the African Broadcasting Area and neighboring countries (Geneva, 1989) (the GE89 Agreement continues to regulate the use of bands 47 - 68 MHz, 230 - 238 MHz and 246 - 254 MHz by the broadcasting service).
- ➔ **GE06A** - The analogue Plan adopted by RRC-06 (Geneva, 2006) and comprising the assignments previously recorded in the GE89 and ST61 Plans in the frequency bands 174 - 230 MHz and 470 - 862 MHz, the assignments appearing in the “RRC List” and assignments recorded in the Master Register as at 31 December 1989 with no equivalent in the ST61 and GE89 Plans.
- ➔ **GE06D** - The digital Plan adopted by RRC-06 (Geneva, 2006) and comprising the T-DAB and DVB-T assignments/allotments.

The LF/MF Broadcasting Service

➤ The LF/MF part contains all notices in process and assignments concerning the LF/MF sound broadcasting service.

It includes the following “Fragments”:

- ➔ **ART 11** - Assignments recorded in the **MIFR** and notices submitted under RR Article 11.
- ➔ **GE75** - Plan for LF/MF broadcasting (Regions 1 and 3) (Geneva, 1975).
- ➔ **RJ81** - Plan for MF broadcasting (Region 2) (Rio de Janeiro, 1981).

The Fixed and Mobile Services (FXM)

➤ **The FXM part covers everything terrestrial that is not in the FM/TV or LF/MF portions. It contains all the notices in process and assignments/allotments for the fixed, mobile or other land services (with the exception of the broadcasting service in FM/TV or LF/MF bands).**

It includes the following "Fragments":

- ➔ **ART 11** - Assignments recorded in the **MIFR** and notices submitted under RR Article 11.
- ➔ **ART 9** - Notices submitted under RR 9.21 (coordination requests) for terrestrial services.
- ➔ **Com Freq** - Frequencies for which common use is prescribed in accordance with RR 11.13 and RR 11.14.
- ➔ **AP25** - RR Appendix 25 allotment Plan.
- ➔ **AP26** - RR Appendix 26 allotment Plan.
- ➔ **AP27** - RR Appendix 27 allotment Plan.
- ➔ **GE85M** - Frequency Plan regulated by the regional agreement for the MF maritime mobile and aeronautical radionavigation services (Region 1) (Geneva, 1985).
- ➔ **GE85N** - Frequency Plan regulated by the regional agreement for the planning of the maritime radionavigation service (radiobeacons) in the European Maritime Area (Geneva, 1985).
- ➔ **GE06L** - List of assignments to primary terrestrial services other than the broadcasting service, established by RRC-06 (Geneva, 2006).

New format of the BR IFIC DVD

The Bureau looked for an alternative to MS-Access, with the following characteristics:

- Easy (or no) installation (no setup, no license...)
- Easy to use, in a multi user environment
- Stand-alone, not requiring DB administration (no accounts, no passwords...)
- Efficient when used programmatically
- Easy to convert from and to
- Having no (or minimum) database file size constraints
- Cross-platform portable data format

After considering several candidates...



www.sqlite.org

New format of the BR IFIC DVD

The Bureau started the work on developing the new BR IFIC (Terrestrial Services), based on the use of **SQLite**. A test period, starting with BR IFIC No. 2719 of 15 May 2012, has been conducted; see CR/332 of 24 April 2012. After the enhancements resulting from the collected comments, a cut-over towards the new format has been effected starting from BR IFIC No. 2739 of 5 March 2013 (see CR/344 dated 4 February 2013)

The entire database (definitions, tables, indices, and the data itself) is stored as a **single cross-platform portable file**

Reduced database file size

Name	Size	Type
BRIFIC_2679.db3	3'434'994 KB	SQLite3 database

Easily convertible to other formats and readable with other tools (ODBC drivers, .NET providers etc,... available)

~~MS-Access~~

~~Administrative Privileges~~

~~Installing, linking, etc~~

No (or minimum) installation required

Plug and Play approach:
The BR IFIC can be directly accessed and the various software packages can be directly launched from the DVD

Installation and configuration available on demand

(Data only, Network, local, single or multi users)

New format of the BR IFIC DVD

BR IFIC 2744

BR IFIC 2744 - 14/05/2013

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BR IFIC Contents


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International
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Union



BR IFIC 2744

BR IFIC 2744 - 14/05/2013

Welcome to the BR International Frequency Information Circular (BR IFIC).



BR IFIC
International
Frequency
Information
Circular
(Terrestrial Services)

DVD
ROM

Language



International
Telecommunication
Union



Terrestrial Services BR IFIC

New format of the BR IFIC DVD

The database structure (e.g. name of tables, name and type of fields) has remained unchanged, so as to reduce the necessary changes to any other software.

To minimize any potential disruption, the following utilities are included in the new TerRaQ:

- to convert and/or link a SQLite Terrestrial BR IFIC database to a Microsoft Access® database and vice-versa;
- to export data to a Microsoft Access® database, in addition to an SQLite database.

New format of the BR IFIC DVD

Software Content

TerRaQ: Software for querying the BR IFIC database:

- Parts I, II, III or IIB and the Special Sections (Parts A, B and C);
- Frequency assignments/allotments recorded in the Master Register and in the various plans, as well as notices currently being processed;
- Specific queries (National extract, etc.).

TerRaNV

- Software for checking the electronic notices;
- Complete validation is performed by the BR.

TerRaNotices

- Creation and validation of electronic notices;
- Incorporates the same validations as TerRaNV.

BR IFIC DB Manager

- It is now possible to have different releases of the BR IFIC databases installed on one PC and choose the desired one

Terrestrial BR IFIC Format Converter

- Convert BR IFIC database file from SQLite to MS Access ® and vice versa

New format of the BR IFIC DVD Query and consult : TerRaQ

- **General Publications Query (GPQ)**
- **Latest Publications Query (LPQ)**
- **Quick Queries**
- **SQL Query**
- **Existing Query**
- **Current BR IFIC Publication Content**

New format of the BR IFIC DVD Query and consult : TerRaQ

GPQ is used to consult Master Register, Plans and Notices being processed.

The screenshot displays the TerRaQ 2012 software interface. At the top, the window title is "TerRaQ 2012 [BRIFIC 2733 - 27/11/2012]". Below the menu bar (File, View, Tools, Preferences, Window, Help) is a toolbar with various icons. A "Session Queries Tracker" window is open, showing a table with the following data:

Name	Type	Is New	Is Saved	File Name	Last Modified	Last Executed	Rows in FM/TV	Rows in LF/MF	Rows in FXM	Timing I
Query_1	GPQ	Yes	No		21/11/2012 13:4...	Not Executed				

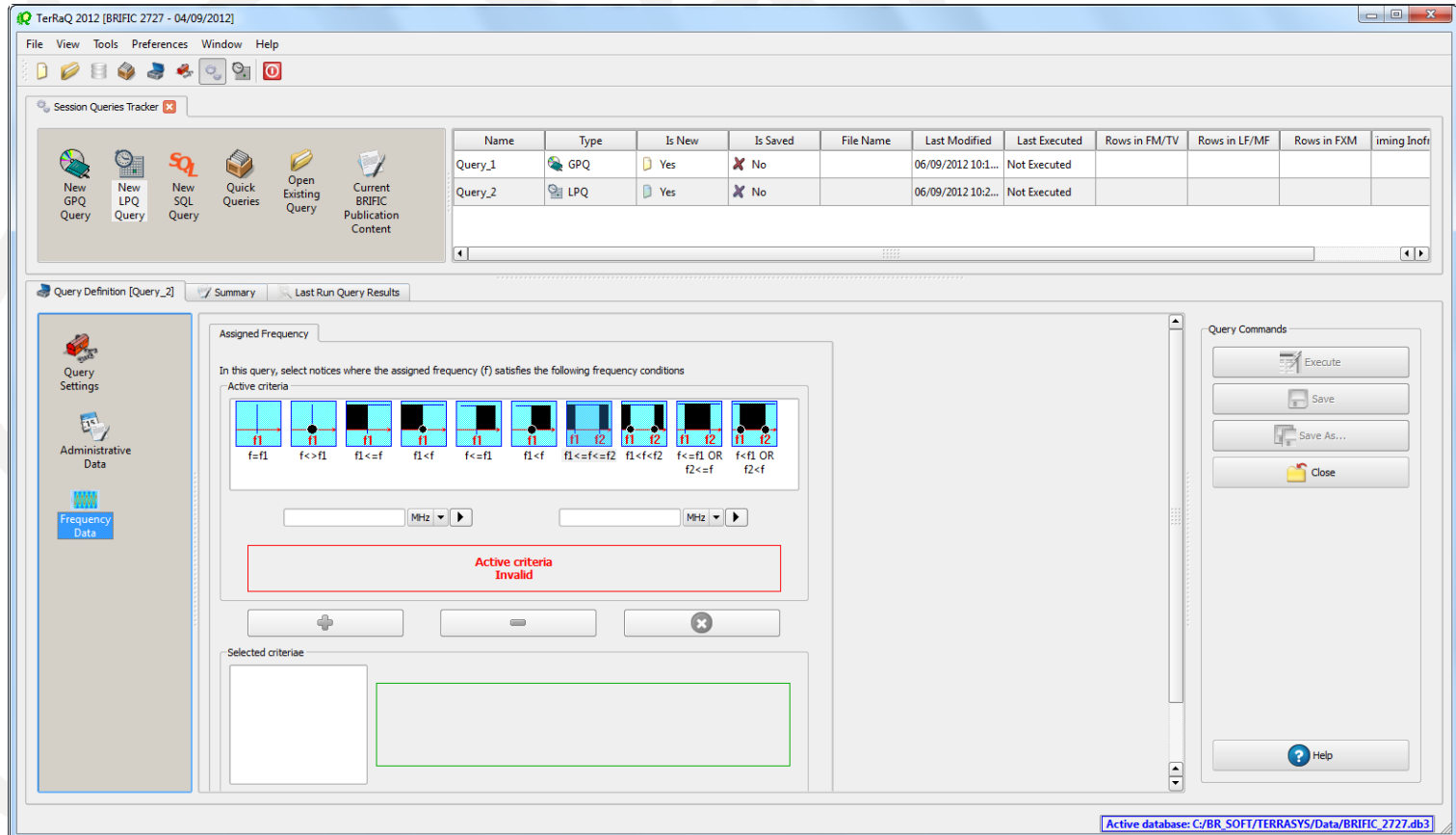
Below the table is a "Query Definition [Query_1]" section with tabs for "Summary" and "Last Run Query Results". The "Summary" tab is active, showing various query parameters:

- Apply the criteria specified on this page to the current query
- Class of emission:** [Dropdown] [Dropdown] [Dropdown]
- Bandwidth code:** [Dropdown] [Dropdown] [Dropdown]
- Channel number:** [Dropdown] [Dropdown] [Dropdown]
- Standard/Allotment area code:** [Dropdown] [Dropdown] [Dropdown]
- Principal site geographic coordinates: Longitude [Dropdown] [Dropdown] [Dropdown] [Dropdown] E, Latitude [Dropdown] [Dropdown] [Dropdown] [Dropdown] N
- Hours of operation: From [00:00] To [24:00]

On the left side, there is a vertical menu with icons for "Query Settings", "Administrative Data", "Frequency Data", "Geographic Data", "Coordination Data", "FXM Specific Data", and "FXM Specific Data". On the right side, there is a "Query Commands" panel with buttons for "Execute", "Save", "Save As...", "Close", and "Help". At the bottom right, the status bar indicates "Active database: C:/BR_SOFT/TERRASYS/Data/BRIFIC_2733.db3".

New format of the BR IFIC DVD Query and consult : TerRaQ

LPQ is used to consult only the current BR IFIC publication



TerRaQ 2012 [BRIFIC 2727 - 04/09/2012]

File View Tools Preferences Window Help

Session Queries Tracker

Name	Type	Is New	Is Saved	File Name	Last Modified	Last Executed	Rows in FM/TV	Rows in LF/MF	Rows in FXM	Timing Info
Query_1	GPQ	Yes	No		06/09/2012 10:1...	Not Executed				
Query_2	LPQ	Yes	No		06/09/2012 10:2...	Not Executed				

Query Definition [Query_2] Summary Last Run Query Results

Assigned Frequency

In this query, select notices where the assigned frequency (f) satisfies the following frequency conditions

Active criteria

$f=f1$
 $f>f1$
 $f1\leq f$
 $f1<f$
 $f\leq f1$
 $f1<f$
 $f1\leq f\leq f2$
 $f1<f<f2$
 $f<f1$ OR $f2\leq f$
 $f2<f$

MHz MHz

Active criteria Invalid

Selected criteria

Query Commands

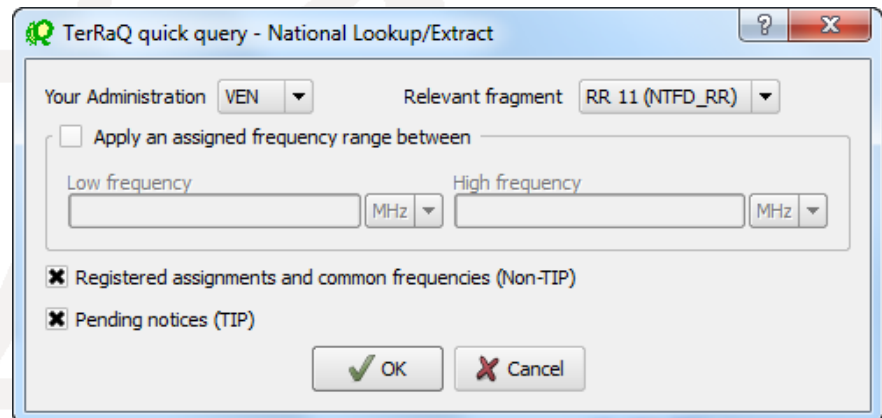
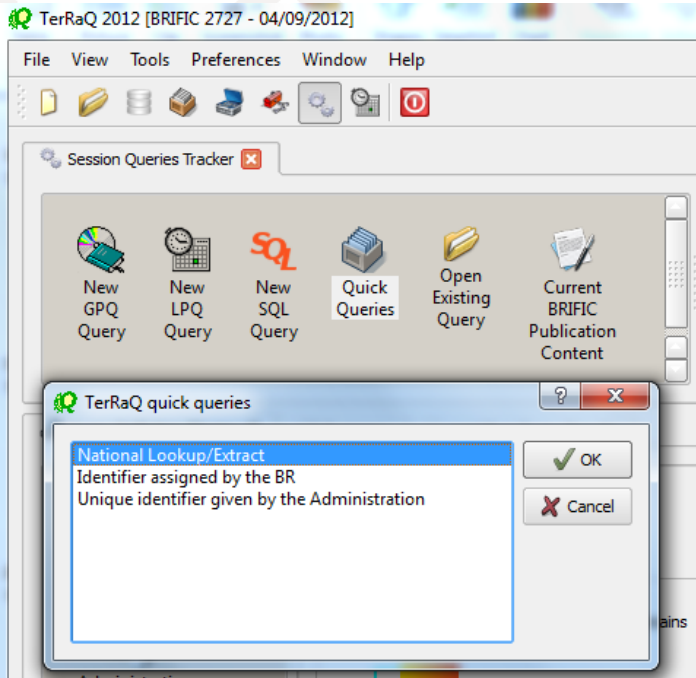
Execute Save Save As... Close Help

Active database: C:/BR_SOFT/TERRASYS/Data/BRIFIC_2727.db3

New format of the BR IFIC DVD Query and consult : TerRaQ

Quick Queries (1/3) - National Lookup/Extract

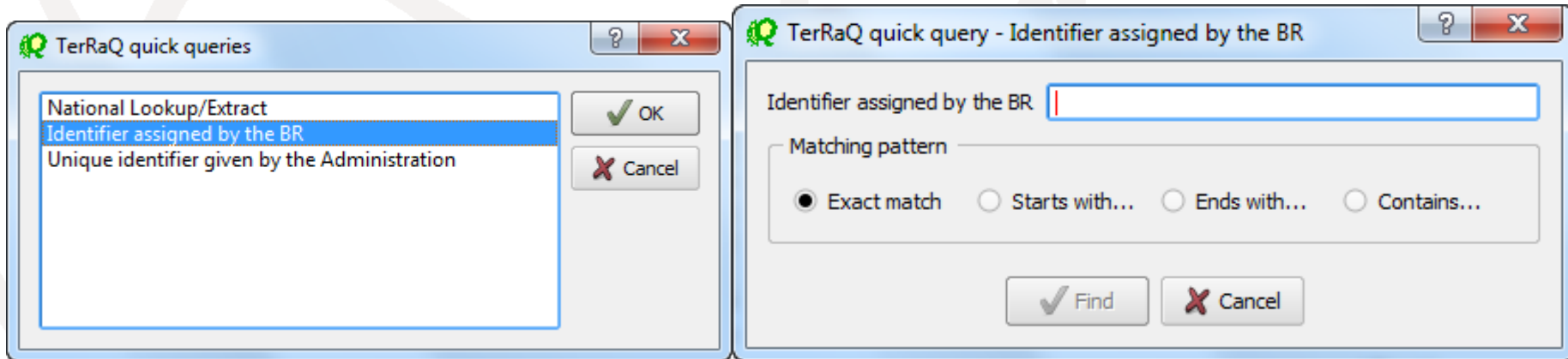
This query might be used to retrieve all (or by a frequency filter) the pending notices and/or the assignments recorded in the MIFR on behalf of a specific Administration (in all fragments of the Radio Regulations or in a specific one).



New format of the BR IFIC DVD Query and consult : TerRaQ

Quick Queries (2/3) - Identifier assigned by the BR

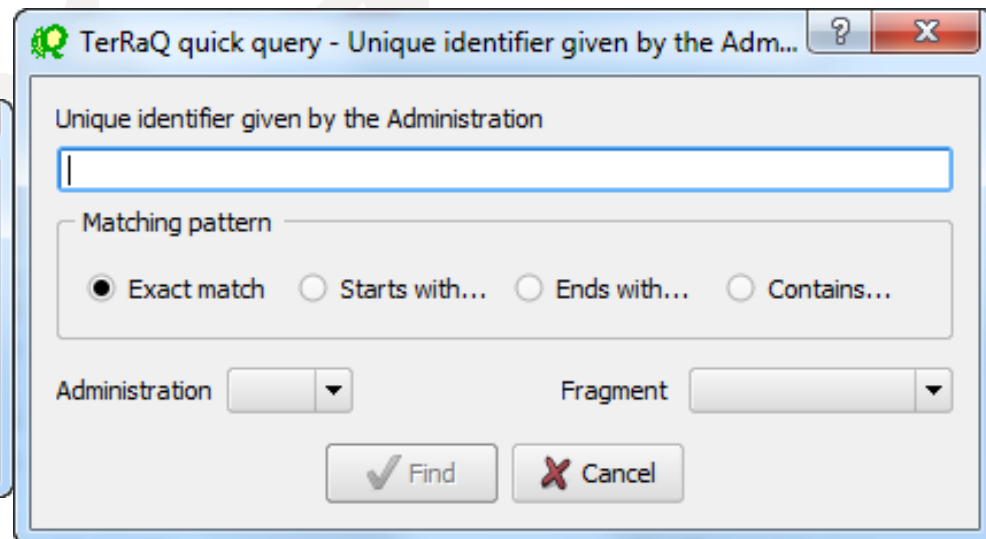
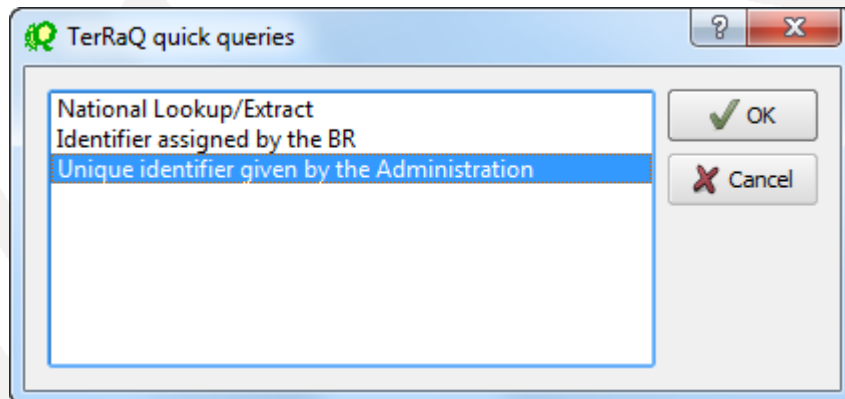
This query only focuses on the assignments with special value(s) for the identifier assigned by the BR.



New format of the BR IFIC DVD Query and consult : TerRaQ

Quick Queries (3/3) - Unique identifier given by the Administration

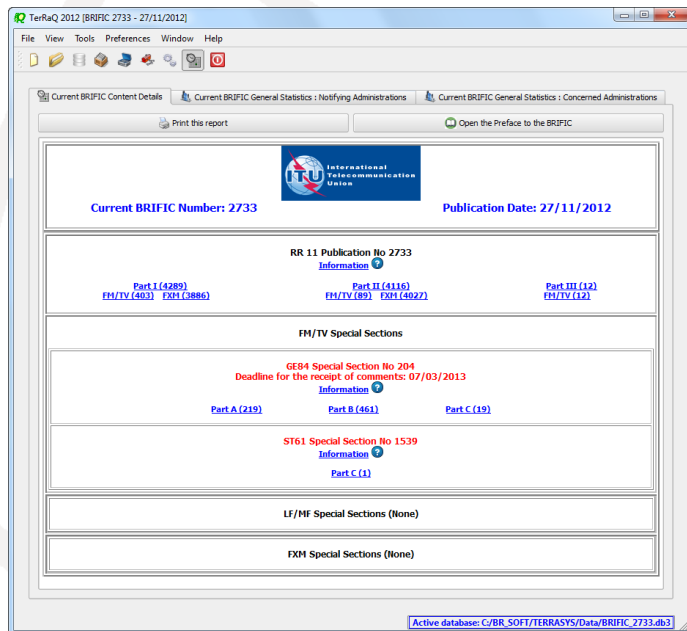
This query only focuses on the assignments with special value(s) for the unique identifier given by a specific Administration with a choice of the concerned Fragment of the BR IFIC.



New format of the BR IFIC DVD Query and consult : TerRaQ

Current BR IFIC Publication Content

These screens show the statistics of the entries existing in each part and each fragment of the BR IFIC. The data is also grouped based on the notifying and concerned Administrations. Using these screens the users are able to quickly access the data grouped in one of these categories.



TerRaQ 2012 [BRIFIC 2733 - 27/11/2012]

Current BRIFIC Number: 2733 Publication Date: 27/11/2012

RR 11 Publication No 2733

Part I (4289) Part II (4116) Part III (12)
 FM/TV (403) FM/TV (89) FXH (4622)

FM/TV Special Sections

GE84 Special Section No 204
 Deadline for the receipt of comments: 07/03/2013

Part A (219) Part B (461) Part C (19)

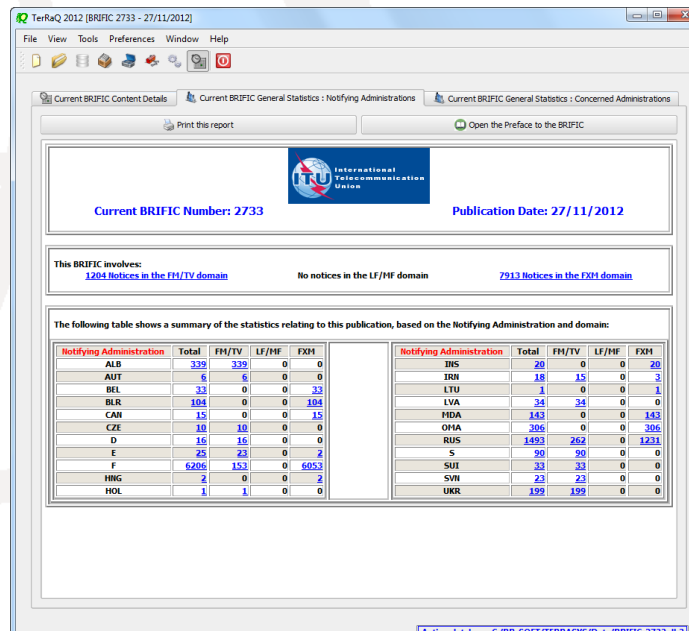
ST61 Special Section No 1539

Part C (1)

LF/MF Special Sections (None)

FXH Special Sections (None)

Active database: C:/BR_SOFT/TERRASYS/Data/BRIFIC_2733.db3



TerRaQ 2012 [BRIFIC 2733 - 27/11/2012]

Current BRIFIC Number: 2733 Publication Date: 27/11/2012

This BRIFIC involves:
 1264 Notices in the FM/TV domain No notices in the LF/MF domain 7913 Notices in the FXH domain

The following table shows a summary of the statistics relating to this publication, based on the Notifying Administration and domain:

Notifying Administration	Total	FM/TV	LF/MF	FXH
ALB	339	339	0	0
AUT	6	6	0	0
BEL	33	0	0	33
BLR	104	0	0	104
CAN	15	0	0	15
CZE	10	10	0	0
D	16	16	0	0
E	25	25	0	0
F	6206	153	0	6053
HKG	2	0	0	2
HOL	1	1	0	0
IRN	20	0	0	20
IRU	18	15	0	3
LTU	1	0	0	1
LVA	34	34	0	0
MDA	143	0	0	143
OMH	306	0	0	306
RUS	1893	262	0	1631
S	20	20	0	0
SUI	33	33	0	0
SVK	23	23	0	0
UKR	199	199	0	0

Active database: C:/BR_SOFT/TERRASYS/Data/BRIFIC_2733.db3

Part 3 – Installation & Configuration

Hardware / Software Requirements

The BR IFIC (Terrestrial Services) is designed to be used on a personal computer running on Windows 2000, Windows XP, or Windows Vista, Windows 7 or higher. The installation process requires a DVD-ROM reader.

Generally speaking, such a workstation configured with Microsoft's minimum requirements (memory, etc.) is sufficient for use with this publication. In addition, approximately [4] gigabytes of disk space is required if the complete data are to be copied to the hard disk.

The BR IFIC (Terrestrial Services) can be configured for a "standalone" local usage on a single workstation or in a "Networked client-server" environment, allowing the sharing of the data between several users.

The Bureau conducted testing to ensure that the BR IFIC (Terrestrial Services) runs properly on Windows 7 platforms. The tests have shown that there are no specific problems on Window 7 32 and 64 bits platforms.

The Bureau also conducted testing to ensure that the BR IFIC (Terrestrial Services) runs properly on Windows 8 platforms. The tests have shown that there are no specific problems on Window 8.

Part 4 – The BR IFIC On the WEB

www.itu.int/ITU-R/go/terrestrial-brific/en

Conclusions

The BR IFIC is a reference publication for frequency managers. In conformity with No. 8.3 of the Radio Regulations, any frequency assignment recorded in the Master Register with a favorable finding has the right to international recognition.

Within the framework of application of this fundamental provision – fundamental, as it provides for the avoidance of harmful interference – it is essential for frequency managers to consult the BR IFIC regularly.

To this end, a free copy of the BR IFIC is provided to each administration and the Bureau publishes the list of assignments in Parts I, II, III and IIB and those in Parts A, B and C of the special sections on the ITU website at the following URL:

www.itu.int/ITU-R/go/terrestrial-brific/en

Conclusions

Furthermore, under No. 11.28 of the Radio Regulations, the Bureau publishes the complete notices received in the BR IFIC within two months. Such publication constitutes acknowledgement of receipt for the notifying administration and the **staff responsible for filing notices with the Bureau** can use it to verify that the published information corresponds to the notices submitted to the Bureau.

The **staff responsible for coordination** can also use the BR IFIC to keep abreast of notices filed by other administrations (including neighboring countries, for example) so as to determine whether coordination is necessary in each case.

In conclusion, the BR IFIC is a working tool which must be available to every frequency manager. If an organization responsible for frequency management is not receiving the BR IFIC, it should take steps to ascertain what is happening to the free copy of each issue that ITU sends out to all member administrations.



Thank you!