


International Telecommunication Union



**REGIONAL
RADIOCOMMUNICATION
SEMINAR FOR AFRICA 2013**

**YAOUNDE, CAMEROON
16-20 SEPTEMBER 2013**

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

Organised by:




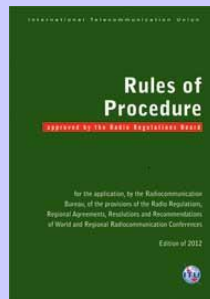


Photo credit: www.jacobs.com / Robert Schmitt Staff / Ministry of Telecommunications, Yaounde, Cameroon

Regulatory Aspects (Terrestrial Radiocommunication Services)



Constitution/Convention

Radio Regulations

Art 4 - 14

Ap 4, 5, 7, 25, 26, 27, 30, 30A, 30B

Res 1, 4, 33, 42, 49, 51, 55, 80, 85, 900, 902...

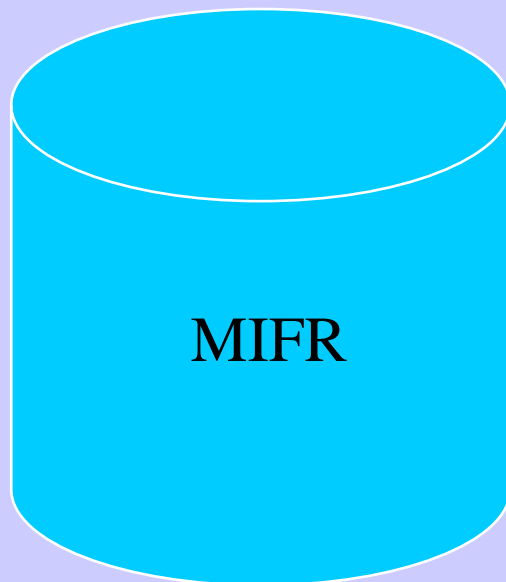
Regional Agreements

ITU-R Recommendations

Rules of procedure

Special Agreements

Architecture



*International
recognition*



Some basic questions

- *Who decides on their content?*
Administrations, Regional Organizations

- *How?*
 - *At Radiocommunication Conferences*

- *When?*
 - *Normally every three years*

RR Allocations

8.3 kHz < f < 275 [1000] GHz

- *> 40 services*
- *Block allocation*
- *Exclusive vs. shared allocations (Primary, secondary, or on a non-interference basis)*
- *Worldwide, Regional, national*

RR procedures

- *Adapted to the current allocation structure*
- *Plan, Coordination, Notification*
- *Mandatory or voluntary*

Frequency plans

- *To preserve rights (equitable access)*
- *Allotment/assignment*
- *Worldwide*
(RR AP 25, 26, 27)
- *Regional/subregional*
 - BC/BT: ST61, GE84, GE89, GE06
 - LF/MF BC: GE75, [RJ81](#), [RJ88](#)
 - Marit./aero.: GE85M, GE85N
- *Broadcasting*
HFBC: RR Art 12
- *Other (outside ITU)*
ICAO, IALA, etc

RR Art. 9 – Coordination

- *Bilateral/multilateral*
- *Identification of affected*
- *Use of standardized methods for calculating the potential for interference (AP 5, ITU-R)*
- *Application of standardized steps:*
 - *Exchange of sufficient number of data elements (Ap. 4)*
 - *Communicating comments within a prescribed period*
 - *Publication of results of coordination (RR9.21)*

RR Art. 9 – Coordination

RR Art. 9

- *Terrestrial services*
 - 9.21
 - 9.16 (*Tx. terr -> Rx earth station in NGSO, if the allocation is under 9.11A*)
 - 9.18 (*Tx. terr -> Rx earth station in GSO, if shared with same rights, above 100 MHz*)
 - 9.19 (*Tx. terr -> typical earth BSS station, in some bands, if pfd value exceeds the permissible level*)

RR Art. 11 - Notification

- *MIFR:*
Reference on frequency usage - International implications

- *Assignments*
 - *Individual*
 - *Generic (Typical stations)*

- *Normally prior to bringing into use*

Notifications - Background (cont.)

- *“Bern List”*
(*Summary data*)



- *“Master International Frequency Register”*
(*Complete data + Technical examination*)

Notifications - Background (cont.)

- “*simplified*” RR
- *TerRaSys* (BR informatic system)

1995



Why notify?

- *Because the Member States of ITU are bound to apply the provisions of the Radio Regulations*



*Rights &
Obligations*

RR Article 11

- *Every assignment shall be notified to BR if:*
 - 1 *It could cause harmful interference*
 - 2 *It is used for international communication*
 - 3 *Is subject to a world or regional Plan*

(cont.)



RR Article 11 (cont.)

● *Every assignment shall be notified to BR if:
(Cont.)*

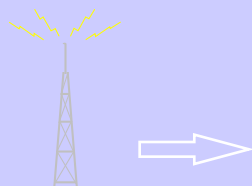
4 It is subject to a coordination procedure (Art 9)

5 International recognition is desired

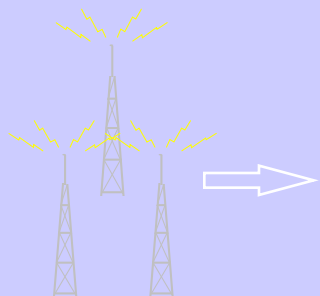
6 For information only

How to notify

Add / Modify / Suppress



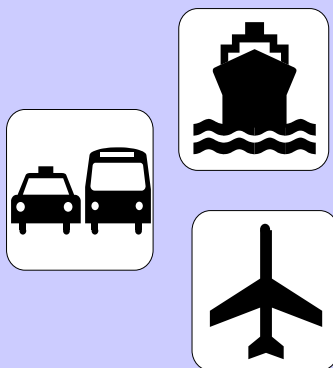
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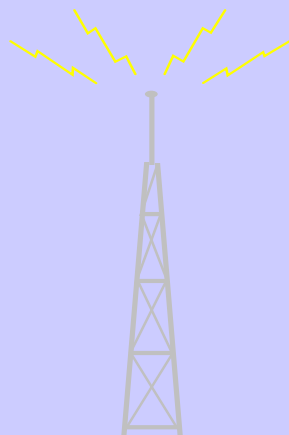
- *By sending one notice form per assignment*
- *Except for typical stations (RR11.17)*

How to notify (cont.)




- *Terrestrial Mobile Service*

Tx
Rx



RR11.9
RR11.12

Cases NOT to be notified

- *Radioamateur*
- *Ship*  *Ship*
- *Mobile stations in the aeronautical mobile service, exclusive bands (Ap.26 & Ap.27)*
- *Common Frequencies
RR11.13 & RR11.14*

RR Article 12

- *Sound Broadcasting in exclusive HF bands 5 900 - 26 100 kHz*

How to notify (cont.)

Media

- *Computer files*
- *Authorised notifiers
(WISFAT)*

Processing of Notifications

Adm.



BR

```
<NOTICE>
t_notice_type=T12
t_d_adm_ntc=2010-11-26
t_fragment=NFD_RR
t_freq_assgn=128.1500
t_station_id=AIR AMBULANCE
t_prov=RR11.2
t_adm_ref_id=SF22125
t_ctry=HNG
t_site_name=BUDAORS
t_d_inuse=2010-08-01
t_is_resub=False
t_nat_srv=OT
t_addr_code=A
t_op_agcy=006
t_action=ADD
t_stn_cls=FD
t_eml_cls=A3E1N
t_bdwidth_cde=6K00
t_long=+0185956
t_lat=+465959
t_op_hh_fr=00:00
t_op_hh_to=24:00
```

1- Validation

2- Publication

BRIFIC - part 1

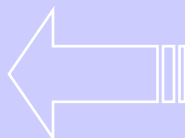
3- Examination

4 -Publication

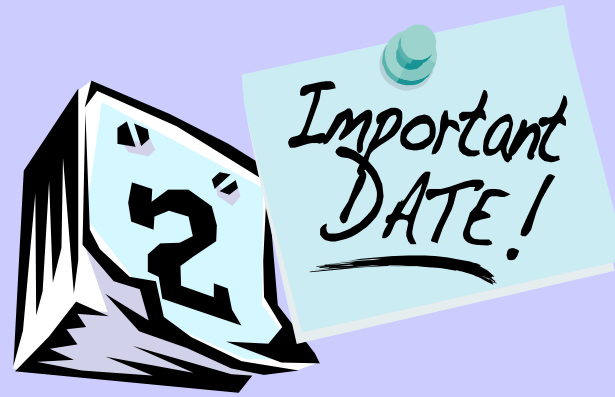
BR IFIC – part 2/3

5- Master Register

Adm.



Importance of Notifying Correctly



- *Date of receipt of complete information (RR11.28)*

Information Circular (BR IFIC)

- *Part I (acknowledgement of receipt)*
- *Part II (accepted)*
- *Part III (not accepted)*
- *Special Sections (Plans, requests for agreement / coordination)*

Information Circular (BR IFIC)



Terrestrial services

<http://www.itu.int/ITU-R/go/terrestrial-brific/en>

Publication in part I of BR IFIC


Part I “acknowledgement of receipt” of complete information



Each administration should verify whether the information published is correct

BR IFIC (Terrestrial)


Publications



The BR IFIC (Terrestrial services) contains:

- ▶ [the International Frequency List \(IFL\), including all the frequencies prescribed for common use;](#)
- ▶ [the frequency assignment/allotment Plans for Terrestrial services;](#)
- ▶ notices under treatment in accordance with Article 11 for updating of the Master Register;
- ▶ notices under treatment pursuant to regional agreements for updating of the Plans;
- ▶ [the Special sections associated with Terrestrial services;](#)
- ▶ the TerRaQ program for querying the published information;
- ▶ the TerRaNV program for checking electronic notices;
- ▶ the TerRaNotices program for the creation and validation of electronic notices;
- ▶ [the Preface to the BR IFIC.](#) 

Other information - [Publication notice](#) - [Installation of the BR IFIC](#)  - [Using the BR IFIC with other BR tools](#) 



[Information Note](#) 

| BR IFIC No. | Date of Publication | Article 11 of RR (Index)  | Special Section  | MDB Extract | Note |
|-------------|---------------------|--|---|--------------------------|------------------------|
| 2752 | 03.09.2013 | AR11_Parts1/2/3 | GE06/83 | IFIC2752 | ReadMe |
| 2751 | 20.08.2013 | AR11_Parts1/2/3 | - | IFIC2751 | ReadMe |
| 2750 | 06.08.2013 | AR11_Parts1/2/3 | - | IFIC2750 | ReadMe |
| 2749 | 23.07.2013 | AR11_Parts1/2/3 | GE06/82 GE84/211 ST61/1541 | IFIC2749 | ReadMe |
| 2748 | 09.07.2013 | AR11_Parts1/2/3 | RR921/D/402 | IFIC2748 | ReadMe |
| 2747 | 25.06.2013 | AR11_Parts1/2/2B/3 | GE84/210 | IFIC2747 | ReadMe |
| 2746 | 11.06.2013 | AR11_Parts1/2/3 | GE06/81 | IFIC2746 | ReadMe |

Examination of Notices



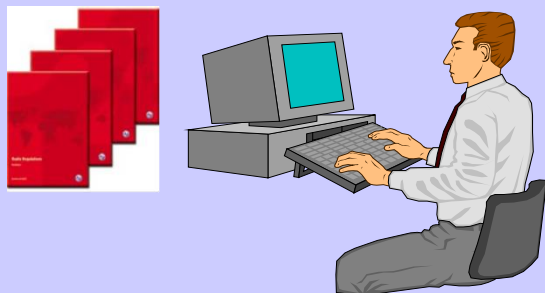
- *Art. 11 Section II
(RR11.27 to RR11.49)*

- In order of their date of receipt*

Examination of Notices (cont.)

RR11.31

1- Regulatory Examination



*RR Art. 5 + “Rules of
Procedure” (RRB)*

Examination of Notices (cont.)

If Regulatory Examination = ☺



- *Coordination (RR11.32)*
- *Interference (RR11.33)*
- *Conformity with Plans
(RR11.34)*

Examination of Notices (cont.)

RR11.32

- *Conformity with procedures relating to coordination with other administrations*

(e.g., footnotes to Table of Frequency Allocations)

Examination of Notices (cont.)

RR11.33

- *Probability of harmful interference when no prior coordination was effected.*

(e.g., in shared bands when the station is located within the coordination area of an earth station)

Examination of Notices (cont.)

RR11.34

- *Conformity with regional or world allotment / assignment Plans*

(e.g., Maritime, Aeronautical, Broadcasting)

RR11.41 Procedure

- *Resubmission procedure for recording in the Master Register of assignments with unfavourable findings with respect to technical examination*

Provision RR11.47

- *Confirm to BR the bringing into use of assignments notified in advance*



Provisional -> Definitive

Provisions RR4.4 & RR8.4

- *Recording in the Master Register of assignments with unfavourable findings*

For information only

Publication in Part 2/3 of BR IFIC

- *Part II: Assignments recorded in the Master Register*
- *Part III: Assignments sent back to the administration*

Master International Frequency Register



- *Is published in the BR IFIC every 2 weeks together with the assignments in process*
- *Contains approximately 2 000 000 assignments*



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ITU – Radiocommunication Bureau