

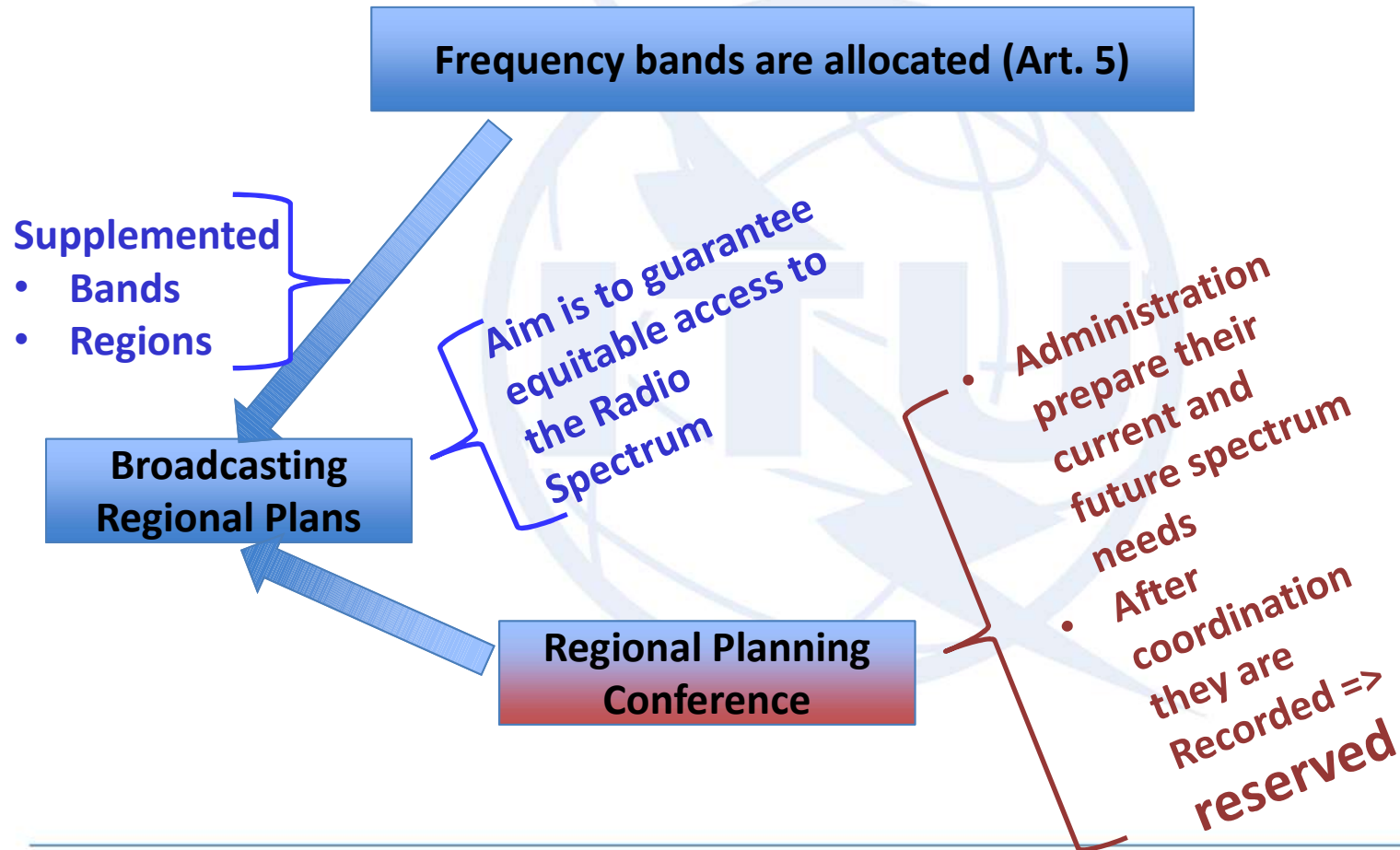


**Terrestrial Workshop  
RRS-19 Africa  
Notification for  
VHF/UHF Broadcasting  
except GE06: Exercises**

*RRS-19-Africas, Terrestrial Workshop –BS Exercises, 13-17 May  
2019, Johannesburg, South Africa*

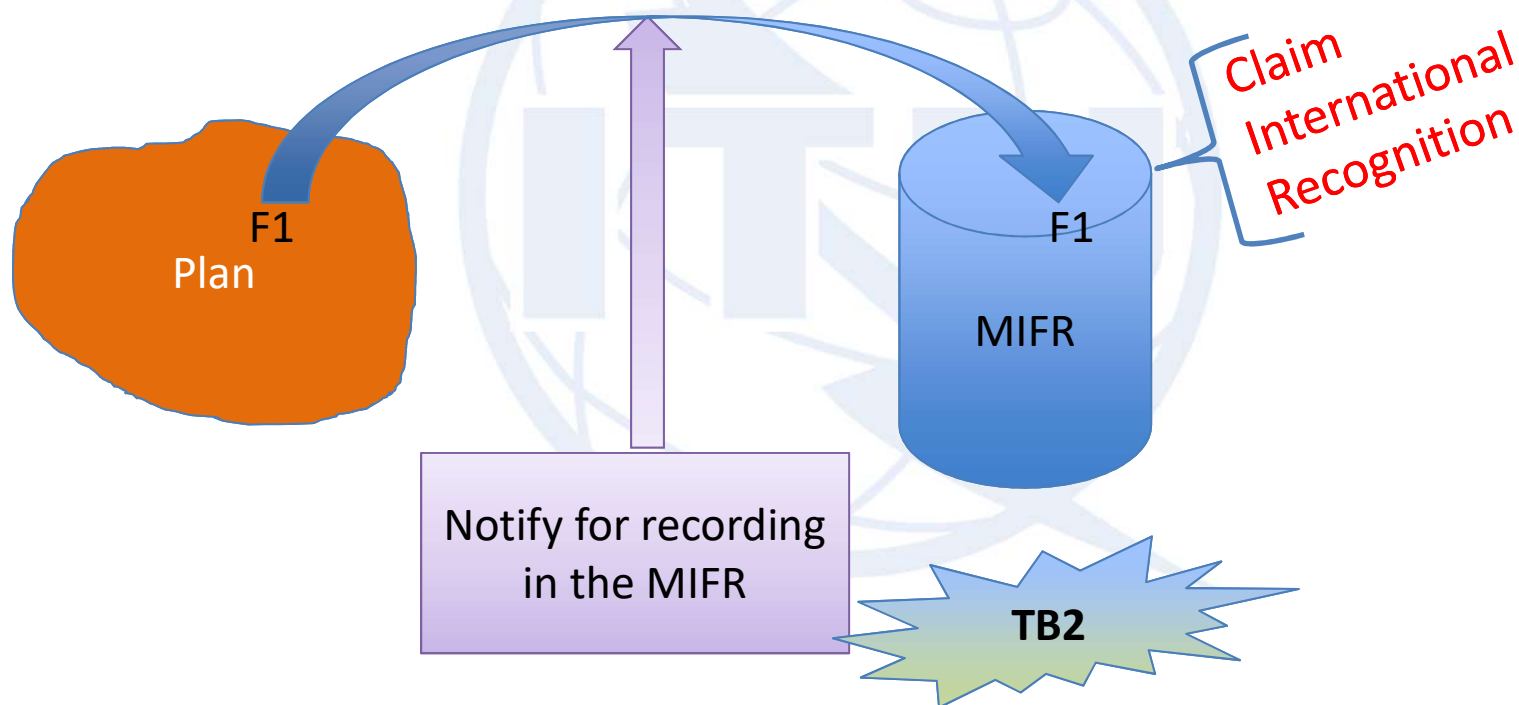


# Broadcasting frequency bands



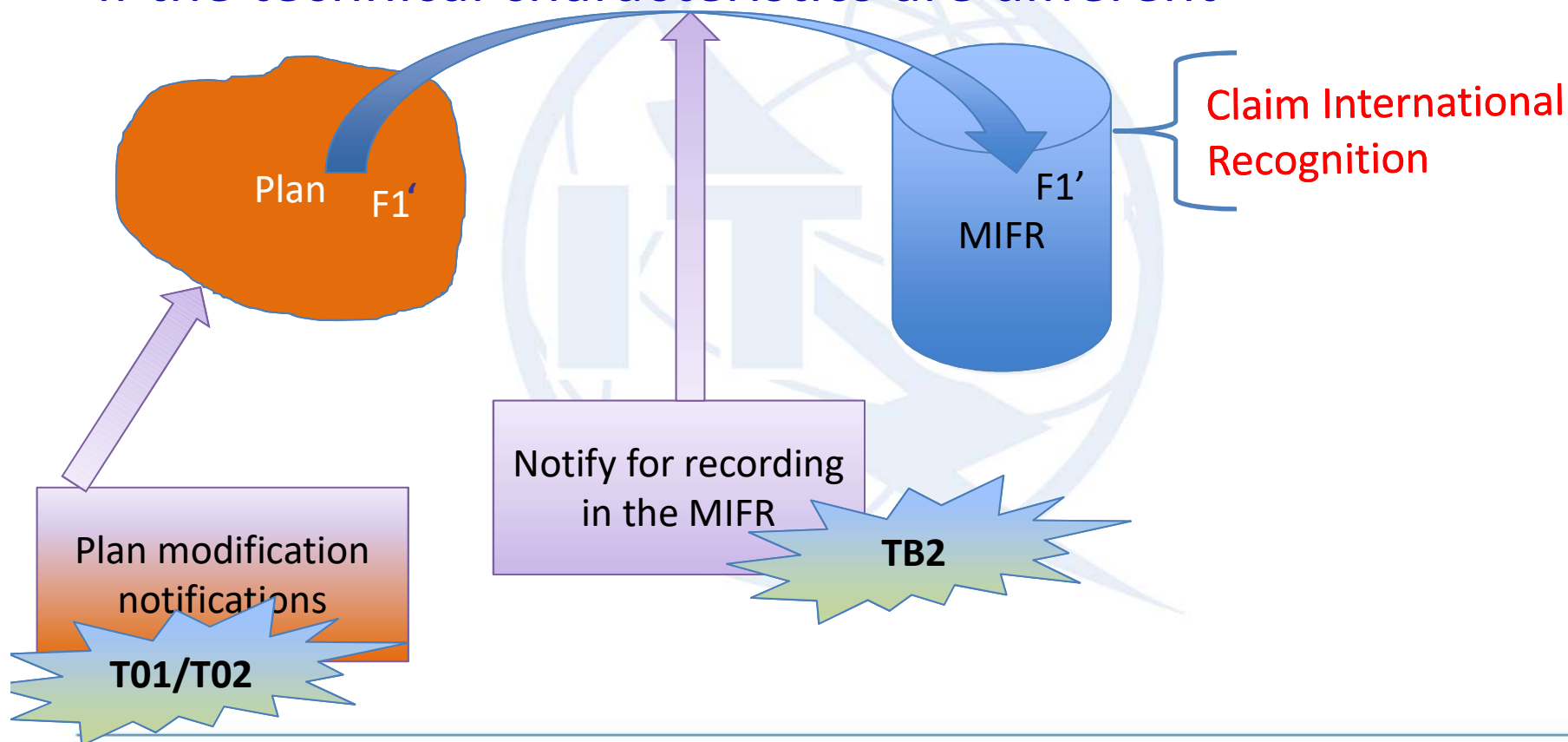
## Notification processes for frequency bands governed by a Regional Plan

When putting into operation a frequency assignment with the exact technical characteristics as in the Plan



# Notification processes for frequency assignments governed by a Regional Plan

If the technical characteristics are different



## General guidelines on the notification process (1/3)

### ➤ Identifying items for *Broadcasting Stations*

AP4	Description of a data item	Data item	Example
<b>1A</b>	<b>Assigned frequency</b>	<b>t_freq_assgn</b>	t_freq_assgn=92.1
<b>4C</b>	<b>Geographical Coordinates</b>	<b>t_long</b> <b>t_lat</b>	t_long=+0375108 t_lat=+073230

and / or

AP4	Description of a data item	Data item	Example
<b>ID1</b>	<b>Unique Identification Code given by the administration</b>	<b>t_adm_ref_id</b>	t_adm_ref_id= <b>SP77</b> <b>For Adm ETH</b>

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## General guidelines on the notification process (2/3)

### ➤ Notice types for VHF/UHF

Description		
<b>T01</b>	Analogue and digital Sound broadcasting	Complete notice
<b>T02</b>	Analogue and digital Television broadcasting	Complete notice
<b>TB2</b>	Notification under Art.11 of an assignment with identical characteristics as in the Plan	Short notice
<b>TB3</b>	Request for publication in Part B	Short notice
<b>TB5</b>	Withdraw a notice or Suppress a recorded assignment	Short notice

## General guidelines on the notification process (3/3)

## Creation and Validation of notices

- TerRaNotices  
BR provides it with BRIFIC DVD



- Online Validation

<http://www.itu.int/ITU-R/terrestrial/OnlineValidation/Login.aspx>

# Reference documents for notification

- Guidelines and examples of different notice types;  
<http://www.itu.int/en/ITU-R/terrestrial/tpr/Pages/Notification.aspx>
- Preface to the BR IFIC;  
<http://www.itu.int/en/ITU-R/terrestrial/brific/Pages/default.aspx>
- Radio Regulations  
<https://www.itu.int/pub/R-REG-RR/en>
- Rules of Procedures  
<https://www.itu.int/pub/R-REG-ROP/en>
- Regional Agreement(s)  
<https://www.itu.int/en/ITU-R/terrestrial/broadcast/Pages/FMTV.aspx>



## Example of Analog Sound Broadcasting Station for recording in MIFR

- **Notice type** (*t\_notice\_type*) – depends on the class of station which is not notified ➤ T01
- **Notifying Administration** (*B, t\_adm*) – ITU symbol for administration ➤ AFS
- **Fragment** (*t\_fragment*) – identifies the notification process for which the notice is submitted ➤ NTFD\_RR
- **Assigned frequency** (*1A - t\_freq\_assgn*) – frequency on which the transmitter broadcast; ➤ 96.0 MHz
- **Geographical area** (*4B - t\_ctry*) – ITU symbol for geo area. ➤ AFS
- **Geographical coordinates** (*4C - t\_long (DDMMSS) and t\_lat(DDMMSS)*) – location of the transmitting ant ➤ 18°56'01"E - 29°15'00"S
  - ❑ *Must be within the jurisdiction of the notifying administration (Res. 1) - Except if a special agreement exists within the two parties: must be sent to the Bureau*
- **Locality of the transmitting antenna** (*4A - t\_site\_name*) – name of locality by which the transmitting antenna is known; ➤ POFADDER

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## Example of Analog sound Broadcasting Station for recording in MIFR

- **Bandwidth** (7AB - t\_bdwidth) – width of the frequency band necessary to transmit the information; ➤ 200 kHz
- **Polarization** (9D – t\_polar) – Horizontal, Vertical or Mixte ➤ Horizontal
- **Maximum effective radiated power** (8BH - t\_erp\_h\_dbw ) – depend on the polarization; ➤ 37 dBW
- **Antenna directivity** (9 – t\_ant\_dir) – to specify if the transmitting antenna is directive or non-directive ➤ ND
- **Height of the Antenna above ground level** (9E - t\_hgt\_agl) ➤ 102 m

# Example of Analog sound Broadcasting for recording in MIFR

- **Maximum effective antenna height (9EB – *t\_eff\_hgtmax*)** – height above the mean level of the ground
  - 204 m (Calculated by TerRaNotices)
- **Antenna characteristics**
  - ❑ **Effective antenna height diagram (9EC – *t\_eff\_hgt@azmXXX*)** – *effective height of the antenna above the mean level of the ground, at 36 different azimuths in 10 intervals – recommended to provide*
    - To Calculate using TerRaNotices
  - ❑ **Antenna attenuation diagram (9NH and/or 9NV – *t\_attn@azmXXX*)** – *attenuation values at 36 different azimuths in 10 intervals for each polarization plane*
    - Only for directive antenna

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# Example of Analog sound Broadcasting for recording in MIFR

- **Date of bringing into use** (2C – t\_d\_inuse) – *Exact date or foreseen date when the frequency assignment is brought into use. Maximum 3 months in advance* ➤ 07 January 1987
- **Address code** (12B – t\_addr\_code) – *Contact details of the responsible organ in case there are any issues with the assignment - (Chapter IV, Section 3 of the preface);* ➤ A
- **Regular hours of operation (UTC)** (10B – t\_op\_hh\_fr and t\_op\_hh\_to) – *starting and ending time of operation* ➤ Round the clock  
00:00 24:00

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# Terrestrial Workshop RRS-19-Africa

## Presentation BS Exercises –Part 2



# EXERCISES

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## BS 01: VHF sound broadcasting assignment

Prepare an electronic notice file of frequency 96.0 MHz assigned to a sound broadcasting station based on the information below, for its recording in the Master Register.

To prepare this notice we will use the “Wizard” functionality of TerRaNotices and we will select the Administration of South Africa (AFS) as the notifying administration.

<b>4A</b>	Transmitting antenna site name	POFADDER
<b>4C</b>	Coordinates of the transmitting station	18° 56'01"E - 29° 15'00"S
<b>7AB</b>	Bandwidth	200kHz
<b>9D</b>	Polarization	Horizontal
<b>8B</b>	Effective radiated power	37 dBW
<b>9</b>	Antenna Directivity	Non directional
<b>9E</b>	Height of the Antenna above ground level	102 m
<b>9EB/ 9EC</b>	Maximum Effective Antenna Height and Effective antenna heights (m) at 36 different azimuths in 10 degrees interval	To be calculated using TerRaNotices facility
<b>8B</b>	Date of bringing into use	Not earlier than 3 Months from putting the frequency assignment into use. RR11.24
<b>9G</b>	Address code	Preface to the BR IFIC
<b>10B</b>	Operating Hours	24 hours

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## BS02: Validating the file with frequency assignment notices

Validate the electronic notice file

“BS 02\_OnlineVal.txt” using the web online validation tool.

*This file is available on terrestrial workshop.*

\*This validation tool is accessible with the **ITU login**

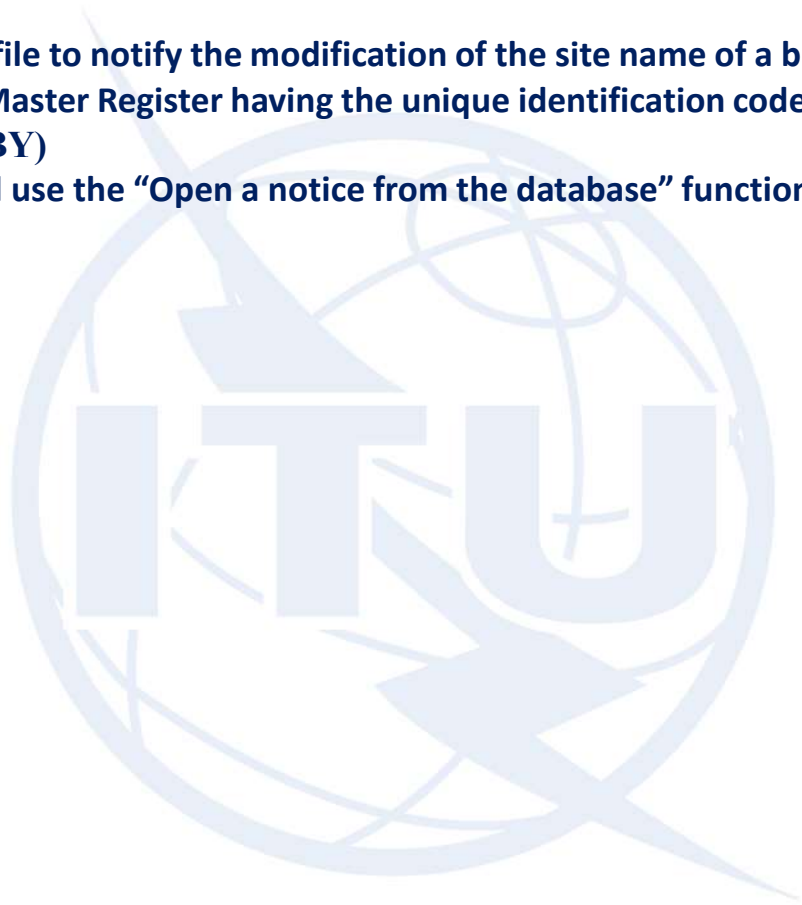
<http://www.itu.int/ITU-R/terrestrial/OnlineValidation/Login.aspx>

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## BS 03: Modification of an assignment recorded in the Master Register

**Prepare an electronic notice file to notify the modification of the site name of a broadcasting frequency assignment recorded in the Master Register having the unique identification code 84024265 for the Administration of Libya (LBY)**

**To prepare this notice we will use the “Open a notice from the database” functionality of TerRaNotices.**



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## BS 04: Request to suppress a frequency assignment

Prepare an electronic notice file to notify the suppression of the following frequency assignment, which is recorded in the Master Register.

To prepare this notice we will use the “Generate TB notices” functionality of TerRaNotices and we will select the Administration of Congo (COG) as the notifying administration.

1A	Assigned Frequency	218.0 MHz
4C	Coordinates of the transmitting station	012°00'00"E - 04°51'00"S

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## BS 05: FM sound broadcasting assignment

*GE84 Plan – Regional Agreement for use of the band 87.5 - 108 MHz for FM sound broadcasting in Region 1 and Democratic Republic of Afghanistan and the Islamic Republic of Iran*

Prepare an electronic notice of frequency 97.0 MHz assigned to a sound broadcasting station based on the information below, for the modification of the GE84 Plan.

To prepare this notice we will use the “Wizard” functionality of TerRaNotices and we will select the Administration of Malawi (MWI) as the notifying administration.

<b>4A</b>	Transmitting antenna site name	<b>ZOMBA</b>
<b>4C</b>	Coordinates of the transmitting station	<b>35°17'00"E - 15°20'01"S</b>
<b>7AB</b>	Bandwidth	<b>200kHz</b>
<b>7D</b>	Transmission system	<b>4</b>
<b>9D</b>	Polarization	<b>Vertical</b>
<b>8B</b>	Effective radiated power	<b>24.0 dBW</b>
<b>9</b>	Antenna Directivity	<b>Non directional</b>
<b>9E</b>	Height of the Antenna above ground level	<b>110 m</b>
<b>9EB/ 9EC</b>	Maximum Effective Antenna Height and Effective antenna heights (m) at 36 different azimuths in 10 degrees interval	<b>To be calculated using TerRaNotices facility</b>

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## BS 06: Request for publication in Part B

*GE84 Plan – Regional Agreement for use of the band 87.5 - 108 MHz for FM sound broadcasting in Region 1 and Democratic Republic of Afghanistan and the Islamic Republic of Iran*

Prepare an electronic notice file for requesting publication of a modification in Part B of the GE84 Special Section for the following notice.

<b>1A</b>	Assigned Frequency	94.0 MHz
<b>4C</b>	Coordinates of the transmitting station	11°16'02"E - 2°22'54"N

To prepare this notice we will use the “Generate TB notices” functionality of TerRaNotices and we will select the Administration of Cameroon (CME) as the notifying administration.

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**BS 07: Request to register an assignment in the Master Register with all technical characteristics as recorded in the plan for a station in operation**  
*GE84 Plan – Regional Agreement for use of the band 87.5 - 108 MHz for FM sound broadcasting in Region 1 and Democratic Republic of Afghanistan and the Islamic Republic of Iran*

Prepare an electronic notice file to request a frequency assignment to record in the Master Register with the same technical characteristics as it is recorded in the GE84 plan having the unique identification code SP77 for the Administration of Ethiopia (ETH).

To prepare this notice we will use the “Generate TB Notices” functionality of TerRaNotices.

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**Thank you for your attention!**

ITU – Radiocommunication Bureau

Questions to [brmail@itu.int](mailto:brmail@itu.int) or [brtpr@itu.int](mailto:brtpr@itu.int)