Terrestrial Workshop
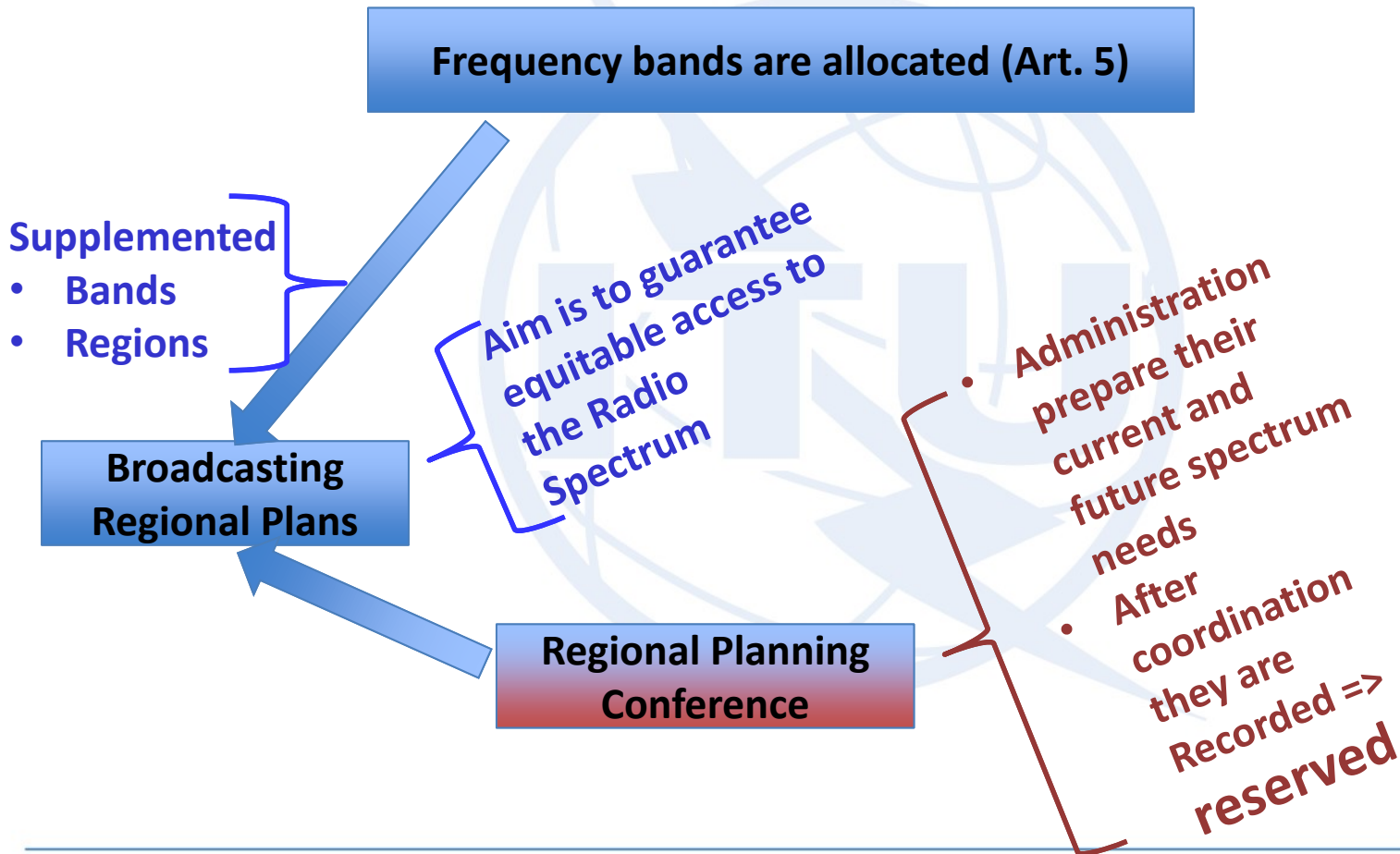# Notification for VHF/UHF Broadcasting except GE06: Exercises

Broadcasting frequency bands

Frequency bands are allocated (Art. 5)

Supplemented
- **Bands**
- **Regions**

Broadcasting Regional Plans

Aim is to guarantee equitable access to the Radio Spectrum

Regional Planning Conference

- *Administration prepare their current and future spectrum needs*
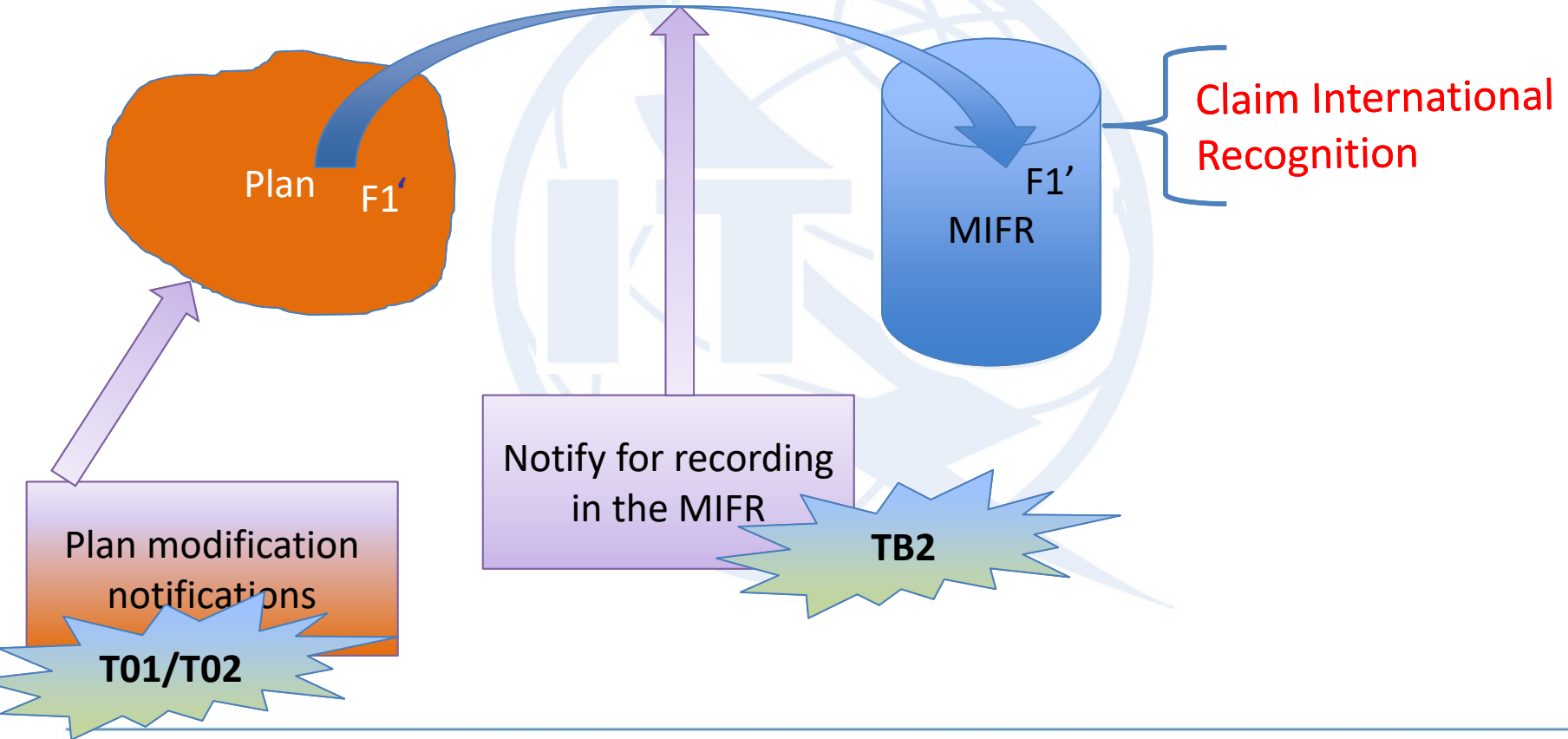- *After coordination they are Recorded => reserved*

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

F1
Plan

F1
MIFR

Claim International Recognition

Notify for recording in the MIFR

TB2
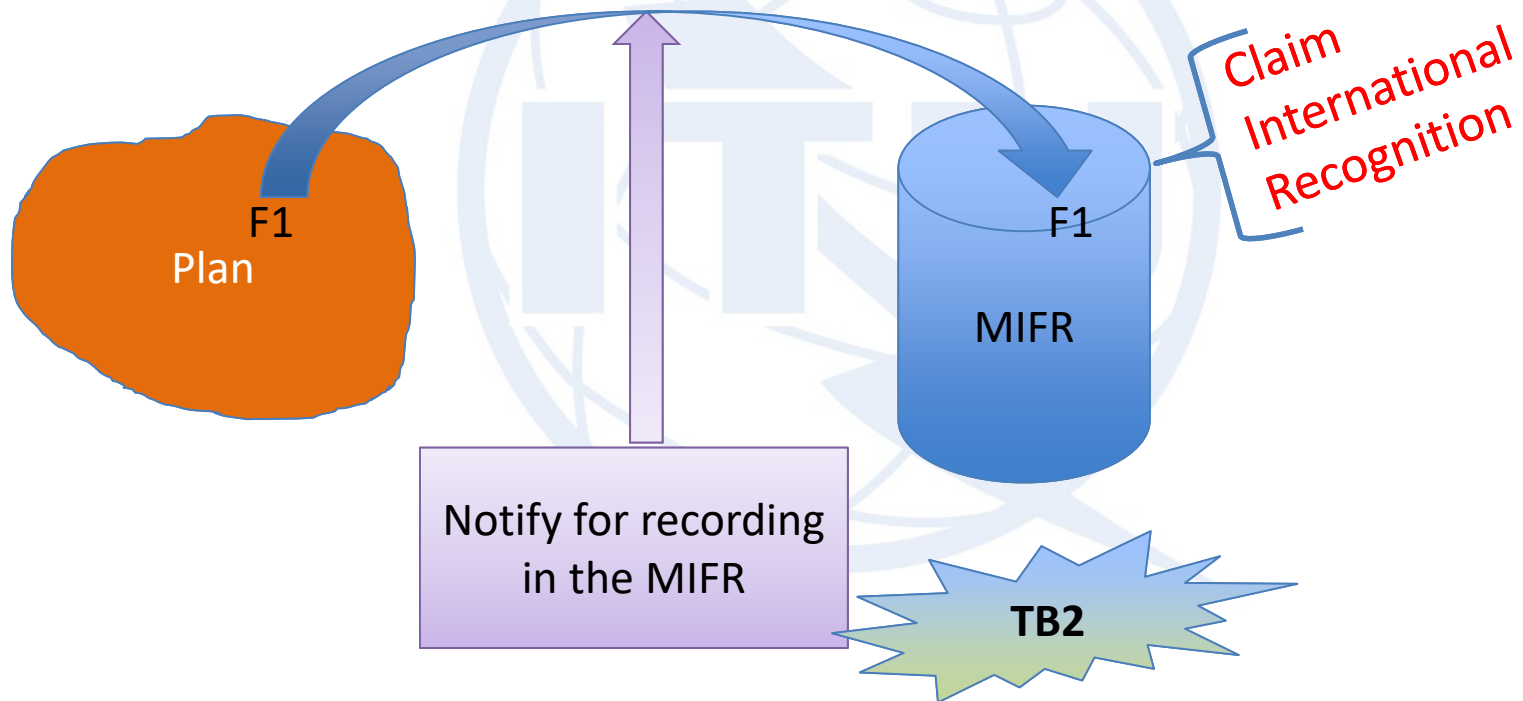
Notification processes for frequency assignments governed by a Regional Plan

If the technical characteristics are different

Plan

F1′

Claim International Recognition

F1′
MIFR

Plan modification notifications

T01/T02

Notify for recording in the MIFR

TB2

General guidelines on the notification process (1/3)

➢ Identifying items for *Broadcasting Stations*

AP4	Description of a data item	Data item	Example
1A	**Assigned frequency**	**t_freq_assgn**	t_freq_assgn=100.5
4C	**Geographical Coordinates**	**t_long** **t_lat**	t_long=+0360900 t_lat=+131500

and / or

AP4	Description of a data item	Data item	Example
ID1	**Unique Identification Code given by the administration**	**t_adm_ref_id**	t_adm_ref_id=SDNTAYAFM1 **For Adm SDN**

General guidelines on the notification process (2/3)

➤ Notice types for VHF/UHF

	Description	
T01	Analogue and digital Sound broadcasting	Complete notice
T02	Analogue and digital Television broadcasting	Complete notice
TB2	Notification under Art.11 of an assignment with identical characteristics as in the Plan	Short notice
TB3	Request for publication in Part B	Short notice
TB5	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;

  https://www.itu.int/en/ITU-R/terrestrial/tpr/Pages/Notification.aspx

- ➢ Preface to the BR IFIC;

  https://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/FNTV.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*

- **Notifying Administration (**B, t_adm**)** – *ITU symbol for administration*

- **Fragment** (t_fragment) – *identifies the notification process for which the notice is submitted*

- **Assigned frequency** *(*1A - t_freq_assgn *)* – *frequency on which the transmitter broadcast;*

- **Geographical area** (4B – t_ctry) – ITU symbol for geo area.

- **Geographical coordinates** *(4C – t_long (DDDMMSS) and t_lat(DDMMSS))* – location of the transmitting ant

  - ❑ *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;

- T01

- ZMB

- NTFD_RR

- 89.5 MHz

- ZMB

- **28°22'01"E - 15°26'00"S**

- **LUSAKA**

Example of Analog sound Broadcasting Station for recording in MIFR

- **Bandwidth** (7AB - t_bdwdth) – *width of the frequency band necessary to transmit the information;*
- 280 kHz

- **Polarization** *(9D – t_polar)* – *Horizontal, Vertical or Mixte*
- Horizontal

- **Maximum effective radiated power** *(8BH - t_erp_h_dbw)* – depend on the polarization;
- 30 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)
- 90 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

➢ **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*

❑ **Antenna attenuation diagram** (9NH and/or 9NV – t_attn@azmXXX) – attenuation values at 36 different azimuths in 10 intervals for each polarization plane

➢ 185 m (Calculated by TerRaNotices)

➢ To Calculate using TerRaNotices

➢ Only for directive antenna

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**

  - ➢ 10 September 2019

- ➢ **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

Terrestrial Workshop Presentation BS Exercises –Part 2

EXERCISES

BS 01: Modification of the GE84 Plan

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 99.2 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 Liberia (LBR) as the notifying administration.

4A	Transmitting antenna site name	MONROVIA-1
4C	Coordinates of the transmitting station	10°49'01"W - 06°19'00"N
7AB	Bandwidth	300 kHz
7D	Transmission system	4
9D	Polarization	Horizontal
8B	Effective radiated power	42.8 dBW
9	Antenna Directivity	Non directional
9E	Height of the Antenna above ground level	10 m
9EB/ 9EC	Maximum Effective Antenna Height and Effective antenna heights (m) at 36 different azimuths in 10 degrees interval	To be calculated using TerRaNotices facility

BS 02: 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 a notice with unique identification code 10187 with notifying administration Malawi (MWI) .

To prepare this notice we will use the "Generate TB notices" functionality of TerRaNotices.

BS 03: 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 for the following assignment with notifying Administration of Sierra Leon (SRL).

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

Coordinates of the transmitting antenna site	13°17'00"W - 8°30'00"N
Assigned Frequency	103.0 MHz

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 Nigeria (NIG) as the notifying administration.

1A	Assigned Frequency	96.0 MHz
4C	Coordinates of the transmitting station	3°31'00"E - 6°42'00"N

BS05: Validating and identifying errors of a frequency assignment notice.

Validate and identify the errors of the electronic notice file "BS05 NoticeswithErrors.txt".

This file is available on the memory stick and workshop site.

➢ To Validate and identify errors of a notice file, we will use "Open file" and "Validate Notice" functionalities of TerRaNotices.

➢ Also use Online validation tool. This validation tool is accessible to all having an ITU login with TIES services from the ITU web site at **http://www.itu.int/ITU-R/terrestrial/OnlineValidation/Login.aspx**.

Thank you for your attention!

ITU – Radiocommunication Bureau

Questions to brmail@itu.int or brtpr@itu.int