



# Terrestrial Workshop on the Preparation of Notices for Fixed and Mobile Services

# Overview of the Notification workshop on Fixed and Mobile Services

- General guidelines for Fixed and Mobile Services
- Reference documents for notification
- The main features of TerRaNotices
- Exercises

# General guidelines on the notification process for Fixed and Mobile Services

- The notification process enables administrations to send, at any time, either new data or to modify the data submitted to the BR
  - The new notification will replace the previous one
  - The new notification shall be a complete notice with the relevant changes
  - The Bureau needs to uniquely identify each notice

# General guidelines on the notification process for Fixed and Mobile Services

- Identifying elements for fixed or mobile notification
  - Frequency, geographical coordinates, class of station, Designation of emission and operating hours
  - Unique identification code given by the administration
- BR Assign ID and site name are NOT identifying elements but they could be notified in the remarks field, for information

# General guidelines on the notification process for Fixed and Mobile Services

- Notifying a transmitting station with several links
  - All the transmitting links of that station shall be notified in the same notice as the transmitting station
  - Each link's associated receiving station shall be notified within the Antenna characteristics of its transmitter
- The same general principle applies to the case of a receiving station with mobile transmitter(s)

# General guidelines on the notification process for Fixed and Mobile Services

- Call sign or station Identification is mandatory for:
  - Fixed service in the bands below 28 MHz
  - Safety services (aeronautical, maritime, etc.)
- Call Sign if provided shall be in conformity with the Article 19 of RR and Appendix 42 to RR
- Article 19 Section III – Formation of call sign for the different types of stations

# General guidelines on the notification process for Fixed and Mobile Services

- Assigned frequencies that fall within the bands shared on an equal basis with space services:
  - The following data items are mandatory
    - Elevation angle
    - Antenna height
    - Altitude of site above sea level
    - Polarization
  - The radiated power and maximum antenna gain shall be notified in isotropical values

## Reference documents for notification

- Guidelines and examples of different notice types

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

- Preface to the BR IFIC



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

- Radio Regulations and World and Regional Agreements





# The main features of TerRaNotices

- Create new notices
- Notice creation “Wizard”
- Open a notice from the database
- Validate an existing notice
- Options

# Exercises

- **FXM 01: Fixed service (point-to-point)**

Prepare an electronic notice of frequency 49.3 MHz used for a fixed link based on the information below, for its recording in the Master Register.

Class of Emission	F1D
Bandwidth	11 kHz
Transmitting antenna site name	IBADAN
Coordinates of the transmitting antenna site	3° 53'00"E - 7° 23'00"N
Nature of service	Preface Chapter IV, Section 7
Date of bringing into use	Not earlier than 3 months
Address code	Preface Chapter IV, Section 3
<b>Antenna</b>	
Antenna directivity	Directional
Azimuth of maximum radiation	210°
Beamwidth	1°
Effective radiated power	7 dBW
Power delivered to the antenna	7 dBW
Name of the location of the receiving station	IPARA
Coordinates of the receiving station	3° 40'00"E - 7° 01'00"N

# Exercises

Class of Emission	G7E
Bandwidth	28.0MHz
Transmitting antenna site name	BAMAKO (MLI)
Coordinates of the transmitting antenna site	8° 04'32"W - 12° 36'19"N
Altitude of site above sea level	500 m
Date of bringing into use	Not earlier than 3 years
Address code	Preface Chapter IV, Section 3
<b>Antenna 1</b>	
Height of the Antenna above ground level	50 m
Antenna directivity	Directional
Azimuth of maximum radiation	230°
Beamwidth	2°
Polarization	Vertical
Elevation angle	0°
Maximum antenna gain relative to isotropic antenna	36 dBi
Equivalent isotropical radiated power	28 dBW
Power delivered to the antenna	-8 dBW
Name of the location of the receiving station	SIBI (MLI)
Coordinates of the receiving station	8° 20'22"W - 12° 23'11"N
<b>Antenna 2</b>	
Height of the Antenna above ground level	55 m
Antenna directivity	Directional
Azimuth of maximum radiation	220°
Beamwidth	2°
Polarization	Vertical
Elevation angle	0°
Maximum antenna gain relative to isotropic antenna	34 dBi
Equivalent isotropically radiated power	27 dBW
Power delivered to the antenna	-7 dBW
Name of the location of the receiving station	NYAMBALI (MLI)
Coordinates of the of receiving station	8° 18'01"W - 12° 19'59"N

- **FXM 02: Fixed service (Point-to-Point) in the shared bands**
- Prepare an electronic notice of frequency 7.20500 GHz, which falls within the bands shared on an equal basis with the space services, used for the operation of two fixed links based on the information below, for its recording in the Master Register.
- The two links originate from the same transmitting station associated with two antennas.
- To prepare this notice we will use the “Wizard” functionality of TerRaNotices and the functionality of TerRaNotices to add many antennas to a single notice.
- As the assigned frequency falls within the bands shared on an equal basis with space services, the following fields are mandatory:
  - Altitude of site above sea level
  - Height of Antenna above ground level
  - Elevation angle
  - Polarization

\* These fields are mandatory for shared bands



# Exercises

## ● FXM 03: Land mobile service (point-to-area/area-to-point)

1/ Prepare an electronic notice of frequency 153.4375 MHz assigned to a Base station having a circular receiving area with a radius of 20 km, for its recording in the Master Register.

<b>Bandwidth</b>	<b>16 kHz</b>
<b>Class of emission</b>	<b>F3E</b>
<b>Transmitting antenna site name</b>	<b>DOUALA (CME)</b>
<b>Location of transmitting station</b>	<b>9° 47'27"E - 4° 02'24"N</b>
<b>Effective radiated power</b>	<b>15 dBW</b>
<b>Antenna directivity</b>	<b>Omnidirectional</b>
<b>Date of bringing into use</b>	<b>Not earlier than 3 years</b>
<b>Address code</b>	<b>Preface Chapter IV, Section 3</b>

2/ Prepare an electronic notice of frequency 158.0375 MHz assigned to the associated Receiving Mobile station of the above Base station, for its recording in the Master Register.

<b>Bandwidth</b>	<b>16 kHz</b>
<b>Class of emission</b>	<b>F3E</b>
<b>Name of the location of the receiving station</b>	<b>DOUALA (CME)</b>
<b>Coordinates of the receiving station</b>	<b>9° 47'27"E - 4° 02'24"N</b>
<b>Effective radiated power</b>	<b>11 dBW</b>
<b>Date of bringing into use</b>	<b>Not earlier than 3 years</b>
<b>Address code</b>	<b>Preface Chapter IV, Section 3</b>

To prepare these notices we will first use the “New Notice” functionality of TerRaNotices with CME as the notifying administration and then we will use the “Insert new notice” functionality of TerRaNotices. This functionality provides the possibility of having more than one notice in a file.

# Exercises

## ● FXM 04: Maritime mobile Service (point-to-area)

Prepare an electronic notice, for the recording in the Master Register of frequency 161.950 MHz assigned to a coast station open to public correspondence situated in SENEGAL having a circular receiving area with a radius of 15 km.

For coast stations, the Call sign or Station identification is mandatory. The Station identification can be composed of any printable characters (max. 20). However, if the Call sign is notified then it shall be in conformity with the provisions of Article 19 and Appendix 42 to the RR.

To prepare this notice we will use the “New Notice” functionality of TerRaNotices and we will select SEN as the notifying administration.

<b>Bandwidth</b>	<b>16 kHz</b>
<b>Class of emission</b>	<b>F3E</b>
<b>Transmitting antenna site name</b>	<b>DAKAR</b>
<b>Coordinates of the transmitting antenna site</b>	<b>17° 24'53"W - 14° 45'00"N</b>
<b>Power delivered to the antenna</b>	<b>13 dBW</b>
<b>Effective radiated power</b>	<b>16 dBW</b>
<b>Call Sign</b>	<b>6VA</b>
<b>Antenna directivity</b>	<b>Omnidirectional</b>
<b>Date of bringing into use</b>	<b>Not earlier than 3 years</b>
<b>Address code</b>	<b>Preface, Chapter IV, Section 3</b>

# Exercises

## ● FXM 05: Typical transmitting station

Prepare an electronic notice, for the recording in the Master Register of frequency 935.8 MHz used by several base stations in your country using the information below.

Frequency assignments having the same technical characteristics operating within a given area can be notified in a single notice as a typical transmitting station under RR.11.17. This provision does not apply to all service types (see RR 11.18-11.21B).

To prepare this notice we will use the “Wizard” functionality of TerRaNotices.

Necessary Bandwidth	200 kHz
Class of emission	F3E
Transmitting geographical area	Enter the country code to notify
Power to the antenna	14.9 dBW
Radiated Power	14.9 dBW
Date of bringing into use	Not earlier than 3 year
Address code	Preface, Chapter IV, Section 3

# Exercises

- **FXM 06: Fixed service (point-to-point) notice with errors**

Use TerRaNotices to validate the electronic notice file FXM06.txt, identify the errors and correct them.

Any questions?

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