

## Exercises on preparing frequency assignment/allotment notices to be sent to the BR

### Part I: Broadcasting Services (BS)

#### BS 01: VHF analog sound broadcasting assignment

1/ Prepare an electronic notice file of frequency 107.2 MHz assigned to a sound broadcasting station based on the information below, for the modification of the GE84 Plan.

Transmitting antenna site name	CHIASSO PEDRINATE (SUI)
Coordinates of the transmitting antenna site	9°0'26"E - 45°49'47"N
Height of the Antenna above ground level	20 m
Antenna directivity	Omnidirectional
Polarization	V
Effective radiated power	30 dBW
Transmission system	4
Necessary bandwidth	300 kHz
Coordination Completed	Italy and Germany

To calculate the “Altitude of the site above sea level”, the “Effective antenna heights” and the “Maximum effective antenna height” you may use the tool “Calculate effective antenna heights using SRTM3 Terrain Database” which is available in TerRaNotices (under the tab “Tools”).

2/ After the successful recording of the assignment in the GE84 Plan, you have to now notify to the BR the bringing into use of this frequency assignment in accordance with the Article 11 of the RR.

#### BS 02: UHF analog Television broadcasting assignment

Prepare an electronic notice file of frequency 533MHz assigned to a TV broadcasting station based on the information below, for its recording in the Master Register.

Transmitting antenna site name	CERRO AZUL (EQA)
Coordinates of the transmitting antenna site	79°57'06"W - 2°10'16"S
Altitude of site above sea level	309 m
Height of the Antenna above ground level	24 m
Frequency stability	RELAXED
TV system	M
Color system	NTSC
Antenna directivity	Omnidirectional
Polarization	H
Effective radiated power	40 dBW
Vision/sound power ratio	10 dB
Maximum Effective Antenna Height	326 m

### BS 03: VHF digital sound (T-DAB) broadcasting assignment

Prepare an electronic notice file of frequency 174.928 MHz assigned to a digital sound broadcasting (T-DAB) station based on the information below, for its recording in the Master Register.

Transmitting antenna site name	CHEMNITZ REICHENHAIN (D)
Coordinates of the transmitting antenna site	12°57'53"E - 50°47'59"N

Use the TerRaNotices facility (Generate TB notices) to select the corresponding frequency assignment from the GE06D Plan and prepare a notification requesting its recording in the Master Register.

### BS 04: UHF digital television (DVB-T) broadcasting assignment

Prepare an electronic notice file of frequency 506 MHz assigned to a digital television broadcasting (DVB-T) station based on the information below, for the modification of the GE06D Plan.

This frequency assignment will be a frequency stemming from the allotment JORT0727.

Transmitting antenna site name	AMMAN2012 (JOR)
Coordinates of the transmitting antenna site	35°52'19"E - 31°57'37"N
Polarization	H
Max. effective radiated power	35 dBW
Ref. Plan configuration	RPC2
Type of Spectrum mask	N
Antenna directivity	Omnidirectional
Height of the Antenna above ground level	100 m
Plan Entry and frequency Assignment code	3C

### BS 05: VHF digital television (DVB-T) broadcasting allotment

Prepare an electronic notice of frequency 177.5 MHz assigned to a digital television broadcasting (DVB-T) allotment based on the information below, for the modification of the GE06D Plan.

Allotment name	AHTARI (FIN)
Unique identifier of the allotment	AHTARI-1
SFN_ID of the allotment	AHTARI-1
Plan Entry	3
Polarization	U
Ref. Plan configuration	RPC2
Type of spectrum mask	N
Reference Network Type	RN1
Contour ID	1

### BS 06: UHF digital television (DVB-T) broadcasting assignment

Prepare an electronic notice file proposing a modification to an assignment recorded in the Master Register with the unique identification code given by the Administration of FIN to the assignment VUOLITTAJA/25.

You may use the facility available in TerRaNotices under the tab “File/Open a notice from the database”.

**BS 07: UHF analogue television broadcasting assignment.**

Prepare an electronic notice file for notifying the modification of the station name of the GE06A frequency assignment notice with the unique identification code **RUS1112032871BT**.

You may use the facility available in TerRaNotices under the tab “File/Open a notice from the database”.

**BS 08: Request for publication in Part B in the GE 84 Special Section**

Prepare an electronic notice file for requesting the publication in Part B of the GE 84 Special Section for either your administration or the Administration of SUI.

You may use the facility available in TerRaNotices under the tab “Tools/Generate TB notices” to select the potential candidate notices that could be ready for a request for publication.

**BS 09: AM Sound broadcasting station (in the tropical zone)**

Prepare an electronic notice file of frequency 2 420 kHz assigned to an AM broadcasting station having a circular receiving area of 650 km, for its recording in the Master Register.

To adequately select the notice type, you may use the facility available in TerRaNotices under the tab “File/Wizard”.

Transmitting antenna site name	SAN FERNANDO (VEN)
Coordinates of the transmitting antenna site	67°39'01"W - 7°52'59"N
Necessary bandwidth	10 kHz
Class of emission	A3E
Antenna gain	3 dB
Power to the antenna	47 dBW
Antenna directivity	Omnidirectional

## BS 10: UHF digital television (DVB-T2) broadcasting assignment - MIFR

The Administration of F has a DVB-T Plan entry (Unique identifier of the assignment in the plan: F\_\_33002-55) that has been implemented as a station using DVB-T2.

Prepare an electronic notice file of frequency 746 MHz assigned to this digital television broadcasting (DVB-T2) station for its recording in the Master Register.

Unique identifier of the assignment	NTFD_RR_F_33002-55
Transmitting antenna Site Name	BORDEAUX (F)
Coordinates of the transmitting antenna site	00°30'16"E - 44°49'14"N
Max. effective radiated power	45 dBW
Bandwidth	8000 kHz
Class of Emission	X7FXF
Polarization	H
Antenna Directivity	ND
Maximum power density	-25.05 dBW/Hz
Height of Antenna above ground level	235 m
Plan Entry	1
Assignment Code	S

*(Hint: according to section 5.1.3 of the GE06 Agreement, this should be notified as a GB1 notice)*

To calculate the “Altitude of the site above sea level”, the “Effective antenna heights” and the “Maximum effective antenna height” you may use the tool “Calculate effective antenna heights using SRTM3 Terrain Database” which is available in TerRaNotices (under the tab “Tools”).

## Part II Fixed and Mobile Service (FXM)

### FXM 01: Fixed service (point-to-multipoint)

Prepare an electronic notice of frequency 4.93 GHz used for the operation of two fixed links based on the information below, for its recording in the Master Register.

Class of Emission	D7W--
Bandwidth	40MHz
Transmitting antenna site name	KHASSAB (OMA)
Coordinates of the transmitting antenna site	56°13'58"E - 26°09'29"N
Altitude of site above sea level	31 m
Antenna 1	
Height of the Antenna above ground level	10 m
Azimuth of maximum radiation	221.7°
Elevation angle	0.9°
Maximum antenna gain	36 dB
Effective radiated power	34.2 dBW
Power to the antenna	-1.0 dBW
Beam width	2.6°
Polarization	V
Name of the location of the receiving station	FINE PEAK
Coordinates of the receiving station	56°10'30"E - 26°05'59"N
Antenna 2	
Height of the Antenna above ground level	34 m
Azimuth of maximum radiation	129°
Elevation angle	0.3°
Maximum antenna gain	37 dB
Effective radiated power	35 dBW
Power to the antenna	0 dBW
Beam width	2.4°
Polarization	V
Name of the location of the receiving station	KHOR HAJD
Coordinates of the of receiving station	56°15'00"E - 26°00'00"N

## FXM 02: Fixed service (Point-to-Point) in shared bands

Prepare an electronic notice file of frequency 6.0638 GHz, which falls within the bands shared on equal basis with the space services, used between two fixed stations, for its recording in the Master Register.

Transmitting antenna site name	VENDOME (F)
Coordinates of the transmitting antenna site	1°03'05"E - 47°48'49"N
Necessary bandwidth	29.6 MHz
Class of emission	G7W
Altitude of site above sea level*	133 m
Height of the Antenna above ground level*	43 m
Azimuth of maximum radiation	206.5°
Elevation angle*	0.1°
Antenna gain	38.7 dB
Effective radiated power	35.1 dBW
Power to the antenna	2 dBW
Beam width	1.9°
Polarization	V
Name of the location of the receiving station	MONNAIE (F)
Coordinates of the receiving station	0°48'25"E - 47°28'55"N

\* These fields are mandatory for shared bands

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

1/ Prepare an electronic notice file of frequency 466.6 MHz assigned to a Base station having circular receiving area of a radius of 30 km, for its recording in the Master Register.

Bandwidth	1.25MHz
Class of emission	G7W
Transmitting antenna site name	BUKH BUKHARA (UZB)
Location of transmitting station	64°25'10"E - 39°45'58"N
Effective radiated power	28 dBW
Antenna directivity	Omnidirectional

2/ Prepare an electronic notice file of frequency 456.6 MHz assigned to the associated Mobile station of the above Base station, for its recording in the Master Register.

Bandwidth	1.25MHz
Class of emission	G7W
Name of the location of the receiving station	BUKH BUKHARA (UZB)
Coordinates of the receiving station	64°25'10"E - 39°45'58"N
Effective radiated power	28 dBW
Antenna directivity	Omnidirectional

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

Prepare an electronic notice file, for recording in the Master Register, a frequency of 8.15040 MHz assigned to a Coast station situated in Korea, having a circular receiving area of a radius of 500 km.

Bandwidth	2.8 kHz
Class of emission	J3E
Transmitting antenna site name	JEJU GWANGPYEONG RI (KOR)
Coordinates of the transmitting antenna site	126°22'30"E - 33°19'00"N
Height of the Antenna above ground level	10 m
Antenna gain	0 dB
Power to the antenna	24 dBW
Effective radiated power	24 dBW
Call Sign	DSA90
Antenna directivity	Omnidirectional

**FXM 05: Suppression of an assignment no longer in use**

Prepare an electronic notice file to suppress from the Master Register the frequency 84.775 MHz assigned to a Typical station belonging to Switzerland that is no longer in use.

Class of station of the target	FB
Bandwidth of the target	16 kHz
Emission class of the target	F3E--
Hours of operation of the target	00:00 – 24:00
Geographic area	SUI

**FXM 06: Typical transmitting station**

Prepare an electronic notice of frequency 506.456 MHz used by several fixed stations within a circular area of a radius of 30 km, using the information below, for the recording in the Master Register.

Necessary Bandwidth	10 kHz
Class of emission	F2D
Center of the circular area	58°32'26"W - 34°42'03"S (ARG)
Power to the antenna	1.7 dBW
Type of Power	Y
Radiated Power	3.1 dBW

**FXM 07: Modification of the radiated power of a notice in process**

Reduce the radiated power of the 2<sup>nd</sup> antenna by 2 dBW of the notice created in FXM 01.