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Terrestrial Services Department

NOTIFICATION OF FREQUENCY ASSIGNMENTS FOR RECORDING IN THE MASTER REGISTER AND TERRESTRIAL PLANS

Introduction

The radio frequency spectrum is a natural resource which all administrations have the right to access and they should be able to use this scarce resource efficiently, neither by being interfered with nor by causing harmful interference to others.

To facilitate such equitable access and a rational use of the radio frequency spectrum, it is imperative that all administrations apply not only their national regulations but also the ITU Radio Regulations¹ (RR), which is an international treaty ratified by Member States.

These regulations ensure that all radio usages obtain international recognition. This is done by recording those frequency assignments in the Master International Frequency Register (MIFR), also known as the Master Register (MR). This allows other administrations to take into consideration these assignments when assigning frequencies to their stations to avoid harmful interference (provision No. 8.2 of RR). It also ensures the availability of the spectrum for future usages which is also another fundamental objective.

Among the many provisions of the Radio Regulations, this document focuses on the provisions that apply to the notification and recording of frequency assignments in the Master Register (Article 11 of the RR) as it is one of the pillars of the international regulations of the radio-frequency spectrum.

To record assignments in the Master Register administrations need to comply with different procedures which depend on the frequency band as specific conditions may apply.

¹ The Radio Regulations are available free of charge at the ITU website <http://www.itu.int/pub/R-REG-RR-2012>.

Regulatory radio frequency spectrum

The regulatory radio frequency spectrum (8.3 kHz – 3 000 GHz) is segmented into smaller bands and allocated to over 40 defined radiocommunication services. These allocations are reflected in the Table of Frequency Allocations, Article 5 of the RR. Some allocations may be supplemented by footnotes, which can either specify further conditions on the use of that frequency band or they can also allocate the frequency band to a service other than to which it is allocated in the table. These allocations may have specific conditions of use, such as, requesting compulsory prior coordination under provision No. 9.21 before assigning it to any station. In this case, a specific notification procedure shall apply.

In addition, there are some frequency bands in specific areas that are governed by either World or Regional Plans. These Plans represent a key mechanism for preserving the rights of all Member States in the context of equitable access to the limited spectrum. Associated to these Plans are plan modification and notification procedures that reply to particular operational requirements that are not met by the Plans, while preserving their integrity. Even though these planned frequencies are protected by the Plan, when they are put into use they shall operate in accordance with the provisions of the RR and shall be notified to the Bureau, to be recorded in the Master Register to obtain international recognition.

Terrestrial notification process

This section will highlight the different notification procedures. In particular, which frequency assignments are to be notified, when and how these notifications should reach the Bureau and a general overview of what happens to the notified frequency assignments.

As described previously, the regulatory frequency spectrum has frequency bands governed by Regional or World Plans and non-planned frequency bands. Among those non-planned frequency bands, they are frequencies that require the application of the compulsory coordination procedure under No. 9.21 before they can be assigned to stations. Therefore, for frequencies that fall either in planned bands or in bands that require prior coordination, there are additional procedures to apply before notifying them for recording in the Master Register.

Notification for recording in the Master Register assignments governed by a regional/world Plan

When an administration wishes to put into operation a frequency assignment that is governed by a Plan, the notifying administration shall verify that the selected frequency assignment is available in the Plan for that administration and the technical characteristics in the Plan correspond with the technical characteristics that are intended to be put into operation by the administration. If such is the case, then the administration may notify the frequency assignment for its recording in the Master Register. If this is not the case, then the administration shall first notify it to the Bureau to modify the Plan by applying the relevant plan modification procedures. After validation and relevant examination, the notice will be published in the relevant Special Section of the BR's International Frequency Information Circular (BR IFIC). After it has successfully entered the Plan, it can be put into operation. Subsequently, administration shall notify it for recording in the Master Register. It is important to note that each Plan has its own specificity therefore it is important to consult it before assigning frequencies that belongs to Plans.

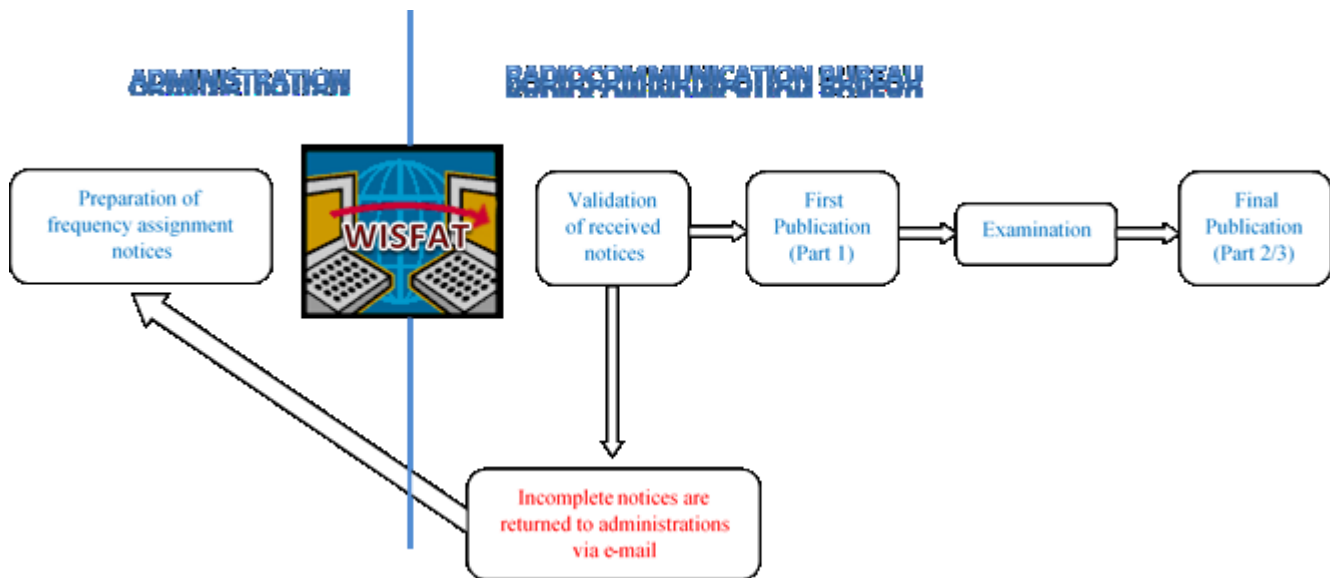
Notification for recording in the Master Register those assignments that require prior coordination under provision No. 9.21

For frequencies that require prior coordination under provision No. 9.21, administrations shall notify to the Bureau the exact data items required in Appendix 4 to the RR using the appropriate notice type. Thereafter, the Bureau will apply the coordination procedure and will publish in the relevant Special Section of the BR IFIC. After successful coordination, and the date of bringing into use of the frequency assignment has been decided, administrations may notify it for recording in the Master Register.

Further information is available at: http://www.itu.int/en/ITU-R/terrestrial/fmd/Documents/fxm-art-9_21.pdf.

Notification for recording in the Master Register

The terrestrial notification process for recording in the Master Register involves many steps that depend on the frequency band. A simplified view of the notification procedure is as follows:



For the Bureau to initiate the treatment of notification of frequency assignments for recording in the Master Register, the notified assignments must contain all the necessary data items listed in Appendix 4 to the RR with valid values (No. 11.15). To facilitate the notification, the Bureau has created different notice types based on Appendix 4 (see Annex 1) and has provided examples and guidelines on the ITU website <http://www.itu.int/en/ITU-R/terrestrial/tpr/Pages/Notification.aspx>.

The first obstacle of the notification is the validation since incomplete notices are not accepted by the Bureau and they are returned to the administration, or in certain cases the Bureau may seek for clarification. For that reason, it is strongly recommended that administrations validate their notices by using the validation tools provided by the Bureau before submitting them.

What should be notified?

Any frequency assignment liable to have an international implication must be notified to the Bureau to obtain international recognition. In other words, any assignment liable to cause interference to existing or future stations in another country or to suffer interference from such stations, must be notified to the Bureau so as to be published in the BR IFIC and recorded in the MIFR and, thereby ensuring that all administrations are informed of the use of such assignments and that they are taken into account in any future planning conducted at national or international level.

In Article 11, provisions Nos. 11.2 - 11.8 define which assignments are to be notified, so when an administration considers that these provisions are met, it should submit a notice for each transmitting frequency, accompanied by the details of the transmitter and its associated receiving station(s), used by the new station that it intends to bring into operation or any station whose characteristics are to be modified. For mobile stations using a different transmit frequency from the base station (duplex mode), the link in the direction of the mobile station to the base station should be notified as the receiving frequency of the base station under provision No.11.9.

In the case where a frequency is used many times within a given area, the application of provision No. 11.17 avoids having to notify each station individually. In other words, one notice can be sent with the typical characteristics of the transmitter within that area. However, it does not apply to all services or to all frequency bands (Nos. 11.18 - 11.21).

When an assignment is no longer in use, it is also important to submit a cancellation notification.

Even though it is extremely important to notify administrations' frequency assignments, there are certain frequency assignments for which administrations should **not** notify to the Bureau. These are:

- frequency assignments which are for common use by stations of a given service, such as Distress and Safety frequencies used in the Global Maritime Distress and Safety System (GMDSS) (No. 11.13). A complete list of these commonly used frequencies that are covered by this provision can be found in the Preface to the BR IFIC, Chapter VI in "Table of frequencies prescribed by the Radio Regulations (RR) for common use by stations of given service(s)" (http://www.itu.int/en/ITU-R/terrestrial/brific/BRIFIC/Preface/PREFACE_EN.pdf);
- frequency assignments to stations in the amateur services (No. 11.14);
frequency assignments to ship stations and to mobile stations of other services (in other words, from a mobile station to another mobile station) (No. 11.14).

When to Notify?

Notices relating to

- terrestrial stations involved in coordination with a satellite network and for high altitude platform stations operating as a base station to provide IMT shall reach the Bureau **not earlier than three years** before the date putting into use (No. 11.25);
- assignments for high-altitude platform stations in the fixed service shall reach the Bureau **not earlier than five years** before the date putting into use (No. 11.26);
- all other terrestrial stations shall reach the Bureau **not earlier than three months** before the date putting into use (No. 11.24).

For notification received before the date of their putting into operation but within the above specified deadlines, the Bureau will provisionally record these assignments in the Master Register. However, if

the Bureau is not informed of their bringing into use, it will send a reminder and if no confirmation is received, the Bureau may cancel these entries from the Master Register (RR No. **11.47**). Administrations will be informed before such action.

For plan modifications, administration may submit their notification whenever required.

How to notify frequency assignments

Following the initial adoption of Resolution **906 (WRC-07)**, the submission of notices for terrestrial services to the Radiocommunication Bureau is in electronic format only.

The electronic format adopted by the Bureau is a text file composed of mandatory sections. Each section is delimited with a beginning and an end tag. This electronic notice file must start with ONE <HEAD> section containing the notifying administration, ONE or MANY <NOTICE> section(s). Each NOTICE section contains all the required administrative and technical data items of the frequency assignment. The file must end with a <TAIL> section containing the number of notices that are in the electronic notice file. An electronic notice file can contain an unlimited amount of notices.

How to submit notifications to the Bureau - WISFAT

In accordance with Resolution **906 (WRC-07)** and Circular Letter CR/287 dated 20 January 2009, electronic notices are to be submitted to the Bureau via the secured web interface, WISFAT (Web Interface for Submission of Frequency Assignments for Terrestrial services).

This interface is secure as only registered notifiers selected by their administration and having a TIES user account may access it. Furthermore, the notifier receives immediately an acknowledgment of receipt for all notifications successfully received by the Bureau.

To become a notifier, an official request should be sent by the concerned administration to brmail@itu.int giving the name, position, service e-mail and the TIES username. Administrations may have as many notifiers as needed.

When submitting many electronic notice files on the same day, it is strongly recommended zipping them into one single file.

Relevant information and access to the interface is available at the ITU website <http://www.itu.int/en/ITU-R/terrestrial/tpr/Pages/Submission.aspx>.

What happens to the notified frequency assignments

Notices received via WISFAT are pre-validated using the same tools (TerRaNotices/TerRaNV) as given to the administrations via the BR IFIC. If the notices are incomplete or the file structure is not respected then these files are immediately returned to the notifying administration. Therefore, it is extremely important to valid the notices before submitting to the BR.

Thereafter these notices are further validated in more detail and also checked against the Master Register. If the notices contain errors then these notices are returned to the notifying administration (RR No. **11.27**) or, in certain cases, clarification will be requested by the BR within a given time period. If no clarification is received the BR will return the notices.

Complete and valid notices will be published in Part 1 of the BR IFIC. This publication serves as an official acknowledgment of receipt, which enables administrations to check that the publication is an accurate reflection of the information submitted. Subsequently, based on the frequency band the notices will be examined with respect to their conformity with the different provision Nos. **11.30 - 11.36**. If the

results of these examinations are favourable then they will be published in Part 2 of the BR IFIC and will be entered into the Master Register. On the other hand, if the results are unfavourable they will be published in Part 3 and will be returned to the administration indicating the reason for its unfavourable findings.

Conclusion

The notification process of frequency assignments starts with the submission of complete and valid notices to the Bureau via the secured web interface (WISFAT). Thereafter, these notices are examined and published in the relevant sections of the BR IFIC.

Taking into consideration that frequency assignments recorded in the Master Register have the right to international recognition, it is important to consult the BR IFIC regularly.

Annex 1

Notice types

1.1 Basic notice types to be used for the notification outside the planning area and bands governed by the GE06 Agreement

Notice Type	To be used for	Applicable provision(s)	Class of station(s)
T11	Terrestrial transmitting station (TX) in the fixed service (Appendix 4, Annexes 1A and 1B)	RR No. 11.2 RR No. 9.21	FX
T12	Terrestrial transmitting station (TX) in the fixed service (Except station in the fixed, or LF/MF/VHF/UHF broadcasting services, or typical station)	RR No. 11.2 RR No. 9.21 GE85N	AL, BC , FA, FB, FC, FD, FG, FL, FP, LR, NL, OE, RN, SM, SS
T13	Terrestrial receiving land station (RX) (Appendix 4, Annexes 1A and 1B)	RR No. 11.9 RR No. 9.21	AM, MA, ML, MO, MR, MS, NR, OD, RM, SA
T14	Terrestrial typical transmitting station (TP) (Appendix 4, Annexes 1A and 1B)	RR No. 11.17	AL, FA, FB, FC, FD, FG, FL, FP, FX, LR, NL, OE, RN, SM, SS
T15	Frequency allotment in the maritime mobile service (Appendix 25)	AP25/1.1.1 AP25/1.1.2 AP25/1.25	FC
T16	Terrestrial transmitting station (TX) (Plan update Regional Agreement, Geneva, 1985) (Article 4 of the agreement)	GE85 (R1-MAR) GE85 (R1-AER)	AL, FC
T17	Terrestrial transmitting station (TX) using adaptive systems (Appendix 4, Annexes 1A and 1B)	RR No. 11.2	FX, FA, FB, FC, FD, FG, FL, FP
T01	VHF Sound broadcasting station	RR No. 11.2 GE84 ST61	BC
T02	VHF/UHF Television broadcasting station	RR No. 11.2 GE89 ST61	BT
T03	LF/MF broadcasting station in Region 1 and MF broadcasting station in Region 3	RR No. 11.2 GE75	BC
T04	MF broadcasting station in Region 2	RR No. 11.2 RJ81	BC

1.2 Simplified notice types to be used for the notification in the broadcasting service (BT and BC)

Notice Type	To be used for:	Applicable provision	Applicable to
TB1	Notification of a modification to the unique identification code given by the administration	RR No. 11.2 , GE84, GE89, ST61	VHF Sound broadcasting and VHF/UHF Television broadcasting station
TB2	Notification under Article 11 of an assignment with all technical characteristics as in the Plan	GE84, GE89, ST61, GE06A, GE06D	VHF Sound broadcasting and VHF/UHF Television broadcasting station
TB3	Requesting publication of a modification in Part B of the corresponding Special Section	GE84, GE89, ST61, GE06A, GE06D	VHF Sound broadcasting and VHF/UHF Television broadcasting station
TB4	Update the coordination information of a notice under treatment	RR No. 11.2 GE84, GE89, ST61	VHF Sound broadcasting and VHF/UHF Television broadcasting station
TB5	Suppress a recorded assignment or withdraw a notice under treatment	RR No. 11.2 , GE84, GE89, ST 61, GE06A, GE06D	VHF Sound broadcasting and VHF/UHF Television broadcasting station
TB6	Notification of a modification to the unique identification code given by the administration	RR No. 11.2 , GE75, RJ81	LF/MF broadcasting station in Regions 1 and 3 MF broadcasting station in Region 2
TB7	Notification under Article 11 of an assignment with all technical characteristics as in the Plan	GE75, RJ 81	LF/MF broadcasting station in Regions 1 and 3 MF broadcasting station in Region 2
TB8	Requesting publication of a modification in Part B of the responding Special Section	GE75, RJ81	LF/MF broadcasting station in Regions 1 and 3 MF broadcasting station in Region 2
TB9	Suppress a recorded assignment or withdraw a notice under treatment	RR No. 11.2 , GE75, RJ81	LF/MF broadcasting station in Regions 1 and 3 MF broadcasting station in Region 2

1.3 Notice types to be used for the broadcasting service within the planning area and bands governed by the GE06 Agreement

Notice type	To be used for	Reference in GE06 Agreement
G02	Application of Article 4* procedure for analogue television broadcasting assignment (in the transition period) Application of Article 5** procedure for analogue television broadcasting assignment (provision No. 5.1.2 a)) Application of Article 5 procedure for an analogue television broadcasting assignment, within the envelope of a digital broadcasting plan entry (provision No. 5.1.3).	Table A.2 (GE06) Table A.2 (GE06)
GS1	Application of Article 4* procedure for digital sound (T-DAB) broadcasting assignment Application of Article 5** procedure for digital sound (T-DAB) broadcasting assignment (provision No. 5.1.2)	Table A.1 (GE06) Table A.1 (GE06)
GS2	Application of Article 4* procedure for digital sound (T-DAB) broadcasting allotment	Table A.1 (GE06)
GT1	Application of Article 4* procedure for digital television (DVB-T) broadcasting assignment Application of Article 5** procedure for digital television (DVB-T) broadcasting assignment (provision No. 5.1.2)	Table A.1 (GE06) Table A.1 (GE06)
GT2	Application of Article 4* procedure for digital television (DVB-T) broadcasting allotment	Table A.1 (GE06)
GB1	Application of Article 5** procedure for an assignment to other broadcasting applications (except analogue television assignments), within the envelope of a digital broadcasting Plan entry, but using characteristics different from those appearing in the Plan (provision No. 5.1.3).	5.1.3 (GE06)
GA1	Addition or suppression of the allotment sub-area for digital television and sound broadcasting allotment (T-DAB or DVB-T), in conjunction with notice types GS2 and GT2, if required	Table A.1 (GE06)

1.4 Notice types applicable to terrestrial services other than broadcasting in the planning area and bands governed by the GE06 Agreement

Notice Type	Applicable to	Based on notice form
G11	TERRESTRIAL TRANSMITTING STATION IN THE FIXED SERVICE Application of Article 4* and 5** procedures including No. 5.1.3	T11
G12	TERRESTRIAL TRANSMITTING STATION, except station in the fixed service, or typical station Application of Article 4* and 5** procedures including No. 5.1.3	T12
G13	TERRESTRIAL RECEIVING LAND STATION Application of Article 4* and 5** procedures including No. 5.1.3	T13
G14	TERRESTRIAL TYPICAL TRANSMITTING STATION Application of Article 4* and 5** procedures, except No. 5.1.3	T14

* Article 4 of the GE06 Regional agreement, procedure for modifications to the Plans and procedure for coordination of other primary terrestrial services.

** Article 5 of the GE06 Regional agreement, notification of frequency assignments to Master Register.

Annex 2

Stations in the terrestrial services – symbols used for their designation

Service	Code	Station	Description/Definition
Fixed	FX	Fixed station	Station in the fixed service
Generic Mobile	FL	Land station	Station in the mobile service not intended to be used while in motion
	MO	Mobile station	Station in the mobile service intended to be used while in motion or during halts at unspecified points
Land Mobile	FB	Base station	Land station in the land mobile service
	ML	Land mobile station	Mobile station in the land mobile service
Maritime Mobile	FC	Coast station	Land station in the maritime mobile service
	FP	Port station	Coast station in the port operations service
	MS	Ship station	Mobile station in the maritime mobile service
	OE	Oceanographic data interrogation station	Oceanographic data interrogation station
	OD	Oceanographic data station	Oceanographic data station
Generic Aeronautical mobile	FA	Aeronautical station	Land station in the aeronautical mobile service
	MA	Aircraft station	Mobile station in the aeronautical mobile service
Aeronautical mobile Route	FD	Aeronautical station	Land station in the aeronautical mobile (R) service
Aeronautical mobile Off Route	FG	Aeronautical station	Land station in the aeronautical mobile (OR) service
Generic Radionavigation	RN	Radionavigation land station	Land station in the radionavigation service
	NR	Radionavigation mobile station	Mobile station in the radionavigation service
Maritime Radionavigation	NL	Maritime radionavigation land station	Land station in the maritime radionavigation service
	RM	Maritime radionavigation mobile station	Mobile station in the Maritime radionavigation service
Aeronautical Radionavigation	AL	Aeronautical radionavigation land station	Land station in the aeronautical radionavigation service
	AM	Aeronautical radionavigation mobile station	Mobile station in the aeronautical radionavigation service
Radiolocation	LR	Radiolocation land station	Land station in the radiolocation service
	MR	Radiolocation mobile station	Mobile station in the radiolocation service

Service	Code	Station	Description/Definition
Meteorological aids	SM	Meteorological aids base station	Land station in the Meteorological aids service
	SA	Meteorological aids mobile station	Mobile station in the meteorological aids service
Standard frequency and time signal station	SS	Standard frequency and time signal station	Standard frequency and time signal station
Broadcasting	BC	Sound broadcasting station	Sound broadcasting station
