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Terrestrial Services Department

LF/MF BROADCASTING, REGIONS 1 AND 3, GENEVA, 1975

1 Introduction

LF and MF broadcasting is regulated by the Agreement established in 1975 in Geneva by the Regional Administrative LF/MF Broadcasting Conference for Regions 1 and 3.

The frequency bands allocated to the broadcasting service are:

- 148.5-283.5 kHz for LF in Region 1 only. This band has 15 channels used mainly in the European Broadcasting Area;
- 526.5-1 606.5 kHz for MF in Regions 1 and 3. This band has 120 channels of which three are reserved for low power transmitters or LPCs (1 485 kHz, 1 584 kHz and 1 602 kHz). For these three low-power channels (LPCs) the maximum effective monopole radiated power must not exceed 1 KW.

Channel spacing for these bands is 9 kHz. The carrier frequencies correspond to integral multiples of 9.

The Plan entered into force on 23 November 1978 and contained approximately 11 000 daytime stations and 10 000 night-time stations. It currently contains a total of 11 879 recorded assignments, 11 701 for the MF band and 178 for the LF band.

2 Plan modification procedure

The Agreement contains a Plan modification procedure set forth in Article 4 ([GE75 Flowchart - http://www.itu.int/en/ITU-R/terrestrial/broadcast/plans/Documents/GE75%20Article%204.pdf](http://www.itu.int/en/ITU-R/terrestrial/broadcast/plans/Documents/GE75%20Article%204.pdf)).

The procedure allows a frequency assignment's characteristics to be modified or a new assignment to be entered both for low-power or other channels.

2.1 Modification pertaining to a channel other than an LPC

An administration wishing to modify the characteristics of an assignment in the Plan or to add a new assignment sends the Bureau the characteristics of the modification or addition using a T03 form of notice (Circular Letter CR/125), indicating the names of the administrations with which agreement has been reached.

The Bureau determines those frequency assignments in conformity with the Plan that may be considered to be affected and publishes the characteristics of the modifications in Part A of a GE75 Special Section together with the names of the administrations considered to be affected.

An assignment is considered to be affected when its usable field-strength resulting from the original recording in the Plan is increased by a value of 0.5 dB or more. For these calculations, the technical criteria in Annex 2 to the Agreement are applied.

To avoid unjustifiable refusals, the Agreement specifies the increase in the interfering field strength which the administration consulted has to accept. The value of 0.5 dB given above defines the limit to the amount by which interference may be increased before it is recognized as unacceptable. Thus there can be no objection if the usable field-strength is increased by less than 0.5 dB. An increase of 0.5 dB or more is subject to **negotiation**.

In application of Article 4, BR calculates the usable field-strength and corresponding usable distance every 20 degrees in azimuth for each new assignment or each modification and stores the values thus obtained in the database.

The time limit for submitting comments is **16 weeks** from publication in Part A. If no comment is received within that 16-week period or if agreement is reached with administrations that have submitted comments, the administration on whose behalf the proposed modification was published informs the Bureau, indicating the final characteristics of the frequency assignment together with the names of the administrations with which agreement has been reached.

The administration may then implement its project.

The Bureau publishes the information in Part B of the GE75 Special Section and updates the Plan.

2.2 Simplified procedure

A simplified procedure applies for minor modifications, such as slight changes in geographical coordinates, or for modifications which would only reduce the probability of interference, such as power reductions. Such modifications are directly published in Part B of the GE75 Special Section and entered in the Plan.

2.3 Modifications to a low-power channel (LPC)

A proposed modification to an LPC is not published in Part A of the GE75 Special Section. Any administration proposing such a change has to obtain the agreement of any other administration having territories within a limiting distance of the proposed station (§ 4.8.3 of Annex 2 to the Regional Agreement).

Once all necessary agreements have been obtained, the administration proposing the modification informs the Bureau, giving the characteristics of the station together with the names of the administrations with which agreement has been reached.

The Bureau publishes the information in Part B of the GE75 Special Section and updates the Plan.

2.4 Cancellation of an assignment in the Plan

When an assignment in conformity with the Agreement is withdrawn, the administration concerned immediately informs the Bureau. The Bureau publishes this information in Part C of the GE75 Special Section and updates the Plan.

All this information appears on the BR IFIC DVD-ROM.

A summary is also published on the ITU website at the following URL:

<http://www.itu.int/ITU-R/eBCD/eBCD.aspx>

Regularly updated information and recent publication may be found on the ITU website at the following URL: <http://www.itu.int/ITU-R/eBCD/eQry.aspx?>

The Article 4 procedure must be re-implemented if the final characteristics are submitted after a period of one year from the date of publication in Part A of the Special Section (see the Rules of Procedure, Part A3).

3 Introduction of digital modulation

The Radio Regulations Board (RRB) has adopted a rule of procedure allowing the introduction of digital modulation in the GE75 Plan. The following text was adopted:

“After consideration of the relevant ITU-R studies, the Board decided that frequency assignment for AM broadcasting in the Plan may provisionally be used with digital modulation (transmission types DRM¹ A2 or B2), provided the radiation is reduced by at least 7 dB in all directions, compared to the radiation of the AM modulated frequency assignment in the Plan.

The power of the transmitter to be notified in case of digital modulation shall be the total power within the necessary bandwidth.

In the examination of the probability of interference from notices related to assignments using digital modulation, the Bureau shall use a co-channel protection ratio increased by 7 dB, and an adjacent channel protection ratio increased by 1 dB compared to the one applicable to the interfered transmitter.

When the proposed assignment using digital modulation is recorded into the Plan following the application of Article 4, it shall bear a symbol indicating that the recording is provisional. The reference situation shall be determined as if it were an AM transmission using an audio-frequency modulating signal of 4.5 kHz and a high degree of compression.

This Rule of Procedure is of a provisional nature until such time that it is confirmed by a competent conference empowered to deal with the subject matter.

4 Notification of frequency assignments

The notification procedure set forth in Article 5 of the Agreement is necessary only when an assignment is brought into use.

An administration wishing to bring a broadcasting assignment into operation in conformity with the Agreement must notify it to the Bureau in conformity with the provisions of Article 11 of the Radio Regulations.

The procedure is as follows:

- The Administration sends a notification request to BR (T03 form of notice);
- The Bureau publishes the assignment’s characteristics in Part I of the BR IFIC;
- The Bureau examines the assignment under the provisions of Article 11 and issues a finding:
 - **favourable**, if the characteristics are in conformity with the RR and the Plan. The assignment is published in Part II of the BR IFIC and entered in the Master International Frequency Register, generally known as the MIFR;

¹ The DRM system is described in Recommendation ITU-R BS.1514.”

- **unfavourable**, if the characteristics are not in conformity with the RR or the Plan. The assignment is published in Part III and returned to the administration.

References

Final Acts of the Regional Administrative LF/MF Broadcasting Conference (Regions 1 and 3), Geneva, 1975, available on the ITU website at the following URL:

<http://www.itu.int/pub/R-ACT-RRC.3-1975/>

Circular Letter CR/125 of 30 July 1999, available on the ITU website at the following URL:

<http://www.itu.int/md/R00-CR-CIR-0125/en>

The Rules of Procedure, available on the ITU website at the following URL:

<http://www.itu.int/pub/R-REG-ROP/>
