

Broadcasting Assignment Plan GE75

148.5 – 283.5 kHz Region 1

526.5 – 1606.5 kHz Region 1 & 3



- **Features of GE75 Agreement**
- **Modification to the GE75 Plan**
- **Notification to the MIFR**
- **Introduction of digital sound**

Evghenii Sestacov
BR/TSD/BCD

Broadcasting Assignment Plan GE75

148.5 – 283.5 kHz Region 1

526.5 – 1606.5 kHz Region 1 & 3



Features of GE75 Agreement

GE75 Agreement comprises:

- rules of the use by the sound broadcasting service of the **low frequency** bands in Region 1 and of the **medium frequency** bands in Region 1 & 3 including technical data used in the preparation of the Plan and in the application of the Agreement
- Plan for the assignment of 15 channels in LF bands and 120 channels in MF bands including 3 Low-Power Channels (e.m.r.p. ≤ 1 kW) on 1485, 1584 and 1602 kHz

Broadcasting Assignment Plan GE75

148.5 – 283.5 kHz Region 1

526.5 – 1606.5 kHz Region 1 & 3



Features of GE75 Agreement

Carrier frequencies: 153, 162, 171, ..., 279 kHz (LW)
531, 540, 549, ..., 1602 kHz (MW)
integer multiples of 9, total 15 + 120 channels

Class of emission:

double sideband amplitude modulation with full carrier (A3E);
bandwidth saving modulation methods may provisionally be used on condition that interference in the same or adjacent channel does not exceed the interference resulting from the application of double sideband modulation with full carrier (Resolution 8)

Broadcasting Assignment Plan GE75

148.5 – 283.5 kHz Region 1

526.5 – 1606.5 kHz Region 1 & 3



Features of GE75 Agreement

Protection ratio co-channel:

- 30 db (27db) for a stable (fluctuating) wanted signal interfered by a stable or fluctuating signal
- 8 dB for a wanted signal interfered with by a signal from transmitter in the same synchronized network

Protection ratio adjacent channel:

- 9, 7, 5, 0 dB for a stable wanted signal depending on the degree of modulation compression and bandwidth of the audio-frequency modulating signal
- 6, 4, 2, -3 dB for a fluctuating wanted signal depending on the degree of modulation compression and bandwidth of the audio-frequency modulating signal

Broadcasting Assignment Plan GE75

148.5 – 283.5 kHz Region 1
526.5 – 1606.5 kHz Region 1 & 3



Features of GE75 Agreement

Agreement entered into force on 23 November 1978 and the Plan contained approximately 11 000 day-time entries and 10 000 night-time entries.

Annual mean value of the proposed modifications treated during last ten years is >100.

Broadcasting Assignment Plan GE75

148.5 – 283.5 kHz Region 1

526.5 – 1606.5 kHz Region 1 & 3



Modification to the GE75 Plan

The following three cases will be presented:

- **Channels other than Low-Power Channels** (Part A then Part B)
- **Low-Power Channels** (directly in Part B)
- **Minor modifications** (directly in Part B)

Broadcasting Assignment Plan GE75

148.5 – 283.5 kHz Region 1

526.5 – 1606.5 kHz Region 1 & 3



Modification to the GE75 Plan: Channels other than Low-Power Channels

Proposed modification is examined on the basis of Annex 2 and according to p. 3.2.5 of Article 4 in order to identify administrations which recorded assignments are considered to be affected.

Assignment recorded in the Plan may be considered affected when its usable field strength E_u is increased by ≥ 0.5 dB as a consequence of the proposed modification. E_u is calculated at any point on the boundary of the service area resulting from the first recording of the assignment in the Plan. When the original assignment in the Plan has been modified in accordance with the Agreement, the calculation shall take account of this modification.

Broadcasting Assignment Plan GE75

148.5 – 283.5 kHz Region 1

526.5 – 1606.5 kHz Region 1 & 3



Modification to the GE75 Plan: Channels other than Low-Power Channels

Characteristics of proposed modification, expiry date of comments (following 16 weeks) as well as the names of affected administrations and of those with which agreement has already been reached are published in **Part A** of Special Section GE75 (**no comment = agreed**).

The results of examination are communicated to the administrations concerned.

Not later than one year after publication in Part A a separate request must be sent for publication in **Part B** of Special Section GE75 containing the final characteristics of the proposed modification together with the names of all administrations with which agreement has been reached.

Broadcasting Assignment Plan GE75

148.5 – 283.5 kHz Region 1
526.5 – 1606.5 kHz Region 1 & 3



Modification to the GE75 Plan: Low-Power Channels

Agreement of any other administration is required when the **distance** between the proposed station and the nearest point on the boundary of that other administration is less than the corresponding values given in 4.8.3 of Annex 2 and for mixed paths in Part A3 of Rules of Procedure

| e.m.r.p. (kW) | Limiting distance (km) |
|------------------|---------------------------|
| 1.0 | 600 |
| 0.75 | 500 |
| 0.5 | 400 |
| 0.25 | 200, 300* |
| 0.1 | 70, 250* |
| 0.05 | 50, 200* |

* propagation path over sea

The agreement is not necessary when proposed modification would **not increase the probability of interference** at any point on the border of this country, within the coordination distance (Art. 4 p. 3.3.1, Part A3 of Rules of Procedure)

BR publishes **directly in Part B** of Special Section GE75 the received characteristics of a proposed modification together with the names of administrations with which agreement has been reached (Art.4 p. 3.3)

Broadcasting Assignment Plan GE75

148.5 – 283.5 kHz Region 1

526.5 – 1606.5 kHz Region 1 & 3



Modification to the GE75 Plan: Minor modifications

The proposed modification is published **directly in Part B** of Special Section GE75 if it

- entails no increase in e.m.r.p. in any direction or
- relates to a change in the site of the station within the tolerances specified in 4.9 of Annex 2 (possible tolerances of 2, 5, 10, 20 km depend on:
 - location of a transmitter, its distance from the coast, distance between affected and interfering transmitters, LF or MF, same or adjacent channel)

Broadcasting Assignment Plan GE75

148.5 – 283.5 kHz Region 1

526.5 – 1606.5 kHz Region 1 & 3



Notification to the MIFR

- Whenever an administration intends to put into use an assignment in conformity with the agreement it shall notify this assignment in accordance with Article 11 of RR
- BR publishes the complete data of notified assignment in **Part I of its BRIFIC** (acknowledgment)
- BR publishes in **Part II of its BRIFIC** the final characteristics of the relevant assignment and records with favorable finding in the MIFR with date of recognition equal to the date of receipt of complete notification, if the notified data are in CONFORMITY with that of corresponding assignment recorded in GE75 Plan
- Otherwise BR publishes in **Part III of its BRIFIC** the final characteristics of the relevant assignment with unfavorable finding and returns the notice

Broadcasting Assignment Plan GE75

148.5 – 283.5 kHz Region 1

526.5 – 1606.5 kHz Region 1 & 3



Introduction of digital sound

- After consideration of the relevant ITU-R studies, the Radio Regulation Board decided that any frequency assignment for AM broadcasting in the Plan may provisionally be used with digital modulation (transmission types DRM 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.
- Therefore, when examining the conformity to the GE75 Plan of a notice received under Article 11 of the Radio Regulations, the Bureau shall accept such a notice as being in conformity to the Plan.
- 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.

Thank you for your attention!

Questions?

Evghenii Sestacov
evghenii.sestacov@itu.int