

2-6 December 2024 Geneva, Switzerland





ITU World Radiocommunication Seminar

Frequency Plans for Terrestrial Broadcasting services



OVERVIEW

- ITU Regions
- Regional Plans
- Regional Plans concerning TV broadcasting
- Regional Plans concerning sound broadcasting
- Article 4: Modifications to the Plans
- Useful links

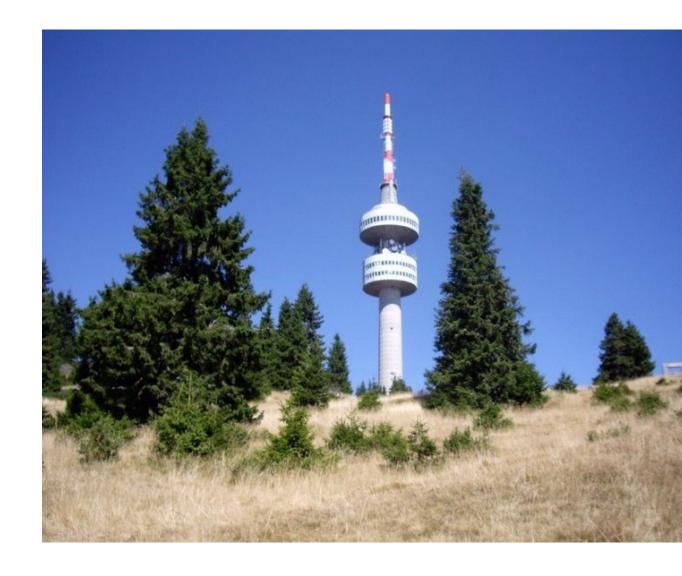
Regional agreements for:

- specific frequency bands
- specific region/area
- specific services

Types of Plans:

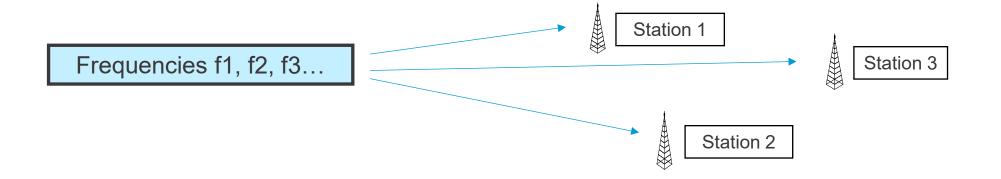
- Assignment Plans (stations)
- Allotment Plans (geographical areas)

Adopted by Regional Conferences: technical criteria + frequency plans

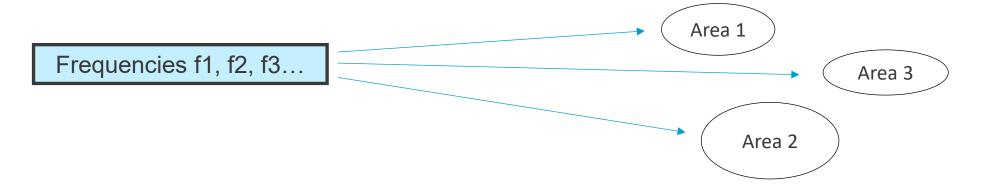




Assignment Plan: frequencies are assigned to stations



• Allotment Plan: frequencies are assigned to geographical areas





Regional Plans (in force) that concern television broadcasting:

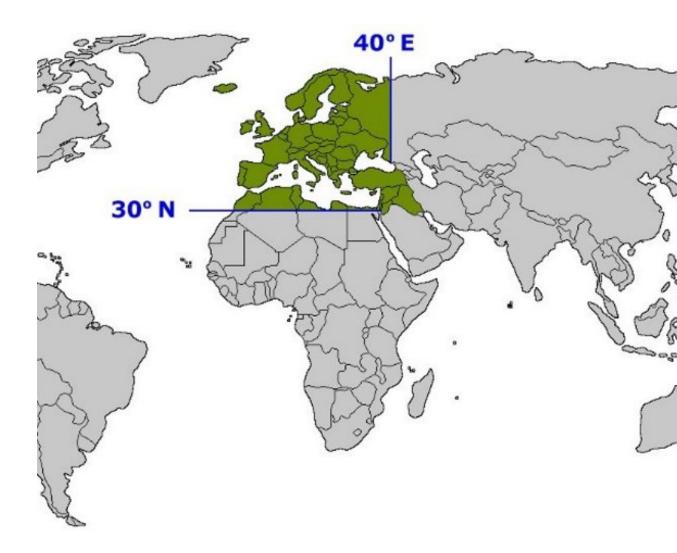
- Stockholm 1961 modified in 2006 (ST61)
- Geneva 1989 modified in 2006 (GE89)
- Geneva 2006 (GE06)





Stockholm 1961 modified in 2006 (ST61)

- Modified in 2006: the bands 174-230 MHz and 470-862 MHz were transferred to GE06 Plan
- Assignment Plan
- Region: European Broadcasting Area (EBA)
- Bands: Band I: 47-68 MHz; Band II: 87.5-100 MHz; Band III: 162-170 MHz
- Services: Broadcasting (sound and television)





Geneva 1989 modified in 2006 (ST61)

- Modified in 2006: the bands 174-230 MHz and 470-862 MHz were transferred to GE06 Plan
- Assignment Plan
- Region: African Broadcasting Area(ABA)
- Bands: Band I: 47-68 MHz; Band III: 230-238 and 246-254 MHz
- Services: Broadcasting (television only)





GE06 (Digital Plan):

- There were 2 plans (analogue and digital).
 On 17 June 2020 the analogue plan ceased to exist
- Assignment and allotments Plan (Plus a list of frequency assignments for other primary services)
- Region: Region I, except the territories of Mongolia and the Islamic Republic of Iran
- Bands: Band III: 174-230 MHz* (*for Morocco 170-230 MHz), Band IV: 470-582 MHz, Band V: 582-862 MHz
- Services: Broadcasting (digital sound and television) and Other primary services





Regional Plans (in force) that concern sound broadcasting:

- Stockholm 1961 modified in 2006 (ST61)
- Geneva 1975 (GE75)
- Rio de Janeiro 1981 (RJ81)
- Geneva 1984 (GE84)
- Rio de Janeiro 1988 (RJ88)
- Geneva 2006 (GE06)



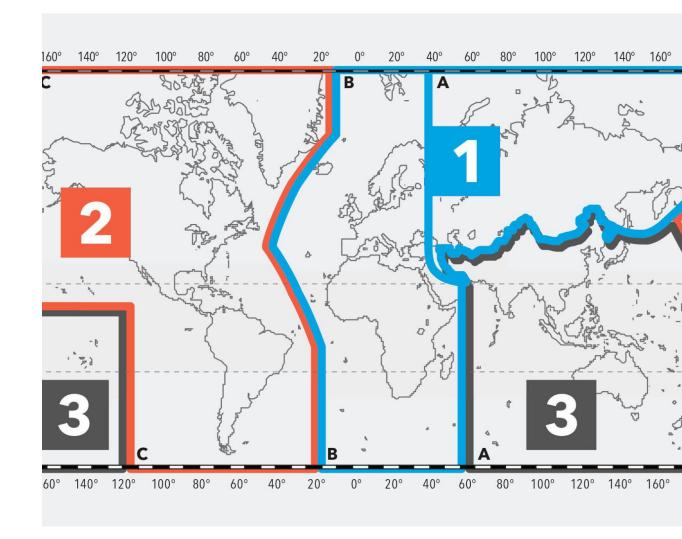


Table 1: Frequency bands and Regions

Band	Frequency band	Region	Plan
LF	148.5 – 283.5 kHz	R1	GE75
MF	526.5 – 1606.5 kHz	R1 and R3	GE75
	535 – 1605 kHz	R2	RJ81
	1605 – 1705 kHz	R2	RJ88
VHF	47 – 68 MHz	EBA	ST61
	87.5 – 108 MHz	R1+IRN+AFG	GE84
	(170 MRC) 174 – 230 MHz	R1-MNG+IRN	GE06

Table 1: Frequency bands and Regions

Plan	Assignments/Allotments
Stockholm-61	Assignments only
Geneva-75	Assignments only
Rio de Janeiro-81	Assignments only
Geneva-84	Assignments only
Rio de Janeiro-88	Allotments only
Geneva-06	Assignments and Allotments





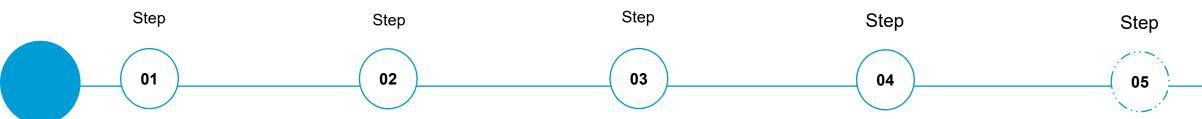
Regional Plans (in force) that concern sound broadcasting:

- Modify the technical characteristics of an assignment/allotment already existing in the Plan.
- Add an assignment/allotment to the Plan.
 Supress an assignment/allotment from the Plan.
- GE06: Add to the Plan an assignment stemming from an allotment already existing in the Plan (converted assignment).



ARTICLE 4: GENERAL PROCEDURE





Submission

BR some proposed modifications administrations and publishes to the Plan

An Administration submits to the BR identifies potentially affected (modifications + affected administrations) in the BRIFIC (Part A of the corresponding Special Section).

Publication in Part A

Coordination

Period to reach agreement between notifier and affected administrations.

Publication in Part B

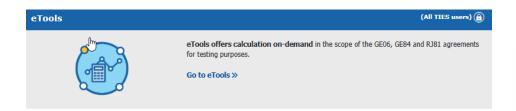
If an agreement is reached, BR publishes the modifications to the Plan in the BRIFIC (Part B of the corresponding Special Section) and the modifications are recorded into the Plan.

Master Register (Article 5*)

When putting the station in operation, the administration should notify the BR in order to include the station in the Master Register

Technical examinations for broadcasting stations



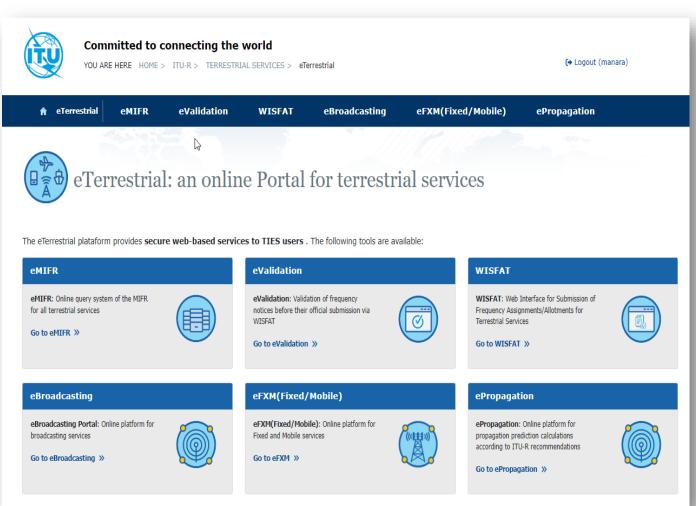


- GE06D Article 4 Plan modification (Coordination and Conformity Examination)
- GE06D compatibility analysis (incl. ATU and ASMG regional planning)
- CA_Compat Compatibility Analyses
- GE84 Optimization and Compatibility Analyses
- RJ81 Article 4 Plan modification



Field Strength Calculations on-demand

- ITU-R P.1812-6
- ITU-R P.1546-6



USEFUL LINKS

FMTV Frequency Plans:

www.itu.int/en/ITU-R/terrestrial/broadcast/Pages/FMTV.aspx

LFMF Frequency Plans:

www.itu.int/en/ITU-R/terrestrial/broadcast/Pages/LFMF.aspx

Online Broadcasting Services and Software:

https://www.itu.int/ITU-R/eTerrestrial/eBroadcasting

Thank you!

ITU – Radiocommunication Bureau

Questions to brmail@itu.int or brbcd@itu.int