



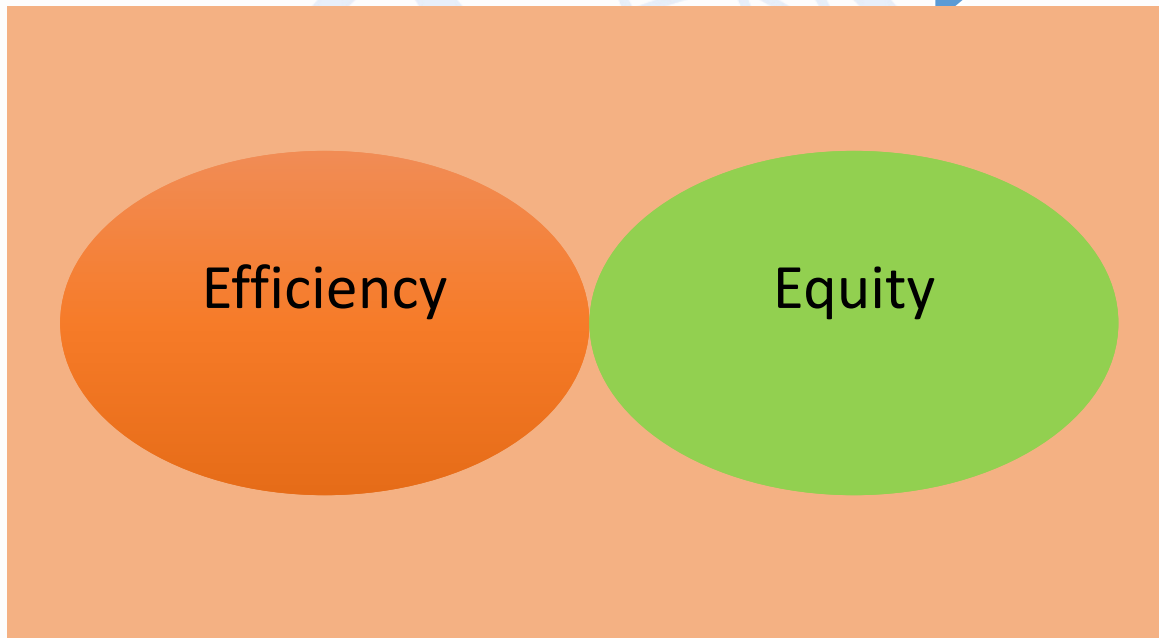
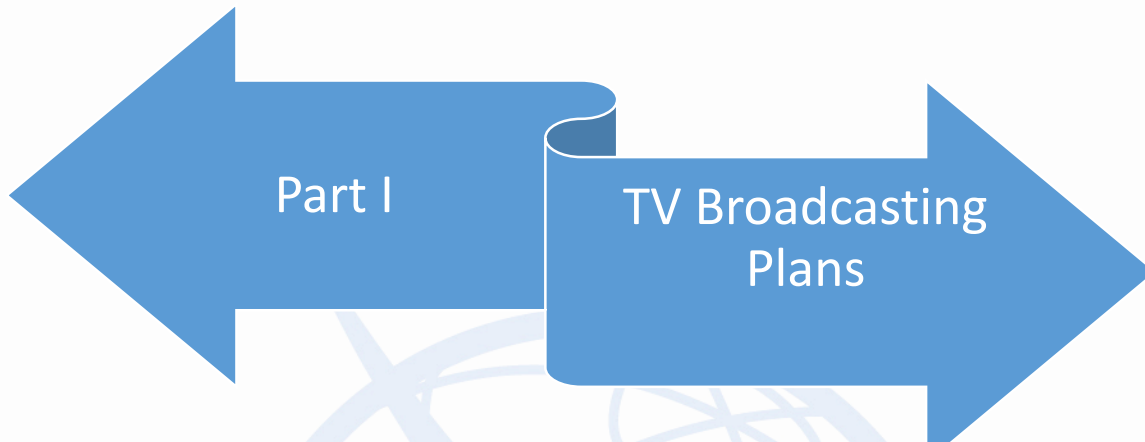
**World Radiocommunication Seminar 2016
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Frequency plans for broadcasting services

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OVERVIEW



- **Regional Plans**
 - **Regional Plans concerning TV broadcasting**
 - **Modifications to the Plans**
 - **Useful links**
-

REGIONAL PLANS

Definition



- **Regional agreements for:**
 - specific frequency bands
 - specific region/area
 - specific services
- **Adopted by Regional Conferences** (technical criteria + frequency plans).
- **Types of Plans:**
 - Assignment Plans (stations)
 - Allotment Plans (geographical areas)



TV REGIONAL PLANS

- **Regional Plans** (in force) that concern **television** broadcasting:
 - Stockholm 1961 modified in 2006 (**ST61**)
 - Geneva 1989 modified in 2006 (**GE89**)
 - Geneva 2006 (**GE06**)

 - **Article 4:** Procedure to make changes to the Plan

 - **Article 5:** Notification of assignments to the MIFR when they are put into service
-

REGIONAL PLANS: ST61

➤ **ST61: Stockholm 1961 modified in 2006**

In 2006 the bands 174-230 MHz and 470-862 MHz were transferred to GE06 Plan

➤ **Assignment Plan**

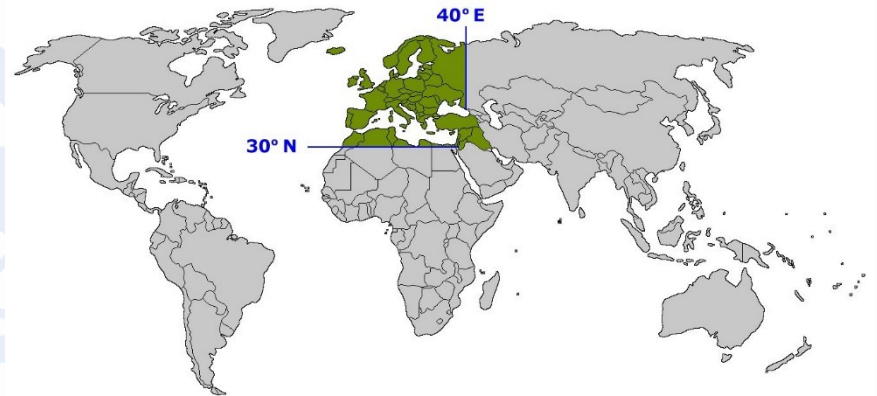
➤ **Region: European Broadcasting Area (EBA)**

➤ **Bands:**

- Band I: 47-68 MHz
- Band II: 87.5-100 MHz
- Band III: 162-174 MHz

➤ **Services:**

- Broadcasting (sound and television)



REGIONAL PLANS: GE89

➤ **GE89:** Geneva 1989 modified in 2006

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)



REGIONAL PLANS: GE06



➤ 2 plans: Analogue and digital

- Analogue plan: Assignments (television)
- Digital plan: Assignments and allotments (sound and television)
- 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*
 - *Analogue and digital television*
- Other primary services



MODIFICATIONS TO THE PLANS



Article 4: Definition

- Agreements (ST61, GE89 and GE06):
 - **Modify** the technical characteristics of an **assignment/allotment** already existing in the Plan.
 - **Add** an **assignment/allotment** to the Plan.
 - **Add** to the Plan an **assignment stemming from an allotment** already existing in the Plan (GE06).
 - **Delete** an **assignment/allotment** from the Plan.
-

MODIFICATIONS TO THE PLANS



Article 4: General Procedure

Submission

An Administration submits to the BR some proposed modifications to the Plan



Publication in Part A

BR identifies potentially affected administrations and publishes (modifications + affected administrations) in the BRIFIC (Part A of the corresponding Special Section).



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



USEFUL LINKS

➤ **Frequency Plans:**

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

➤ **Article 4 procedure (flowchart):**

www.itu.int/en/ITU-R/terrestrial/broadcast/plans/Documents/GE06%20Art4.pdf

➤ **Final Acts:**

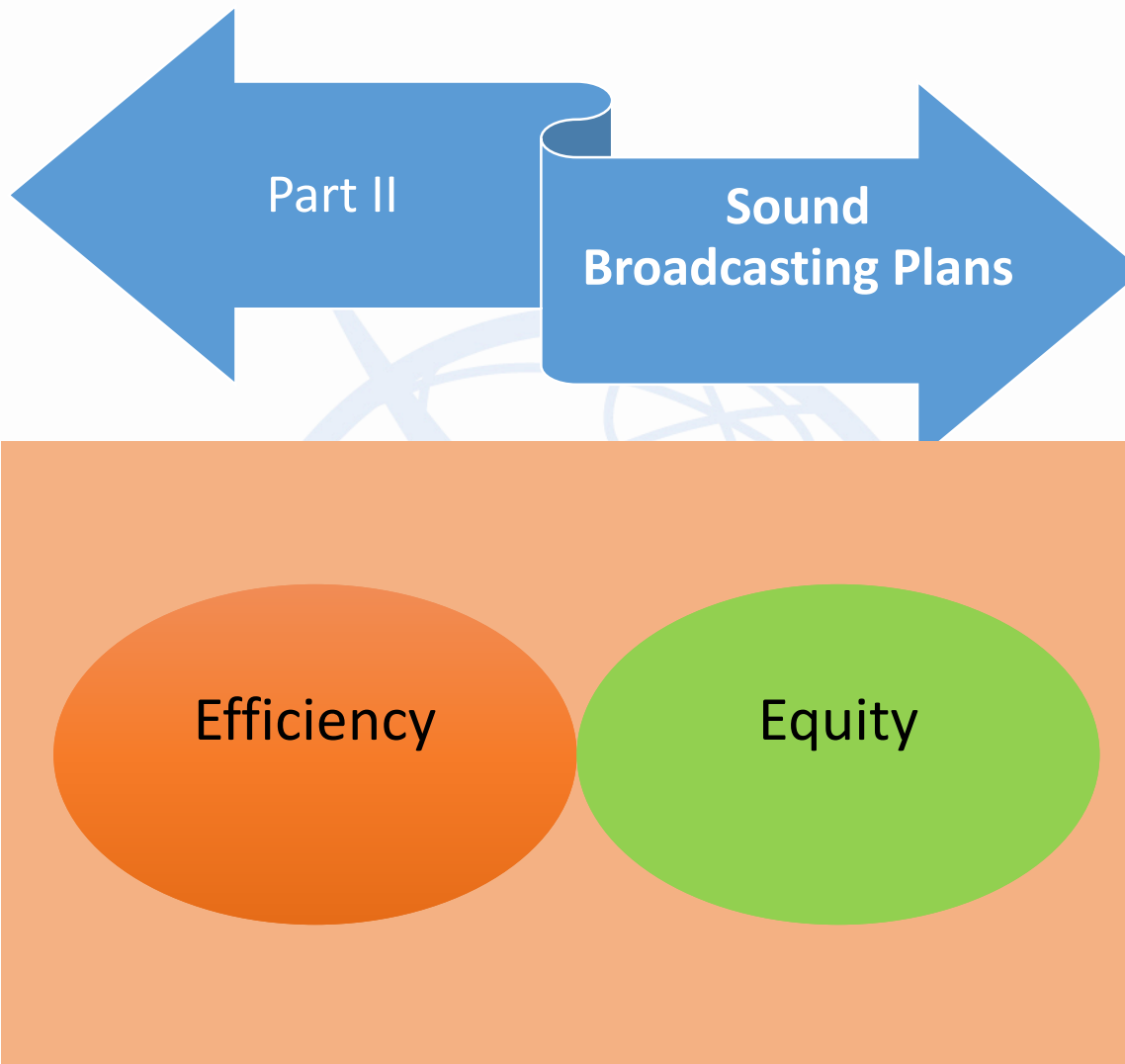
GE06: www.itu.int/pub/R-ACT-RRC.14-2006

GE89: www.itu.int/pub/R-ACT-RRC.11-1989

Revision of GE89: www.itu.int/pub/R-ACT-RRC.16

ST61: www.itu.int/pub/R-ACT-RRC.1-1961

Revision of ST61: www.itu.int/pub/R-ACT-RRC.15-2006



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Overview



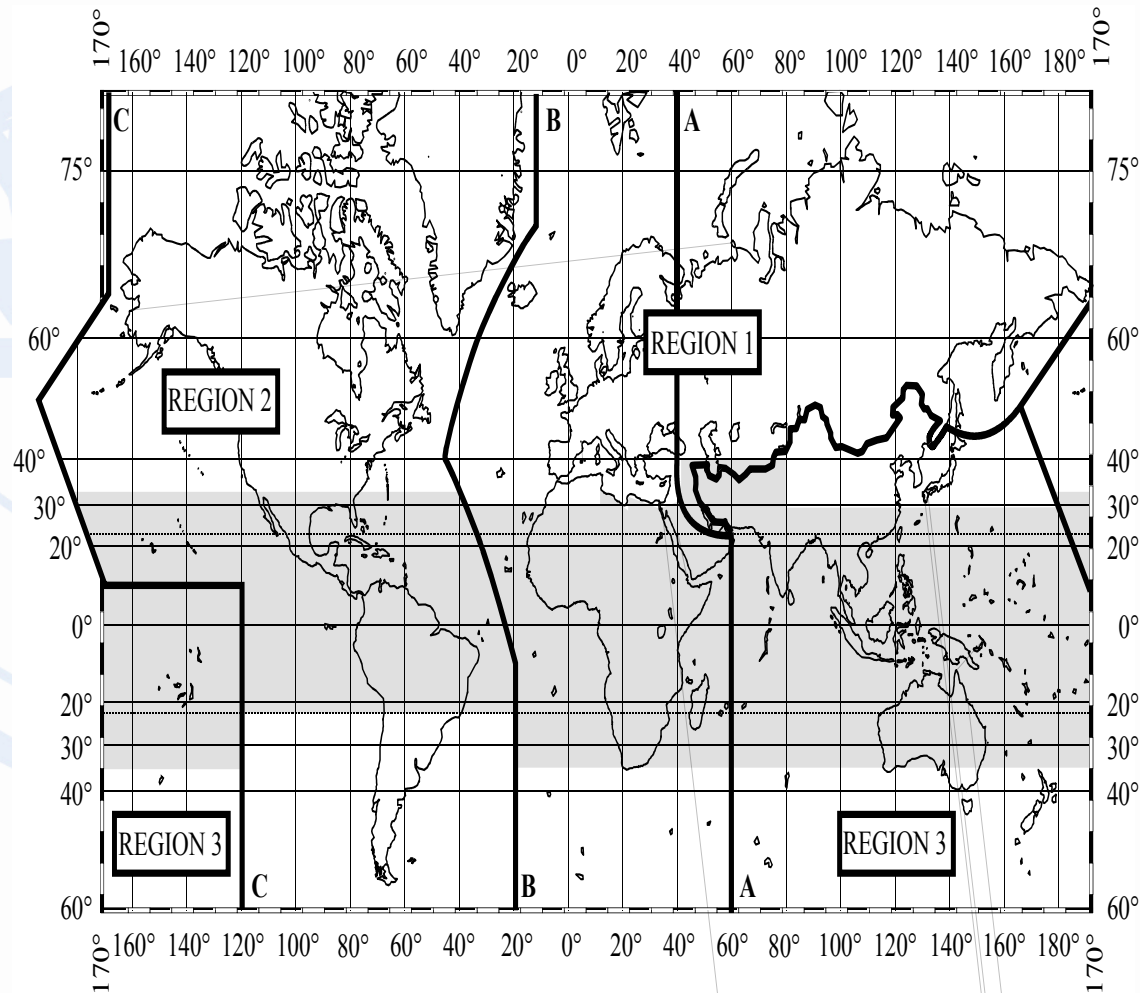
- **ITU Regions**
- **LF/MF bands allocated to the broadcasting service and Regional Sound Broadcasting Plans**
- **Basis and Modifications to Broadcasting Plans**
- **Notification of frequency assignments to the Master Register**



Low and Medium Frequency bands allocated to the broadcasting service and covered by a Regional Sound Broadcasting Plan



Frequency Band, kHz	R1	R2	R3
148.5-283.5			
535-1605			
1605-1606.5			
1606.5-1705			



The shaded part represents the Tropical Zones as defined in Nos. 5.16 to 5.20 and 5.21.

Colored box – the band is allocated to broadcasting and covered by a RSBP
Not colored – the band is not allocated to broadcasting in the appropriate ITU Region



Regional Sound Broadcasting Plans Summary

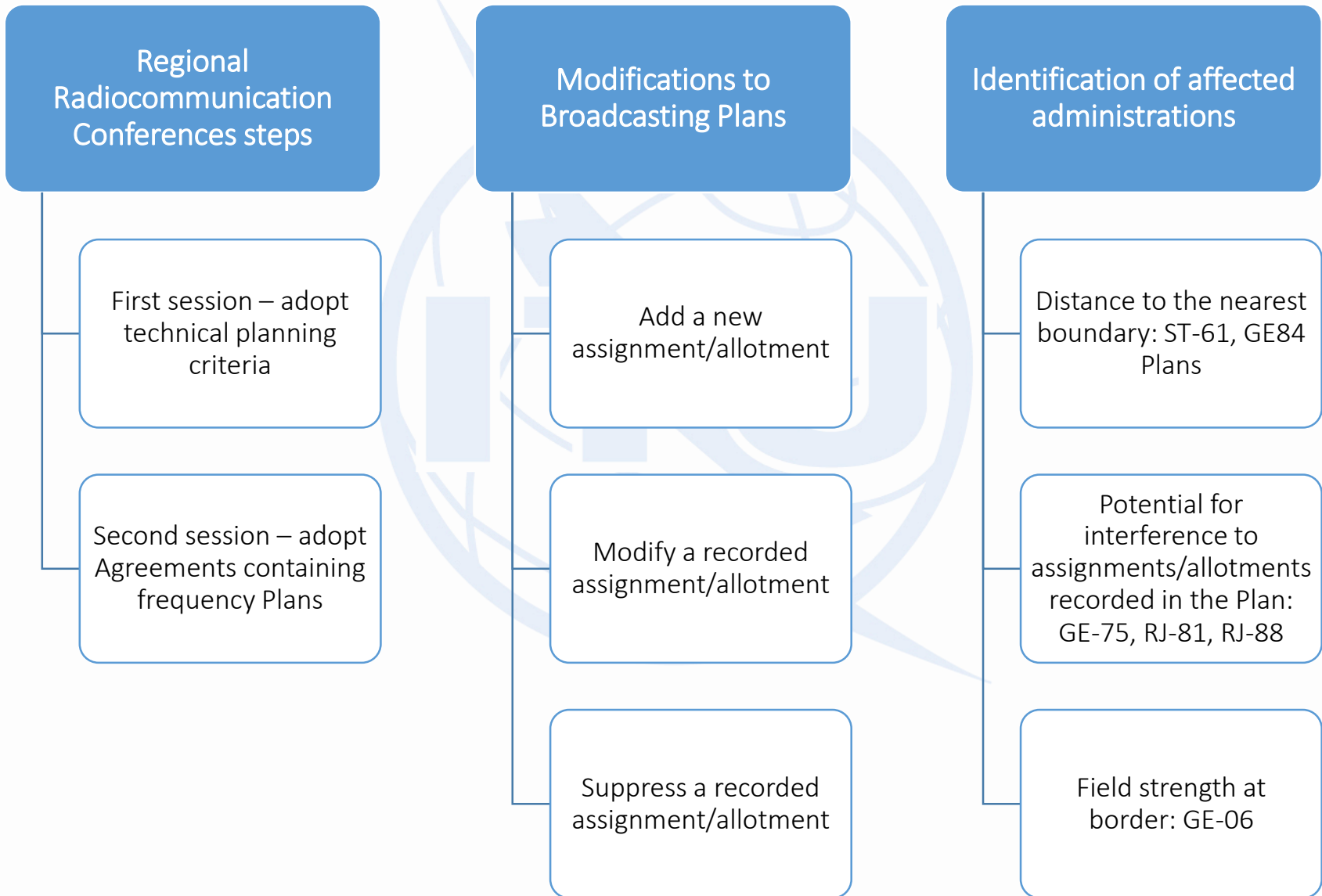


Band	Frequency band (kHz/MHz)	Region/ Geographical zone	Plan
LF	148.5 – 283.5 kHz	R1	GE75
MF	526.5 – 1606.5 kHz	R1 and R3	GE75
	535 – 1605 kHz	R2	RJ81
	1605 – 1705 kHz	R2	RJ88
VHF	47 – 68 MHz	EBA	ST61
	87.5 – 108 MHz	R1+IRN+AFG	GE84
	(170 MRC) 174 – 230 MHz	R1-MNG+IRN	GE06

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

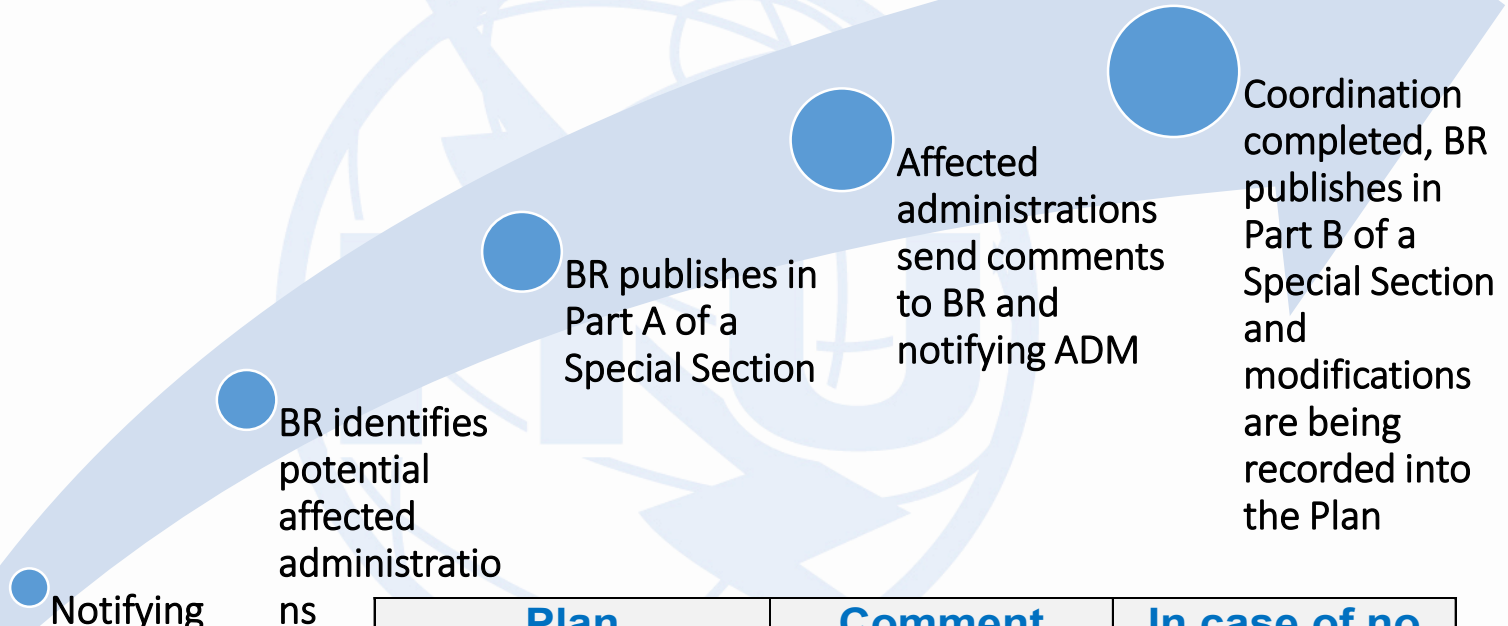


Basis of Broadcasting Plans





Article 4 - General procedure



Plan	Comment Period	In case of no comment
Stockholm-61	12 weeks	Agreement
Geneva-75	16 weeks	Agreement
Rio de Janeiro-81	60 days	Agreement
Geneva-84	100 days	Agreement
Rio de Janeiro-88	Not applicable	-
Geneva-06	75 days	Disagreement



“Quick” Plan modification procedure



For corresponding Plans no agreement is required if modifications involve:

- Less interference – lower ERP/site
- Distance to border > coordination distances
- Field strengths at border less than coordination limits
- Suppression of the recorded assignment/allotment



Part B publication



- ✓ Not automatic
- ✓ Notifying ADM **must request** for publication in Part B
- ✓ If no request for publication in Part B:

Plan	Period from date of publication in Part A	BR action
Stockholm-61	Not applicable	-
Geneva-75	One year	Removal
Rio de Janeiro-81	180 days	Removal
Geneva-84	Not applicable	-
Geneva-06	24 months+75 days	Removal



Notification to the Master Register for all Broadcasting Plans (Sound and TV)



When an administration proposes to bring into use an assignment, it shall notify its characteristics to the BR in accordance with the provisions of Article 11 of the Radio Regulations

Plan	Article
Stockholm-61	5
Geneva-75	5
Rio de Janeiro-81	5
Geneva-84	7
Rio de Janeiro-88	5
Geneva-89	5
Geneva-06	5



*Thank you for your
attention!*

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