



Broadcasting Regulatory Aspects and WRC-23

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SUMMARY

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- **Main Regulatory Framework**
- **Radio Regulations and Broadcasting**
- **WRCs and Broadcasting: WRC-23 and WRC-27**
- **Other Regulatory Texts**
- **Broadcasting Trends**



ITU's RADIOCOMMUNICATION SECTOR (ITU-R)

- Global management of the radio-frequency spectrum and satellite orbits
- Ensure interference-free operations of radiocommunication systems

Radiocommunication Bureau (BR)

- Administrative and technical support for ITU-R
- Applies the provisions of the Radio Regulations and Regional Agreements
- Maintains the Master International Frequency Register (MIFR)

MAIN REGULATORY FRAMEWORK

- **Constitution (CS)**
Establishes the purpose of the ITU, its composition and structure as well as the rights and obligations of its Members
- **Convention (CV)**
Complements the Constitution by establishing the details of the functioning of the Union and its main Conferences
- **Radio Regulations (RR)**



RR: 118 YEARS OF INNOVATION

1906

2024

From the first International Radiotelegraph Convention

To the current Radio Regulations



RR follow and anticipate technological advancements





RADIO REGULATIONS (RR)

Binding international treaty that governs the use of frequency spectrum and satellite orbits

- **International Treaty ratified by governments** → Mandatory: to be reflected in national legislation
- **Rights and obligations** of ITU Member States when using radio spectrum and orbit resources
- **Long-term commitment** from regulators and governments → Stable regulatory context
- **Updated every 3-4 years** at World Radiocommunication Conferences (WRC)

Objectives:

- Interference-free operation
- Harmonization in the use of spectrum and orbits



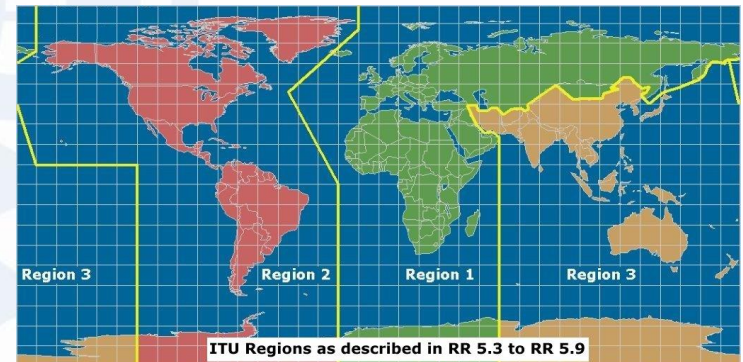
BROADCASTING IN THE RADIO REGULATIONS (RR)

➤ Article 1: Terms and definitions

1.38 - Broadcasting service: A radiocommunication service in which the transmissions are intended for direct reception by the general public. This service may include sound transmissions, television transmissions or other types of transmission.

➤ Article 5: Frequency allocations

- For the allocation of frequencies, the world has been divided into three Regions (Art. 5.2 del RR)
- Spectrum (from 8.3 kHz to 1 000 GHz) is divided in frequency bands which are allocated to specific services (only some bands of the spectrum can be used for the broadcasting service)





BROADCASTING IN THE RADIO REGULATIONS (RR)

➤ **Article 11: Notification and recording of frequency assignments**

- All frequency assignments with international implications must be notified to the ITU when they are put into service.
- Compliant assignments are registered in the Master International Frequency Register (MIFR) and obtain the right to international recognition.
- The MIFR is the only global database with operating stations. It contains more than 2,800,000 terrestrial and spatial assignments

➤ **Article 12:**

Seasonal planning of the HF bands allocated to the broadcasting service

WORLD RADIOCOMMUNICATION CONFERENCE (WRC)

- Analyses and reviews the Radiocommunications Regulations



- It is held every 3 or 4 years (... 2003, 2007, 2012, 2015, 2019, 2023, 2027...)

BROADCASTING IN WRCs



WRC-23:

- **Agenda Item 1.5:** to review the spectrum use and spectrum needs of existing services in the frequency band 470-960 MHz in Region 1 and consider possible regulatory actions in the frequency band 470-694 MHz in Region 1 on the basis of the review in accordance with Resolution 235 (WRC-15);
- **Outcomes:**
 - 470-694 MHz: Secondary allocation to the Mobile Service in 44 states, (subject to WRC-31 review).
 - 614-694 MHz: Primary allocation to the Mobile Service and IMT identification in 11 states.
 - 614-694 MHz: Secondary allocation to the Mobile Service in 8 African countries.
 - Broadcasting Service was specifically protected.



WRC-27:

- No Agenda Items specifically dealing with broadcasting
- Agenda items 1.6, 1.9, 1.10, 1.11, 1.13, 1.17 concerning other services might have an impact on the broadcasting service.
- ITU-R Working Party 6A is following possible impact on broadcasting of these Agenda Items.



OTHER IMPORTANT REGULATORY TEXTS

➤ **Broadcasting Regional Plans**

- Formal agreements between Administrations on the use of frequencies by the broadcasting stations in a specific region/area for specific services.
- Adopted by Regional Conferences (Treaty status) → Mandatory

➤ **ITU-R Recommendations**

- Despite their non-mandatory nature, they serve as international technical standards.



BROADCASTING PLANS IN FORCE

➤ **TV broadcasting regional plans:**

- Stockholm 1961 modified in 2006 (ST61) - European Broadcasting Area
- Geneva 1989 modified in 2006 (GE89) - African Broadcasting Area
- Geneva 2006 (GE06) - Region 1 (except Mongolia) + Iran

➤ **Sound broadcasting regional plans:**

- Stockholm 1961 modified in 2006 (ST61) - European Broadcasting Area
- Geneva 1975 (GE75) - Regions 1 and 3 (525 - 1605 kHz)
- Rio de Janeiro 1981 (RJ81) - Region 2
- Geneva 1984 (GE84) - Region 1 and Part of Region 3
- Rio de Janeiro 1988 (RJ88) - Region 2
- Geneva 2006 (GE06) - Region 1 (except Mongolia) + Islamic Republic of Iran



BROADCASTING TRENDS

- **Digital Terrestrial Television**
Transition from analogue to digital still not finalized in many countries
- **Hybrid TV: Integrated Broadcasting-Broadband Systems (IBB)**
Combination of Internet Broadband and Broadcasting technologies
- **5G Broadcasting**
Allows linear TV and radio to be broadcast to compatible 3GPP-based devices like smartphones
- **Ultra High Definition Television (UHDTV) and High Dynamic Range (HDR)**
Better viewer experience

A large, faint, light blue watermark of the ITU logo is centered in the background of the slide. It consists of a globe with latitude and longitude lines and two red lightning bolts, with the letters "ITU" overlaid in the center.

Thank you!

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