

International Regulatory Framework: ITU Radio Regulations

(Noumea, 11-15 April 2011)

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International
Telecommunication
Union

Committed to connecting the world



Overview: ITU

The **International Telecommunication Union** (ITU), is the specialized agency of the United Nations responsible for information and communications technologies.



Overview: ITU

Established in 1865, the ITU is headquartered in Geneva – Switzerland.

- 191 Member States
- 572 Sector members
- 153 Associate members
- 750 staff / ~70 nationalities



Overview: ITU

The ITU mission:

“to enable the growth and sustained development of telecommunications and information networks, and to facilitate universal access so that people everywhere can participate in, and benefit from, the emerging information society and global economy.”



Overview: ITU

According to its **Constitution**, ITU is required to:

...allocate spectrum, register frequency allocation of radio services and manage and register the orbital positions and other parameters of satellites, **“in order to avoid harmful interference between radio stations of different countries”**.



Overview: ITU

Through the ITU, the international spectrum management system is therefore based on:

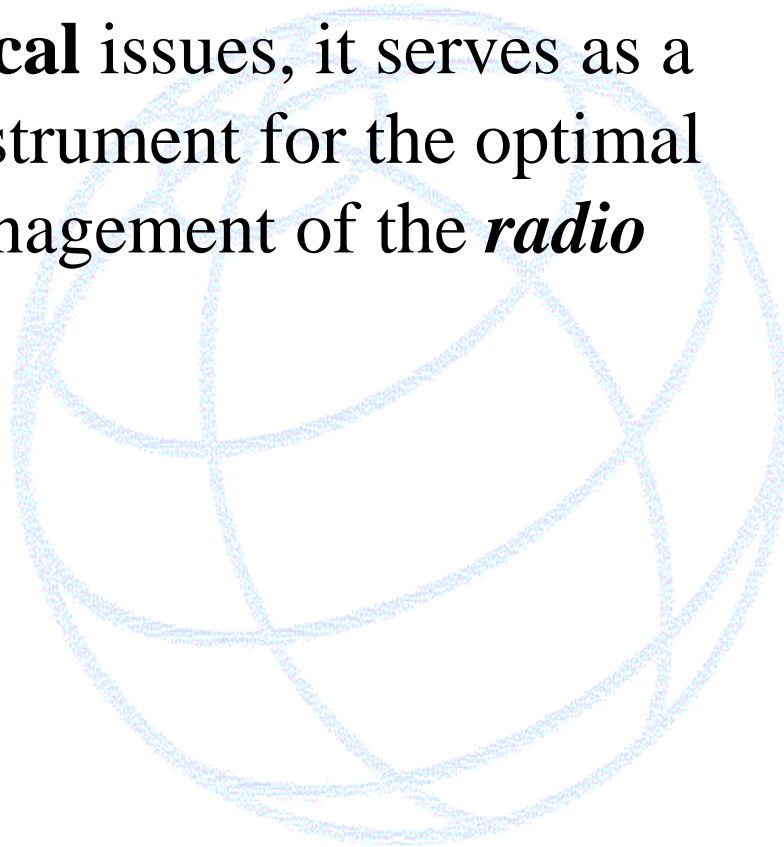
Internationally agreed **frequency bands**, regulatory procedures for **frequency coordination, notification and registration**. These regulations and procedures are contained in the international **Radio Regulations**



Overview: Radio Regulations



Intergovernmental treaty text covering both **legal** and **technical** issues, it serves as a supranational instrument for the optimal international management of the *radio spectrum*.



Overview: Radio Regulations



The *Radio Regulations (RRs)* define:

- the allocation of different frequency bands to different radio services;
- the mandatory technical parameters to be observed by radio stations, especially transmitters;
- procedures for the coordination of radio services (ensuring technical compatibility)



Overview: Radio Regulations



The *Radio Regulations (RRs)* define:

- notification of frequency assignments made to radio stations by national governments (formal recording and protection in the Master International Frequency Register)
- other procedures and operational provisions.



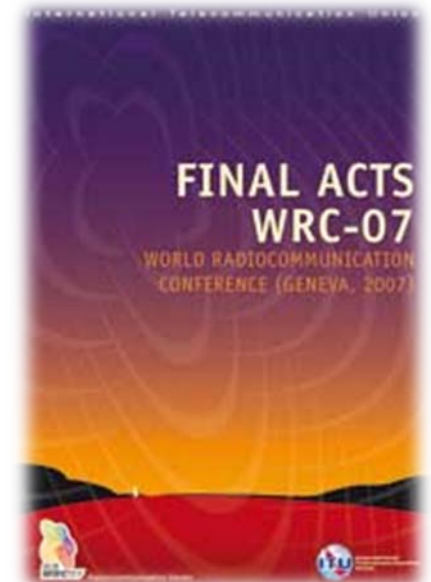
Development

The drafting, revision and adoption of the *Radio Regulations* is the responsibility of the World Radiocommunication Conferences (WRCs), organized by ITU. These meetings are held every 3 to 4 years.



Development

The most recent published version of the *Radio Regulations*, the "Edition of 2008" contains the complete texts of the *Radio Regulations* as adopted and revised by WRC-07, including all articles, appendices, resolutions, and a subset of the recommendations issued by ITU-R.



Parts of the Radio Regulations



The Radio Regulations (*treaty status*) include:

- **Articles** (Volume 1),
- **Appendices** (Volume 2),
- **WRC Resolutions and Recommendations** (Volume 3),
- **ITU-R Recommendations** incorporated by reference (Volume 4).



Objectives

Accommodate
new
requirements

Compatible
operation

Protect existing
services

Cost
effectiveness

Interoperability

International
recognition

Performance
criteria

Coordination
procedures

Implementation
options

ITU Constitution and RRs: basic principles on spectrum use

CS 195 (PP-02) (No. 0.2 of the Radio Regulations)

Limit to minimum essential the number of frequencies and the spectrum used. Apply the latest technical advances.

CS 196 (PP-98) (No. 0.3 of the Radio Regulations)

Radio frequencies and any associated orbits are limited natural resources \Rightarrow rational, efficient and economical use



ITU Constitution and RRs: basic principles on spectrum use

CS 197 (PP-98) (No. 0.4 of the Radio Regulations)
Not to cause harmful interference to the radio services of other Member States or of recognized or duly authorized operating agencies ⇒ equitable access

CS 198 (PP-98) Each Member State undertakes to require the operating agencies which it recognizes ... to observe No. 197

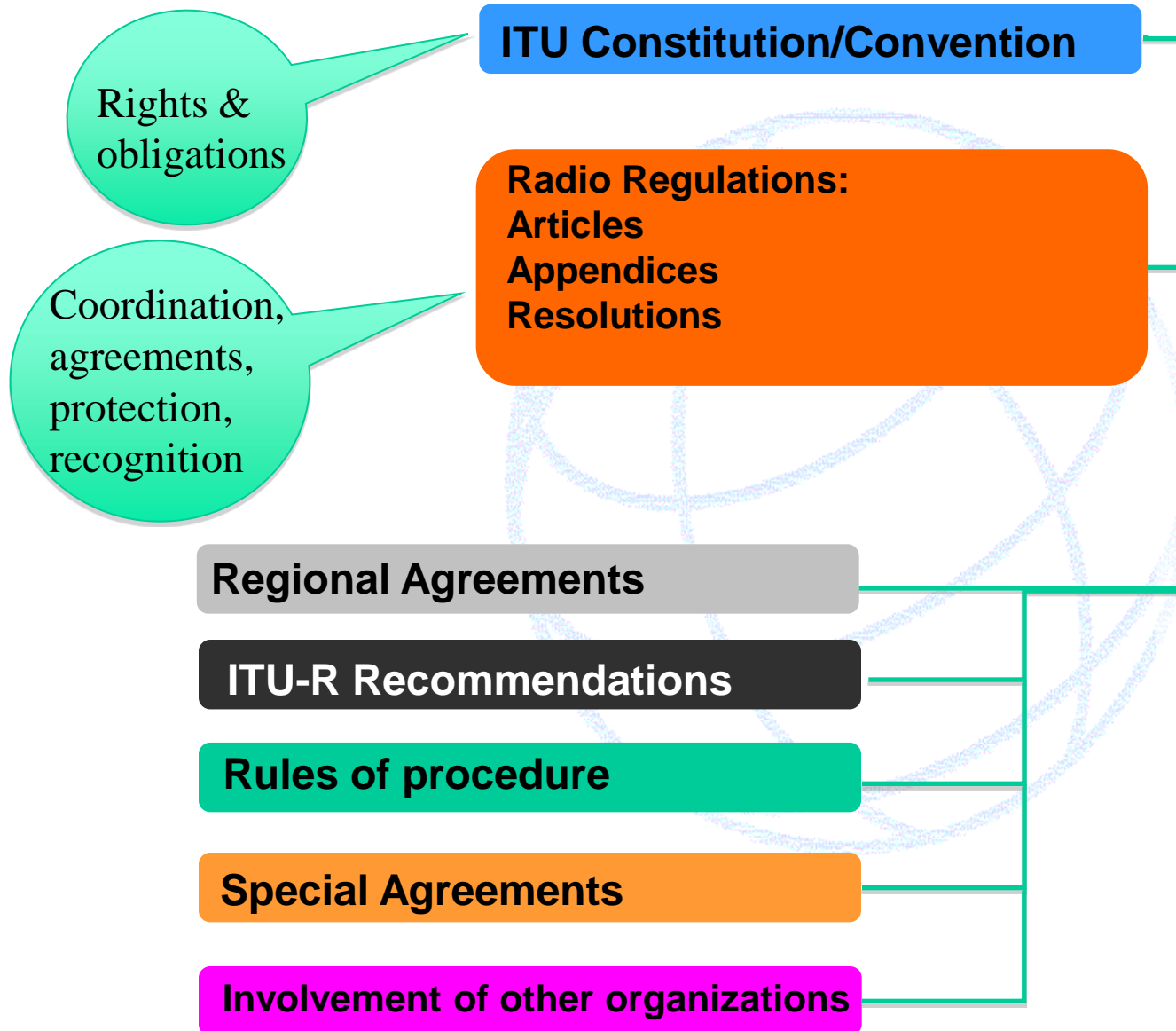


Regulations according to services



- **Regulation varies from service to service**
 - General provisions applicable to all services
 - Provisions applicable specifically to the fixed and the land mobile services
 - Maritime mobile and the aeronautical mobile services subject to very detailed international regulations (safety of life services)
 - Involves broad international use of equipment and practices.
 - Implies need to handle relevant operational procedures and technical material in a larger international context.

Instruments



Summary – Radio Regulations



- Allocation of different frequency bands to different radio services.
- Mandatory technical parameters to be observed by radio stations.
- Procedures for coordination.
- Ensure technical compatibility.
- Notification and formal recording in the Master International Frequency Register for interference protection.
- Ensure protection of existing services and avoid harmful interference between Administrations.

Thank you...

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