ITU and the Radiocommunication Sector
ITU at a Glance
Specialized Agencies of the United Nations

- UNESCO
- WHO
- ILO
- UPU
- ICAO
- WMO
- IMO
- IAEA
- WB
- UNWTO
- FAO
- IFAD
- UNIDO
- WIPO
- WFP
- IMF

Specialized UN agency with focus on Telecommunication / ICTs
Management

WHO ARE WE?

ITU Elections

ITU Officials

5 ELECTED OFFICIALS

Secretary General

Deputy Secretary General

Director of the Radiocommunication Bureau (BR)

Director of the Telecommunication Standardization Bureau (TSB)

Director of the Telecommunication Development Bureau (BDT)

DURATION

A maximum of two four-year terms in any elected post
Meet us

WHO ARE WE?

Our numbers

193 MEMBER STATES
700 PRIVATE SECTOR ORGANIZATIONS
70 ACADEMIA MEMBERS
Radiocommunications - regulations - standards

Standardization

Development
ITU-T
/STANDARDIZATION/
Crucial role in defining operation and interoperability of technologies that underpin global communications network

200 - 300 new global standards approved every year, with over 4,000 in use today
Meet the sectors

ITU - D

KEY ROLES

Spread equitable and affordable **access to telecommunications** to help stimulate social and economic development

**Human capacity-building** particularly in developing and least developed countries (LDCs)

Helps to ensure that people everywhere are empowered to **reap the benefits that connectivity delivers**
ITU-R
/RADIOCOMMUNICATIONS/
Meet the sectors

ITU - R

KEY Mission

to ensure rational, equitable, efficient and economical use of the radio-frequency spectrum
• effect allocation & allotment and the registration of radio frequency & GSO orbital position
• coordinate efforts to eliminate harmful interference
<table>
<thead>
<tr>
<th>Year</th>
<th>Location</th>
<th>Event</th>
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<tbody>
<tr>
<td>1906</td>
<td>Berlin</td>
<td>International Radiotelegraph Convention (1st Radio Regulations)</td>
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<tr>
<td>1927</td>
<td>Washington DC</td>
<td>CCIR (International Radio Consultative Committee)</td>
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<tr>
<td>1932</td>
<td>Madrid</td>
<td>Telegraph &amp; Radiotelegraph Conventions merged: the International Telegraph Union became the International Telecommunication Union</td>
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<tr>
<td>1947</td>
<td>Atlantic City</td>
<td>IFRB (International Frequency Registration Board) ITU as UN specialized agency</td>
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</table>
  - RRB (Radio Regulations Board)  
  - BR (Radiocommunication Bureau) |
Roles of ITU-R

- international regulations
- global standards & guidelines
- assistance to administrations

☑ Rights of access to the spectrum
☑ Efficient use of spectrum
☑ Operation free from interference
☑ Economies of scale
☑ Interoperability and roaming
☑ Global harmonization
☑ Guidelines for national & regional regulations

GOOD QUALITY AND LESS COSTLY EQUIPMENT
MORE FAVORABLE INVESTMENT ENVIRONMENT (CLEAR & STABLE)
In implementing this mission, the actions in ITU-R aim at creating the conditions for harmonized development and efficient operation of existing and new radiocommunication systems, taking due account of all parties concerned.

**ITU-R mission**

- To ensure **interference-free operations** of radiocommunication systems by implementing the Radio Regulations and regional agreements, as well as updating these instruments in an efficient and timely manner through the processes of world and regional radiocommunication conferences.
- To establish **Recommendations** intended to assure the necessary performance and quality in operating radiocommunication systems.
- To seek ways and means to ensure the **rational, equitable, efficient and economical use of the radio-frequency spectrum and satellite-orbit resources** and to promote flexibility for future expansion and new technological developments.

**Role conducted through (inter alia):**

- World and Regional Radio-communication Conferences
- Radiocommunication Study Groups
- Radio Regulations Board
- Radiocommunication Bureau
ITU-R structure & activities

RoP: Rule of Procedure
RR: Radio Regulations (treaty status)
RRB: Radio Regulations Board
SG: Study Group
WRC: World Radiocommunication Conference
CPM: Conference Preparatory Meeting
MIFR: Master International Frequency Register
RA: Radiocommunication Assembly
RAG: Radiocommunication Advisory Group
Rec: Recommendations (international voluntary standards)
IFIC: International Frequency Information Circular
The Radio Regulations (international *treaty*) incorporates the decisions of the World Radiocommunication Conferences, including all Appendices, Resolutions, Recommendations and ITU-R Recommendations incorporated by reference.

- Frequency block *allocations* to defined radio services (Article 5)
- Mandatory or voluntary *regulatory procedures* (coordination, plan modification, notification, recording) that are adapted to the allocation structure
World Radiocommunication Conference

✓ Updates the Radio Regulations (*treaty status*)
  • Spectrum Allocation
  • Notification procedures
  • Administrative and operational procedures
✓ Adopts Resolutions
✓ Held every 3-4 years

http://www.itu.int/ITU-R/go/wrc
WRC-15

9 kHz < proposals < 3000 GHz

✓ Coordination and recording procedures for space systems and earth stations: capture, processing and publication of data and examination of frequency assignment notices submitted by administrations for inclusion in the formal coordination procedures or recording in the Master International Frequency Register (MIFR).
✓ Procedures for space related assignment and allotment plans
✓ Assistance to administrations on all of the above issues

http://www.itu.int/ITU-R/space
Terrestrial Services

✓ Regulatory and Technical Functions
  • Broadcasting / Fixed and Mobile / Maritime Mobile / Aeronautical Mobile

✓ Terrestrial Plans
  • AP25, AP26, AP27, ST61, GE75, RJ81, GE84, GE85M, GE85N, RJ88, GE89, GE06

✓ HF Broadcasting (Art.12)

✓ Administrative and Operational Procedures
  • International means of identification
    - call sign series / maritime identification digits / blocks of selective call sign numbers
  • Service Documents
    - Ship stations / coast stations / radio determination / call signs / MARS, etc

✓ Harmful interference & monitoring programs

http://www.itu.int/ITU-R/terrestrial
Space Services Software

http://www.itu.int/ITU-R/software/space
### ITU-R Study Groups

<table>
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<tr>
<th>SG 1:</th>
<th>Spectrum management</th>
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<tr>
<td>SG 3:</td>
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<td>Broadcasting service</td>
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<td>SG 7:</td>
<td>Science services</td>
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- >900 Recommendations
- “Standards” in areas of spectrum management and radio technology
- Result of consensus from meetings of world-wide experts
- Some referred to in RR
- Used by spectrum planners and system designers

In addition:

- CCV: Coordination Committee for Vocabulary
- CPM: Conference Preparatory Meeting
- SC: Special Committee on regulatory and procedural matters

[http://www.itu.int/ITU-R/go/rsg](http://www.itu.int/ITU-R/go/rsg)
ITU-R Publications

- Radio Regulations (RR)
- Service documents
  - e.g., BR International Frequency Information Circular (IFIC)
- ITU-R Recommendations
  - Online subscriptions
  - CD/DVD-ROM
  - Paper
- Handbooks & Reports

http://www.itu.int/publications
Thank you !