

ITU and the Radiocommunication Sector

Mark Griffin
Space Services Department
ITU Radiocommunication Bureau (BR)

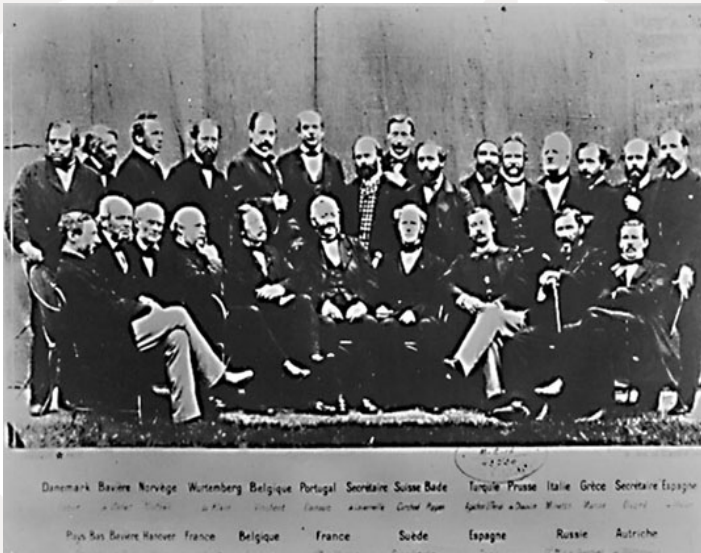
Bangkok, Thailand
28 -30 September 2010

ITU in brief

Committed to Connecting the World



- ✓ 20 countries founded on 17 May 1865 the **International Telegraph Union (ITU)**



- ✓ Today : **191** Member States,
> 700 Sector Members & Associates
- ✓ 750 staff / 70 nationalities
- ✓ Annual budget = 140 mil. USD
- ✓ <http://www.itu.int>



ITU is the leading United Nations agency for **information** and **communication technologies**

Structure



**Radiocommunications
- regulations
- standards**

Standardization

Development



Key priorities

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- **radio spectrum**

- **international standards**

- **emergency communications & climate change**

- **digital divide**

- **cybersecurity**



Emergency Telecommunications

- Natural disasters affect people worldwide
- Poor and remote communities most vulnerable
- ICT help reduce impact and revive development efforts
- ITU Framework for Cooperation in Emergencies:
 - Timely & universal access in aftermath of disaster
 - Standards for interconnection & call prioritization
 - Effective frequency use for emergencies
 - broadcasting, maritime and public safety signals
 - Disaster resilient networks
 - Telecommunication equipment for relief effort, including telemedicine to help injured
 - Legal frameworks to allow cross-border deployment
 - Rehabilitation of affected networks

ITU Bridging the Digital Divide

- ICTs are omnipresent tools (e-Commerce, e- government, e-learning, and e-Health, e-community development...)
- Global issues that will shape our common future in the 21st century.
- Success in finding viable and sustainable solutions to bridging the digital divide will determine to what extent we are able to fulfill the World Summit on the Information Society (WSIS)

ITU-R history in brief

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1906 (Berlin)	International Radiotelegraph Convention (1 st <i>Radio Regulations</i>)
1927 (Washington DC)	CCIR (International Radio Consultative Committee)
1932 (Madrid)	Telegraph & Radiotelegraph Conventions merged: the International Telegraph Union became the International Telecommunication Union
1947 (Atlantic City)	IFRB (International Frequency Registration Board) ITU as UN specialized agency
1992 (Geneva)	ITU-R (Radiocommunication Sector): <ul style="list-style-type: none">▪ RRB (Radio Regulations Board)▪ BR (Radiocommunication Bureau)
2006	 100 years of ITU <i>Radio Regulations</i>

*"To ensure rational, equitable, efficient and economical use of the **radio-frequency spectrum** by all radiocommunication services, including those using satellite orbits, and to carry out studies and adopt recommendations on radiocommunication matters."*

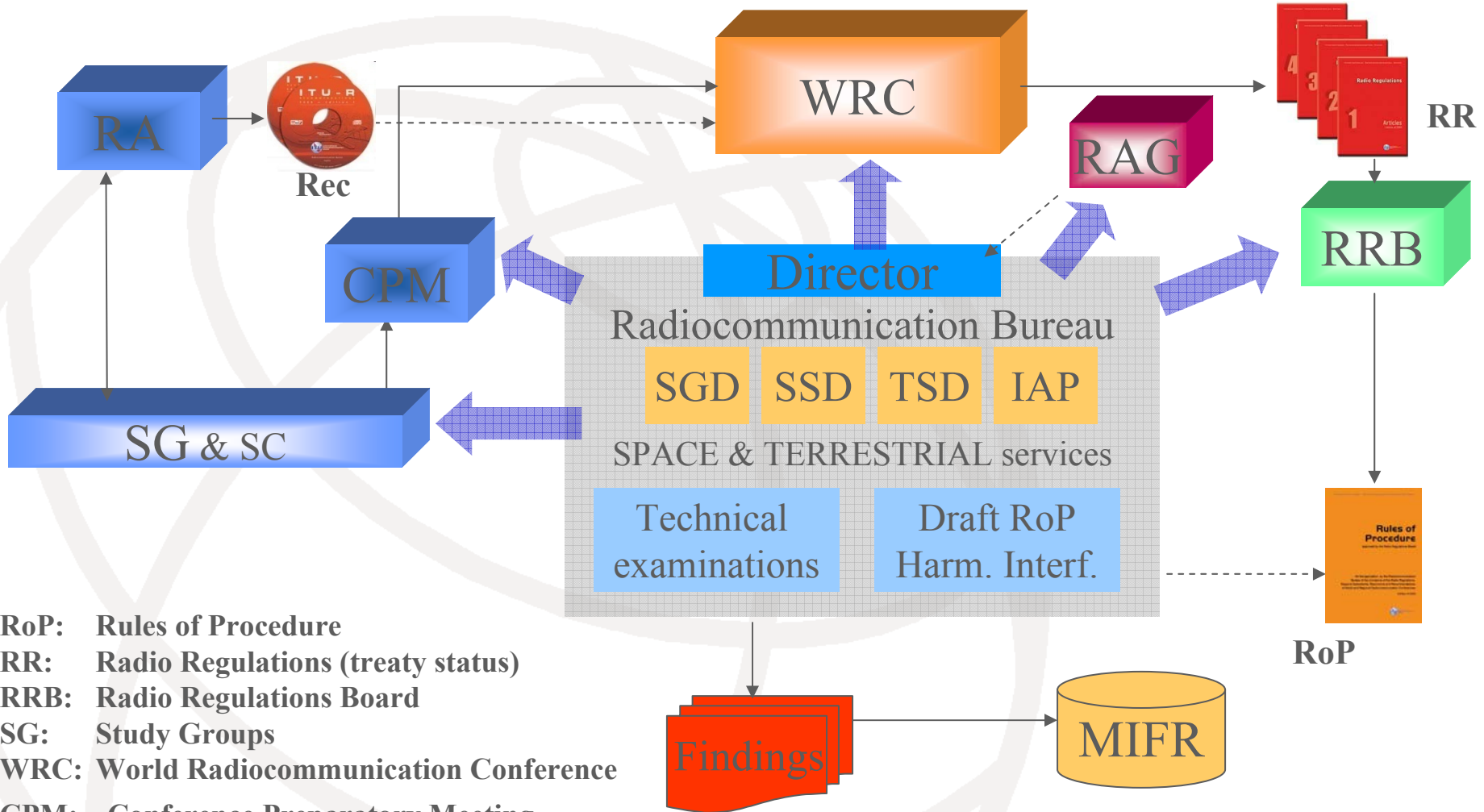
Role conducted through

(inter alia):

- ✓ World and Regional Radio-communication Conferences
- ✓ Radiocommunication Study Groups
- ✓ Radio Regulations Board
- ✓ Radiocommunication Bureau



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.



- RoP:** Rules of Procedure
- RR:** Radio Regulations (treaty status)
- RRB:** Radio Regulations Board
- SG:** Study Groups
- WRC:** World Radiocommunication Conference
- CPM:** Conference Preparatory Meeting
- MIFR:** Master International Frequency Registry
- RA:** Radiocommunication Assembly
- RAG:** Radiocommunication Advisory Group
- Rec:** Recommendations (international voluntary standards)

World Radiocommunication Conference

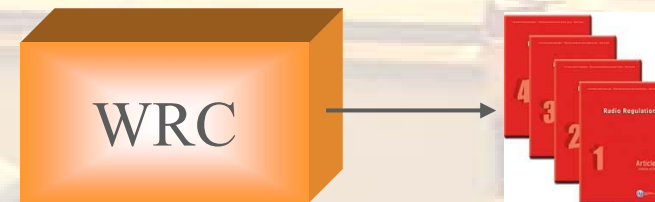
✓ Updates the Radio Regulations (*treaty status*)

- Spectrum Allocation
- Notification procedures
- Administrative and operational procedures



✓ Adopts Resolutions

✓ Held every 3-4 years



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.



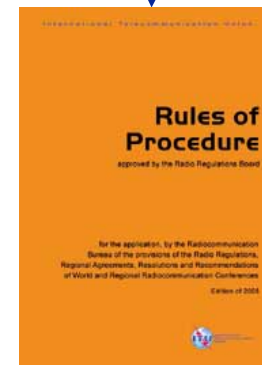
- Frequency block **allocations** to defined radio services (Article 5)
- Mandatory or voluntary **regulatory procedures** (coordination, plan modification, notification, recording) that are adapted to the allocation structure

Radio Regulations Board (RRB)

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- ✓ Approves Rules of Procedure to facilitate the application of the Radio Regulations
- ✓ Considers cases of harmful interference & appeals against BR decisions on frequency assignment
- ✓ Part-time elected members & max. 3 or 4 meetings/year



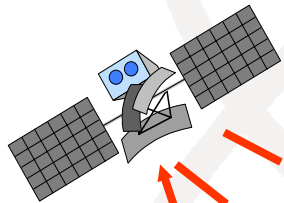
- ✓ ***Coordination and recording*** procedures for space systems and earth stations: capture, processing and publication of data and examination of frequency assignment notices submitted by administrations for inclusion in the formal coordination procedures or recording in the Master International Frequency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

GSO
SATELLITES

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INTERFERENCE



Non-GSO
SATELLITES

Interference
free
operation



Control of
interference

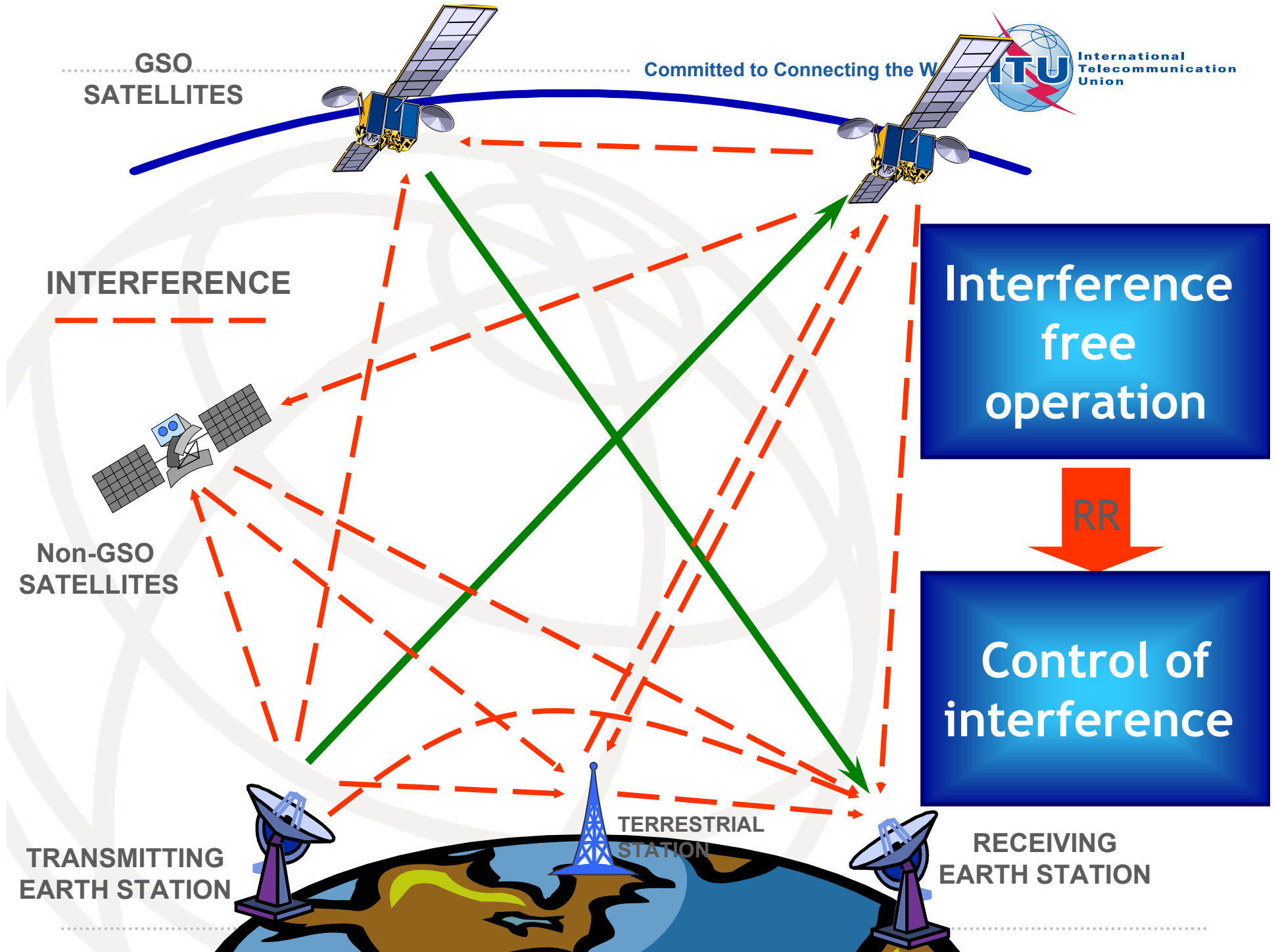
TRANSMITTING
EARTH STATION



TERRESTRIAL
STATION



RECEIVING
EARTH STATION



- ✓ **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
 - all 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**

SG 1: Spectrum management
SG 3: Radiowave propagation
SG 4: Satellite services
SG 5: Terrestrial services
SG 6: Broadcasting service
SG 7: Science services

- ✓ **>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:

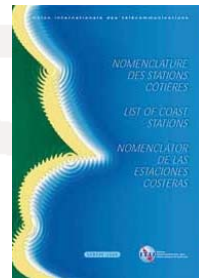
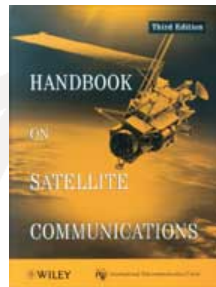
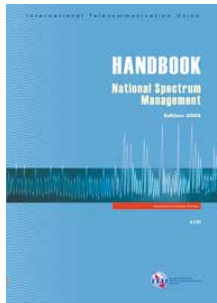
CCV: Coordination Committee for Vocabulary

CPM: Conference Preparatory Meeting

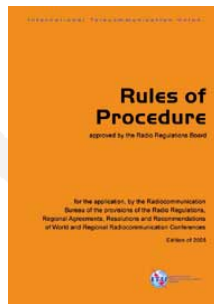
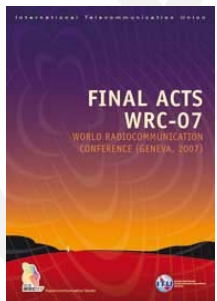
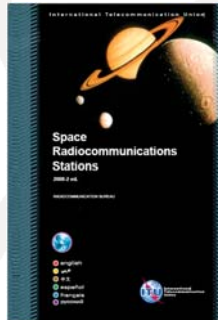
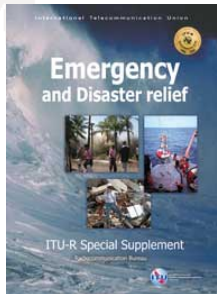
SC: Special Committee on regulatory and procedural matters

ITU-R Publications

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- **BR International Frequency Information Circular (IFIC)**
- **Space Radiocommunication Stations on DVD-ROM**
- **Radio Regulations**
- **Service documents**
- **ITU-R Recommendations**
 - **Online subscriptions**
 - **CD/DVD-ROM**
 - **Paper**
- **Handbooks**



<http://www.itu.int/publications>

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Radiocommunication Sector (ITU-R)

The [ITU Radiocommunication Sector \(ITU-R\)](#) plays a vital role in the global management of the radio-frequency spectrum and satellite orbits - limited natural resources which are increasingly in demand from a large and growing number of services such as fixed, mobile, broadcasting, amateur, space research, emergency telecommunications, meteorology, global positioning systems, environmental monitoring and communication services - that ensure safety of life on land, at sea and in the skies. [More...](#)

In Focus: Spotlight on ITU-R's key activities



[ITU global standard for international mobile telecommunications "IMT-Advanced"](#)



[Maritime mobile Access and Retrieval System \(MARS\)](#)



[Radiocommunications and Climate Change](#)



[Emergency Radiocommunications](#)

Events



[World Radiocommunication Conference 2012 \(WRC-12\)](#)

[World Radiocommunication Seminar 2010 \(WRS-10\)](#)

[Regional preparation for WRC-12](#)



[2nd ITU Information Meeting on WRC-12 Preparation, Geneva, Switzerland, 24-25 November 2010](#)



[BR/BDT Regional Seminar "Management of radio-frequency spectrum and satellite orbits at international level", Tashkent, Republic of Uzbekistan, 21-25 June 2010](#)



[ITU/IDA Workshop on the efficient use of the spectrum/orbit resource](#)

Newsflashes

- 13/08/10 [CPM - Draft CPM Report to WRC-12 is now available!](#)
- 12/08/10 [BR Circular letter CR/318 dated 22 June 2010 - New deadline for replies](#)
- 02/08/10 [MARS - Radiocommunication Bureau updates the Annex to BR Circular Letter \(CM/20\)](#)
- 23/07/10 [SG4 - Package of five draft new ITU-R Recommendations on RNSS systems](#)

Director's corner



Biography

Meetings

- 20/09 [WP 1C](#) (Amsterdam) - Confirmed
- 27/09 [SG 1](#) (Geneva) - Confirmed
- 04/10 [SG 7](#) (Geneva) - Confirmed
- 05/10 [WP 7A](#) (Geneva) - Confirmed
- 05/10 [WP 7B](#) (Geneva) - Confirmed

[ITU-R Meetings schedule](#)

[Meeting sessions](#) - [Member Information and Delegate Registration](#)

Publications

Key Publications

- [Radio Regulations](#)
- [List VIII - List of International Monitoring Stations](#)
- [List V - List of Ship Stations](#)
- [Maritime Manual - Manual for Use by the Maritime Mobile and Maritime Mobile-Satellite Services](#)
- [Rules of Procedure](#)

Latest Publications

- 12/11 [Handbook on Spectrum Monitoring](#)
- 18/04 [WRC-07 Final Acts](#)
- 16/04 [List IV](#)
- 16/04 [List VIIA](#)
- 15/04 [Q.27/6](#)

Latest Recommendations

- 16/07 [BT.1845-1 \(03/10\)](#)
- 22/06 [BT.1620-1 \(03/10\)](#)
- 16/07 [E.207-11 \(04/10\)](#)

Radiocommunication Sector (ITU-R)
World Radiocommunication Conferences (WRC)
Radiocommunication Assemblies (RA)
Radio Regulations Board (RRB)
Radiocommunication Advisory Group (RAG)
Study Groups
Space Services
Terrestrial Services
Sector Organization
Membership
Activities
Conferences and Meetings
Seminars/Workshops
Information
Publications
Administrative Circulars and Circulars Letters
Operational Plans
Performance Reports
Databases and Services
MARS
GLAD
BR IFIC (Space Services)
BR IFIC (Terrestrial Services)
Patents
SNL
SNS
Terminology
Other information
Address and contacts