



Radiocommunication Study Groups

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Roles of ITU Radiocommunication Sector



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)**

International spectrum management framework

ITU Constitution,
Convention

High level principles,
rights and obligations

Plenipot

Radio Regulations
Bi/multilateral Agreements

Table of Frequency Allocations
Satellite orbit/terrestrial Plans
Frequency coordination
Frequency registration
Emergency procedures ...

WRC
RRC

ITU-R Recommendations

RA/
Mail

ITU-R Reports,
Handbooks, software tools

Technical characteristics
Sharing criteria/assessment
Spectrum management
Operational aspects ...

Study Groups
WPs, TGs

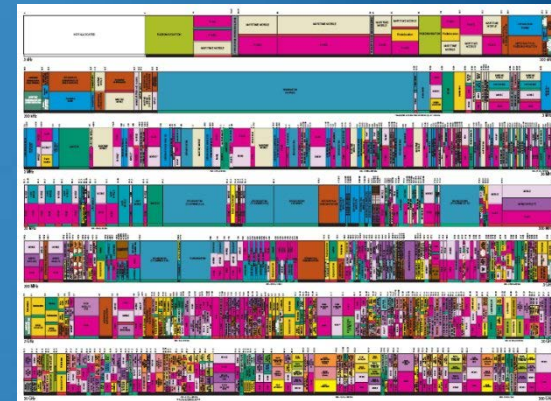
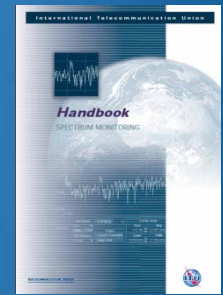
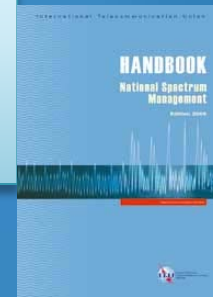
Study Group 1

Spectrum management

Spectrum Management (SM)
-principles and techniques

General principles of sharing
Spectrum monitoring

Long-term strategies for spectrum utilization
Economic approaches to national SM



Harmonization of Short Range Devices

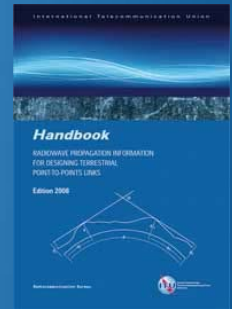
Coexistence studies on wireless power transmissions, PLT, Smart Grid/Home Networking

Spectrum Management and Monitoring evolutions (e.g. CRS)



Study Group 3

Radiowave propagation



Propagation in ionized and non-ionized media

Point-to-point, point-to-area and Earth-space propagation scenarios

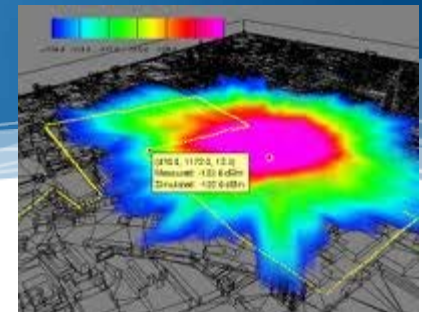
Modelling and development of prediction methods

Radio noise



Characteristics and mapping of propagation medium

Propagation prediction methods



Study Group 4

Satellite services



Systems and performance in FSS, BSS, MSS and RDSS

Efficient orbit/spectrum utilization for FSS, BSS, MSS and RDSS

IP Global broadband Internet access via satellite

Early warning and relief operations



Technical characteristics for systems and networks in the RNSS

Satellite radio interface of IMT-Advanced

Technical and operational requirements for earth stations on mobile platforms



Study Group 5

Terrestrial services

IMT-2000 and IMT-Advanced

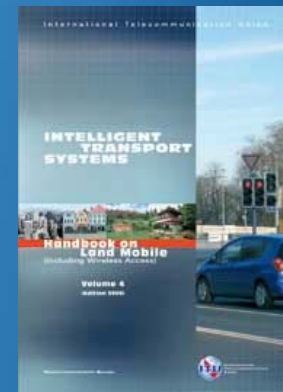
Fixed, mobile, portable and nomadic communications, including BWA, RLANs, HAPS

Maritime and aeronautical services

Radiodetermination service

Amateur service

SDR and CRs



Next generation mobile access “IMT-Advanced”

Spectrum issues for maritime and aeronautical services



Study Group 6

Broadcasting service

Programme production
Programme assembly
Delivery
Reception quality



Sharing issues at UHF

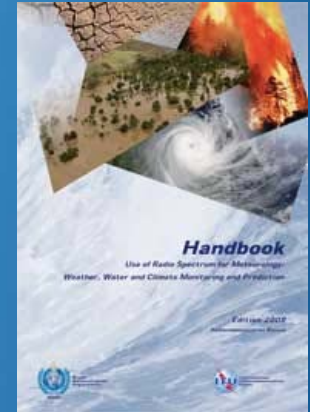
Multimedia and data broadcasting for mobile reception

Accessibility



Study Group 7

Science services



Systems for space operation, space research, Earth exploration and meteorology

Radio astronomy

Standard frequency and time signals



EESS including meteorological satellite service for disaster prediction and detection, and for climate monitoring

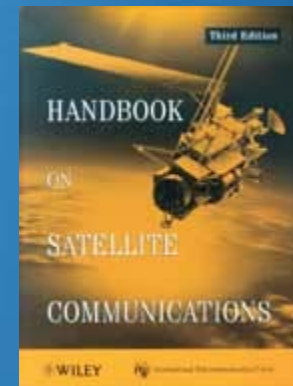
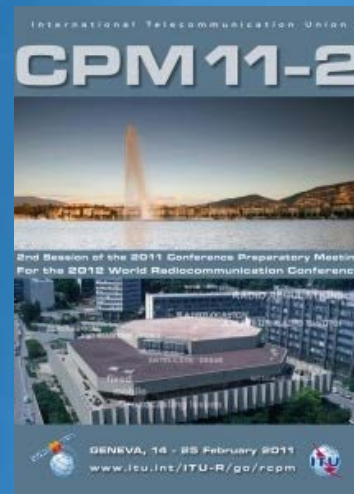
Protection of passive services, e.g. radioastronomy

Studies regarding the use of the Leap Second



Study Group Products

- ITU-R Recommendations
- Reports and Handbooks
- Technical bases for radio conferences



Study Groups

Scope

More than 1 500 specialists, from telecommunication organizations and administrations throughout the world, participate in the work of the Study Groups concerned with:

- ▶ drafting Technical bases for Radiocommunication Conferences
- ▶ developing Draft Recommendations
- ▶ compiling Handbooks

General Information

- ▶ [Scope](#)
- ▶ [Study Group Structure](#)
- ▶ [Brochure](#)
- ▶ [Chairmen and Vice-Chairmen](#)
- ▶ [Chairmen and Vice-Chairmen Meetings](#)
- ▶ [Contacts](#)
- ▶ [Mailing lists - FTP server](#)
- ▶ [Remote participation](#)
- ▶ [ITU-R Electronic facilities](#)
- ▶ [ITU-R Meeting Schedule - Meeting sessions](#)
- ▶ [Focal Points for Event Delegate Registration System \(EDRS\)](#)

Structure

- ▶ [Study Group 1 \(SG 1\) - Spectrum management](#)
- ▶ [Study Group 3 \(SG 3\) - Radiowave propagation](#)
- ▶ [Study Group 4 \(SG 4\) - Satellite services](#)
- ▶ [Study Group 5 \(SG 5\) - Terrestrial services](#)
- ▶ [Study Group 6 \(SG 6\) - Broadcasting service](#)
- ▶ [Study Group 7 \(SG 7\) - Science services](#)
- ▶ [Coordination Committee for Vocabulary \(CCV\)](#)
- ▶ [Conference Preparatory Meeting \(CPM\)](#)
- ▶ [Special Committee \(SC\)](#)
- ▶ [Joint Task Group 4-5-6-7 \(JTG 4-5-6-7\) - WRC-15 Agenda items 1.1 and 1.2](#)

Disbanded Groups

- ▶ [Study Group 8 \(SG 8\) - Mobile, radiodetermination, amateur and related satellite services](#)
- ▶ [Study Group 9 \(SG 9\) - Fixed service](#)

Documents & Publications

- ▶ [Administrative Circulars and Circulars Letters](#)
- ▶ [ITU-R Resolutions](#)

Thank you!