

ITU-R Study Groups

Colin Langtry
Chief
BR Study Groups Department



ITU overview

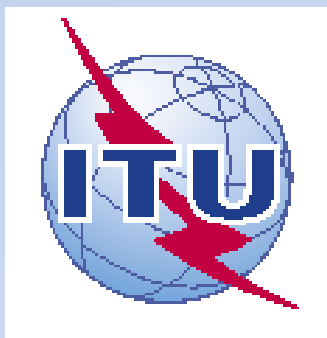
193 Member States
>700 Sector Members
Associates and Academia

ITU

Helping the World Communicate

ITU-T

Telecommunication
standardization
- network and
service aspects



ITU-R

Radiocommunication
standardization and
global radio spectrum
management

ITU-D

Assisting
implementation and
operation of
telecommunications in
developing countries



International spectrum management framework

ITU Constitution,
Convention

Plenipot

High level principles,
rights and obligations

Radio Regulations
Bi/multilateral Agreements

WRC
RRC

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

ITU-R Recommendations

RA/
Mail

ITU-R Reports,
Handbooks, software tools

Study Groups
WPs, TGs

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

INTERNATIONAL TELECOMMUNICATIONS UNION

HANDBOOK

National Spectrum Management

2010 Edition

INTERNATIONAL TELECOMMUNICATIONS UNION

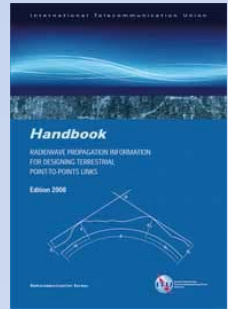
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Coexistence studies on wireless power transmissions, PLT, Smart Grid/Home Networking

Study Group 3

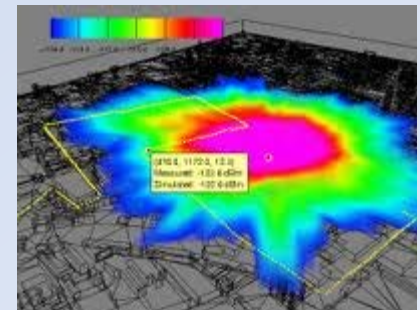
Radiowave propagation



- Propagation in ionized and non-ionized media
- Point-to-point and Earth-space propagation
- Modelling and development of prediction methods
- Radio noise

Characteristics and mapping of propagation medium

Propagation prediction methods



Study Group 4

Satellite services



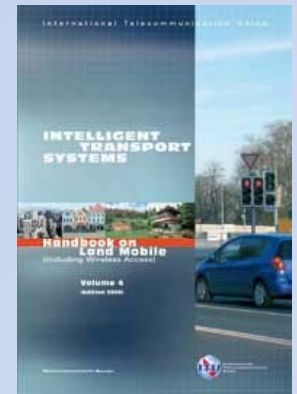
Satellite radio interface of IMT-2000 and IMT-Advanced

Earth stations on mobile platforms

BSS UHDTV systems

Study Group 5

Terrestrial services



- IMT-2000, IMT-Advanced and “IMT-2020”
- Fixed, mobile, portable and nomadic communications, including BWA, RLANs, HAPS
- Maritime and aeronautical services
- Radiodetermination service
- Amateur service
- SDR and CRs



5G mobile broadband

Spectrum issues for maritime and aeronautical services



Study Group 6

Broadcasting service



- Programme production
- Programme assembly
- Delivery
- Reception quality



Sharing issues at UHF

Use of broadcasting in emergency and disaster relief

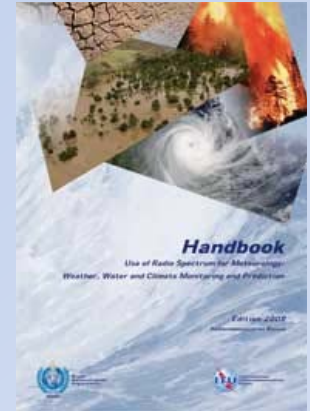
Advanced audio systems and extended image dynamic range

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

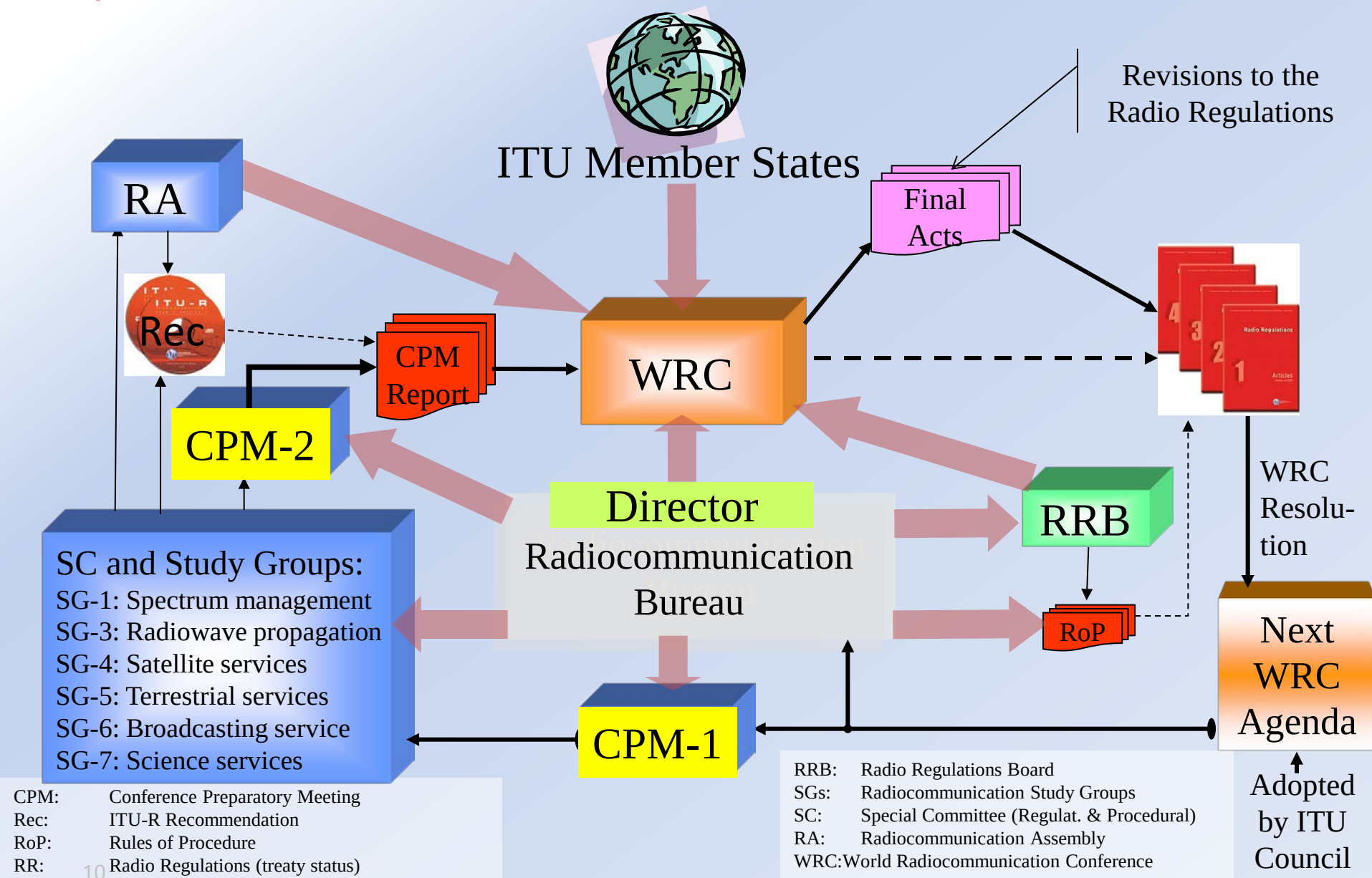
Protection of passive services, e.g. radioastronomy

Studies on UTC – the universal time scale





The CPM in the WRC Process



Study Group Products

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

