ITU in brief

✓ ~140 years old
(Founded on 17 May 1865)

✓ 189 Member States, 620 Sector Members, 100 Associates

✓ 750 staff / 71 nationalities

✓ Annual budget = $150,000,000

✓ Website: www.itu.int

UN specialized agency, concerned with the development of telecommunication networks and services worldwide
Radiocommunication Sector (ITU-R)  

Mission  

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.

Mission achieved through *(inter alia)*:  
✓ World and Regional Radiocommunication Conferences  
✓ Approval of Recommendations

Technical studies are required which are conducted in **Study Groups**
# ITU-R Study Group 6 (Broadcasting service)

## Scope

Radiocommunication broadcasting (terrestrial and satellite) of vision, sound, multimedia and data services primarily intended for delivery to the general public.

## Key areas of study

### Digital terrestrial broadcasting
- protection criteria for RRC
- “planning parameters” for digital sound broadcasting at frequencies below 30 MHz.”
- transition from analogue to digital terrestrial broadcasting

### Digital satellite broadcasting
- satellite return channel for interactive BSS
- system parameters for BSS between 17.3 and 42.5 GHz (including associated feeder-links)

### Studies on advanced broadcasting technologies
- large screen digital imagery (LSDI) & interactive multimedia services
- objective measurement of perceptual image quality & image scanning formats

### Studies for WRC-07
- identification of additional spectrum for the broadcasting service in the HF bands
- protection of terrestrial broadcasting service from multiple satellite broadcasting systems in the band 620-790 MHz
- Spectrum usage and operational characteristics of ENG systems
Wireless signals proved effective in communication for rescue work when a sea disaster occurred. Effective communication was able to exist between ships and ship to shore points and at the beginning of the 1900’s, a number of ocean liners had installed wireless equipment.

As a consequence, in 1906 the first International Radiotelegraph Conference gathered maritime States in Berlin to sign the International Radiotelegraph Convention, establishing the principle of compulsory intercommunication between vessels at sea and the land. The annex to that Convention contained the first regulations governing wireless telegraphy. Those regulations, which have since been expanded and revised by numerous radio conferences, are now known as the Radio Regulations.
The “Red Books” incorporates the *Radio Regulations* (*treaty status*) and decisions of the World Radiocommunication Conferences, including Resolutions, Recommendations and ITU-R Recommendations incorporated by reference.

**RR main concepts**

- Frequency block allocations to defined radio services (Article 5)
- Regulatory procedures (coordination, plan modification, notification, recording)
WRC Process

CPM: Conference Preparatory Meeting
Rec: ITU-R Recommendation
RofP: Rules of Procedure
RR: Radio Regulations (treaty status)

ITU Member States (189)
Advanced technologies

Technical bases

Final Acts
Revisions to RR, Resolutions & Recommendations

No harmful interference

Advanced technologies

CPM
SGs & SC

Radiocommunication Bureau

WRC

RR

RRB

MIFR

Findings

MIFR: Master International Frequency Registry
RRB: Radio Regulations Board
SGs: Radiocommunication Study Groups
WRC: World Radiocommunication Conference

Revisions to RR, Resolutions & Recommendations

No harmful interference
WRC Regional Preparation

✓ Preparation of common coordinated proposals
Proposal from APT to WRC-03: “to consider identification of globally/regionally harmonized bands, to the extent practicable, for the implementation of existing analogue and future digital ENG applications and to make regulatory procedures, as necessary”.

- Many administrations were looking toward reducing the present spectrum available for ENG as a result of other technologies competing for the bands currently allocated to ENG.
- There was no agreed identification of globally/regionally harmonized bands for the implementation of existing analogue and future digital ENG applications.

Material goes “live to air”, which demands the certainty of an interference free radio-frequency spectrum channel for the duration of the event.
REC. 723 (WRC-03): Spectrum usage and operational characteristics of ENG systems recommends that ITU-R continue the study, as a matter of urgency, of the technical, operational and frequency issues of ENG on a global basis; invites the Director, BR to include the status of this study in his Report to WRC-07 for information,

Studies were allocated to ITU-R Working Party 6J (former 6P) as the responsible group and WPs 4B, 6E, 8A, 8D, 8F, 9B, 9D as interested and contributing groups.

WP 6J was chosen as it has allocated to it the following Study Group 6 study Questions:

89/6: USER REQUIREMENTS FOR ENG
93/6: FREQUENCY REQUIREMENTS FOR ENG

WRC-07, § 7.1
SG WP TG
(responsible ITU-R groups)

1
1A
1/9
4A
4-9S
6E
6J
7B
7C
8A
8B
8D
8F
6-8-9
9C
SC

WRC-07
agenda items)

1.2
7.1
1.20 1.21
1.10 1.12 1.19
1.8 1.18
1.11
1.12
1.13
1.14 1.16
1.7 1.17
1.4
1.9

Chapters
(draft text)
(15.9.06)
Meeting of Chapter Rapporteurs
(25-29.9.06)
Draft CPM Report
(CPM)

CPM Report Preparation

Meeting of Chapter Rapporteurs
(25-29.9.06)
Draft CPM Report

CPM Report
(5-16.3.07)
Thank you!