#### **Regional Development Forum 2008**

"Bridging the Standardization Gap in Developing Countries" for the Asia-Pacific Region Hanoi, Vietnam, 15-17(am) September 2008

### An overview of the ITU Radiocommunication Sector (ITU-R)

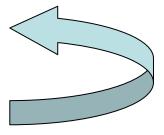
Kevin Hughes Head, Study Group Department ITU Radiocommunication Bureau



# **ITU key priorities**



- radio spectrum
- international standards
- emergency communications
- ICTs and climate change
  digital divide
  cybersecurity





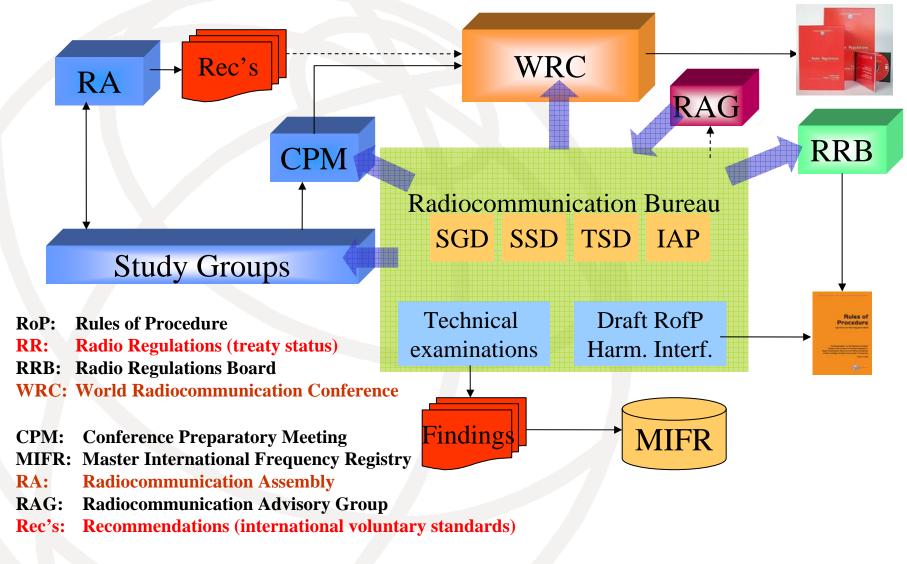
# **ITU-R** mission

"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." Role conducted through (inter alia): ✓ world and regional radiocommunication conferences ✓ establishment of Recommendations

Technical studies are required which are conducted in Study Groups

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 structure & activities**



### WRC

### **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

Hanoi, Vietnam, 15-17(am) September 2008

RR

WRC

# **Radio Regulations (RR)**

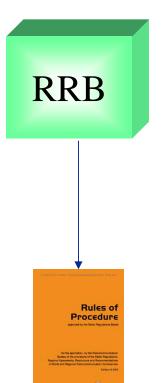
The Radio Regulations (treaty status) incorporates the decisions of the World Radiocommunication Conferences, including all Appendices, Resolutions, **Recommendations and ITU-R** Recommendations incorporated by reference.



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)**

- 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. 4 meetings/year



# Objectives of a Radiocommunication Assembly

- Review working methods and procedures of the ITU-R Study Groups
  - new and revised ITU-R Resolutions
- Establish Study Group work programme for the next study period
  - ITU-R Questions
- Establish structure of Study Groups
- Elect Chairmen and Vice-Chairmen of Study Groups, CPM, SC and RAG
- Approve ITU-R Recommendations (in practice, by exception)

# **Objectives of ITU-R Study Groups**

- Develop technical bases for WRCs and RRCs
  - CPM process for WRCs
- Develop ITU-R Recommendations
  - International voluntary standards (but some mandatory through incorporation by reference into RR)
- Compile Reports and Handbooks

ITU-R represents the International Focal Point for radio standardization, inextricably linked with its international spectrum regulatory role

# **ITU-R Study Groups**

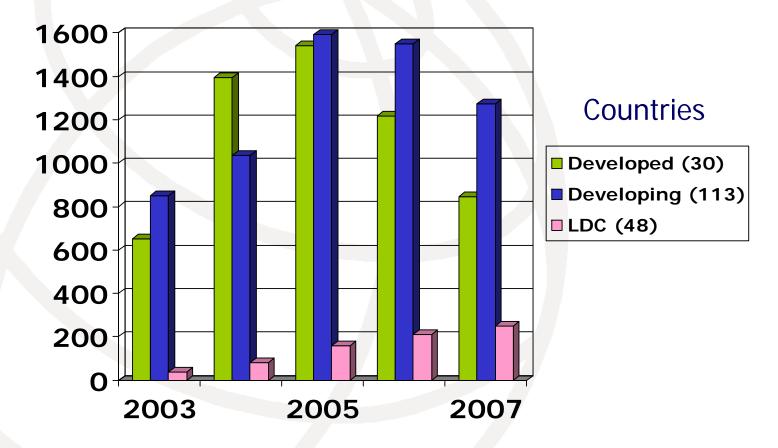
Groups of experts (> 1500) from ITU membership:

- ITU Member States: 191
- ITU-R Sector members: 276
- ITU-R Study Group Associates: 27
- Unique global forum addressing standardization of radiocommunications:
  - Administrations of Member States
  - Manufacturers, Scientific or Industrial Organizations
  - Service providers / Operators
  - User forums

ITU Global Directory: http://www.itu.int/GlobalDirectory/itu\_global\_directory.htm

### Participation in ITU-R Study Group meetings

Tendency: increasing participation representatives from LCD and developing countries (comparing with 2003)



Hanoi, Vietnam, 15-17(am) September 2008

# **ITU-R Study Groups**

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

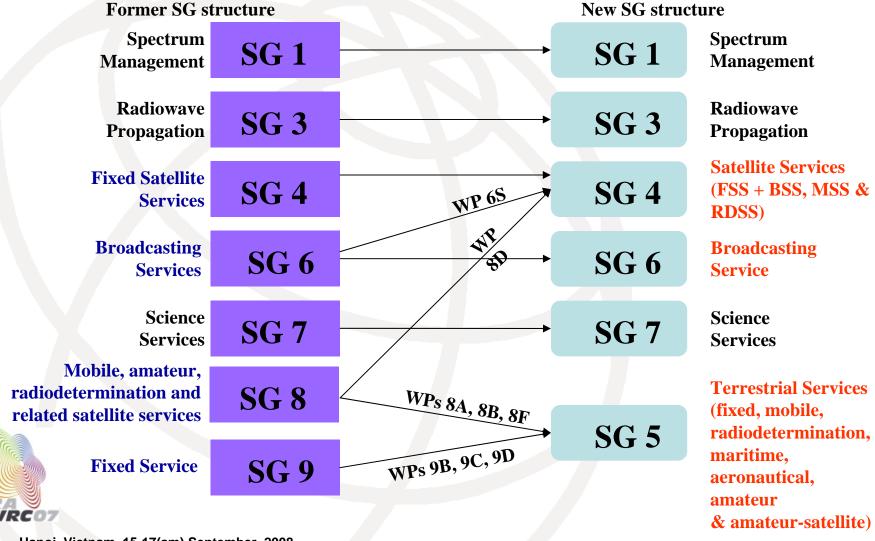
In addition:

- 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

- >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

# Study Group structure approved at RA-07



### **Space Services**

- 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

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
  - 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

#### http://www.itu.int/ITU-R/terrestrial

# **ITU-R** Publications

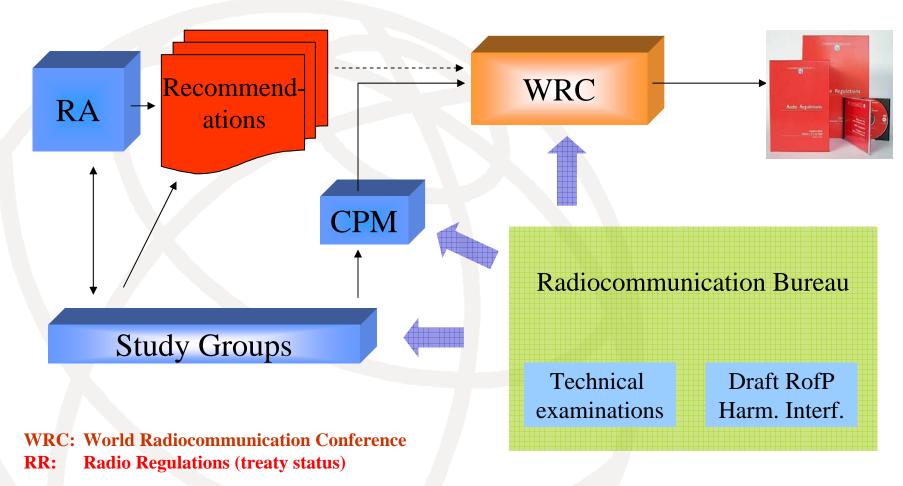


BR International Frequency Information Circular (IFIC)

- Space Radiocommunication Stations on CD-ROM
- Radio Regulations
- Service documents
  - ITU-R Recommendations
    - Online subscriptions
    - CD-ROM
    - Paper
- Handbooks

http://www.itu.int/publications

# **ITU-R** standardization



- **CPM:** Conference Preparatory Meeting
- **RA:** Radiocommunication Assembly
- **Rec's: Recommendations (international voluntary standards)**

# ITU-R and The Standardization Gap

## Standardization role

# International Spectrum Management role

# To help Bridge the Standardization Gap