



ITU WORKSHOP

Overview of activities of ITU-R Study Group 3
on radiowave propagation

**The Hague, The Netherlands
10 April 2014**

www.itu.int/go/rsg3-EuCAP14



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Overview of activities of ITU-R
Study Group 3 on radiowave propagation:
(The Hague, 10 April 2014)

Introduction to ITU-R

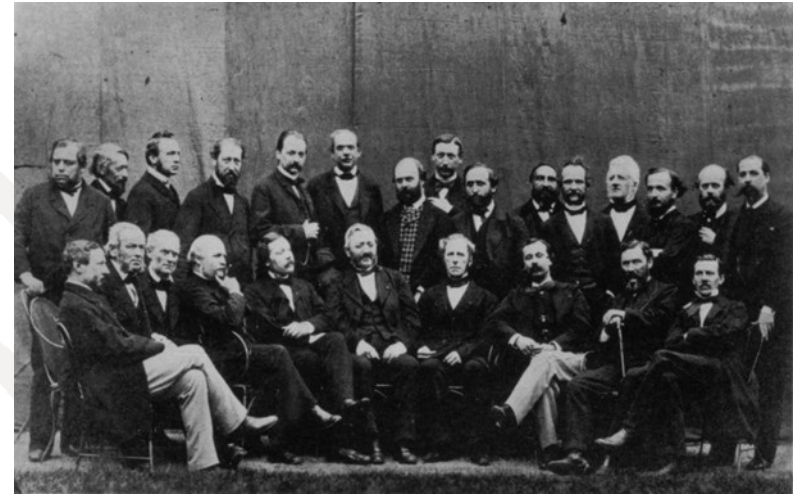
David Botha



- **Brief history of ITU**
- **Overview of ITU**
- **ITU-R objectives**
- **Overview of ITU-R**
- **ITU-R Study Group Objectives**
- **ITU-R Study Groups**
- **Membership**
- **WRC/RA Process**
- **WRC Purposes**

**International Telegraph
Convention –
17 May 1865, Paris**

**International Radiotelegraph
Conference - Berlin, 1906
29 nations**



**International Radio Consultative Committee (CCIR) -
Washington, 1927**

**ITU – UN specialised agency for telecommunications
15 November 1947 (enter into force 1 January 1949)**

**Today – ITU is United Nations specialised agency for
information and communication technologies (ICT)**

ITU is committed to connecting all the world's people

- Allocate global radio spectrum
- Allocate satellite orbits (orbital positions)
- Develop technical standards
- Improve access to ICTs to underserved communities

Plenipotentiary Conference, Geneva 1992 defined current structure:

- ITU-T - Standardisation sector
- ITU-R – Radiocommunication sector
- ITU-D – Development sector



ITU-R objectives



- **Meet, in a rational, equitable, efficient and economical way, the ITU membership's requirements for radio-frequency spectrum and satellite-orbit resources, while avoiding harmful interference**
- **Provide for worldwide connectivity and interoperability, improved performance, quality and affordability of service and overall system economy in radiocommunications, including through the development of international standards**
- **Foster the acquisition and sharing of knowledge and know-how on radiocommunications**

Space Services

- **International coordination, notification and recording procedures for space systems and earth stations**
- **Examination of frequency assignment notices**
- **Manages procedures for space-related ITU assignment or allotment plans**



Terrestrial Services

- **International coordination, notification and recording procedures for terrestrial systems**
- **Examination of frequency assignment notices**
- **International means of identification, safety of life, service publications**



Radiocommunication Study Groups

- **Prepare technical bases for WRC**
- **Develop ITU-R Rec. (radiocommunication standards), Reports and compile radiocommunication Handbooks**



ITU-R Study Group Objectives



**Develop technical bases
for radio conferences**



**CPM process
for WRCs**

Establish Recommendations



International voluntary *standards* on:

- **spectrum management**
- **system characteristics and operation**

ITU-R represents:

**International focal point for
standardisation of wireless systems**

Compile Reports and Handbooks

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

- CPM:** Conference Preparatory Meeting
- SC:** Special Committee on Regulatory and procedural matters
- CCV:** Coordination Committee for Vocabulary

- ✓ **>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**
- ✓ **CPM report on the technical, operational, regulatory and procedural aspects of WRC preparations.**

<http://www.itu.int/ITU-R/go/rsg>



Unique among UN agencies - public and private sector membership

- **193 Member States**
- **ICT regulators**
- **Leading academic institutions**
- **>700 private companies**
- **63 Academia (14 in ITU-R)**

**Network with governments,
industry, academia**

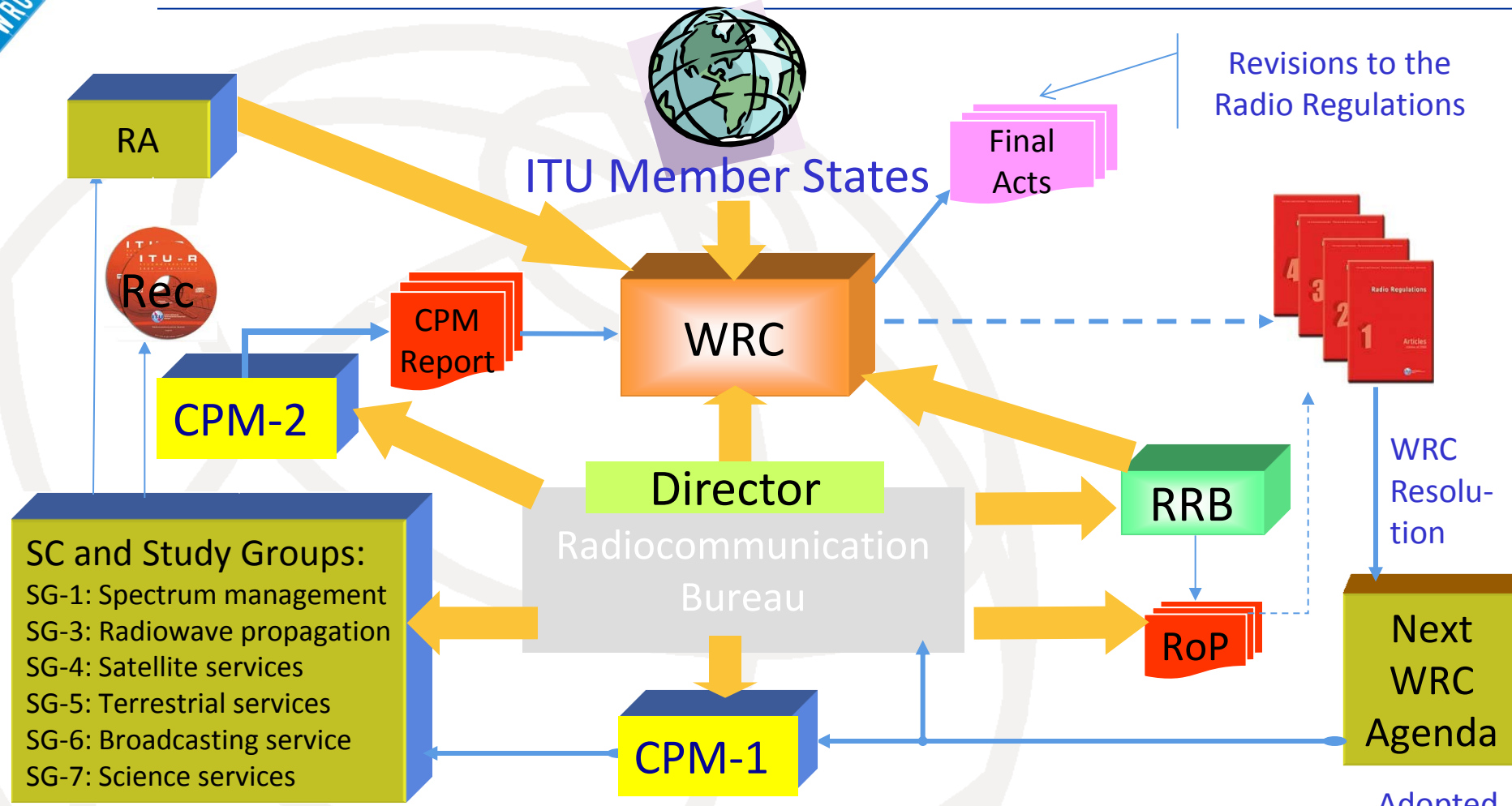
**Bring your expertise to
global debate**

**Influence direction of
ICT development**

<http://www.itu.int/en/membership/Pages/default.aspx>



WRC/RA Process



SC and 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

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

RRB: Radio Regulations Board
 SGs: Radiocommunication Study Groups
 SC: Special Committee (Regulate. & Procedural)
 RA: Radiocommunication Assembly
 WRC: World Radiocommunication Conference

WRC Resolution
 Next WRC Agenda
 Adopted by ITU Council

Revisions to the Radio Regulations

Final Acts

ITU Member States

Radio Regulations
 4
 3
 2
 1
 Articles

CPM Report

CPM-2

RA

WRC

Director
 Radiocommunication Bureau

RRB

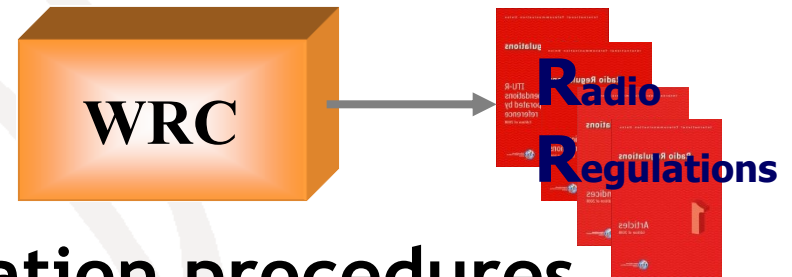
RoP

CPM-1

Next WRC Agenda

✓ Updates the Radio Regulations (*treaty status*)

- Spectrum Allocation
- Coordination and Notification procedures
- Administrative and operational procedures



✓ Adopts Resolutions

✓ Held every 3-4 years



Thank you for your attention

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