Caribbean Telecommunications Union
Shaping Caribbean Telecommunications

Meeting of the Caribbean Spectrum Management Task Force
10 May 2023 (Online)

WRC process

By Karlis Bogens
Head, Fixed and Mobile Services Division,
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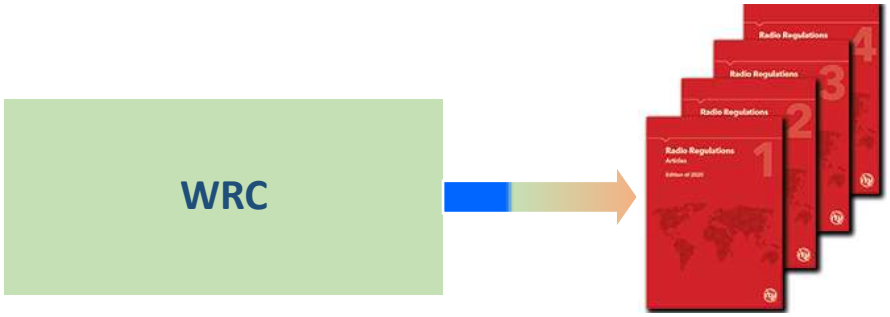
World Radiocommunication Conference (WRC)

- **Update the Radio Regulations**, the **international treaty** on the **use of radio spectrum and satellite orbits**
- **Bring together all stakeholders** in a process that is aimed at **building consensus**
- Provide a **stable** and **predictable regulatory environment** needed **for future investments**
- Enable **new radiocommunication systems** and **applications** to **access the radio spectrum**
- Protec the operation of **existing radiocommunication services**
- Ensure the **rational, equitable, efficient and economical use** of the **radio-frequency spectrum and satellite-orbit resources**
- **Examples of WRC-19:** 4 weeks, 3 420 participants ,163 administrations, 129 other entities (including industry), 29 agenda items and issues, 568 documents, 5 811 proposals

World Radiocommunication Conference (WRC)

- **Updates the Radio Regulations (CS* 89)**
  (treaty status)
  - Spectrum Allocation
  - Coordination and Notification procedures
  - Administrative and operational procedures

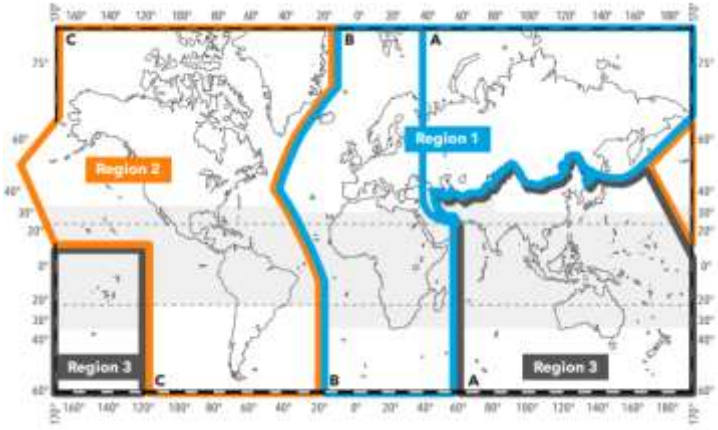


www.itu.int/pub/R-REG-RR

- **Adopts Resolutions**
- **Held every 3-4 years (CS* 90)**
- **Additional provisions in CV* and GR***

- Constitution (CS), Convention (CV) and General Rules (GR) of Conferences, Assemblies and Meetings of the ITU are available in ITU Collection of Basic Texts (www.itu.int/pub/S-CONF-PLE

- **Main goals of the RR:**
  - **interference free operation of stations**
  - **harmonization of spectrum/orbit use**



WRC cycle

- **Report of the Conference Preparation Meeting (CPM) toWRC-23, held from 27 March to 6 April 2023**

Role of ITU-R in preparation to WRC's

- **ITU-R Studies - development of technical and regulatory basis for WRC decisions**
- **SG develop international standards (recommendations), reports, opinions and handbooks on Radiocommunication matters**
- **Examples of steps in study process:**
  - ✓ determining spectrum requirements (derived from traffic estimations)
  - ✓ technical and operational characteristics of radiocommnucation systems
  - ✓ studies of compatibility between new and existing applications
  - ✓ identification of candidate bands, regulatory solutions
- **ITU-R consists of 6 SG, composed by 21 Working Parties (WP)**

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

Regional preparation for WRC-23

Regional preparation for WRC-23

YOU ARE HERE HOME > ITU-R > CONFERENCES AND MEETINGS > WRC > WRC-23 > REGIONAL PREPARATION FOR WRC-23

SHARE

Asia-Pacific Telecommunity (APT)

Arab Spectrum Management Group (ASMG)

African Telecommunications Union (ATU)

European Conference of Postal and Telecommunications Administrations (CEPT)

Inter-American Telecommunication Commission (CITEL)

Regional Commonwealth in the Field of Communications (RCC)

- Resolution 72 (Rev. WRC-19)

See details www.itu.int/go/wrc-23-regional

[3rd ITU Inter-regional Workshop on WRC-23 Preparation - (Geneva, Switzerland, 27 – 29 September 2023)]

Work in cooperation with other International Organisations

Assistance in preparation of positions on WRC's

IMO INTERNATIONAL MARITIME ORGANIZATION

ICAO · OACI · ИКАО

IATA

ITU International Telecommunication Union

WORLD METEOROLOGICAL ORGANIZATION

esa

IARU

IUCAF

CRAF

etc.

Topics on the WRC-23 Agenda

WRC-23 agenda

1.1 *1.2* *1.3* *1.4* *1.5* — Mobile / Broadcasting

- **3.3 ≤ MS & IMT ≤ 10.5 GHz**
- **0.694 ≤ HIBS ≤ 2.7 GHz**
- **470 ≤ BS, MS ≤ 960 MHz**

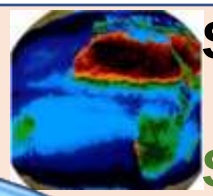
1.6 — Sub-orbital vehicles

1.7 *1.8* *1.9* *1.10* — Aviation

- New AMS(R)S) VHF alloc.
- UAS CNPC links via FSS
- Dig. techno. for aviation safety-of-life applications (App.27)
- New AMS alloc. (around 15.5 & 22 GHz) for non-safety applications

1.11 — Maritime

- GMDSS modernization and e-navigation

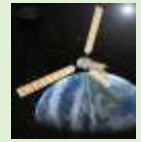


Science — *1.12* *1.13* *1.14*

- Spaceborne radar sounders (2ndary) EESS (active) @ 45 MHz
- SRS @ 14.8-15.35 GHz
- Remote-sensing observation requirements - EESS (passive) @ 231.5-252 GHz

1.15 *1.16* *1.17* *1.18* *1.19* — Satellite

- A-ESIM & M-ESIM (GSO Ku-FSS)
- ESIM (NGSO Ka-FSS)
- ISS / Sat.-to-Sat. links
- NB MSS for IoT (L/S-bands)
- Ka-FSS (s-E) (R2)



Satellite regulatory issues *7*

Note: The WRC-23 agenda item numbers are indicated in italic (agenda items 2, 3, 4, 5, 6, 8, 9 (9.1, 9.2, 9.3) and 10 are not mentioned here).

► **19 specific and 11 standing items, see Res. 811 (WRC-19)**

WRC-23 – World Radiocommunication Conferences (WRC) (itu.int)

WRC-23 documents will be available electronically on the WRC-23 website, including the Provisional Final Acts of the Conference which will be made available after the conclusion of the conference.

Please note that, in accordance with Resolution 165 (Rev. Dubai, 2018), the **deadline for the submission of proposals to WRC-23 is 30 Oct. 2023.**

An ITU TIES account is required to access WRC-23 documents and other electronic resources.

Main documents of the conference

Contributions (C)
proposals for the work of the conference

Blue documents
submitted by the Editorial Committee to the Plenary (1st reading)

Pink documents
submitted by the Editorial Committee to the Plenary (2nd reading)

Minutes of the Plenary Meetings

Summary

- ITU-R provides spectrum resources for all radiocommunication systems
- ITU-R ensures interference-free operation of different radio equipment and its compatibility with other terrestrial systems (through compatible allocations, channeling arrangements, technical limitations)
- ITU-R standardizes radio equipment ensuring their interoperability

Thank you!

ITU – Radiocommunication Bureau

Questions to brmail@itu.int