

UNITED NATIONS WORKSHOP ON SPACE LAW



ITU Regulations and Procedures

Presentation by

Shola TAYLOR

CEO, Kemilinks International

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Outline of Presentation

- Introduction to Kemilinks International
- The ITU

The ITU in brief

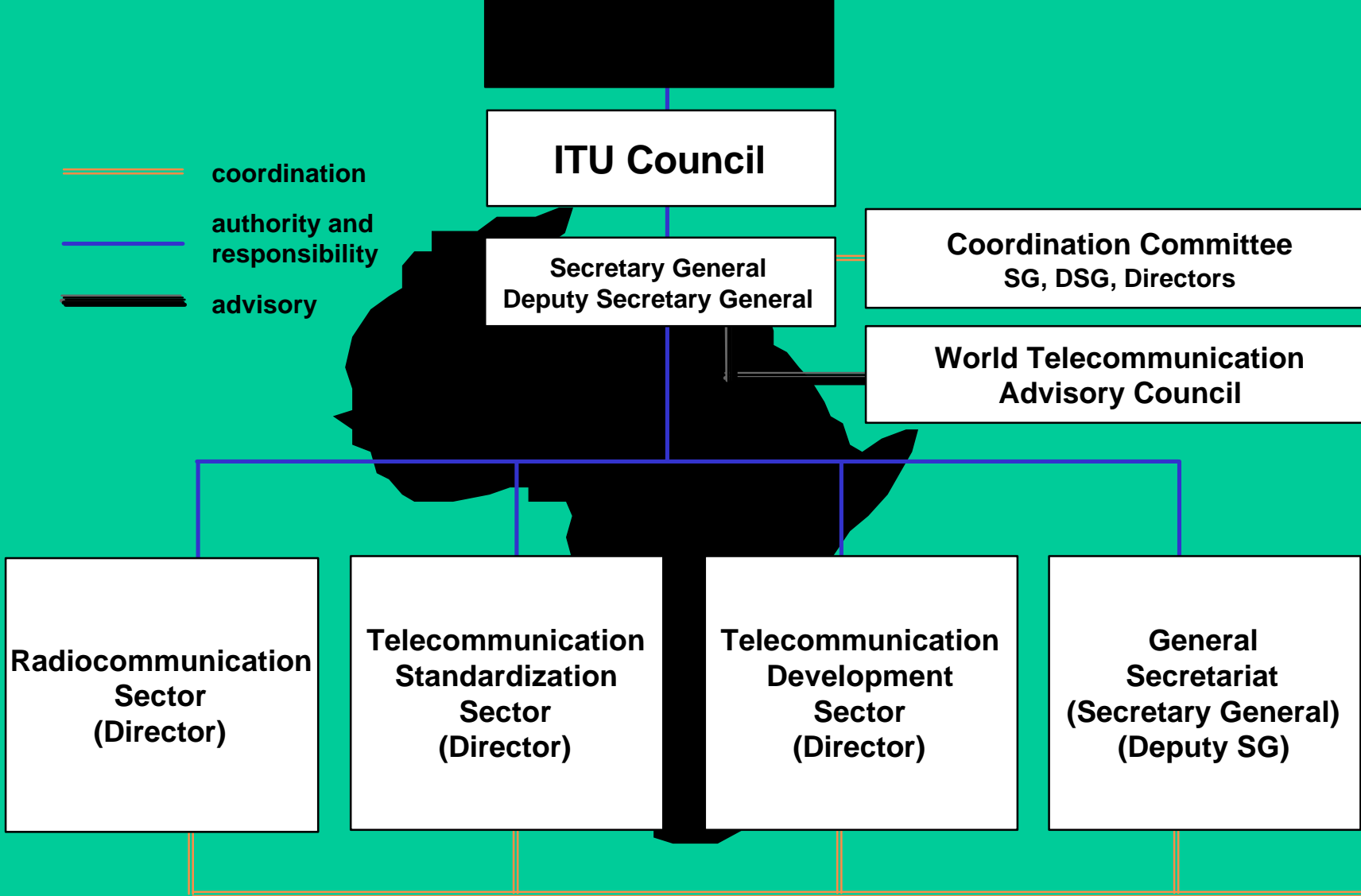
- Founded 17 May 1865
- Specialised United Nations (UN) agency
- Coordination of telecom networks & services globally
- Currently 189 Member States
- Plus 650 Sector Members (mainly private organisations)
- 750 staff / 71 nationalities

ITU Structure (I)

- Plenipotentiary Conference
- ITU Council
- ITU Sectors :
 - Telecom Development Bureau (BDT)
 - Bureau for Standardisation (TSB)
 - Radiocommunication Bureau (BR)
- General Secretariat

ITU Structure (II)

- World Radiocommunication Conferences/Regional RadioCommunication Confernces
 - Radiocommunication Assemblies and Study Groups
 - Telecommunication Standardization Assembly
 - World Development Conference/Regional Preparatory Conferences
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Legal Framework

- United Nations Outer Space Treaty (1967)
- Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space , including the Moon and Other Celestial Bodies 20.01.1967
- ITU

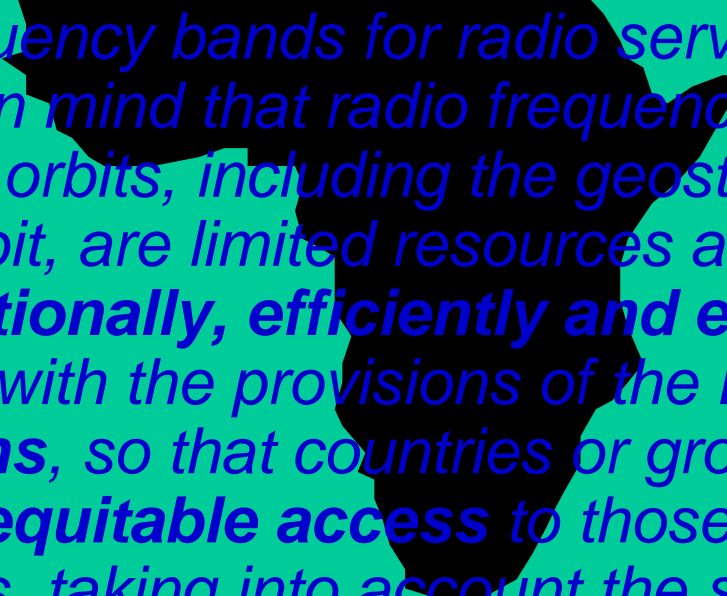
UN Outer Space Treaty 1967

- free for exploitation and use by all States
- not subject to national regulations
- use in conformity with international regulations
- no individual ownership; it is a common natural resource
- States retain jurisdiction and control over objects they have launched into outer space
- basis for ITU Regulations

ITU Legal Framework

- ITU Constitution
- ITU Convention
- ITU Radio Regulations
- ITU Rules of Procedures
- ITU-R Recommendations
- Basic Principles
 - frequency allocations
 - rights and obligations of States
 - international recognition of rights through recording in MIFR

ITU Constitution No 196 – Art 44



*“In using frequency bands for radio services, Members shall bear in mind that radio frequencies and any associated orbits, including the geostationary-satellite-orbit, are limited resources and that they must be **rationally, efficiently and economically**, in conformity with the provisions of the **Radio Regulations**, so that countries or groups of countries may have **equitable access** to those orbits and frequencies, taking into account the special needs of developing countries and the geographical situation of particular countries”*

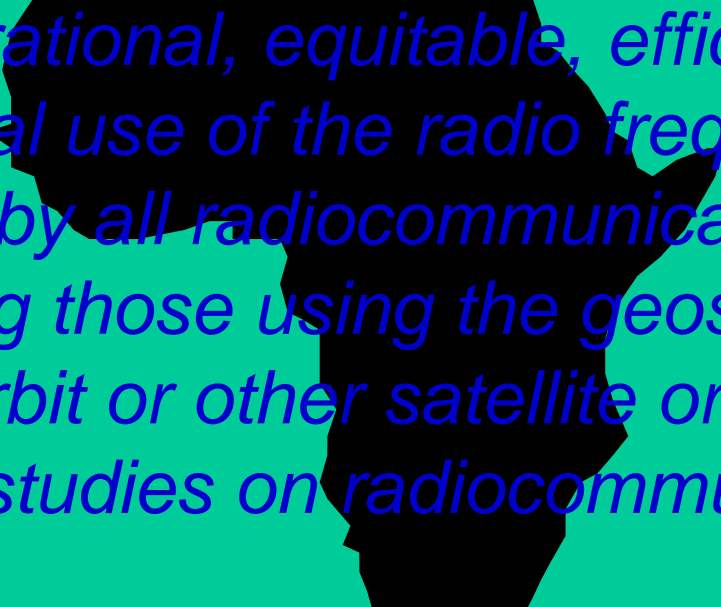
Challenges

- Changes in telecommunications services
- Convergence
- Liberalisation
- Increased demand for telecom services leading to increased demand for spectrum

ITU-R

- World Radiocommunication Conferences
- Radiocommunication Assembly
- Radio Regulations Board
- Radiocommunication Advisory Group
- Space services
- Terrestrial services
- Study Groups
- Publications
- Seminars and Information meetings
- Cooperation with other Sectors

Mission



“To ensure rational, equitable, efficient and economical use of the radio frequency spectrum by all radiocommunication services -- including those using the geostationary satellite orbit or other satellite orbits -- and to carry out studies on radiocommunication matters”

World Radiocommunication Conferences (I)



- Forum for international agreement on use of radio spectrum and satellite orbit
- Attended by Administrations and observers
- Held every two to three years
- Update the Radio Regulations
 - Spectrum Allocation
 - Notification procedures
 - Administrative and Operational Procedures

World Radiocommunication Conferences (II)

- WRC-03 (9 June – 4 July 2003)
 - 2334 participants from 145 Member States
 - 48 agenda items
- Various innovations
 - simplification of procedures
- Adopt Resolutions

Radiocommunication Assembly



- Held in conjunction with a WRC
- Approve ITU-R Recommendations
- Adopt a work program for the ITU-R Study Groups
- Adopt work procedures

Radio Regulations Board (RRB)

- 12 Part-time Members
- Four meetings/year in Geneva
- Adopts Rules of Procedures to facilitate the application of the Radio Regulations

Radio Regulations Board (RRB)

- Rules of Procedure
 - Draft prepared by BR or Administrations in cases where Radio Regulations are not sufficiently clear
 - Adopted by RRB
 - Applied by BR to process notifications
 - Could be used by competent WRCs to improve Radio Regulations

Planning Procedures

- A priori planning
 - guarantees equitable access to orbit and spectrum resources for *future* requirements
- Coordination Procedures
 - to ensure efficient use of orbit and spectrum resources and interference free operation satisfying *actual* requirements

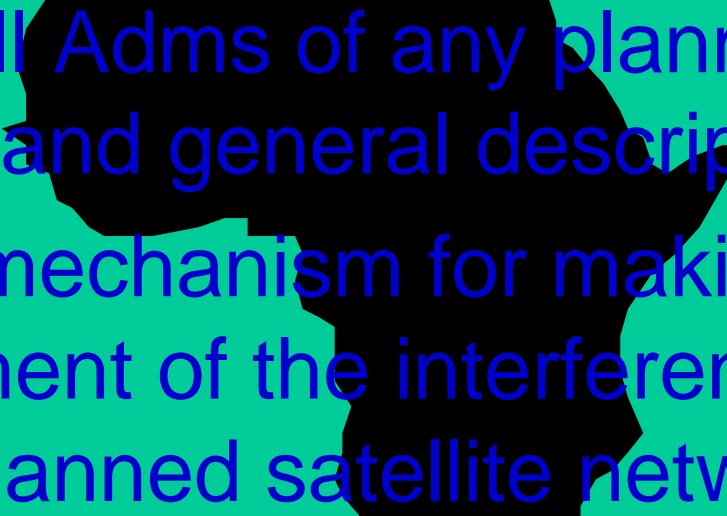
A priori planning procedure

- Allotment Plan for FSS
 - part of 4/6 & 10-11/12-13 GHz band (Appdx 30B)
- BSS Plan
 - 11.7-12.7 GHz (Appdx 30A)
 - associated Plan for feeder links (14 & 17 GHz bands – Appdx 30A)
- Plans provide orbital position, frequency spectrum and service area (usually country territory)

Coordination procedures

- Principle of FCFS
- All coordination procedures consolidated in
 - Art 9 of RR (procedures for effecting coordination with or obtaining agreement of other administrations)
 - Appdx 4 (various data to be supplied)
 - Appdx 5 (criteria for identification of Admn with which coordination is required)
- Provisions detailing Notification requirements
 - Art 11
 - Resolution 33
- Three basic steps in provisions
 - Advance Publication, Coordination and Notification

Advance Publication (I)

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- Inform all Adms of any planned satellite network and general description
 - Formal mechanism for making initial assessment of the interference effects of that planned satellite network

Advance Publication (III)

- 1A: Advance publication of information on satellite systems that are NOT subject to coordination procedure under Section II of Article 9
- 1B: Advance publication of information on satellite systems that are SUBJECT to the coordination procedure under Section II of Article 9

API (IV)

- BR publishes Special Section API/A
- No priority in being first to start advance publication
- Starts the regulatory clock
- Must be re-started:
 - for new frequency band(s)
 - for a change of GSO orbital location by > 6 degrees

Coordination

(Sec II, Art 9)

- Regulatory obligation
 - Adm seeking to assign frequency assignment in MIFR)
 - Adm whose existing/planned services affected by assignment
- Agreement confers rights and imposes obligations on both Adm

Notification

(Art 11)

- Final regulatory step to record frequency assignment in MIFR (Master Register)
- Art 6 (CS 37) provides obligations of Adms to abide by Const & Convention

Satellite Network Filings

- Delay in processing space notices became a concern sometime ago
- Speculative filings or paper satellites
- Various interventions made – PP94, PP98, WRC99, WRC 2000 but problem persisted
- Council 2001 provided additional budget allocation for more staff : this and other measures led to reduction of backlog
- Council 486
- Council decision Rev 2005

Regulatory Mechanisms (Control of interference)

- **Allocation** : Frequency separation of stations of different services
- **Power Limits** : PFD to protect TERR services / EIRP to protect SPACE services / EPFD to protect GSO from Non-GSO
- **Regulatory protection** e.g. No. 22.2: Non-GSO to protect GSO (FSS and BSS)
- **Coordination** between Administrations to arrive at interference-free operation / Process and Procedure described in RR

Assistance from ITU

- BR may provide assistance during coordination procedures of sat networks or an earth station
- Art 13 contains provisions for assistance wrt to Art 9, 11 and Appdx 30, 30A and 30B
- Assistance open to both parties – requesting Adm and Adm receiving coordination request

THE END



THANK YOU