ITU International Regulatory Framework

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Based on the Material Prepared by the ITU

ITU in brief

✓ Founded on 17 May 1865

Leading United Nations agency for *Information and Communication Technologies (ICTs)*

5 Elected Officials

✓ 193 Member States,
> 700 Sector Members, Associates plus *Academia*

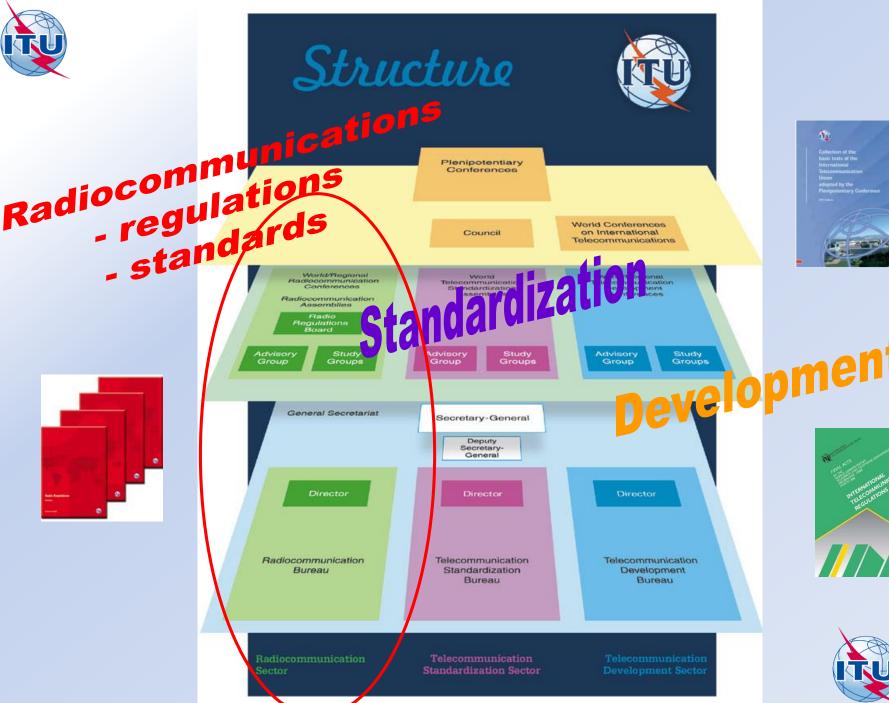✓ 750 staff & 100 nationalities

✓ Annual budget = US$180,000,000

http://www.itu.int

4 regional offices, 8 area offices
HQ in Geneva, Switzerland

MOSCOW
GENEVA
BRIDGETOWN
TEGUCIGALPA
DAKAR
YAOUNDE
SANTIAGO
BRASILIA
HARARE
CAIRO
ADDIS ABABA
BANGKOK
JAKARTA

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ITU Key priorities

- ➢ **radio spectrum**

- ➢ **international standards**

- ➢ **emergency communications**

- ➢ **digital dividend**

- ➢ **cyber security**

Interference Control Mechanism within ITU Regulatory Framework

- *Allocation* – Frequency separation of different radio services

- *Regulatory Protection* – Not to cause harmful interference or claim protection

- *Power Limits* – PFD, EPFD and EIRP level limitations

- *Coordination* – between Administrations to discuss mutually acceptable technical and operational conditions

ITU Radio Regulations - 1

- **Intergovernmental Treaty – *legal bindings* on all Member states, governing the use of *spectrum/orbit* resources by administrations**

- **Define the *rights* and *obligations* of Member States in respect of the use of these resources**

- **The ITU Radio Regulations incorporates the decisions of WRCs, including all Articles, Appendices, Resolutions, Recommendations and ITU-R Recommendations incorporated by reference.**

- **Two main concepts:**

➢ **Frequency block *allocations* to defined *radio services* (FA Table - Article 5)**

➢ **Mandatory or voluntary *regulatory procedures* (Coordination, Plan, Notification) and Recording in the Master International Frequency Register (*MIFR*) that are adapted to the frequency allocation structure**

RNSS Regulatory situation summary

WRC Resolution 609
RNSS-ARNS Compatibility
1164 - 1215 MHz

WRC Resolution 608
No constraints on original RNSS use in the band 1215 – 1260 MHz

ARNS - For Safety-of-Life Services

Original RNSS allocation 1215-1260 MHz

40 MHz extension

(L5/E5a/E5b/L3/B2)   (L2)   (E6/B3/LEX)

All RNSS systems	GPS	GLONASS	Galileo/Compass/QZSS	Up

1164   1215   1240   1260   1300 1350

ARNS protection:
EPFD < -121.5 dBW/m²/MHz
for all sats in view

RLS / RNS / EESS / SRS + (FS+MS)

Original RNSS allocation 1559-1610 MHz

(L1/E1/B1)

ARNS & RNSS	Up

1559   1610 1626.5

allocation after WRC-12

(S1)

RDSS

2483.5   2500

Shared with
FS+MS+MSS+rls

RNSS-MLS Compatibility
5000-5010MHz => 5030-5150MHz

(C1)

Up	Down

5000 5010   5030 MHz

RNSS-RAS Compatibility
5010-5030MHz => 4990-5000MHz