ITU International
Regulatory Framework

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ITU in brief

- Founded on 17 May 1865
- 193 Member States, > 700 Sector Members, Associates & Academia
- 750 staff & 100 nationalities
- Annual budget = US$180,000,000

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

- 5 Elected Officials

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

http://www.itu.int
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
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

RES-609 (r. WRC-07)
RNSS-ARNS Compatibility
(960)1164 - 1215 MHz

ARNS - For Safety-of-Life Services
(L5/E5a/E5b/L3/B2)

RES-608 (WRC-03)
No constraints on use of original RNSS in the band 1215 – 1260 MHz

Original RNSS allocation 1215-1260 MHz

new 40 MHz extension
(L2)
(E6/B3/LEX)

ARNS protection - EPFD -121,5 dBW/m² in 10 MHz for all sats in view

Original RNSS allocation
1559-1610 MHz

(L1/E1/B1)

ARNS & RNSS

RLS / RNS / EESS/SRS + (FX+MOB)
Nos. 5.329, 5.330, 5.331 & 5.332

No. 5.443B
RNSS-MLS Compatibility
5000-5010MHz => 5030-5150MHz

RES-741 (WRC-15)
RNSS-RAS Compatibility
5010-5030MHz => 4990-5000MHz

Shared with FX+MOB+MS+Rls
Nos. 5.150, 5.351A, 5.398, 5.398A
5.399, 5.401 & 5.402

RDSS

2500

2483.5

2483.5

5000 5010 5030 MHz

Shared with FX+MOB+MS+Rls
Nos. 5.150, 5.351A, 5.398, 5.398A
5.399, 5.401 & 5.402