### International Telecommunication Union (ITU)

# Involvement of Non-State Actors in Regulation of the Radio Spectrum and the Orbits

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Véronique GLAUDE

veronique.glaude@itu.int

**ITU Satellite Expert** 

**BR Space Services Department** 

ITU and the Radio Regulations (RR)

to share global natural limited resources:



Radio Spectrum and Orbits





ITU is the United Nations specialized agency for information and communication technologies (ICTs), Geneva HQ

## States and non-states Space actors work in synergy

**From legal point of view**, the Radio Regulations are an international treaty binding Member states. Non-state actors "only" participate to the work.

**From practical point of view**, the operators and other non-state actors play a fundamental role as technical experts and end-users of the spectrum and orbits.

#### Why does the state/non-state partnership work in ITU for the Radio Regulations?

- States need the technical expertise of their national satellite operators
- Operators need the legal stability of the international treaty to secure a sustainable business and revenue for their Satellite projects



Therefore the **ITU specificity** is to have maintained a successful synergy amongst the legal and practical frameworks since the origin and 1963 Conference.

In consequence, the Radio Regulations always evolved to adapt the regulatory environment to the needs of the States and the private sector.

### Non-state Space Actors and ITU-R

- Participate actively as expert to review the Radio Regulations:
   Meetings (WRC 19), Study Groups (SG 4)
- Apply the Radio Regulations through their notifying administrations: Satellite Networks filling, Master Register, Interference
- Request of assistance, capacity building and support from the Bureau: Symposium, seminars (WRS 18), workshops



### **Participants at ITU**

193 Member States+700 Sector Members165 Associates190 Academia

Member States
Sector Members
Associates
Academia

Regional/National
Standards Development
Organizations
e.g. ETSI, IEC

UN bodies e.g. WIPO, WMO

Industry fora e.g. GSMA, ESOA WiMAX Telecom related
Regional organisations
e.g. CITEL, CEPT, APT,
ASMG, ATU, RCC

### **Non-State Space Actors: future trends**

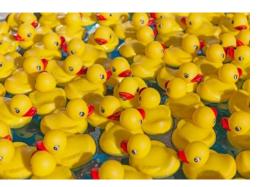


**Private investors and new technologies** create new needs and usage of spectrum/orbit:

Mega-constellations,
Small satellites,
Earth Stations In Motion,
Moon/mars/asteroid exploration...



**ITU and the Radio Regulations may be challenged** by actors not coming from the telecom world, "smaller" and being less related to national Space policy.



- Less sensitive to interference free operation (short duration)
- Limited budget to attend ITU meetings (Head Quarter in Geneva)
- Limited time and resource to contribute to Study Groups
- Averse to initiate coordination process (complex/lengthy/costly)
- Difficult/costly to outreach new Space actors (national and international)



**but** remain essential and unique to prevent interference and to ensure equitable sharing of global resources.

# Future evolutions and potential risks to mitigate

### To engage New Space actors globally:

- Improving the Radio Regulations with easier access to spectrum/orbits: Faster/simplified/less costly coordination process (during WRC19 Resolution to consideration short duration missions)
- Implementing remote participation to meetings with modern communications means
- Full on line access to Satellite network filling process (submissions, publications, examinations, exchange, data)
- Cost recovery on fillings adapted (Council)
- Training/assistance to advocate/educate

#### Consequences to consider:

- An increased number of participants implies a more complex coordination process and consensus decision approach
- Risk of unbalance for ITU if cost to outreach is much higher than cost recovery and membership fee

At the Plenipotentiary Conference 2018, the Document 52 reports on the pilot project to involve SMEs in the work of ITU-D and ITU-T for the time being.

Options to explore: new category for SMEs, encourage Member States to include SMEs in their national delegation, allow SMEs to participate in ITU SG on a "pay-as-you-go" basis, enhance existing ITU events and activities, which currently provide special opportunities for SMEs, strengthen collaboration with SMEs associations

# Conclusion



- State to ensure legal stability and satellites operators as technical experts
  have been working in synergy since the beginning of the Radio Regulations
- How to involve New Space actors in Radio Regulations, is the new challenge
- Innovation is under consideration from membership aspects to specific Resolutions in the Radio Regulations and data system sharing

→ Spectrum and Orbits remain limited resources to which non-state space actors need a secured access. This can be ensured by the Radio Regulations as its framework is designed to adapt to evolving situations.



### CONTACT

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