



Session 5: Satellite Service Licensing Trends

Regulatory “Best Practices” for Space-based Broadband

Obstacles to deploying SatComs

- ◆ **Prohibition on satcoms** in some countries unless provided by state-owned telco
- ◆ **High import taxes + duties** on end-user terminals
- ◆ **High license fees** per installation + foreign ownership limits
- ◆ **Gateway obligations** restrict market access

Existing Best Practice

- Service provider required ISP license + *poss.* VSAT installer license
- Needs to fulfill few simple conditions
- Government fee reflects annual administrative cost
- Unlimited number of FSS/ MSS terminals can be deployed (blanket licensing)

Benefits of NGSO Technologies

- **True ubiquitous geographic universal service**
- **Efficiently reach unserved areas with flexibility**
- **Overcome geographic challenges to provide:**
 - Connectivity immediately following emergencies and disasters
 - Services to end users
 - Data capacity to ISPs and enterprise customers
 - Backhaul capacity for mobile systems in remote areas, or to improve capacity for mobile systems with oversaturated backhails
- **Low latency and high capacity make NGSOs the ideal option for real-time applications**
- **Satellite has a key role in a multi-network broadband ecosystem**

Certainty and Fairness Regarding Spectrum Access is Essential

■ Reliance on the ITU

- Protection measures and predictability for spectrum uses
- Most countries do not require separate frequency allocation, in addition to that of ITU
- Follow internationally-accepted ITU processes

■ Open Skies Policies

- “Open Skies” policies allow domestic licensees to choose the best backbone infrastructure to serve their users—simple registration is often sufficient
- “Landing rights” or other domestic service licenses result in diminished choices, insufficient capacity, and higher prices to end users
- The requirement of service licensing for satellite connectivity will only raise costs to end users

Licensing Regimes Should Facilitate Efficient Rollout and Coexistence

■ Technology Neutrality

- Competitive prices for end users result from policies that allow deployment of the most efficient and affordable services, regardless of architecture model

■ Domestic and Cross-Border Competition

- It is detrimental to innovation and deployment to offer an advantage to only domestic operators

■ Blanket Licensing and Exemptions from Licensing

- As new satellite systems begin to provide service, blanket licensing allows for scaled solutions
- Look to the recent ECC Decisions on streamlined licensing of Ku-band satellite earth stations

Licensing Timelines and Processes Require Transparency and Harmony

■ Application Processes

- Online applications ease burdens on operators, provide for easy tracking, and save time
- Digital signatures are efficient

■ Timelines

- Predictability of application review timeframe helps operators plan for deployment
- Consider adoption of default approval of application if regulator does not respond within certain timeframe

■ International and Regional Harmonization

- Satellites systems require substantial investment, years of design, and building before deployment
- Spectrum access and certainty are essential for systems to be developed and launched

Administrative Requirements and Fees Should be Reasonable

■ Equipment Type Approval (Homologation)

- Self-certification is an acceptable practice, in conjunction with approval from a reputable institution

■ Fees

- Costs of licensing should be limited to recovery of the regulator’s administrative costs to process the application and maintain the license
- For NGSO systems with multiple antennas at a “gateway” site, licensing should be administered on a “per site” basis and not a “per antenna” basis
- Spectrum fees on a “Per MHz” basis discourage innovation—use of large bandwidths for new high-capacity services should not be punished, given the strong benefits such services bring to end users

Key aspects include

1. **Technology Neutrality:** local entities choose infrastructure system based on own merits
2. **Transparency & non discrimination:** rules are streamlined and cost based
3. **Smart provision of access to spectrum:** critical connectivity (e.g. BB4All, Disaster relief, eHealth or eEducation) not evaluated on economic grounds
4. **Favour competition:** domestic and foreign operators on equal footing
5. **Minimize local constrains:** commercial or technical presence are not imposed
6. **Facilitate provision and use of equipment:** no need for type approval or certification
7. **Encourage blanket licensing:** one single entity is licensed for a large number of VSATs
8. **Address security concerns:** address governments and regulators concerns to monitor traffic or avoid unauthorized transmissions
9. **Exchange & follow best practices:** national regulators develop regionally harmonized approaches together

Regulation is a means to an end: help developing competition and serving the goal of closing “digital divide”

Satellite

Beyond the reach of other technologies

**Next Session 4:
Satellite Integration in to 5G**