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Policy and Regulatory Guidelines for Satellite Services

Presenter: **E. Kasule Musisi**
ITSO Consultant
Email: e.musisi@kiyindi-electric.com
Cell: +256.772.783.784

Topics Outline

Radio Regulatory Organisations

Satellite Policy Principles

Key Regulatory Trends

Means of monitoring and controlling the spectrum

Radio regulation organizations 1/6

National spectrum management

Governments control the use made of radio by stations within their jurisdiction typically by making spectrum management a function of a civil service department or by setting up an agency for the purpose. These national regulating bodies are known as ‘Administrations’.

Radio regulation organizations 2 /6

ITU

Where good use of the spectrum requires wider consultation or agreement to permanent policies and procedures, the administrations use the International Telecommunication Union (ITU) as their global forum.

Radio regulation organizations 3/6

Federal Communications Commission (FCC)

The **Federal Communications Commission** (**FCC**) is an independent agency of the United States government, created, directed and empowered by Congressional statute , and with the majority of its commissioners appointed by the incumbent President.

The FCC works towards goals in the six following areas:

- Broadband
- Competition
- The spectrum
- The media
- Public safety and homeland security
- And modernizing the FCC.

Radio regulation organizations 4/6

ITSO

ITSO is the continuation of INTELSAT, the intergovernmental organization established by treaty in 1973.On July 18, 2001, the satellite fleet, customer contracts and other operational assets of the Organization were transferred to Intelsat Ltd, a new private company now registered in Luxembourg and various amendments to the ITSO Agreement took effect.

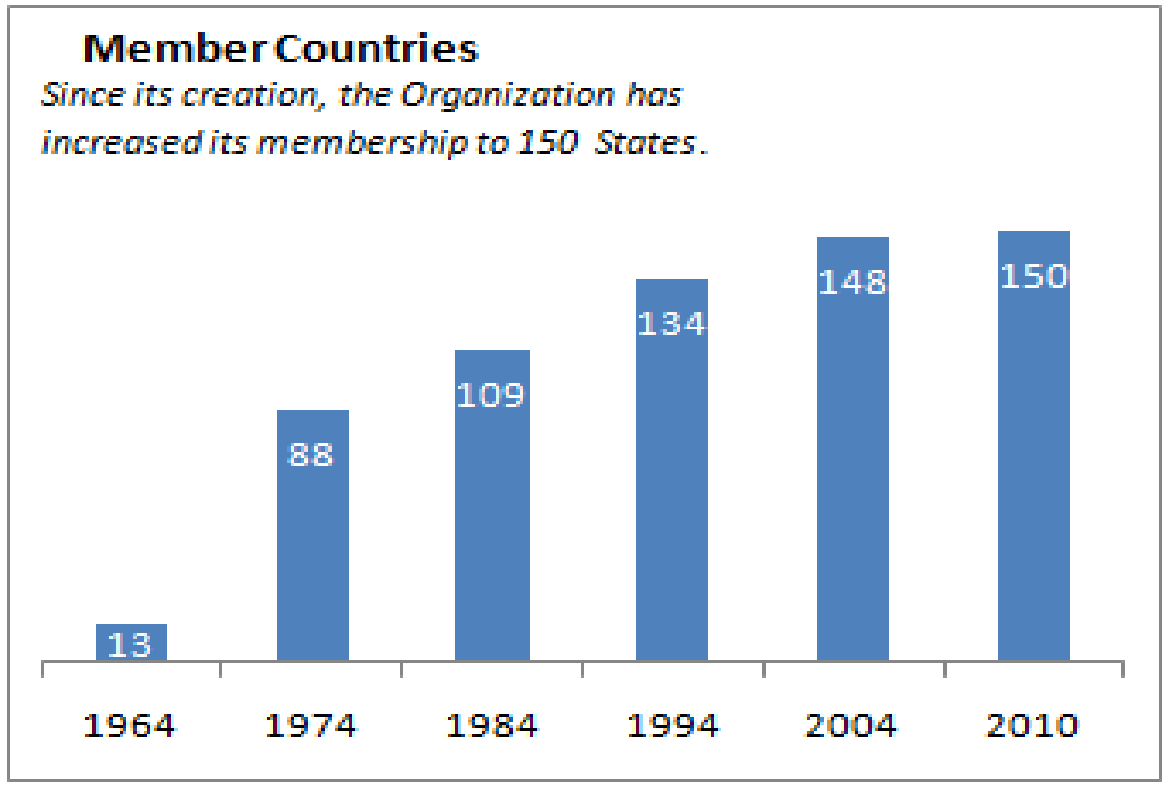
Radio regulation organizations 5/6

ITSO

For this purpose, ITSO transferred its global satellite system, including the geostationary-orbital locations, “landing rights” and the brand-name of “Intelsat,” to Intelsat, Ltd. Since this transfer in 2001 up to 2010, Intelsat has invested US$ 2.6 billion to substantially improve the global connectivity and coverage that it offers.

Radio regulation organizations 6/6

ITSO



**The current number of Member Countries is 149

Satellite policy principles 1/7

- Non Discriminatory Market Entry
- Open borders for competitive access
- Transparency of Telecommunication Rules and Policies
- Content neutral regulation
- Technology-Neutral Regulations and Licensing Requirements

Satellite policy principles 2/7

Non Discriminatory Market Entry:

Many countries have already agreed to provide unlimited market access for satellite and other telecommunications services as a part of their commitments in the WTO GATS and its Fourth Protocol on Basic Telecommunications Services.

Satellite policy principles 3/7

Open borders for competitive access

The second necessary measure for an open, competitive market is providing nondiscriminatory market access for both domestic and non-domestic satellite and telecommunications service providers. This is often referred to as an “Open Skies”policy.

Satellite policy principles 4/7

Open borders for competitive access: For example, satellite service operators should not be required to have a corporate presence in a country in order to provide services in that country.

Satellite policy principles 5/7

Transparency of Telecommunication Rules and Policies: In compliance with the WTO Agreement, a significant number of regulators have undertaken the task of publishing regularly their laws and regulations on satellite licensing and permits. Making this information readily available to the public is an extraordinary step in advancing the transparency of a country's policies.

Satellite policy principles 6/7

Content neutral regulation: Satellite networks can be effectively used to provide all forms of telecommunications services. As a result, administrations that regulate "content" often apply those regulations to satellite operators.

In any event, content restrictions that are imposed by a country should be technology-neutral – applying equally to satellite-based and wireline telecommunications service providers.

Satellite policy principles 7/7

Technology-Neutral Regulations and Licensing Requirements : Modern telecommunications services are being provided to consumers using a number of different technologies, such as wireline, satellite and terrestrial wireless networks. In order to facilitate fair competition between these technologies, regulators must strive, to the extent possible, to make their regulations, licensing requirements and regulatory fees technically neutral.

Key regulatory and licensing trends 1/6

The public policy principles discussed above provide a clear road map for administrations seeking to establish a licensing and regulatory structure for satellite services, or to reform existing regulatory structure in order to facilitate competition.

Key regulatory and licensing trends$_{2/6}$

Space segment (Landing rights):

Governments are realizing that tremendous demand for Internet, data, voice, video and other essential services is best addressed by policies that permit open and direct access to all satellite resources assuming that they have been properly co-ordinated through the ITU.

Key regulatory and licensing trends 3/6

Ground segment : In addition to licensing of the space segment, many administrations have attempted to create licensing regimes for the terrestrial segment of satellite networks. Efforts to require licenses for the ground segment can be divided into two groups :

- authorization requirements for satellite service providers
- and individual licensing for earth station facilities.

Key regulatory and licensing trends 4/6

Network Operator and Service Provider Licensing: Many countries require that public network operators hold licenses so that there is some quality assurance of the service being provided to their public. A few countries have adopted this rule also for private VSAT services. As the nature of private satellite services is being understood better, the requirement for this type of license is declining.

Key regulatory and licensing trends 5/6

Individual and Blanket Earth Station Licensing: Traditionally, most governments have required each VSAT or mobile terminal to be licensed individually; this was in addition to requiring a network operator's license. Under "blanket licensing" VSATs are configured based upon technical criteria involving power level, frequency, etc. - that eliminate the risk of unreasonable interference. Thus, a single blanket license can be issued covering a very large number of VSAT terminals.

Key regulatory and licensing trends 6/6

Establishing appropriate fees The fundamental rationale for licensing fees is that they should compensate administrative costs to the regulator but should not be used as a source of real profit for the government.

Means of monitoring and controlling the spectrum 1/4

In granting radio frequencies, the authority or agency verifies the applicant's planned location of radio equipment before installation and checks the authorized equipment for conformity with the licensing conditions.

The agency carries out pre-license and post – license conformity inspections with the aim to control the frequency usage consequently to detect any illegal (unlicensed) usage of the spectrum.

Means of monitoring and controlling the spectrum 2/4

The main tasks of the regulation agency will typically consist of :

- Verify applicant's planned location of radio equipment before installation.
- Check the authorized equipment for conformity with the licensing conditions.
- Carry out conformity inspection prior to and after granting licenses
- Carry out random checking on installations to verify compliance to assigned specifications as well as the real condition of equipment declared to be unused.
- Survey and inspect radio communication installations.
- Ensure compliance of equipment and stations with the national rules and regulations.

Means of monitoring and controlling the spectrum 3/4

- Check the frequency spectrum, in relation to enforcement and monitoring aspects.
- Ensure compliance with national conditions of licenses.
- Check the technical and operational characteristics of radio equipment.
- Verify the compatibility and the interference-free use of authorized emissions, to detect and identify the origin of interference and to resolve them.
- Detect and identify unauthorized transmissions.
- Determine channel and band usage, including assessment of channel availability.
- Assist to resolve interference problems

Means of monitoring and controlling the spectrum 4/4

The interferences and signal strengths can be measured using a measurement vehicle.

End

Questions?