Global Satellite BWA Activities in ITU

Regional Seminar on
Broadband Wireless Access
for rural and remote areas for the Americas

Brasilia
23 to 25 May 2005

R. Passerini, **ITU-BDT**

STUDY QUESTION ITU-R 269/4

"Spectrum requirements and technical and operational characteristics of user terminals (VSAT) for global broadband satellite systems".

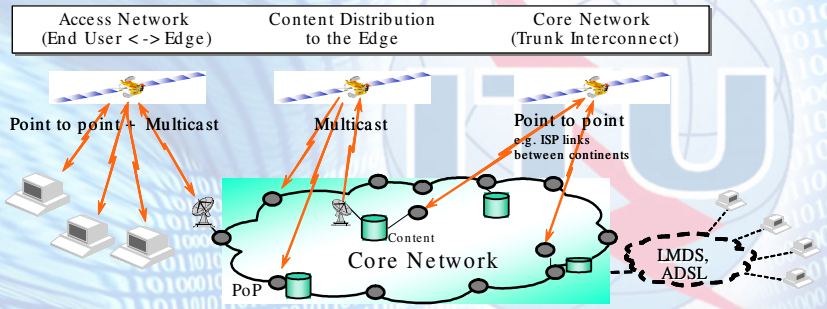
1 What are the spectrum requirements for the provision, on a worldwide basis, of high speed Internet services?

2 What are the frequency bands that could be identified in the short, medium and long term for the provision of high speed Internet services?

3 What are the technical and operational characteristics that could facilitate the mass production of simple (i.e. very small aperture terminal (VSAT)) terminal equipment at affordable prices?

ITU-R Study Group 4

The current work under **Question ITU-R 269/4** is focused on the access network scenarios, using geostationary satellites and fixed satellite terminals.



Globally harmonized standards

Recommendation ITU-R S.1709:
Technical characteristics of air interfaces for global broadband satellite systems

Specifications for a generic satellite network architecture and protocol structures, and for satellite & earth stations air interfaces based on the following standards:

TIA-1008: Internet Protocol over Satellite (IPoS)

ETSI EN 301 790 V.1.3.1: Interactive Channel for Satellite Distribution Systems &
ETSI BSM/RSM-A: Air interface specifications for global broadband communications between earth stations and regenerative satellites

ITU World Radiocommunication Conference 2007 (WRC-07)

Agenda Item 1.19:

"To consider the results of the ITU-R studies regarding spectrum requirement for global broadband satellite systems in order to identify possible global harmonized FSS frequency bands for the use of Internet applications, and consider the appropriate regulatory/technical provisions, taking also into account No. 5.516B of the Radio Regulations".

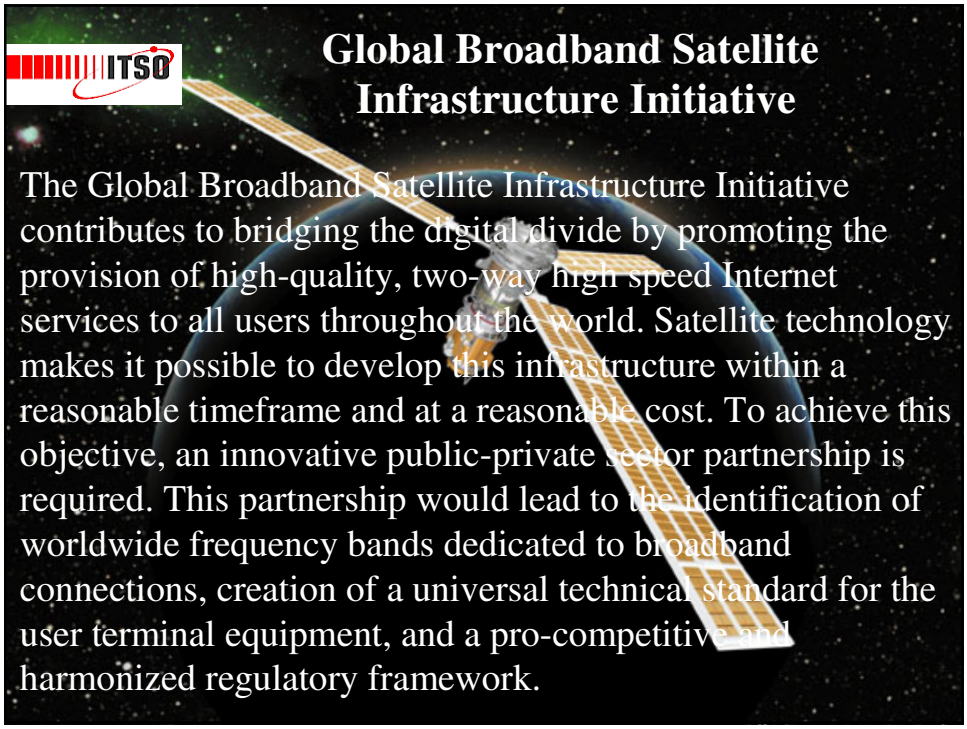
WSIS

world summit on the information society
Geneva 2003 - Tunis 2005

Plan of Action (Document WSIS-03/GENEVA/DOC/5): C2. Information and communication infrastructure: an essential foundation for the Information Society:

d) Develop and strengthen national, regional and international **broadband network infrastructure, including delivery by satellite** and other systems, to help in providing the capacity to match the needs of countries and their citizens and for the delivery of new ICT-based services. Support technical, regulatory and operational studies by the ITU and, as appropriate, other relevant international organizations in order to:

- broaden **access to orbital resources**, global frequency harmonization and global systems standardization;
- encourage public/private partnership;
- promote the provision of global high-speed satellite services for underserved areas such as remote and sparsely populated areas;
- explore other systems that can provide high-speed connectivity.



ITSO

Global Broadband Satellite Infrastructure (GBSI) Initiative

GOAL

Make benefits of broadband technology universally accessible, i.e., to as many people as possible, as soon as possible, and at the lowest cost possible.

APPROACH

- ✓Universal technical standard for user terminals
- ✓Harmonized radio frequency bands
- ✓Minimal, harmonized and pro-competitive regulatory environment

KEY ELEMENT

- ✓Public-Private Partnership with the role of each partner clearly defined

Global Broadband Satellite Infrastructure (GBSI) Initiative

Contribution from ITSO's Director-General to WSIS

Memorandum of Understanding

signed and endorsed by a number of stakeholders, including satellite operators, equipment manufacturers, and international organizations.

The 1st meeting of the industry signatories of the GBSI MoU was held on October 28, 2004 in Madrid, Spain to accelerate the implementation of the GBSI Initiative.