



*Radiocommunication Bureau*  
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Circular Letter  
4/LCCE/81

18 December 2003

**To Administrations of Member States of the ITU and  
Radiocommunication Sector Members participating in the  
work of Radiocommunication Study Group 4**

**Subject: Studies on Question ITU-R 269/4 on Spectrum requirements and technical  
and operational characteristics of user terminals (VSAT) for global  
broadband satellite systems**

The Radiocommunication Assembly (RA-03), approved new Question ITU-R 269/4, entitled "Spectrum requirements and technical and operational characteristics of user terminals (VSAT) for global broadband satellite systems".

A large number of developing countries has witnessed significant development in their telecommunication infrastructure in the past 10 years, bringing to them the reality of a "global online community". Despite the dynamic role played by the telecommunication industry in the economic development and social progress of such countries, the problem of the "digital divide" still remains. Solutions for bridging this divide are becoming increasingly urgent and require the involvement of the world telecommunication industry with particular focus on the expansion of services in developing countries. With this perspective, the thrust of Question ITU-R 269/4 is to initiate studies within ITU-R in one particularly important area, namely that of enhancing broadband access to developing countries.

The importance of studies on global broadband satellite systems for Internet applications was addressed at the WRC-03 and reflected, in part, in Agenda Item 1.19 of the WRC-07. Here, the emphasis is on bridging the digital divide through the provision of high-speed Internet access to developing countries, via low cost satellite terminals, recognizing also the need to serve remote and sparsely populated communities.

The Question has been assigned to Study Group 4 by the RA-03. Given its importance, the Chairmen of Study Group 4 and Working Parties 4A and 4B, together with the BR, are seeking ways to initiate the necessary studies. The main objective of the Question is to address issues which relate to the provision, as soon as practicable, of high-data rate access to the Internet for developing countries at affordable prices. Many areas in developing countries have large populations but low overall population densities, low incomes per capita, and limited terrestrial telecom connections. Relatively high frequency FSS systems such as those identified for possible HDFSS applications might be the most appropriate means of meeting these requirements. It may be noted that the CPM06-1 assigned responsibility for the ITU-R studies on WRC-07 Agenda Item 1.19 to Working Party 4A, with Working Party 4B among the supporting groups.

With such a background, this circular letter is being sent to members of ITU-R SG 4 to encourage the commencement of studies in response to Question ITU-R 269/4 with a view to progressing the work as far as possible prior to the block of SG 4 meetings in April 2004.

The text of Question ITU-R 269/4 is reproduced in Annex 1.

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Annex: 1

Distribution:

- Administrations of Member States and Radiocommunication Sector Members participating in the work of Study Group 4
- ITU-R Associates participating in the work of Radiocommunication Study Group 4
- Chairman and Vice-Chairmen of Radiocommunication Study Group 4
- Secretary-General of the ITU, Director of the Telecommunication Standardization Bureau, Director of the Telecommunication Development Bureau

## Annex 1

### QUESTION ITU-R 269/4

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

(2003)

The Radiocommunication Assembly,

*considering*

- a) Article I(d), paragraph 6, of the ITU Constitution (Geneva, 1992) sets forth the purpose of the Union “to promote the extension of the benefits of the new telecommunication technologies to all the world’s inhabitants;”
- b) Resolution 71 (Minneapolis, 1998) concerning the Strategic Plan for the Union for the period 1999-2003, in particular Goal 2, to “promote global connectivity to the global information infrastructure (GII) and global participation in the global information society (GIS);”
- c) Resolution 71 (Rev.Marrakesh, 2002) concerning the Strategic Plan of the Union, particularly Objective 2, to “assist in bridging the international digital divide in information and communication technologies (ICT), by facilitating development of fully interconnected and interoperable networks and services to promote global connectivity and by taking a leading role in the preparations for, and taking due account of the relevant results of, the World Summit on the Information Society (WSIS);”
- d) Resolution 37 (Istanbul, 2002) and Resolution 129 (Marrakesh, 2002) concerning the bridging of the digital divide;
- e) Resolution 113 (Marrakesh, 2002) concerning the contribution of the Union to the work of the World Summit on the Information Society (WSIS);
- f) that satellite telecommunications technology has the potential to accelerate the availability of high-speed internet services in developing countries, including the least-developed countries, the land-locked and island countries, and economies in transition;
- g) that all of the regional ministerial meetings in preparation for the WSIS duly acknowledged the close link between the availability of a large-scale broadband infrastructure and the provision of public education, health, and trade services and on-line access to e-government and e-trade information;
- h) that the international nature of satellite services would benefit from greater international harmonization in the use of frequencies, market access policies, and open and interoperable standards for user terminal equipment;
- j) that for the purposes of global operations and economies of scale, it is advisable to agree on common technical, operating and frequency system parameters; and

k) that the Union plays an important role in the promotion of global telecommunications development, and to this end, coordinates efforts with a view to guarantee its harmonization,

*decide* that the following Question should be studied:

- 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?
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