# International Telecommunication Union



#### Radiocommunication Bureau

(Direct Fax N°. +41 22 730 57 85)

# Administrative Circular CACE/459

28 August 2008

To Administrations of Member States of the ITU and Radiocommunication Sector Members participating in the work of the Radiocommunication Study Groups and the Special Committee on Regulatory/Procedural Matters

**Subject:** Radiocommunication Study Group 4

- Approval of 1 new ITU-R Question
- Suppression of 3 ITU-R Questions

By Administrative Circular CAR/256 of 21 May 2008, 1 draft new ITU-R Question was submitted for approval by correspondence in accordance with Resolution ITU-R 1-5 (§ 3.4). In addition, the Study Group proposed the suppression of 3 ITU-R Questions.

The conditions governing these procedures were met on 21 August 2008.

The text of the approved Question is attached for your reference (Annex 1) and will be published in Addendum 1 to Document 4/1 which contains the ITU-R Questions approved by the 2007 Radiocommunication Assembly and assigned to Radiocommunication Study Group 4. The suppressed ITU-R Questions are indicated in Annex 2.

Valery Timofeev Director, Radiocommunication Bureau

Annexes: 2

#### **Distribution:**

- Administrations of Member States and Radiocommunication Sector Members
- ITU-R Associates in the work of Radiocommunication Study Group 4
- Chairmen and Vice-Chairmen of Radiocommunication Study Groups and Special Committee on Regulatory/Procedural Matters
- Chairman and Vice-Chairmen of the Conference Preparatory Meeting
- Members of the Radio Regulations Board
- Secretary-General of the ITU, Director of the Telecommunication Standardization Bureau, Director of the Telecommunication Development Bureau

 Place des Nations
 Telephone
 +41 22 730 51 11
 Telex 421 000 uit ch
 E-mail: itumail@itu.int

 CH-1211 Geneva 20
 Telefax
 Gr3: +41 22 733 72 56
 Telegram ITU GENEVE
 http://www.itu.int/

 Switzerland
 Gr4: +41 22 730 65 00
 http://www.itu.int/

#### Annex 1

### **QUESTION ITU-R 274/4**

## Technical methods for improving the spectrum/orbit utilization

(2008)

The ITU Radiocommunication Assembly,

considering

- a) that there is currently a shortage of available spectrum and orbital resources in some segments of the geostationary-satellite orbit (GSO) and in some frequency bands;
- b) that coordination of satellite systems operating in the same frequency band may be difficult when angular separation of satellites is less than  $2^{\circ}$   $3^{\circ}$ ;
- c) that satellite systems which have already been brought into use are experiencing progressively increasing levels of aggregate interference;
- d) that, in some cases, state-of-the-art signal processing methods may be used to substantially reduce the effect of interferences created by systems operating in the same frequency bands,

decides that the following Questions should be studied

- 1 What earth station (ES) techniques could be used to mitigate interferences between different satellite systems operating in the same frequency bands and having nearby GSO positions?
- 2 What is the reduction of mutual interference between different satellite systems that could be reached when applying special ES techniques intended for reduction of interference, taking into account station-keeping of GSO satellites?
- 3 How much could efficiency of the use of spectrum/orbit resource be increased (i.e. by reduced angular separation) when applying state-of-the-art signal processing methods to ES signals?
- 4 To what extent are the advantages accrued by the incorporation of interference-reduction techniques offset by drawbacks such as increased operational complexity, additional ES facilities and other adverse operational impacts?

*further decides* 

1 that the results of these studies should lead to the formulation of appropriate Reports and/or Recommendations by 2010.

Category: S1

## Annex 2

## List of suppressed ITU-R Questions

Question ITU-R	Title
240-1/4	Technical criteria for frequency sharing between the fixed-satellite service using highly elliptical orbits and the fixed service as they affect the fixed-satellite service
251-1/4	Frequency sharing criteria between systems in the fixed-satellite service and systems in the fixed service using high-altitude platform stations
254-1/4	Sharing feasibility of earth stations on board vessels operating in the fixed-satellite service with stations in the fixed service in the band 5 925-6 425 MHz and other uplink frequency bands at 6 GHz and 14 GHz