

INTERNATIONAL TELECOMMUNICATION UNION



Radiocommunication Bureau
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Administrative Circular CACE/597

20 December 2012

**To Administrations of Member States of the ITU, Radiocommunication Sector Members,
ITU-R Associates participating in the work of Radiocommunication Study Group 4
and ITU-R Academia**

Subject: Radiocommunication Study Group 4 (Satellite services)
– **Proposed approval of 1 draft revised ITU-R Question**

At the meeting of Radiocommunication Study Group 4 held on 28 September 2012, the Study Group decided to seek adoption of 1 draft revised ITU-R Question by correspondence, according to § 3.1.2 of Resolution ITU-R 1-6.

As stated in Administrative Circular CACE/586, dated 18 October 2012, the consultation period for the adoption of the Question ended on 18 December 2012.

The Question has now been adopted by Study Group 4 and the approval procedure of Resolution ITU-R 1-6, § 3.1.2, is to be applied.

Having regard to the provisions of § 3.1.2 of Resolution ITU-R 1-6, Member States are requested to inform the Secretariat (brsgd@itu.int) by 20 February 2013, whether they approve or do not approve the proposal above.

Any Member State who objects to the approval of a draft Question is requested to inform the Director and the Chairman of the Study Group of the reasons for the objection.

After the above-mentioned deadline, the results of this consultation will be announced in an Administrative Circular and the approved Question will be published as soon as practicable (see: <http://www.itu.int/ITU-R/go/que-rsg4/en>).

François Rancy
Director, Radiocommunication Bureau

Annex: 1

- 1 draft revised ITU-R Question

Distribution:

- Administrations of Member States of the ITU and Radiocommunication Sector Members participating in the work of Radiocommunication Study Group 4
- ITU-R Associates participating in the work of Radiocommunication Study Group 4
- ITU-R Academia
- Chairmen and Vice-Chairmen of Radiocommunication Study Groups and the 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

Annex

(Document 4/14)

DRAFT REVISION OF QUESTION ITU-R 75-3/4

Performance objectives of international digital transmission links in the fixed-satellite and mobile-satellite services

(1992-1993-1994-1995)

The ITU Radiocommunication Assembly,

considering

- a) that availability and performance criteria are required for each particular network architecture selected for providing specific services via international digital links in the fixed-satellite and mobile-satellite services;
- b) that service requirements are constantly evolving and new services are rapidly emerging which may have an impact on satellite-link performance;
- c) that Recommendation ITU-R S.1062 has been established to specify the performance of satellite systems at or above the primary rate up to and including 155 Mbit/s;
- d) ~~that the ITU-T has adopted Question ITU-T 16/13 deciding to identify the criteria mentioned in a) and to propose appropriate impairment allocations for different satellite reference digital paths~~ Recommendation ITU-T G.826 has been established to specify end-to-end error performance parameters and objectives for international, constant bit-rate digital paths and connections;
- e) that Recommendation ITU-T G.828 has been established to specify error performance parameters and objectives for international, constant bit rate synchronous digital paths ~~the ITU-T will need assistance from appropriate experts within ITU-R Study Groups in carrying out this study;~~
- f) that Recommendation ITU-T Y.1541 has been established to specify network performance objectives for IP-based services, in which geostationary satellites within hypothetical reference paths for validating the IP performance objectives were included as an example ~~satellite systems providing synchronous digital hierarchy (SDH) transmission may require performance objectives different from those contained in Recommendation ITU-R S.1062;~~
- g) that satellite systems supporting ~~asynchronous transfer mode (ATM) transmission~~ IP-based services may require performance objectives different from those contained in Recommendation ITU-R S.1062;
- h) that satellite systems supporting time-varying channel conditions using adaptive transmission techniques may require performance objectives different from those contained in Recommendation ITU-R S.1062.

decides that the following Questions should be studied

- 1 What encoding/decoding techniques for error correction, if any, may be needed to meet the performance criteria identified by the ITU-T?
- 2 What are the resultant performance objectives expressed in terms of BER versus percentage of time which arise from service specific performance requirements ~~(e.g., ATM cell loss ratio and facsimile error free page objectives)~~?
- 3 What are the methods available to the satellite system designer to accommodate service requirements with regard to satellite system attributes such as propagation impairments, burst-error characteristics and delay?
- ~~4 What arrangements should be made by the ITU-R to offer the most appropriate liaison with the ITU-T to provide the assistance indicated in § e)?~~

further decides

- 1 that the results of the above studies should be included in appropriate Recommendations and/or Reports;
- 2 that the above studies should be completed by ~~2013~~2015.

Category: S42
