

INTERNATIONAL TELECOMMUNICATION UNION



Radiocommunication Bureau
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Administrative Circular
CACE/586

18 October 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 adoption by correspondence 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 according to § 3.1.2 of Resolution ITU-R 1-6 (Adoption by a Study Group by correspondence).

The consideration period shall extend for two months ending on 18 December 2012. If within this period no objections are received from Member States, the approval by consultation procedure of § 3.1.2 of Resolution ITU-R 1-6 will be initiated.

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

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

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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
