# International Telecommunication Union



#### Radiocommunication Bureau

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Administrative Circular CACE/410

9 February 2007

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 6

Approval of 1 new ITU-R Question and 2 revised ITU-R Questions

By Administrative Circular CAR/223 of 18 October 2006, 1 draft new and 2 draft revised ITU-R Questions were submitted for approval by correspondence in accordance with Resolution ITU-R 1-4 (§ 3.4).

The conditions governing these procedures were met on 18 January 2007.

The texts of the approved Questions are attached for your reference (Annexes 1 to 3) and will be published in Addendum 7 to Document 6/1 which contains the ITU-R Questions approved by the 2003 Radiocommunication Assembly and assigned to Radiocommunication Study Group 6.

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#### Annexes: 3

#### Distribution:

Administrations of Member States and Radiocommunication Sector Members

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

- ITU-R Associates in the work of Radiocommunication Study Group 6

 Secretary-General of the ITU, Director of the Telecommunication Standardization Bureau, Director of the Telecommunication Development Bureau

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#### Annex 1

## QUESTION ITU-R 125/6

## Stereoscopic television<sup>1</sup>

(2007)

The ITU Radiocommunication Assembly,

considering

- a) that flat-screen television display technology is now mature and affordable;
- b) that large screen displays have been demonstrated to be suited to stereoscopic<sup>2</sup> television viewing;
- c) that digital television systems are now in widespread use;
- d) that digital television encoding offers far greater scope for stereoscopic television systems than does analogue television encoding;
- e) that digital stereoscopic television encoding offers far greater monoscopic compatibility than does analogue stereoscopic television encoding;
- f) that a significant time has elapsed since previous ITU-R studies on stereoscopic television and that there may have been significant advancements in this time;
- g) that ITU- R has established a range of television broadcasting systems in Recommendations ITU-R BT.601, ITU-R BT.709 and ITU-R BT.1201 for television production;
- h) that ITU-R has established a family of Recommendations for Large Screen Digital Imagery;
- j) that ITU-R has two existing Recommendations on Stereoscopic television, namely Recommendations ITU-R BT.1198 and ITU-R BT.1438;
- k) that previous ITU-R studies on stereoscopic television pre-dated the widespread implementation of digital television and that digital technology may now offer significantly expanded options for stereoscopic television implementation,

decides that the following Question should be studied

- 1 What stereoscopic systems are now available, or are under development, for television production, post-production, distribution and emission?
- What are the relative merits of each system in each of these areas and in various viewing contexts?

<sup>&</sup>lt;sup>1</sup> This Question should be brought to the attention of the International Electrotechnical Commission (IEC).

<sup>&</sup>lt;sup>2</sup> Stereoscopic image systems allow the illusion of depth to be presented using a flat display.

- **3** How compatible are the various systems and at what point in the production chain must they diverge from a common format?
- **4** What common stereoscopic programme format/s can be used to maximise compatibility between stereoscopic systems?
- 5 What parameters from Recommendations ITU-R BT.601, ITU-R BT.709 and ITU-R BT.1201 for television production are applicable to the development of stereoscopic television broadcasting system(s)?
- 6 How the development of stereoscopic television broadcasting system relates to the specifications of Large Screen Digital Imagery;
- 7 How can compatibility of stereoscopic television technology with monoscopic television systems be maximised?
- **8** What criteria should be used to assess the performance of stereoscopic television systems and what should be the minimum standard of performance under these criteria?
- 9 Is there a compatible stereoscopic television system with a clear performance advantage, a clear compatibility advantage and/or a clear cost advantage which can be recommended for general use?
- 10 Is any stereoscopic performance compromise necessary to maintain monoscopic compatibility and if so, what is its extent and how is it perceived by the audience?
- Is any monoscopic performance compromise necessary to incorporate compatible stereoscopic signals in a digital television system and if so, what is its extent and how is it perceived by the audience?

further decides

- 1 that the results of the above studies should be addressed to prepare (a) new Recommendation(s) and Reports or Handbooks;
- that the above studies should be completed by 2008.

Category: S1

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#### Annex 2

# QUESTION ITU-R 26-1/6

# Interactive satellite broadcasting systems (television, sound and data)

(1995-2002-2007)

The ITU Radiocommunication Assembly,

considering

- a) the progress in information processing, storage and transmission technology;
- b) the development of advanced broadcasting transmission channels (cable, satellite master antenna, terrestrial relay, or direct satellite reception);
- c) the development of enhanced and digital television systems using these channels;
- d) the need within such systems of interactivity for a variety of purposes;
- e) interactivity could effectively extend the capability of TV receivers to provide access to Internet web content, thus help in bridging the digital divide;
- f) the increasing opportunities to introduce new types of data broadcasting;
- g) the development of transmission methods suitable for use in receiving from viewers return information related to the programme material (vision, sound and data);
- h) the large number of domestic receivers likely to be impacted by the adoption of interactive satellite services and the resulting need for a common world-wide system architecture,

decides that the following Question should be studied

- 1 What are the possible methods and channels for interactive satellite broadcasting systems received through cable, satellite master antenna, terrestrial relay, switched network or direct satellite reception?
- What interactive services (or near-interactive services) are likely to be needed and what are their requirements for the return channel?
- **3** What are the appropriate management methods and transmission means techniques that could be employed for such return channels?
- **4** What methods could be adopted to utilize existing frequency band allocations for such return data channels, in order to achieve conservation of resources required?

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<sup>\*</sup> This Question should be brought to the attention of the International Electrotechnical Commission (IEC), the International Standardization Organization (ISO) and the Telecommunication Standardization Sector of the ITU and to Radiocommunication Study Groups 4, 8, and 9.

<sup>\*\*</sup> This Question should be studied in conjunction with Question ITU-R 3/6.

- 5 What are the commonalities for such return data channels with those being adopted for other interactive television broadcasting systems?
- **6** What possibilities exist for the world-wide adoption of common return channel capabilities to operate under different transmission media and what technical parameters for return data channels are appropriate in various types of interactive satellite broadcasting systems?
- What characteristics needed for interactive satellite services should be identified to increase the flexibility of such systems?
- **8** What provisions could be incorporated to facilitate anonymous reception of broadcast programmes by consumers not wishing to invoke interactivity?
- **9** What is the most appropriate method for the network synchronization when using interactive satellite broadcasting channel?

NOTE 1 – See Recommendations: ITU-R BT.1434, ITU-R BT.1435 and ITU-R BT.1436,

further decides

- 1 that the results of the above studies should be coordinated with the Telecommunication Standardization Study Group 9;
- 2 the results are to be used in preparation of new Recommendations concerning the satellite transmission return path characteristics, possibly in conjunction with other Working Parties dealing with related topics;
- 3 that the studies should be completed by 2008.

Category: S1

#### Annex 3

# QUESTION ITU-R 118-1/6

# Broadcasting means for public warning, disaster mitigation and relief

(2005-2007)

The ITU Radiocommunication Assembly,

considering

- a) the natural tragedies due to earthquakes and their consequences, alongside the possible role of radiocommunications in disaster relief:
- b) the initiative of the Secretary-General of ITU to contribute to global efforts in order to reduce the effects of possible future disasters;
- c) the general aspects of telecommunications associated with such disasters including, *inter alia*, prediction, detection, alerting and the organization of relief efforts;
- d) the existence of numerous radiocommunication systems and the availability of a large equipment base at the present time;
- e) the need for compatibility of radiocommunication systems for public warning, disaster mitigation and relief with current and future receivers;
- f) the necessity to establish work programmes in ITU-R Study Group 6 in developing Reports and Recommendations on this matter,

decides that the following Question should be studied

- **1** What radiocommunication systems are used to detect potential disasters and to alert and support relief efforts?
- **2** What broadcasting systems are available for disseminating information and advising small or large populations and, potentially, across national borders?
- 3 What frequency bands, assigned to the broadcasting service and the satellite broadcasting service, may be used for disseminating information and advising small or large populations and, potentially, across national borders?
- **4** What broadcasting and satellite broadcasting equipment is currently available for use in the event of a major disaster?
- **5** What procedures currently exist to coordinate the efforts of the broadcasting and the satellite broadcasting sectors at an international level?
- **6** What actions do broadcasters around the world currently take in response to major disasters?
- What are the technical requirements for future radiocommunication broadcasting systems to be used for public warning, disaster mitigation and relief?

further decides

- 1 that the results of the above studies should be included in (a) Report(s) and/or in (a) Recommendation(s);
- that the above studies should be completed by 2008.

NOTE 1 – This activity should be coordinated with other Study Groups in particular with ITU-T Study Group 2 and ITU-D Study Group 2.

Category: S1