INTERNATIONAL TELECOMMUNICATION UNION

Radiocommunication Bureau
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Administrative Circular
CACE/609

9 April 2013

To Administrations of Member States of the ITU, Radiocommunication Sector Members, ITU-R Associates participating in the work of the Radiocommunication Study Group 6 and ITU-R Academia

Subject: **Radiocommunication Study Group 6 (Broadcasting service)**

– Approval of 3 revised ITU-R Questions

By Administrative Circular CACE/602 of 29 January 2013, 3 draft revised ITU-R Questions were submitted for approval by correspondence in accordance with Resolution ITU-R 1-6 (§ 3.1.2).

The conditions governing this procedure were met on 29 March 2013.

The texts of the approved Questions are attached for your reference (Annexes 1 to 3) and will be published in Revision 2 to Document 6/1 which contains the ITU-R Questions approved by the 2012 Radiocommunication Assembly and assigned to Radiocommunication Study Group 6.

François Rancy
Director, Radiocommunication Bureau

Annexes: 3

Distribution:

– Administrations of Member States and Radiocommunication Sector Members participating in the work of Radiocommunication Study Group 6
– ITU-R Associates participating in the work of Radiocommunication Study Group 6
– ITU-R Academia
– 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

Annex 1

QUESTION ITU-R 130-2/6[1]

Digital interfaces for production, post-production and international exchange of television programmes for broadcasting

(2009-2012-2013)

The ITU Radiocommunication Assembly,

considering

a)	that the practical implementation of television and sound production requires definition of the details of various studio interfaces and the data streams traversing them;

b)	that the ITU-R has image formats defined for SDTV, HDTV, LSDI and UHDTV;

c)	that ITU-R has established Recommendations on digital interfaces for SDTV and HDTV, in parallel and serial forms, for coaxial and optical cables for production, post production and international exchange of television programmes;

d)	that ITU-R has also established Recommendations on digital audio interfaces for production, post production and international exchange of television programmes;

e)	that ITU-R has been studying video formats with higher definition than HDTV, three-dimensional television (3DTV), UHDTV and multichannel sound systems, which require higher data rate interfaces;

f)	that programme content and related data can be transferred either as a continuous stream or in the form of packets;

g)	that increased performance of IP networks has made it possible for broadcasters to introduce networked broadcasting systems for production and post-production inside and between broadcasting stations;

h)	that networked production and post-production systems should be constructed from interoperable pieces of equipment having standardized common interfaces and control protocols;

j)	that the transport mechanism should operate independently of the type of payload;

k)	that specifications should cover the possibility of conveying sound or any other ancillary signals through the interface, taking into account the original source timing;

l)	that for operational and economic reasons it is desirable to investigate whether the specification should also cover the possibility to use the same interface to transport the various image formats given in ITU-R Recommendations,

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[1]	In the year 2012, Radiocommunication Study Group 6 extended the completion date of studies for this Question.

decides that the following Questions should be studied

1   What parameters are necessary to define specified digital interfaces for the image formats covered by ITU-R Recommendations?

2   What parameters are necessary to define compatible optical fibre digital interfaces?

3   What transport and control protocols are necessary to define interfaces for networked production and post-production systems?

4   What ancillary signals including payload identification[2] are required to be carried across the interfaces with the video signals, and what are the parameters necessary to define specifications for these signals?

5   What technical requirements should be specified for the associated digital sound channels?

6   What are the parameters that should be specified to use the same interface to also transport the various payloads given in ITU-R Recommendations?

further decides

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

2   that the above studies should be completed by 2015.

Category: S2

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[2] Identification of video, audio and ancillary data carried on a digital interface or individual links.

Annex 2

QUESTION ITU-R 133-1/6

Enhancements of digital terrestrial television broadcasting

(2010-2013)

The ITU Radiocommunication Assembly,

considering

a)   that terrestrial television broadcasting undergoes the transition from analogue to digital emission;

b)   that digital emission can provide opportunities for enhancements of broadcasting, including:

–   HDTV;

–   digital three-dimensional (3D) TV broadcasting;

–   broadcasting portable reception;

–   broadcasting mobile reception;

–   high bit-rate data broadcasting;

–   multimedia broadcasting;

–   interactive broadcasting;

c)   that there is considerable interest in maximizing the efficiency of the digital terrestrial television broadcasting;

d)   that there is considerable progress in development of compression techniques for digital television;

e)   that future integrated/hybrid systems may allow complementary terrestrial broadcasting with other methods of broadcast content delivery,

decides that the following Questions should be studied

1   What are the anticipated future developments in terrestrial television broadcasting technology following the transition to digital broadcasting?

2   What are the future requirements for digital terrestrial television broadcasting technologies?

3   What efficiencies will be achieved by the enhancements of broadcasting?

4   What possibilities may the broadcast content delivery in future integrated/hybrid systems offer, in addition to terrestrial broadcasting?[1]

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[1]   This Question should be brought to the attention of ITU-R Study Group 5 and ITU-T Study Group 9.

further decides

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

2   the above studies should be completed by 2015.

Category: S3

further decides

Annex 3

QUESTION ITU-R 136-1/6[1]

Worldwide broadcasting roaming[2, 3]

(2012-2013)

The ITU Radiocommunication Assembly,

considering

a) that there is an increasing demand to use portable broadcast receivers worldwide (worldwide roaming);

b) that the service requirements for digital sound broadcasting systems in different bands have been developed and adopted in ITU-R (Recommendation ITU-R BS.1348 for the bands below 30 MHz; Recommendation ITU-R BS.774 for VHF/UHF bands);

c) that the requirements for enhanced multimedia services for digital terrestrial broadcasting in VHF bands I and II have been developed and adopted in ITU-R (Recommendation ITU-R BS.1892);

d) that various digital sound broadcasting systems for fixed and mobile reception and their parameters are described in ITU-R Recommendations and Reports (Recommendations ITU-R BS.1514, ITU-R BS.1615, Reports ITU-R BS.2004, ITU-R BS.2144 for the bands below 30 MHz; Recommendations ITU-R BS.1114, ITU-R BS.1660, Reports ITU-R BS.1203, ITU-R BS.2208, ITU-R BS.2214 for VHF/UHF bands);

e) that various digital multimedia broadcasting systems for fixed and mobile reception and their parameters are described in ITU-R Recommendations and Reports (Recommendations ITU-R BT.1833, ITU-R BT.2016, Report ITU-R BT.2049);

f) that various digital terrestrial television broadcasting systems are described in ITU-R Recommendations and Reports (Recommendations ITU-R BT.709, ITU-R BT.1306, ITU-R BT.1877, Reports ITU-R BT.2140, ITU-R BT.2142, ITU-R BT.1543, etc.);

g) that various digital satellite sound and television broadcasting systems are described in ITU-R Recommendations (Recommendations ITU-R BO.1130, ITU-R BO.1516, ITU-R BO.1724, ITU-R BO.1784);

h) that a set of ITU-R Recommendations invite the ITU membership and radio receiver manufacturers to study the possibility of the development of multiband, multistandard radio receivers (Recommendations ITU-R BS.774, ITU-R BS.1114, ITU-R BS.1348);

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[1]   This Question should be brought to the attention of ITU-R Study Groups 4, 5 and ITU-T Study Groups 9, 17 as well as to IEC.

[2]   The definition of the term "roaming" for IMT-2000 is set in Recommendation ITU-R M.1224: the ability of a user to access wireless telecommunication services in areas other than the one(s) where the user is subscribed.

[3]   The term "worldwide broadcasting roaming" is proposed for the reception, by a single receiver, of TV, sound and multimedia broadcasting being provided in different areas of the world.

j)	that the implementation of various versions of interactivity in TV and radio broadcasting systems including use of Internet are described in ITU-R Recommendations (Recommendations ITU-R BT.1508, ITU-R BT.1564, ITU-R BT.1667, ITU-R BT.1832, etc.);

k)	that software-defined radio (SDR) is under study in ITU;

l)	that modern digital broadcasting receivers are increasingly based on loaded software or firmware that may be subject to updating;

m)	that modern broadcast receives are often equipped with an interface that allows the additional connection to the Internet (for, e.g., interactivity and downloads);

n)	that methods of broadcast content delivery via future interactive and existing systems, as found in, for example, Recommendation ITU-R BT.1833 are in progress in addition to terrestrial broadcasting;

o)	that worldwide broadcasting roaming may facilitate the regional, national and international harmonization of broadcasting;

p)	that worldwide broadcasting roaming offers the possibility of intersystem interoperability for information services in disaster and emergency situations, navigation, safety, etc.,

decides that the following Questions should be studied

1	What are the service requirements and features for worldwide broadcasting roaming?

2	What are the system requirements (basic characteristics and performances) that need to be fulfilled in order to realise worldwide broadcasting roaming?

3	What are the technical characteristics of broadcast receivers including elements of SDR and its enhancements that may be used for implementation of worldwide broadcasting roaming?

further decides

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

2	that the above studies should be completed by 2015.

Category: S2

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