

QUESTION ITU-R 16-2/6

Digital interactive broadcasting

(2002-2003-2009)

The ITU Radiocommunication Assembly,

considering

- a) the progress in information processing and communication technologies;
- b) the rapid progress towards digital broadcast delivery systems;
- c) the potential for such systems to support interactivity for a variety of purposes;
- d) the development of radiocommunication methods over various delivery media suitable for use in receiving, from users, return communication related to the programme material (vision, sound, multimedia and data);
- e) that broadcast receivers and multimedia systems which incorporate interactive services are available for consumer use;
- f) that a number of ITU Recommendations already exist which are related to provision for a return channel, for instance Recommendations ITU-R BT.1667 and ITU-R BT.1832;
- g) that return information from viewers can be also provided in a deferred way (users have to store and then take care of the delivery of the information);
- h) the availability of mass storage media in receivers permitting local interaction without the need of a return channel;
- j) the existence of Recommendation ITU-R BT.1369 “Basic principles for a worldwide common family of systems for the provision of interactive television services”, many of which apply equally to sound, multimedia and data broadcasting;
- k) the necessity of the development of interactive broadcasting in order to accelerate bridging the digital divide;
- l) the possible role of interactive broadcasting in the broadcasting audience monitoring (e.g. mediametry) and Internet audience monitoring,

decides that the following Questions should be studied

- 1 What are the opportunities for commonality among systems specified for return data from the receiver to the broadcaster, and to other users of such data, for different reception media (e.g. terrestrial, satellite, common antenna, cable, the Internet etc.)?
- 2 What interactive services (including deferred and local interactive services*) are likely to be needed and what are their performance requirements for the return channel?

* The level of interaction provided by broadcasting a range of alternative content to a local mass storage device for access and selection by the user.

- 3 Which protocols, preferably selected among those already standardized for such purposes, should be recommended as being suitable for the various transmission media used to carry the return channel?
- 4 What are the appropriate protocols, APIs and storage media suitable to collect “various versions of forward broadcast data requiring user activity” or “interactive data resulting from the user activity”?
- 5 What possibilities exist for the harmonious use of multimedia systems, in storing in an appropriate way, the “various versions of forward broadcast data” or the “interactive data created by the user”?
- 6 How can anonymous reception of broadcast without explicit signalling for privacy opt-out, be maintained in the framework of interactive broadcasts?

further decides

- 1 that the results of the above studies should be included in (a) Report(s) and/or Recommendation(s);
- 2 that this work should be coordinated with the relevant Study Groups in the Radiocommunication and Telecommunication Standardization Sectors;
- 3 that the above studies should be completed by 2011.

Category: S2