



- Question 11/2: Examine digital broadcasting technologies and systems, including cost/benefit analyses, assessment of demands on human resources, interoperability of digital systems with existing analogue networks, and methods of migration from analogue to digital technique
- Question 13/2: Methods to enhance the viability of public service broadcasting, particularly focusing on developing countries

STUDY GROUP 2

SOURCE: PROPOSED RAPPORTEUR FOR QUESTION 11/2

TITLE: REVISIONS TO QUESTION 11/2 AND QUESTION 13/2

The Study Group Management Team, recognizing an overlap between the expected output of Question 13/2 with the mandate of Study Group 1 of the Development Sector (i.e., regulations, policies, etc.), proposed that Question 13/2 be divided into two parts (see Document 2/033):

1. the technical parts of Question 13/2, including the relevant expected outputs, to be integrated into Question 11/2; and
2. the policy parts of Question 13/2 to be sent to Study Group 1 for consideration.

Study Group 2 formed a small drafting group entrusted with the task of preparing a final draft revision of Question 11/2, and a modified version of Question 13/2. The drafting group met on 7 September 1998, and merged the relevant parts of Question 13/2 with Question 11/2. It is proposed that some parts of Question 13/2, items 2.2 and 2.5 of that Question, be studied jointly by Study Groups 1 and 2, since these items contain both policy and technology aspects. It is further proposed that the remainder of Question 13/2 be submitted as is to Study Group 1 to be handled either

- a) as a stand-alone Question or
- b) by incorporation into an existing Study Group 1 Question(s).

The revisions to Question 11/2 are as follows:

Q. 11/2 Examine digital broadcasting technologies and systems, including cost/benefit analyses, assessment of demands on human resources, interoperability of digital systems with existing analog networks, and methods of migration from analog to digital techniques.

1. Statement of problem or situation

While it seems clear that the migration to digital broadcasting technologies will be universal over time, it will not progress evenly in all countries or regions. Ironically, some satellite digital broadcasting technologies will be introduced in the developing countries before they become available in the developed countries.

The ITU-D can play a role in assisting Member States evaluate the economic issues involved in migrating from analog to digital broadcasting methods, including the introduction of digital technology into radio program production¹. The ITU-D could also provide updates on related Studies being conducted in the ITU-R and ITU-T Sectors.

In many countries increased broadcast services, and the resulting fragmentation of audiences, is threatening the continued viability of the Public Service Broadcaster (PSB) and its ability to provide needed educational and informational services. The PSB thus requires, inter alia, development of an effective, efficient and competitive infrastructure, taking best advantage of modern telecommunications and information technologies.

2. Questions or issues proposed for study

Identify the economic impact and development aspects of proposed and existing digital sound, television and cable broadcasting systems, with particular attention on receiver costs; identify migration techniques from analog to digital broadcasting, taking into consideration the experiences of ITU-D Member States and Sector Members.

The Rapporteur Group for Question 11/2 will also focus on the following issues:

2.1 In what ways can digital technology best be introduced into the distribution and delivery of the PSB's services, including rural and sparsely populated areas, particularly taking account of the convergence between broadcasting and other telecommunication services, which offers significant operational, economical and performance enhancements?

2.2 How can the emerging GII and other digital networks be used to improve the services of the PSB's, especially in developing countries, through, for example, the provision of access to shared resources or their use for the collection and distribution of programmes and their elements?

In addition, the following issues will be studied jointly by the Rapporteur Group for Question 11/2 and the relevant group(s) within Study Group 1, the former focusing on technology issues and the latter on policy issues:

¹ The latter is a goal set forth in the Beirut Declaration, which emanated from the 1996 Regional Telecommunication Development Conference for the Arab States (AR-RTDSC-96).

2.3 How can digital and information technologies be used to enhance the production capabilities and to improve economies and efficiency of production of broadcasting services by the PSB's in developing countries?

2.4 What other value-added services and products can be introduced to enhance the PSB's performance?

3. Specification of the expected output

Economic cost-benefit analyses of various digital broadcast systems, including an assessment of the demands of these systems on human resources in developing countries and the systems' interoperability with existing networks. The collection, analysis and periodic dissemination of relevant data received from those organizations and groups listed below in Part 8 of this document. Periodic updates on Studies taking place in the other ITU Sectors, including analysis of any economic issues that these Studies might raise. Analysis of various migration techniques/strategies. Examination of distance education applications for satellite digital sound broadcast services, including interactivity.

Additional Studies arising from this Question will be in the form of proposals for demonstrations and pilot projects in developing countries, for which the specific needs and operational requirements of the PSB's will be identified.

4. Required timing of the expected output

The course of the next ITU-D Study Period.

5. "Proposers/Sponsors" - Those who requested study of the Question or issue

This technological array was originally adopted for study by Working Party A/2 during its meeting in May 1995.

6. Input required, in carrying out the study

- 1) Collection of related contributions and data from ITU-D Member States and Sector Members, and those organizations and groups listed below in Part 9 of this document.
- 2) Examination of ITU-T and ITU-R Study Group Questions related to this technological array.
- 3) Discussion in the relevant ITU-D Study Group.

7. Target audience for the output

a)

	Developed Countries	Developing Countries	LDCs
Telecom policy-makers	*	*	*
Telecom regulators	*	*	*
Broadcasting operators	*	*	*
<u>Manufacturers</u>	*	*	*
<u>Service Providers</u>	*	*	*
* The Question outputs are generally targeted to broadcasters, policy makers and regulators worldwide, and more specifically to those in developing and least developed countries.			

b) Target audience - Who specifically will use the output

Users of the output are expected to be middle and upper level Managers among Operators and Regulators world-wide.

8. Proposed method of handling this Question/issue

It is proposed that this Question be handled within a Study Group.

9. Coordination requirements of the study

The ITU-D Rapporteur's Group dealing with this Question should coordinate closely with:

- Other ITU-D Rapporteur's Groups dealing with similar issues, in particular the successor Groups to Questions 3/1, 2/2 and 8/2.
- The relevant Focal Points in the BDT.
- The ITU-D's SPACECOM Project.
- The Regional Broadcasting Unions and Associations.
- Other International and Regional Organizations, as appropriate.
