



INTERNATIONAL TELECOMMUNICATION UNION

**TELECOMMUNICATION
DEVELOPMENT BUREAU**
ITU-D STUDY GROUPS

Document 1/032-E
10 September 1998
Original: English only

FIRST MEETING OF STUDY GROUP 1: GENEVA, 10 - 12 SEPTEMBER 1998
FIRST MEETING OF STUDY GROUP 2: GENEVA, 7 - 9 SEPTEMBER 1998

Question 10/1: Regulatory impact of the phenomenon of convergence within the telecommunications, broadcasting, information technology and content sectors

STUDY GROUP 1

SOURCE: CHAIRMAN STUDY GROUP 2

TITLE: DRAFT REPORT OF THE MEETING ON QUESTIONS 11/2 AND 13/2

Please find - for your information - the results of the work of Study Group 2 concerning Questions 11/2 and 13/2.

Annex: 1

**TELECOMMUNICATION
DEVELOPMENT BUREAU
ITU-D STUDY GROUPS**

**Document 2/REP/005-E
9 September 1998
Original: English only**

FIRST MEETING OF STUDY GROUP 1: GENEVA, 10 - 12 SEPTEMBER 1998
FIRST MEETING OF STUDY GROUP 2: GENEVA, 7 - 9 SEPTEMBER 1998



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- 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: RAPPORTEUR FOR QUESTION 11/2

TITLE: DRAFT REPORT OF THE MEETING ON QUESTIONS 11/2 AND 13/2

The Rapporteur Group for Question 11/2 met on 8 September 1998 and reached the following conclusions:

1. **Documents 2/033-E and 2/053-E.** The meeting accepted the proposal of the Chairman for Question 13/2 to combine the technical aspects of that Question with Question 11/2. The revised text of Question 11/2 is attached as Annex 1 to this document. In addition, the meeting agreed to send the remainder of Question 13/2, dealing mainly with policy considerations, to Study Group 1 for its consideration. The revised text for Question 13/2 is attached to this document as Annex 2.
2. **Document 2/021-E.** The meeting noted with appreciation the valuable document on a "Model Public Service Broadcasting Law," and agreed to transmit it to the Director of the BDT, to be reviewed with the assistance of representatives of both Study Group 1 and 2. The meeting further agreed that after such review the document should be addressed within the framework of the official collaboration agreement between the UNESCO and the ITU-D.
3. **Documents 2/044-E and 2/027-E.** The meeting reviewed recent ITU-R achievements in the area of standardization of digital television and sound broadcasting, as well as digital high definition television production.
4. **Document 2/008-E.** The meeting noted with appreciation the notice from the Director of the Radiocommunication Bureau regarding a forthcoming workshop on frequency planning for digital terrestrial television.

5. **Document 2/041-E (1/014-E).** The meeting reviewed the extensive “Digital Radio Guide” submitted by the Vice Chairman of the World Broadcasting Unions (WBU) – Technical Committee. The meeting agreed to use this very useful document as a basis for issuing an annual report to update ITU-D members on digital radio broadcasting technologies. The meeting also agreed to issue a liaison statement to the WBU thanking it for the contribution, and seeking its assistance as an active collaborator for Question 11/2.
6. **Document 2/042-E.** The meeting took note of the contribution from Canada on Question 13/2, on the subject of “long-term strategies for the use of radio frequency spectrum”. The meeting agreed to study the impact of Resolution 9’s application on this subject.
7. **Future meetings and associate rapporteurs.** The meeting agreed that the Rapporteur Group should meet in Geneva in June 1999, prior to the September 1999 meeting of the full Study Group, and in conjunction with the meeting of the Rapporteur Group for Question 9/2. The following associate rapporteurs were also identified: Mme. Sebnem BILGET, Turkish Radio and Television Supreme Council; and M. George-Dupont HENIUS, UNESCO.
8. **Liaison Requirements.** The Rapporteur Group for Question 11/2 will liaise with ITU-D Study Group 1, and ITU-R Study Groups 9, 10 and 11.

ANNEX 1

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 analogue networks, and methods of migration from analogue to digital technique

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 analogue to digital broadcasting methods, such as the introduction of digital technology into radio programme production¹, and the provision of high band width terrestrial links between studios and satellite feeder link stations. 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 Question or issue 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 analogue 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?
- 2.3 How can digital 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?

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-RTDC96).

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 9 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 PSBs 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	*	*	*
Manufacturers	*	*	*
Service Providers	*	*	*
* The Question outputs are generally targeted to broadcasters, policy makers and regulators world-wide, 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.
- UNESCO and other International and Regional Organizations, as appropriate.

ANNEX 2

Q. 13/2 Methods to enhance the viability of public service broadcasting, particularly focussing on developing countries

1 Statement of Problem

Broadcasting plays a prominent role in educating and informing the public and in supporting economic, social and cultural development. Social and political changes in many countries are leading to demands for additional broadcast services, requiring more channels and thus to increased fragmentation of the audiences. This loss of audience is a threat to the continued viability of the Public Service Broadcaster, who is operating within a fixed and frequently obsolescent mandate, in turn undermining the capability to provide the educational and informational services required.

Both developed and especially developing countries are facing difficulties in adopting policy, legal and regulatory instruments to deal with these trends to increased numbers of services and with the concurrent trend to technological convergence with other telecommunication services. The Public Service Broadcaster thus requires:

- a new regulatory and legal basis for his activities taking into account the special mandate as well as the new environment and circumstances under which he must operate;
- design and development of broadcast services compatible with the mandate and the resources available.

2 Draft Question

- 2.1 What are the key elements in the definition of a model role and mandate for the Public Service Broadcaster (PSB) in developed and developing countries, that will clearly differentiate between the PSB and other broadcasters?
- 2.2 How can information communications 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?

3 Description of the Expected Output

The Studies arising from this Question should be oriented to the achievement of practical results that can be implemented in a relatively short time-frame and which may require cooperation among a number of organizations and agencies. Principally they will be in the form of:

- Guidelines for the development of policies and of regulatory and legal instruments to define the role and mandate of the PSB and to establish the necessary coordination with other telecommunication services.
- Guidelines for the economic and effective application of digital technologies to the needs of the PSB in developing countries.

The output from the studies is required prior to the conclusion of the current study period (1998-2002).

5 Source of Study Contributions

The studies arise from the work carried out under Question 8/2 of the WTDC-94 (Buenos Aires) and are supported by the ITU-D, the ITU-R, ITU-T, UNESCO and Regional Broadcasting Unions through the World Broadcasting Unions (WBU) as well as relevant professional institutions.

6 Sources of Input Required, in Carrying out the Study

Inputs to these studies may be found in the work of the ITU in all of its sectors, in the work of UNESCO and of the WBU, as well as from Members of ITU-D and the broadcasting manufacturing industries. The PSB's in developing countries must also play a significant role in developing and supporting the work of any associated demonstration or pilot-project activities.

7 Target Audience for the Output

	Developed countries	Developing countries	LDCs
Telecom Policy Makers	-	x	x
Telecom Regulators	-	x	x
Broadcasting Regulators	x	x	x
Service Providers (operators)	-	x	x
Public Service Broadcasters	x	x	x
Cultural and Educational Authorities	x	x	x
Manufacturers	x	x	x

8 Proposed Method of Handling this Question or Issue

a) How? Indicate the suggested handling of the proposed Question or Issue

- 1) Within a Study Group
 - Question (over a multi-year study period) x
 - Focus Group (12 months duration maximum) -
- 2) Within Regular BDT Activity
 - Programmes -
 - Projects x
 - Expert consultants x
- 3) Joint studies with the UNESCO and WBU may be beneficial x

9 Coordination Requirements of the Study

Coordination of the studies with those of other sectors of the ITU is required. Specifically, ITU-R Study Groups 4, 10, 11, ITU-TS Study Groups 13, 15 have studies planned or in progress in related areas and have produced Recommendations of interest to this work. Similarly, work in progress within the WBU and UNESCO is also relevant to these studies.
