STUDY GROUP 1

QUESTION 2/1

Strategies, policies, regulations and methods of migration to and adoption of digital broadcasting and implementation of new services

1 Statement of the situation or problem

- 1.1 The migration from analogue to digital broadcasting technologies has been completed in some countries, while others are in the process of completing the transition. The Final Report of Question 8/1 from the study period 2014-2017 indicates that the transition results in a variety of strategies, plans and implementation actions that achieve a successful process to maximize the benefits.
- 1.2 The ITU Telecommunication Development Sector (ITU-D) can continue playing a role in helping Member States evaluate the technical and economic issues involved in the transition from analogue to digital technologies and services. On these matters, ITU-D has been collaborating closely with both the ITU Radiocommunication (ITU-R) and the ITU Telecommunication Standardization Sector (ITU-T), thus avoiding duplication.
- 1.3 The use of the "digital dividend" is an important issue, and continues to be widely debated by broadcasters and operators of telecommunication and other services operating in the same frequency bands. The role of the regulatory authorities in this regard is crucial to balancing the interests of users with the demands of growth in all branches of the industry.
- 1.4 ITU had been working to analyse and identify best practices for the transition from analogue to digital broadcasting. It is important to emphasize the report on ITU-D Question 11-3/2 of the 2010-2014 study period, which identifies public policies that should be applied as means for countries to be able to start the digital transition.
- 1.5 It is also important to mention the Digital Terrestrial Television Broadcasting Switchover (DSO) database, which contains information on relevant events (e.g. workshops, frequency coordination meetings and seminars), publications (e.g. ITU-R and ITU-D, roadmaps and workshop presentations), websites (e.g. ITU-R and ITU-D, GE-06), contacts and sources of information.
- 1.6 In addition, the report on ITU-D Question 8/1 of the 2014-2017 study period presented best practices that accelerate the transition and narrow the digital divide by deploying new services, communication strategies for public awareness on digital broadcasting, and radio spectrum issues related to the analogue switch-off process, among other case studies.
- 1.7 Other issues to consider are the studies from other ITU Sectors, especially taking into account the decisions of the World Radiocommunication Conference (WRC-15) on the exploitation of the digital dividend in the future. In this regard, it is relevant to take into

consideration the maintenance of study topics related to technical and economic aspects involved in the transition from analogue to digital broadcasting.

1.8 Finally, another important issue for the future of broadcasting is the emergence of new broadcasting technologies and standards that could be taken into account when developing countries¹ are implementing the digital television transition.

2 Question or issue for study

Studies under the Question will focus on the following issues:

- 2.1 Analysis of methods and issues for the transition to digital terrestrial sound and television broadcasting, including analogue-to-digital and digital-to-digital, allowing the deployment of new services and applications for consumers.
- 2.2 National experiences on strategies and socio-economic aspects of the introduction of new broadcasting technologies, emerging services and capabilities.
- 2.3 National experiences on spectrum planning activities in preparation for the analogue switch-off.
- 2.4 National experiences on interference mitigation measures.
- 2.5 Analysis of the gradual transition to digital sound broadcasting, study cases, sharing of experiences and strategies implemented.
- 2.6 Costs of the transition to digital broadcasting and mplications for the various players: broadcasters, operators, technology providers, manufacturers and distributors of receivers, and consumers, among others.
- 2.7 The use of the digital-dividend frequency bands resulting from the transition to terrestrial digital broadcasting, including technical, regulatory and economic aspects, such as:
- a) status of the use of the digital-dividend frequency bands;
- b) standards/Recommendations adopted or currently being studied by the other two ITU Sectors related to the topic;
- c) sharing of the digital-dividend frequency band;
- d) harmonization and cooperation at regional level;
- e) the role of the digital dividend in saving financing, cost savings on the transition to digital, and best experience and practice in this regard;
- f) use of the digital dividend to help bridge the digital divide, especially for the development of communication services for rural and remote areas;
- g) guidelines on the transition to digital sound broadcasting, focusing on the experiences of those countries that have completed this process.

¹ These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

3 Expected output

- a) A report reflecting the studies outlined in §§ 2.1, 2.2, 2.3 2.4, 2.5, 2.6 and 2.7 above.
- b) Periodic dissemination of relevant data emanating from the organizations and groups listed in § 8 below. Periodic updates on studies taking place in the other ITU Sectors.
- c) National experiences on strategies and socio-economic aspects of the introduction of new broadcasting technologies, services and capabilities.

4 Timing

An annual progress report is expected at each study group meeting.

5 Proposers/sponsors

Brazil, Mexico, APT.

6 Sources of input

- 1) Collection of related contributions and data from Member States and ITU-D Sector Members, and those organizations and groups listed in § 9 below.
- 2) Updates and outputs of ITU-R and ITU-T study groups; relevant Recommendations and reports related to digital broadcasting.
- 3) Collection of information on the impact on developing countries of transition to digital broadcasting, re-planning and interactivity.
- 4) Outputs of WTDC Resolution 9 (Rev. Buenos Aires, 2017), including relevant Recommendations, guidelines and reports.

7 Target audience

Target audience	Developed countries	Developing countries
Telecom policy-makers	Yes	Yes
Telecom regulators	Yes	Yes
Service providers/operators	Yes	Yes
Broadcasting operators	Yes	Yes
ITU-D programme	Yes	Yes

a) Target audience – Who specifically will use the output

Beneficiaries of the output are expected to be middle and higher-level managers in broadcasters, telecommunication/ICT operators and regulators worldwide.

b) Proposed methods for implementation of the results

Activities include conducting technical studies, observing best practices, and developing comprehensive reports serving the target audience's interests.

8 Proposed methods of handling the Question or issue

a) How?

1) Within a study group:

Question (over a multi-year study period)

 \checkmark

2) Within regular BDT activity (indicate which programmes, activities, projects, etc., will be involved in the work of the study Question):

Programmes

 \checkmark

Projects

 \checkmark

Expert consultants

V

Regional offices

 \checkmark

3) In other ways – describe (e.g. regional, within other organizations with expertise, jointly with other organizations, etc.)

b) Why?

To be defined in the workplan.

9 Coordination and collaboration

The ITU-D study group dealing with this Question should coordinate closely with:

- Other ITU-R and ITU-T study groups dealing with similar issues, and in particular other relevant ITU-D groups, for example the ITU-D Working Group on Gender Issues
- The Technical Committee of the Inter-Regional Broadcasting Union
- UNESCO and relevant international and regional broadcasting organizations, as appropriate
- The Director of the Telecommunication Development Bureau (BDT) shall, through the appropriate BDT staff (e.g. regional directors, focal points) provide information to rapporteurs on all relevant ITU projects in different regions. This information should be provided to the meetings of the rapporteurs when the work of the programmes and regional offices is in the planning stages and when it is completed.

10 BDT programme link

WTDC Resolutions 10 (Rev. Hyderabad, 2010), Resolution 9 (Rev. Buenos Aires, 2017), Resolution 17 (Rev. Buenos Aires, 2017) and Resolution 33 (Rev. Dubai, 2014)

Links to BDT programmes aimed at fostering the development of telecommunication/ICT networks as well as relevant applications and services, including bridging the standardization gap.

11 Other relevant information

As may become apparent within the life of the Question.