

QUESTION 6/2

ICT and climate change

1 Statement of the situation or problem

The issue of climate change has emerged as a global concern and requires global collaboration by all concerned, in particular the developing countries (which are the most vulnerable group of countries with respect to climate change). International initiatives in this domain are seeking to achieve sustainable development and identify ways and means in which ICTs can monitor such climate change and reduce overall global greenhouse gas (GHG) emissions.

ITU-T Study Group 5 is the lead study group for study of ICT environmental aspects of electromagnetic phenomena and climate change, including design methodologies to reduce environmental effects, such as recycling related to ICT facilities, equipment, and that ITU-R Study Group 7 (Science services) is the lead study group for studies related to the use of radio technologies, systems and applications, including satellite systems, for environment and climate-change monitoring and climate-change prediction.

In this respect, the outcomes of ITU-T and ITU-R resolutions and Recommendations, and in particular Resolution 73 (Rev. Dubai, 2012) of the World Telecommunication Standardization Assembly (WTSA) and Resolution 673 (Rev. WRC-12) of the World Radiocommunication Conference should serve as a basis for the study of this Question.

2 Question or issue for study

There are a variety of issues that members will address within the four coming years of this Question. It is expected that the following steps for the study will play a major role in the future in order to meet the objective of this Question:

- a) In close collaboration with the relevant BDT programme(s), identify the regional needs for such applications for developing countries.
- b) Elaborate a methodology for the implementation of this Question, in particular gathering evidence and information regarding current best practices on how ICTs can help reduce overall GHG emissions, taking into consideration progress achieved by ITU-T and ITU-R in this regard.
- c) Consider the role of Earth observation in climate change, as determined by the implementation of Resolution 673 (Rev. WRC-12), on radiocommunication use for Earth observation applications, in order to enhance the knowledge and understanding of developing countries in respect of the utilization and benefits of relevant applications in connection with climate change.
- d) Develop best-practice guidelines for the implementation of relevant Recommendations adopted by ITU-T as a result of the implementation of Resolution 73 (Rev. Dubai, 2012), both for monitoring climate changes and reducing the impact of climate change using the action plan of WTSA Resolution 44 (Rev. Dubai, 2012), in particular programmes 1, 2, 3 and 4 of that resolution.

3 Expected output

The output will be a report on the results of the work concluded for each step identified above, taking into account the specific needs of developing countries. Other outputs could be the organization of workshops and seminars for the developing countries, in relation with the relevant ITU-D programme and in consultation with the relevant ITU-T and ITU-R study groups.

4 Timing

The output will be generated on a yearly basis. The output for the first year will be analysed and assessed in order to update the work for the next year, and so on. An interim report will be produced by 2016. The final report is due by the end of 2017.

5 Proposers/sponsors

The Question was approved by WTDC-14.

6 Sources of input

Contributions are expected from:

Member States, Sector Members and Associates, as well as inputs from:

- a) Relevant BDT programmes, and particularly ICT initiatives successfully implemented for climate change
- b) Regional needs as identified by relevant questionnaires and/or workshops on the subject
- c) Regional and/or national action plans and/or results in combating climate change
- d) Progress achieved by ITU-T and ITU-R study groups in this domain, in particular the results of the Joint Coordination Activity on ICTs and climate change (JCA-ICTCC)
- e) Progress achieved by the United Nations Intergovernmental Panel on Climatic Change (IPCC) and other similar initiative(s).

7 Target audience

Target audience	Developed countries	Developing countries ¹
Telecom policy-makers	Yes	Yes
Telecom regulators	Yes	Yes
Service providers/operators	Yes	Yes
Manufacturers	Yes	Yes

a) Target audience – Who specifically will use the output

The output of this Question will be used by both developed and developing countries, and in particular the least developed countries (LDCs), small island developing states (SIDS), landlocked countries (LLDCs) and countries with economies in transition.

b) Proposed methods for implementation of the results

Within Study Group 2.

8 Proposed methods of handling the Question or issue

Close coordination is essential with ITU-D programmes, and with other relevant ITU-D study Questions, ITU-R study groups dealing with ICT for climate change and ITU-T Study Group 5.

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

a) How?

- 1) Within a study group:
 - Question (over a multi-year study period)
- 2) Within regular BDT activity:
 - Programmes
 - Projects
 - Expert consultants
- 3) In other ways – describe (e.g. regional, within other organizations, jointly with other organizations, etc.)

b) Why?

To ensure that the work and output of this study Question is not duplicated and that there is better collaboration among BDT, the other ITU Sectors, Sector Members and other United Nations agencies.

9 Coordination and collaboration

- Regular ITU-D activities
- Other study group Questions or issues
- Regional organizations, as appropriate
- Work in progress in the other ITU Sectors.

10 BDT programme link

Objective 5, Output 5.1.

11 Other relevant information

To be determined during the implementation of this Question.