World Telecommunication Development Conference

RESOLUTION 66 (Hyderabad, 2010)

Information and communication technology and climate change

The World Telecommunication Development Conference (Hyderabad, 2010),

Recalling

- a) Resolution 35 (Kyoto, 1994) of the Plenipotentiary Conference, on telecommunication support for the protection of the environment;
- b) § 20 of the Geneva Plan of Action of the World Summit on the Information Society, on eenvironment, calling for the establishment of monitoring systems using information and communication technologies (ICTs) to forecast and monitor the impact of natural and man-made disasters, particularly in developing countries;
- c) Resolution 34 (Rev. Doha, 2006) of the World Telecommunication Development Conference, on the role of telecommunications/ICTs in early warning and mitigation of disasters and humanitarian assistance;
- d) Resolution 136 (Antalya, 2006) of the Plenipotentiary Conference, on the use of telecommunications/ICTs for monitoring and management in emergency and disaster situations for early warning, prevention, mitigation and relief;
- e) Resolution 673 (Geneva, 2007) of the World Radiocommunication Conference, on the use of radiocommunications for Earth observation applications, in collaboration with the World Meteorological Organization (WMO);
- f) the outcomes of the United Nations Climate Change Conference (Bali, Indonesia, 3-14 December 2007), highlighting the role of ICTs as both a contributor to climate change and an important element in tackling the associated challenges;
- g) the chairman's report adopted at the ITU Symposium on ICTs and Climate Change, held in Kyoto on 15-16 April 2008, in order to raise awareness of the importance and opportunities of using ICTs to mitigate and address the effects of climate change;
- h) Resolution 73 (Johannesburg, 2008) of the World Telecommunication Standardization Assembly, on ICTs and climate change, defining the role of the ITU Telecommunication Standardization Sector (ITU-T) in this area;
- i) Question 22/2 of Study Group 2 of the ITU Telecommunication Development Sector, dealing with the utilization of ICTs for disaster management, resources and active and passive space-based sensing systems as they apply to disaster and emergency relief situations, and the anticipated results of this Question;
- *j*) Resolution 1307 adopted by the 2009 session of the ITU Council, ITU studies having shown that ICT is one of the critical elements, if not the fundamental element, in combating climate change, in terms of monitoring climate change and the role it can play in any international agreement in this area, in addition to mitigating the effects of climate change in many cases;
- k) Opinion 3 (ICT and the environment) of the World Telecommunication Policy Forum (Lisbon, 2009), which highlighted the importance of the work associated with climate change in its many facets, including the global problems of the distribution of food, as well as the need for study on environmentally safe disposal and recycling of discarded ICT equipment;

- *l)* the outcomes of the United Nations Climate Change Conference (Copenhagen, Denmark, 7-16 December 2009);
- m) the Nairobi Declaration on the Environmentally Sound Management of Electrical and Electronic Waste, and the adoption by the ninth Conference of the Parties to the Basel Convention of the Work Plan for the Environmentally Sound Management of E-waste, focusing on the needs of developing countries,

taking into consideration

- a) that the United Nations Intergovernmental Panel on Climate Change (IPCC) estimated that global greenhouse gas (GHG) emissions had risen by more than 70 per cent since 1970, having an effect on global warming, changing weather patterns, rising sea-levels, desertification, shrinking ice cover and other long-term effects;
- b) that climate change is acknowledged as a threat to all countries and calls for a global response;
- c) the role ITU can play in promoting green ICTs to mitigate climate-change effects;
- d) that the consequences of developing countries' lack of preparation in the past have recently come to light, and that they will be exposed to incalculable dangers and considerable losses, including the consequences of rising sea levels for many coastal areas in developing countries;
- e) that the strategic plan for the Union for 2012-2015 gives clear priority to combating climate change using ICTs;
- f) that radio-based remote sensing applications on board satellites are the main global observation tools employed by the Global Climate Observation Systems for climate monitoring, disaster prediction, detection and mitigation of the negative effects of climate change;
- g) that the role of ICTs in tackling the challenge of climate change encompasses a wide array of activities, including, but not limited to: the development of energy-efficient devices, applications and networks; the development of energy-efficient working methods; the implementation of satellite and ground-based remotesensing platforms for environmental observation, including weather monitoring; and the use of ICTs to warn the public of dangerous weather events and provide communication support for governmental and non-governmental aid providers,

aware

- a) that ICTs also contribute to emissions of greenhouse gases, a contribution which, although relatively small, will grow with the increased use of ICTs, and that the necessary priority must be given to reducing greenhouse gas emissions from equipment;
- b) that ICTs will make a major contribution to mitigating and adapting to the effects of climate change, as well as monitoring changes,

noting

- a) current and future work on ICTs and climate change, including the work in relevant ITU study groups such as ITU-T Study Group 5, which focuses on the study of ICT environmental aspects of electromagnetic phenomena and climate change;
- b) the use of ICTs as energy-efficient and eco-friendly working methods, as exemplified by the Virtual International Symposium on ICTs and Climate Change (23 September 2009, Seoul, Republic of Korea);

- c) that it is important to facilitate an environment in which ITU Member States, Sector Members and other stakeholders may cooperate to obtain and effectively use remote-sensing data for research in climate change, disaster management and public administration purposes;
- d) the positive impact of ICTs in mitigating climate change, insofar as they offer more energyefficient alternatives to other applications by providing more efficient energy-management systems (buildings/homes) and distribution systems (smart grid),

resolves

1 to give priority to ITU-D activities in this area and to providing the necessary support, while ensuring appropriate coordination among the three ITU Sectors on a full range of issues, including, for example, studies on the impact of non-ionizing radiation;

2 to continue and further develop ITU-D activities on ICTs and climate change in order to contribute to the wider global efforts to moderate climate change being made by the United Nations;

3 to include, as a priority, assistance to developing countries in strengthening their human and institutional capacity in tackling ICTs and climate change, as well as in areas such as climatechange adaptation, as a key element of disaster-management planning,

instructs the Director of the Telecommunication Development Bureau

1 to formulate a plan of action for the role of ITU-D in this regard, taking into account the role of the other two Sectors;

2 to ensure that the plan of action is implemented under the relevant programme of the Hyderabad Action Plan dealing with ICTs and climate change, taking into account the needs of developing countries, and cooperating closely with the study groups of the other two Sectors and with ITU-D Study Group 2 in its implementation of the relevant Questions on ICTs and climate change;

3 to promote liaison with other relevant organizations in order to avoid duplication of work and optimize the use of resources:

- 4 to organize, in close collaboration with the Directors of the Radiocommunication Bureau and the Telecommunication Standardization Bureau and with other competent bodies, workshops, seminars and training courses in developing countries at the regional level for the purpose of raising awareness and identifying key issues;
- 5 to report on progress on the implementation of this resolution annually at the meeting of the Telecommunication Development Advisory Group;

6 to ensure, in the implementing of the Hyderabad Action Plan, that appropriate resources are allocated for initiatives related to ICTs and climate change,

instructs the Telecommunication Development Advisory Group

to consider possible changes to working methods in order to meet the objectives of this resolution, such as extending the use of electronic means, virtual conferencing, teleworking, etc.,

invites Member States, Sector Members and Associates

1 to continue to contribute actively to the ITU-D work programme on ICTs and climate change;

- 2 to continue or initiate public and private programmes that include ICTs and climate change, giving due consideration to relevant ITU initiatives;
- 3 to support and contribute to the wider United Nations process on climate change;
- 4 to take necessary measures to reduce the effects of climate change by developing and using more energy-efficient ICT devices, applications and networks;
- 5 to continue supporting the work of the ITU Radiocommunication Sector in remote sensing (active and passive) for environmental observation in accordance with relevant resolutions adopted by radiocommunication assemblies and world radiocommunication conferences.