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| PLENARY MEETING | | **Addendum 13 to Document WTDC-17/21-E** |
|  | | **8 September 2017** |
|  | | **Original: Arabic** |
| Arab States | | |
| revision of resolution 34 | | |
| The role of telecommunications/information and communication technology in disaster preparedness, early warning, rescue, mitigation, relief and response | | |
|  | | |
| **Priority area:**  – Resolutions and Recommendations  **Summary:**  –  **Expected results:**  –  **References:**  – | | |

**MOD** ARB/21A13/1

RESOLUTION 34 (Rev. Buenos aires, 2017)

The role of telecommunications/information and communication   
technology in disaster preparedness, early warning, rescue,   
mitigation, relief and response

The World Telecommunication Development Conference (Buenos Aires, 2017),

recalling

*a)* Resolution 36 (Rev. Guadalajara, 2010) of the Plenipotentiary Conference, on telecommunications/information and communication technologies (ICTs) in the service of humanitarian assistance;

*b)* Resolution 136 (Rev. Busan, 2014) of the Plenipotentiary Conference, on the use of telecommunications/ICTs for monitoring and management in emergency and disaster situations, and for early warning, prevention, mitigation and relief;

*c)* Resolution 644 (Rev.WRC-12) of the World Radiocommunication Conference (WRC), on radiocommunication facilities for disaster mitigation and relief operations;

*d)* Resolution 646 (Rev.WRC‑15) of WRC, on public protection and disaster relief;

*e)* Resolution 647 (Rev.WRC‑15) of WRC, on radiocommunication aspects, including spectrum management guidelines, for early warning, disaster prediction, detection, mitigation and relief operations relating to emergencies and disasters;

*f)* Article 5 of the International Telecommunication Regulations, on safety of life and priority of telecommunications;

*g)* Resolution 182 (Rev. Busan, 2014) of the Plenipotentiary Conference, on the role of telecommunications/ICTs in regard to climate change and the protection of the environment,

considering

*a)* that the Intergovernmental Conference on Emergency Telecommunications (Tampere, 1998) (ICET-98) adopted the Convention on the Provision of Telecommunication Resources for Disaster Mitigation and Relief Operations (Tampere Convention) and that this convention came into force in January 2005;

*b)* that ITU launched two new initiatives during the 2nd Global Forum on Emergency Telecommunications (Kuwait, 2016): the ITU Network of Volunteers for Emergency Telecommunications and the Global Emergency Fund for Rapid Response;

*c)* that the second Tampere Conference on Disaster Communications (Tampere, 2001) (CDC‑01) invited ITU to study the use of public mobile networks for early warning and the dissemination of emergency information and the operational aspects of emergency telecommunications such as call prioritization;

*d)* that the World Radiocommunication Conference (Geneva, 2015), in its Resolution 646 (Rev.WRC‑15), encouraged administrations to satisfy temporary needs for frequencies in emergency and disaster-relief situations, to utilize both existing and new technologies and solutions (satellite and terrestrial) for satisfying interoperability requirements and furthering the goals of public protection and disaster relief and to facilitate cross-border circulation of radiocommunication equipment intended for use in emergency and disaster-relief situations through mutual cooperation and consultation without hindering national legislation;

*e)* that Resolution 646 (Rev.WRC‑12) likewise recommends administrations to use regionally harmonized frequency bands for public protection and disaster relief to the maximum extent possible, taking into account the national and regional requirements and having regard to cooperation with other countries concerned;

*f)* that the World Radiocommunication Conference (Geneva, 2012), in its Resolution 644 (Rev.WRC‑12), resolved that the ITU Radiocommunication Sector (ITU‑R) continue to study, as a matter of urgency, those aspects of radiocommunications/ICTs that are relevant to early warning, disaster mitigation and relief operations, such as decentralized means of telecommunications/ICTs that are appropriate and generally available, including amateur terrestrial and satellite radio facilities, mobile and portable satellite terminals, as well as the use of passive space‑based sensing systems;

*g)* that the World Radiocommunication Conference (Geneva 2012) in Resolution 647 (Rev.WRC-15) resolved that the Radiocommunication Bureau, through the study groups, study those aspects of radiocommunications/ICTs that are relevant to early warning, disaster prediction, detection, mitigation and relief operations taking into account Resolution ITU‑R 55;

*h)* that the World Radiocommunication Conference (Geneva, 2012), in its Resolution 647 (Rev.WRC‑12), instructed the Director of the Radiocommunication Bureau (BR) to continue assisting Member States to provide BR with information of interest, in particular updated contact information of the radiocommunication service related to emergency situations and relief, for inclusion in the database, in application of Resolution ITU-R 55;

*i)* that Resolution 647 (Rev.WRC‑12) likewise invites the Director of the Telecommunication Standardization Bureau (TSB) and the Director of the Telecommunication Development Bureau (BDT) to collaborate closely with the Director of BR to ensure that a consistent and coherent approach is adopted in the development of strategies in response to emergency and disaster situations;

*j)* the work of the ITU‑R and ITU Telecommunication Standardization Sector (ITU‑T) study groups in adopting Recommendations that have helped to provide technical information on satellite and terrestrial radiocommunication systems and wired networks and their role in disaster management, including important Recommendations pertaining to the use of satellite networks in times of disasters;

*k)* the work of the ITU‑T study groups in developing and adopting Recommendations for priority/preferential emergency telecommunications and emergency telecommunication services (ETS), including consideration of use of both terrestrial and wireless telecommunication systems during emergencies;

*l)* that the Radiocommunication Assembly (Geneva, 2012) updated Resolution ITU‑R 53‑1 on the use of radiocommunications in disaster response and relief and Resolution ITU‑R 55‑1 on ITU studies of disaster prediction, detection, mitigation and relief;

*m)* that the World Conference on International Telecommunications (Dubai, 2012) adopted provisions regarding the absolute priority of safety-of-life telecommunications, such as distress telecommunications, where technically practicable and in accordance with the relevant articles of the ITU Constitution and Convention and taking due account of the relevant ITU‑T Recommendations;

*n)* that modern telecommunications/ICTs are basic tools for disaster mitigation and relief;

*o)* that mobile and personal communication systems are beneficial for responding to disasters, and should therefore also be used before a disaster to ensure information can be shared with those who need it most;

*p)* the terrible disasters from which many countries suffer, and the disproportionate impact of disasters and of climate change on developing countries;

*q)* that least developed countries (LDCs), landlocked developing countries (LLDCs) and small island developing states (SIDS) are particularly vulnerable to the impact that disasters can have on their economies and infrastructures and lack the capacity to respond to disasters;

*r)* that the requirements of persons with specific needs should be taken into account with respect to disaster warning, response planning and recovery efforts;

*s)* that climate change may be considered to be a major contributing factor to emergencies and disasters affecting humankind;

*t)* the role of the private sector, governments and international and non-governmental organizations in providing telecommunication/ICT equipment and services, expertise and capacity-building assistance to support disaster relief and recovery activities, particularly through the ITU Framework for International Cooperation in Emergencies (IFCE);

*u)* that the ITU Global Forum on Effective Use of Telecommunications/ICT for Disaster Management: Saving Lives (2007) outlined ways for ITU and its members to integrate ICTs into disaster-management plans;

*v)* that a disaster, when it occurs, may extend beyond the borders of a State, and its management may involve the deployment of efforts by more than one country in order to prevent loss of human life and regional economic crisis;

*w)* that coordination between international, regional and national organizations that specialize in disaster management and administrations increases the probability of saving human life when rescue operations are conducted, and thereby mitigates the consequences of a disaster;

*x)* that collaborative work and networking among disaster-management experts is essential;

*y)* that the use of telecommunications/ICTs for sharing of information in the event of a disaster is a powerful decision-making tool for rescue services and operating entities, and for communication with and between citizens,

taking into account

Resolution 60/125, "International cooperation on humanitarian assistance in the field of natural disasters, from relief to development", adopted by the United Nations General Assembly in March 2006,

noting

*a)* § 51 of the Geneva Declaration of Principles adopted by the World Summit on the Information Society (WSIS), on the use of ICT applications for disaster prevention;

*b)* § 20 (c) of the Geneva Plan of Action adopted by WSIS, on e‑environment, which calls for the establishment of monitoring systems, using ICTs, to forecast and monitor the impact of natural and man‑made disasters, particularly in developing countries, LDCs and countries with small economies;

*c)* § 30 of the Tunis Commitment adopted by WSIS, on disaster mitigation;

*d)* § 91 of the Tunis Agenda for the Information Society adopted by WSIS, on disaster reduction;

*e)* thatthe 2012 United Nations Conference on Sustainable Development developed a framework for follow-up, which invites all relevant agencies of the United Nations system and other relevant international organizations to support developing countries and, in particular, LDCs in capacity building for developing resource-efficient and inclusive economies, including through enhancing knowledge and capacity to integrate disaster risk reduction and resilience into development plans;

*f)* the continued pursuit by ITU and other relevant organizations of joint activities being undertaken at the international, regional and national levels to establish internationally agreed means to operate systems for public protection and disaster relief on a harmonized and coordinated basis, and the successful role of BDT through its programme activities in this area;

*g)* that the capability and flexibility of all telecommunication facilities depend upon appropriate planning for the continuity of each phase of network development and implementation;

*h)* the successful role of BDT, in partnership with the ITU membership, with respect to rapid intervention in enabling and facilitating telecommunications/ICTs for countries which have suffered disasters;

*i)* that all phases of disaster operations can be greatly facilitated by national emergency communication plans that enable the pre‑positioning, rapid deployment and effective utilization of ICT equipment;

*j)* that including use of telecommunication/ICT tools in infrastructure development planning can avert the risk of disasters and mitigate their effects,

noting further

*a)* the latest version of the ITU Telecommunication Development Sector (ITU‑D) Handbook on Emergency Telecommunications (2014), the Compendium of the ITU's Work on Emergency Telecommunications (2007), the ITU Handbook on Best Practice on Emergency Telecommunications (2008), and the adoption of Recommendation ITU‑D 13 (Rev. 2005), on effective utilization of the amateur radio services in disaster mitigation and relief operations;

*b)* that further guidance for ITU members on disaster-communication management is provided by the successful conclusions and outputs of ITU‑D Study Group 2, notably under Question 22‑1/2, including the Handbook on Outside Plant for Areas Frequently Exposed to Natural Disasters and an online toolkit which will be updated on a regular basis;

*c)* that the online toolkit maintained by Question 5/2 (continuation of Question 22‑1/2) and BDT serves as a publicly available resource with references and links to all relevant ITU resolutions, Recommendations, reports and handbooks;

*d)* that the ITU regional offices can be particularly helpful prior to and following emergencies, owing to their proximity to affected countries,

recognizing

*a)* that frequent tragic events in the world and the experience of BDT and the ITU membership in this area clearly demonstrate the need for enhanced disaster preparedness and for plans that incorporate consideration of high-quality communications equipment and services as well as reliable telecommunication infrastructure, in order to ensure public safety and assist disaster relief agencies in minimizing risk to human life and to provide the necessary general public information and communication needs in such situations;

*b)* that natural disasters can damage both telecommunication/ICT infrastructures and electricity supplies that power telecommunication/ICT systems and devices, making services inoperable, such that considerations of redundancy and resilience of infrastructure and power supplies become important when planning for disasters;

*c)* that there is a growing general awareness at the global level of the potentially serious negative consequences of climate change,

resolves to instruct the Director of the Telecommunication Development Bureau

1 to continue to ensure that priority consideration is given to emergency communications as an element of telecommunication/ICT development, including continued close coordination and collaboration with ITU‑R and ITU‑T and relevant international organizations; coordination with the Radiocommunication Bureau must take into consideration the outcomes of studies, especially those mentioned in WRC Resolutions 644, 646 and 647, which provide for harmonized models for PPDR networks;

2 to organize a forum on emergency communications every two years, to provide administrations with best practices in terms of mechanisms, procedures and coordination for the use of telecommunication/ICT in emergency situations;

3 to establish contact points at the level of BDT and ITU regional offices, enabling affected States to request direct assistance in terms of emergency communications, and getting assistance; the contact numbers of these points are to be circulated to ITU members; the contact points are also to be responsible for coordinating assistance to disaster-struck countries on the part of ITU and relevant international organizations;

4 to facilitate and encourage the use by members of telecommunications that are appropriate and commonly available for disaster response and mitigation, including those provided by amateur radio services, satellite and terrestrial network services/facilities;

5 to promote, in close collaboration with ITU‑R and ITU‑T, emergency information broadcasting, for example audio and TV broadcasting, mobile messages, etc., taking into account persons with disabilities and specific needs;

6 to support administrations in their work towards the implementation of this resolution as well as the ratification and implementation of the Tampere Convention;

7 to report to the next world telecommunication development conference on the status of ratification and implementation of the Tampere Convention;

8 to support administrations and regulators in those areas identified in this resolution by taking appropriate measures during the implementation of the ITU‑D Action Plan;

9 to continue to support administrations in preparing their national disaster response and relief plans, including consideration of the necessary enabling national regulatory and policy environments to support the development and effective use of telecommunications/ICTs for disaster mitigation, relief and response;

10 to strengthen the role of the ITU regional offices, in coordination with the above-mentioned points of contact, in assisting Member States and Sector Members in developing emergency preparedness plans and early-warning systems, in organizing training workshops on emergency relief and response, in providing equipment training, in fostering collaboration with all parties involved and in helping deploy communication equipment during emergencies;

11 as part of the ITU framework for cooperation in emergencies, to continue providing assistance to administrations, in coordination with the above-mentioned points of contact, within available resources, and in collaboration with the ITU membership and other partners, through the temporary supply of emergency communications equipment and services, especially during the initial phases of disasters;

12 to expedite the study of aspects of telecommunications/ICTs related to flexibility and continuity in the event of disasters, as part of national disaster plans, including promoting the use of broadband networks for emergency communications through the work of the ITU‑D study groups, in collaboration with expert organizations, taking account of the activities of the other ITU Sectors and relevant international organizations; these studies must take into account the opinion of the advisory groups and the recommendations, guidelines and standards relating to technical and operational aspects of providing suitably advanced solutions to meet the needs of civil protection and of telecommunications/ICT for disaster relief; these studies should further take into account the uses and development of existing systems and their likely transition, especially as this concerns national and international operations in many developing countries;

13 in implementing Objective 4.2 for 2020-2023, to work collaboratively with the ITU‑D study Questions, as well as with the other two Sectors, ITU regional offices, the ITU membership and other relevant expert organizations in implementing this resolution, and to report regularly on programme activities and relevant regional initiatives to the study groups;

14 to assist administrations in the use of mobile networks for the timely dissemination of alert messages and warnings in situations of risk or emergency, for those in potentially affected areas;

15 to assist Member States in enhancing and strengthening the use of all available services, including satellite, amateur radio and broadcasting services in emergency situations, when conventional sources of electricity supply or telecommunications are often interrupted;

16 to include in the ITU Academy's training plans programmes on the use of ICTs for disaster management and mitigation;

17 to help activate the two new GET-2016 programmes,

requests the Secretary-General

1 to continue to work closely with the office of the United Nations Emergency Relief Coordinator and other relevant external organizations with a view to further increasing the Union's involvement in, and support to, emergency communications, and to report on outcomes of related international conferences, relief activities and meetings so that the Plenipotentiary Conference (Dubai, 2018) may take any action that it deems necessary;

2 to explore the possibility of introducing a globally harmonized emergency number to supplement existing domestic emergency numbers, taking into account the relevant ITU-T recommendations,

invites

1 the United Nations Emergency Relief Coordinator, the Working Group on Emergency Telecommunications and other relevant external organizations or bodies to ensure follow-up and continue collaborating with ITU, specifically BDT, in working towards implementing this resolution and the Tampere Convention, and supporting administrations and international and regional telecommunication organizations in the implementation of that Convention;

2 Member States to continue to deploy all necessary efforts to integrate disaster risk reduction and resilience into telecommunication development plans, as well as to incorporate ICTs into national or regional disaster-management plans and frameworks, taking note of the specific needs of persons with disabilities, children, older persons, displaced persons and the illiterate in disaster preparedness, rescue, relief and recovery planning, and the importance of collaborating with all stakeholders in all disaster phases;

3 regulators to ensure that disaster mitigation and relief operations make provision for the necessary telecommunications/ICTs, through appropriate national regulations and national disaster plans as well as enabling regulatory and policy environments;

4 ITU‑D to take account of the particular telecommunication requirements of LDCs, LLDCs, SIDS and low-lying coastal countries in terms of disaster preparedness, rescue, relief and recovery;

5 Member States that have not yet ratified the Tampere Convention to take necessary action to do so as appropriate;

6 BDT to consider how space-based technologies can be used to help ITU Member States collect and disseminate data on the effects of climate change and support early warning, having regard to the link between climate change and natural disasters;

7 ITU‑D to take account of the work of ITU‑R study groups and dedicated working groups, considering the increased use of mobile and portable communication devices which can be used by first responders to transmit and receive critical information;

8 Member States to facilitate, to the extent practicable, cross-border circulation of radiocommunication equipment intended for use in emergency situations, rescue and relief operations and disaster-relief situations, through mutual cooperation and consultation, without prejudice to national legislation, in accordance with Resolution 646 (Rev.WRC‑15);

9 Member States to encourage authorized operating companies to inform all users, including roaming users, in good time and free of charge, of the number to be used for calls to the emergency services;

10 Member States to introduce, in addition to their existing national emergency numbers, a globally harmonized national number for access to emergency services, taking into account the relevant ITU‑T Recommendations;

11 Sector Members to make the necessary efforts to enable the operation of telecommunication services in emergency or disaster situations, giving priority, in all cases, to telecommunications concerning safety of life in the affected areas, and providing for such purpose contingency plans;

12 Member States and Sector Members to work together on the study of new digital technologies, standards and related technical issues for improving radio broadcasting systems for sending and receiving information concerning public warning, rescue, disaster mitigation and relief;

13 Member states to consider the appropriate and effective mechanisms to facilitate disaster communications preparedness and response efforts;

14 Member States to coordinate on a regional basis, with the help of ITU bodies and regional and international specialized organizations, in order to draw up regional response plans in the event of a disaster;

15 Member States to develop partnerships, in order to reduce barriers to access to relevant data obtained through the use of telecommunications/ICTs required for the purpose of assisting rescue operations.

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