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International Telecommunication Union
Standardization Sector

WORLD TELECOMMUNICATION STANDARDIZATION ASSEMBLY
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Resolution 79 – Role of telecommunications/information and communication technologies in handling and controlling e-waste from telecommunication and information technology equipment and methods of treating it

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications, and information and communication technologies (ICTs). The ITU Telecommunication Standardization Sector (ITU-T) is a permanent organ of ITU. ITU-T is responsible for studying technical, operating and tariff questions and issuing Recommendations on them with a view to standardizing telecommunications on a worldwide basis.

The World Telecommunication Standardization Assembly (WTSA), which meets every four years, establishes the topics for study by the ITU-T study groups which, in turn, produce Recommendations on these topics.

The approval of ITU-T Recommendations is covered by the procedure laid down in WTSA Resolution 1.

In some areas of information technology which fall within ITU-T's purview, the necessary standards are prepared on a collaborative basis with ISO and IEC.

RESOLUTION 79 (Rev. New Delhi, 2024)

Role of telecommunications/information and communication technologies in handling and controlling e-waste from telecommunication and information technology equipment and methods of treating it

(Dubai, 2012; Geneva, 2022; New Delhi, 2024)

The World Telecommunication Standardization Assembly (New Delhi, 2024),

recalling

a) Resolution 182 (Rev. Bucharest, 2022) of the Plenipotentiary Conference, on the role of telecommunications/information and communication technologies (ICTs) in regard to climate change and the protection of the environment;

b) Resolution 66 (Rev. Kigali, 2022) of the World Telecommunication Development Conference (WTDC), on ICT, environment, climate change and circular economy;

c) Resolution 73 (Rev. New Delhi 2024) of this assembly, on ICTs, environment, climate change and circular economy;

d) § 19 of the Hyderabad Declaration adopted by WTDC-10, stating that the formulation and implementation of policies for proper disposal of e-waste are of great importance;

e) the Basel Convention (March, 1989) on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, which characterizes certain wastes resulting from electrical and electronic assemblies as hazardous;

f) § 20 of Action Line C7 (E-environment) of the Geneva Plan of Action of the World Summit on the Information Society (Geneva, 2003), calling for governments, civil society and the private sector to be encouraged to initiate actions and implement projects and programmes for sustainable production and consumption and the environmentally safe disposal and recycling of discarded hardware and components used in ICT;

g) 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[1],

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

considering

a) that, the amount of e-waste generated is rising in line with increased demand and consumption of increasingly affordable telecommunication/ICT equipment;

b) that only a small part of e-waste is being properly collected and recycled, causing a negative impact on the environment and public health, in particular in developing countries;

c) that ITU and relevant stakeholders (such as the United Nations Environment Programme, United Nations Development Programme for the Basel Convention, United Nations Institute for Training and Research and other relevant organizations) have a key role to play in strengthening coordination between interested parties to study the effects of e-waste;

d) Recommendation ITU-T L.1000 of the ITU Telecommunication Standardization Sector (ITU-T), on the universal power adapter and charger solution for mobile terminals and other handheld ICT devices, Recommendation ITU-T L.1100, on the procedure for recycling rare metals in ICT goods, the ITU-T L.1020 series of Recommendations, on circular economy and circularity, Recommendation ITU-T L.1031, on the guideline for the development of an e-waste management system and achieving the e-waste targets of the Connect 2030 Agenda, and Recommendation ITU-T L.1070, on global digital sustainable product passport opportunities to achieve a circular economy;

e) that telecommunication/ICT equipment may be used internationally and that there is a need for an international approach on e-waste management,

recognizing

a) that governments have an important role to play in limiting the impact of e-waste by formulating appropriate strategies and policies and promoting circularity of telecommunication/ICT equipment;

b) that the growing availability and reliability of data can help to develop efficient policies for environmentally sustainable telecommunication/ICT equipment lifecycle management;

c) that most of the e-waste from the telecommunication/ICT sector may end up in the informal sector without formal disposal procedures;

d) that telecommunication/ICT stakeholders, including manufacturers, can make a major contribution to alleviating the impact of e-waste, such as by planning for future recycling at the design stage;

e) that ongoing work and studies in ITU-T Study Group 5 under Question 5/5, on e-waste, circular economy and sustainable supply-chain management, may include aspects of environmental protection and sustainable design/manufacture, recycling of ICT equipment/facilities and secondary raw materials;

f) the various and current efforts in developing countries and regions related to e-waste management, notwithstanding the challenges that still persist;

g) the need to increase awareness of effective management of e-waste in developing countries;

h) the impact of counterfeit ICT devices on e-waste generation;

i) the role of circular economy in reducing the global volume of e-waste and moving from the traditional linear production/consumption pattern to one that is sustainable;

j) that there is a lack of tools for monitoring, measuring and assessing the environmental impacts of both e-waste and telecommunications/ICTs;

k) that the informal sector remains the predominant sector for handling e-waste in developing countries;

l) that sustainable management of e-waste is essential to achieve the United Nations Sustainable Development Goals;

m) ongoing work in Study Group 2 of the ITU Telecommunication Development Sector under Question 6/2, on ICTs and the environment, studying strategies to develop a responsible approach to, and comprehensive treatment of, telecommunication/ICT waste;

n) that digitalization through ICTs can be a useful way of optimizing e-waste management to achieve net zero targets;

o) the benefits of repurposing telecommunication/ICT devices for new uses extends their lifespan,

recognizing further

a) that large quantities of used, old, obsolete and unserviceable telecommunication/ICT hardware and equipment are exported to developing countries for supposed reuse;

b) that many developing countries are suffering from severe environmental hazards, such as water pollution and health risks, due to e-waste, including from the influx of new telecommunications/ICTs;

c) that children, pregnant women and people working in recycling are particularly vulnerable to the negative health impacts of e-waste exposure;

d) that the availability of counterfeit telecommunication/ICT hardware and equipment in developing countries exacerbates the challenge of handling and controlling e-waste;

e) that countries are striving to establish effective strategies for e-waste management and promote circularity within the ICT sector,

resolves to instruct the Director of the Telecommunication Standardization Bureau, in collaboration with the Director of the Telecommunication Development Bureau

1 to pursue and strengthen the development of ITU activities in regard to handling and controlling e-waste from telecommunication and information technology equipment and methods of treating it, in particular in developing countries;

2 to assist developing countries to undertake proper assessment of the magnitude/quantity of e-waste generated in a harmonized manner;

3 to address the handling and controlling of e-waste and to contribute to global efforts designed to deal with the increasing hazards which arise therefrom;

4 to work in collaboration with the relevant stakeholders, including academia and relevant organizations, and to coordinate activities relating to e-waste among the ITU study groups, focus groups and other relevant groups;

5 to organize seminars and workshops to enhance awareness of the hazards and sustainable management of e-waste, in particular in developing countries, and gauge the needs of developing countries, which are the countries that suffer most from the hazards of e-waste;

6 to assist developing countries and facilitate their work in the implementation of circular-economy principles;

7 to continue promoting e-waste data collection and global databases on e-waste, in collaboration with relevant stakeholders, in order to support effective formulation of regional and national policies and strategies,

instructs Study Group 5 of the ITU Telecommunication Standardization Sector, in collaboration with the relevant ITU study groups

1 to develop and document examples of best practice for handling and controlling e-waste resulting from telecommunications/ICT and methods of treating and recycling it, for dissemination among ITU Member States and Sector Members;

2 to develop ITU-T Recommendations, methodologies and other publications relating to sustainable and reliable management of e-waste resulting from telecommunication/ICT equipment and products, and appropriate guidelines on implementation of these Recommendations

3 to study and develop ITU-T Recommendations and reports on methodologies for estimating the lifespan of telecommunication/ICT equipment and collection systems for e-waste in all geographic areas;

4 to study and develop ITU-T Recommendations and reports, and to promote best practices for recycling and reuse of e-waste and promote the use of secondary/recycled materials;

5 to study the impact of used telecommunication/ICT equipment and products brought into developing countries and give appropriate guidance, taking into account *recognizing further* above, to assist developing countries,

invites Member States

1 to take all necessary measures to handle and control e-waste in order to mitigate the hazards which can arise from used telecommunication/ICT equipment;

2 to cooperate with each other in this area and promote international collaboration;

3 to incorporate e-waste management policies/processes, including their tracking, collection and disposal, in their national ICT policies and strategies, and take adequate measures in this regard;

4 to include both prevention of exposure to the environmental hazards of e-waste and treatment of e-waste in relevant policies/strategies;

5 to raise public awareness of the means and methods available for the general public to recycle e-waste in an environmentally sustainable way;

6 to promote the circular utility of e-waste through reuse and recycling;

7 to collaborate with relevant stakeholders in developing sustainable and comprehensive e-waste management frameworks by adopting relevant ITU-T Recommendations and other international standards;

8 to encourage manufacturers to design durable devices with longer lifespans and further encourage consumers to participate in circular economy by reusing and maintaining user devices,

encourages Member States, Sector Members and Academia

1 to participate actively in ITU-T studies and activities on e-waste, through the submission of contributions and by other appropriate means;

2 to implement ITU-T Study Group 5 Recommendations on sustainable management of e-waste and circularity;

3 to share best practices and raise awareness of the benefits associated with e-waste management, in accordance with relevant ITU-T Recommendations.