

Resolution 79 – The role of ICT in handling and controlling e-waste from telecommunication and information technology equipment and methods of treating it

ESSENCE OF THE RESOLUTION

- **RAPID TECHNOLOGICAL ADVANCEMENT AND IOT IMPACT:** The resolution acknowledges the rapid progress in telecommunications and information technology, leading to increased consumption of electronic equipment. It recognizes the emergence of a new dimension with the widespread adoption of IoT devices, contributing to automation and interaction.
- **INTERNET EXPANSION AND DIGITAL PANDORA'S BOX:** The expansion of 5G and Wi-Fi has opened up new possibilities and challenges regarding the use of IoT devices. The resolution notes the dominance of interconnected devices in the world, especially IoT gadgets.
- **ROLE OF ITU AND RELEVANT STAKEHOLDERS:** Recognizing the role of the International Telecommunication Union (ITU) and relevant stakeholders, the resolution emphasizes the need for coordination to study the effects of e-waste. It mentions specific recommendations related to universal power adapters, recycling rare metals, and sustainable practices.
- **GOVERNMENTAL AND CIRCULAR ECONOMY INITIATIVES:** Governments are acknowledged for their role in formulating strategies, policies, and legislation to limit e-waste. Circular economy initiatives, such as the Circular Economy Action Plans and E-waste Management Rules, are recognized as essential components in addressing the e-waste challenge.
- **ROLE OF DEVELOPING COUNTRIES:** The resolution acknowledges that e-waste from the telecommunication sector often ends up in the informal sector in developing countries. It emphasizes the potential contribution of IoT devices and the telecommunications sector in alleviating the impact of e-waste.
- **SUSTAINABLE DEVELOPMENT GOALS AND AWARENESS:** The resolution emphasizes the importance of sustainable management of e-waste to achieve United Nations Sustainable Development Goals. It also notes the inadequate awareness of effective e-waste management in developing countries.

Aim is to address the rapid technological advancement with the growing problem of e-waste generated by telecommunications and IT equipment.

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LIMITATIONS OF THE RESOLUTION

- **INFORMAL SECTOR DOMINANCE:** The text highlights that the informal sector remains the predominant sector for handling e-waste in developing countries, posing challenges in terms of formal disposal procedures.
- **COUNTERFEIT ICT DEVICES:** The impact of counterfeit ICT devices on e-waste generation is acknowledged, posing an additional challenge to handling and controlling e-waste. It lacks concrete measures to tackle the increasing influx of counterfeit ICT equipment, adding to the e-waste burden.
- **LACK OF MEASUREMENT TOOLS:** The resolution notes a lack of tools for measuring the environmental impacts of e-waste and assessing the environmental impact of telecommunications/ICTs.
- **RESOURCE DEPENDENCY:** Implementing the resolution's recommendations, especially in developing countries, requires significant financial and technological resources.
- **LIMITED ENFORCEABILITY:** Resolutions are not legally binding, relying on voluntary implementation by member states.

A more comprehensive and inclusive approach is crucial to enforce and address informal sector dominance for handling e-waste in developing and un-developing countries.

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MODIFICATIONS RECOMMENDED

- **STERENGHENING CIRCULAR ECONOMY PRACTICES:** Emphasize the need for developing countries to integrate circular economy practices into their national strategies, leveraging initiatives like the Circular Economy Action Plans. Encourage the adoption of sustainable and circular practices across the entire lifecycle of electronic and telecommunication devices.
- **EXPANDING E-WASTE MANAGEMENT RULES:** Advocate for the expansion of E-waste Management Rules, ensuring they cover all aspects of network equipment, including optical fiber, to create a comprehensive regulatory framework.
- **FORMAL DISPOSAL PROCEDURES:** Propose specific measures to enforce formal disposal procedures for e-waste in the telecommunication / ICT sector to prevent informal handling and dumping.
- **GLOBAL COLLABORATION ON COUNTERFEIT DEVICES:** Call for international collaboration to address the issue of counterfeit telecommunication / ICT hardware, proposing joint efforts to curb their availability and mitigate their impact on e-waste generation.
- **ENVIRONMENTAL IMPACT ASSESSMENT TOOLS:** Advocate for the development and standardization of tools to measure the environmental impacts of e-waste and assess the environmental consequences of telecommunications / ICTs, promoting transparency and accountability.
- **ENHANCING ITU'S ROLE:** Suggest specific actions that ITU can take to enhance its role, such as facilitating the development of international standards for sustainable design, manufacture, and recycling of ICT equipment.
- **TECHNOLOGY INTEGRATION FOR E-WASTE TRACKING:** Expand on the recommendation to use Blockchain technology by providing details on how it can be integrated into the entire e-waste management chain for tracking and ensuring ethical practices.
- **INTEGRATION OF AI IN RECYCLING FACILITIES:** Offer specific guidelines for the integration of AI into recycling facilities, including recommendations for standardized sorting processes and the recovery of valuable materials from e-waste.
- **BRIDGE BETWEEN FORMAL AND INFORMAL SECTORS:** Provide practical strategies to create a bridge between the formal and informal sectors in managing e-waste, potentially through training programs, regulatory incentives, or collaborative initiatives.
- **PROMOTING REPAIR AND MAINTENANCE:** Advocate for policies that incentivize consumers to repair and maintain devices instead of frequently replacing them, contributing to a reduction in e-waste generation.

To mitigate the challenges and to tackle e-waste, it's important to enhance ITU's role for developing of standards regarding e-cycling, formal disposal procedure including leveraging latest technologies like Block Chain and Artificial Intelligence.