

WORLD TELECOMMUNICATION STANDARDIZATION
ASSEMBLY
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**Resolution 96 – ITU Telecommunication
Standardization Sector studies for combating
counterfeit and tampered
telecommunication/information and
communication technology devices**



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.

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RESOLUTION 96 (Rev. New Delhi, 2024)

ITU Telecommunication Standardization Sector studies for combating counterfeit and tampered telecommunication/information and communication technology devices

(Hammamet, 2016; New Delhi, 2024)

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

recalling

- a)* Resolution 188 (Rev. Bucharest, 2022) of the Plenipotentiary Conference, on combating counterfeit and tampered telecommunication/information and communication technology (ICT) devices;
- b)* Resolution 177 (Rev. Bucharest, 2022) of the Plenipotentiary Conference, on conformance and interoperability (C&I);
- c)* Resolution 176 (Rev. Bucharest, 2022) of the Plenipotentiary Conference, on measurement and assessment concerns related to human exposure to electromagnetic fields (EMF);
- d)* Resolution 79 (Rev. Kigali, 2022) of the World Telecommunication Development Conference (WTDC), on the role of telecommunications/ICTs in combating and dealing with counterfeit and tampered telecommunication/ICT devices;
- e)* Resolution 47 (Rev. Kigali, 2022) of WTDC, on enhancement of knowledge and effective application of ITU Recommendations in developing countries¹, including C&I testing of systems manufactured on the basis of ITU Recommendations;
- f)* Resolution 72 (Rev. New Delhi, 2024) of this assembly, on measurement and assessment concerns related to human exposure to EMF;
- g)* Resolution 62 (Rev. Kigali, 2022) of WTDC, on assessment and measurement of human exposure to EMF;
- h)* Resolution 182 (Rev. Bucharest, 2022) of the Plenipotentiary Conference, on the role of telecommunications/ICTs in regard to climate change and the protection of the environment;
- i)* Resolution 76 (Rev. New Delhi, 2024) of this assembly, on C&I testing, assistance to developing countries, and a possible future ITU Mark programme;
- j)* Resolution 84 (Rev. Kigali, 2022) of WTDC, on combating mobile telecommunication device theft,

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

recognizing

- a) the negative impact of counterfeit and tampered telecommunication/ICT devices on governments, manufacturers, vendors, operators, consumers and the environment, such as loss of revenues, erosion of brand value/intellectual property rights and reputation, network disruptions, poor quality of service (QoS), loss/theft of user information and potential hazard to public health and safety, as well as the generation of e-waste and discouraging efforts aimed at enhancing service affordability;
- b) that counterfeit and tampered telecommunication/ICT devices may negatively impact on security and privacy for users;
- c) that counterfeit and tampered telecommunication/ICT devices often contain illegal and unacceptable levels of hazardous substances, threatening consumers and the environment;
- d) that some countries have conducted awareness campaigns on counterfeit and tampered device issues and deployed successful solutions including regulations in their markets to deter the spread of counterfeit and tampered telecommunication/ICT devices, which could be taken by other countries as useful experiences and case studies;
- e) that countries face significant challenges in finding effective solutions to combat counterfeit and tampered telecommunication/ICT devices, given the innovative and creative ways used by persons engaged in this illicit activity to evade enforcement/legal measures;
- f) that ITU's Conformity and Interoperability and Bridging Standardization Gap programmes are intended to add value, by bringing clarity to standardization processes and product conformity with international standards;
- g) that providing interoperability, safety and reliability should be a key objective of ITU Recommendations;
- h) the ongoing work of ITU Telecommunication Standardization Sector (ITU-T) Study Group 11 as the leading expert in the study of combating counterfeit and tampered telecommunication/ICT devices at ITU, and also the related work and studies, in particular those of ITU-T Study Groups 5, 17 and 20 and ITU Telecommunication Development Sector Study Group 2;
- i) that industry initiatives have been created to coordinate activity between operators, manufacturers and consumers,

recognizing further

- a) that some countries rely on unique device identifiers, such as International Mobile Equipment Identity (IMEI) in the Equipment Identity Register (EIR), to limit and deter the proliferation of counterfeit and tampered telecommunication/ICT devices;
- b) that, as stated in Resolution 188 (Busan, 2014) of the Plenipotentiary Conference, Recommendation ITU-T X.1255, which is based on the digital object architecture, provides a framework for discovery of identity management information,

noting

- a) that individuals or entities engaged in manufacturing and trading of counterfeit and tampered telecommunication/ICT devices are continually developing and enhancing their capabilities and means of illegal activities to circumvent Member States' and other affected parties' legal and technical efforts to combat counterfeit and tampered products and telecommunication/ICT devices;
- b) that supply and demand economics for counterfeit and tampered telecommunication/ICT devices complicate attempts to tackle the global illegal market, and that no single solution is easily envisaged,

aware

- a) of the current work and outputs of ITU-T Study Group 11, namely Recommendations ITU-T Q.5050 series and other ongoing studies such as guidelines and best practices, including the use of unique telecommunication/ICT device identifiers, for combating counterfeit and tampered telecommunication/ICT devices;
- b) of the current work and studies in ITU-T Study Group 20, on the Internet of Things (IoT), IoT identity management and the increasing importance of IoT devices to society;
- c) of the ongoing work and studies in ITU-T Study Group 2, on operational aspects of service provision and telecommunication management, and the importance of identity management for telecommunications;
- d) that there is ongoing cooperation with standards development organizations (SDOs), the World Trade Organization (WTO), the World Intellectual Property Organization (WIPO), the World Health Organization (WHO) and the World Customs Organization (WCO) on matters related to counterfeit and tampered products;
- e) that governments play an important role in combating the manufacture and international trade of counterfeit and tampered products including telecommunication/ICT devices, by formulating and applying the appropriate strategies, policies and legislation;
- f) that tampering with unique telecommunication/ICT device identifiers diminishes the effectiveness of solutions adopted by countries;
- g) of the current related work and studies in ITU-T study groups on emerging technologies, including distributed information-sharing solutions,

considering

- a) that, in general, telecommunication/ICT devices that do not comply with a country's applicable national conformity processes and regulatory requirements or other applicable legal requirements should be considered unauthorized for sale and/or activation on telecommunication networks of that country;

- b)* that a counterfeit telecommunication/ICT device is a product that explicitly infringes the trademark, copies hardware or software designs, or infringes brand or packaging rights of an original or authentic product and, in general, infringes applicable national and/or international technical standards, regulatory requirements or conformity processes, manufacturing licensing agreements, or other applicable legal requirements;
- c)* that a reliable unique identifier shall be unique for each equipment it aims to identify, can only be assigned by a responsible management entity and should not be changed by unauthorized parties;
- d)* that a tampered (making unauthorized changes to) telecommunication/ICT device has components, software, a unique identifier, items protected by intellectual property rights, or trademark tentatively or effectively altered without the explicit consent of the manufacturer or its legal representative;
- e)* that some countries have started implementing measures that aim to deter counterfeit and tampered telecommunication/ICT devices based on an identification mechanism, which can also be effective for the control of tampered telecommunication/ICT devices;
- f)* that tampering telecommunication/ICT devices, especially the ones that clone a legitimate identifier, may diminish the effectiveness of solutions adopted by the countries when addressing counterfeiting;
- g)* that a framework for discovery and management of identity information can assist in combating counterfeiting and tampering of telecommunication/ICT devices;
- h)* that ITU and other relevant stakeholders have key roles to play in fostering coordination between the parties concerned in order to study the impact of counterfeit and tampered telecommunication/ICT devices and the mechanism for limiting their use, and to identify ways of dealing with them both internationally and regionally;
- i)* the importance of maintaining user connectivity,

resolves

- 1 to explore ways and means, within the scope of ITU, to combat and deter counterfeiting and tampering of telecommunication/ICT devices in order to protect governments, telecommunication providers, industry and consumers from the negative impacts of counterfeit and tampered telecommunication/ICT devices;
- 2 that ITU-T Study Group 11 should be the lead study group in the area of combating counterfeit and tampered telecommunication/ICT devices;
- 3 to consider solutions to be used in order to differentiate between authentic/genuine and counterfeit or tampered telecommunication/ICT devices,

instructs the Director of the Telecommunication Standardization Bureau, in close collaboration with the Director of the Telecommunication Development Bureau

- 1 to organize workshops and events across the ITU regions to promote the work in this field, involving all stakeholders and raising awareness of the impact of counterfeit and tampered telecommunication/ICT devices;
- 2 to assist developing countries in preparing human resources to combat the spread of counterfeit and tampered telecommunication/ICT devices, by providing capacity-building and training opportunities based on different technological solutions;
- 3 to work in close collaboration with relevant stakeholders, such as WTO, WIPO, WHO and WCO, on activities relating to combating counterfeit and tampered telecommunication/ICT devices, including restricting the trading, export and circulation of these telecommunication/ICT devices internationally;
- 4 to coordinate activities relating to combating counterfeit and tampered telecommunication/ICT devices through ITU-T Study Group 11 and focus groups;
- 5 to assist Member States in taking the necessary actions to apply relevant ITU-T Recommendations for combating counterfeit and tampered telecommunication/ICT devices, including the use of conformity assessment systems;
- 6 to promote and share information on best practices and emerging trends developed by industry and governments in combating counterfeit and tampered telecommunication/ICT devices,

instructs the Director of the Telecommunication Standardization Bureau

- 1 to collaborate with industry associations, consortia and forums to identify possible technological measures, both software and hardware, that may be developed to deter tampering and the use and spread of counterfeit and tampered telecommunication/ICT devices;
- 2 to submit the results of these activities to the ITU Council for its consideration and required action;
- 3 to involve experts and external entities as appropriate,

instructs the Director of the Telecommunication Standardization Bureau, in close collaboration with the Directors of the Radiocommunication and Telecommunication Development Bureaux

- 1 to assist Member States in addressing their concerns with respect to counterfeit and tampered telecommunication/ICT devices, through information sharing at regional or global level, including conformity assessment systems;

2 to assist all the membership, considering relevant ITU-T Recommendations, in taking the necessary actions to prevent or detect the tampering (making unauthorized changes to) and/or replication of unique telecommunication/ICT device identifiers, and interacting with other SDOs related to these matters,

instructs Study Group 11 of the ITU Telecommunication Standardization Sector, in collaboration with other study groups concerned

1 to continue developing Recommendations, technical reports and guidelines to address the problem of counterfeit and tampered telecommunication/ICT devices and to support the Member States in anti-counterfeiting/tampering activities on different types of devices;

2 to collect, analyse and exchange information about counterfeiting and tampering trends in the telecommunication/ICT sector, study on use of emerging technologies and relevant solutions in combating counterfeit and tampered telecommunication/ICT devices;

3 to study secure identifiers and their potential to be used in combating counterfeit and tampered telecommunication/ICT devices, in collaboration with ITU-T Study Groups 2, 17 and 20;

4 to study methods of assessing and verifying identifiers used for purposes of combating counterfeit and tampered telecommunication/ICT devices;

5 with the involvement of relevant standardization organizations, to develop mechanisms as appropriate for identifying counterfeit and tampered telecommunication/ICT devices, by means of unique identifiers that are resistant to replication and respond to confidentiality/security requirements;

6 to study possible solutions, including frameworks to discover identity management information, that could support combating of counterfeit and tampered telecommunication/ICT devices;

7 to identify a list of technologies/products, used for testing conformance with ITU-T Recommendations, in order to help in efforts to combat counterfeit ICT production,

invites Member States

1 to take all necessary measures, including collaboration, cooperation and exchange of experiences and expertise with other Member States, to combat counterfeit and tampered telecommunication/ICT devices in a country/region, as well as globally;

2 to promote the adoption of national legal and regulatory frameworks to combat counterfeit and tampered telecommunication/ICT devices;

3 to consider measures to mitigate the import, circulation, advertisement and sale of counterfeit and tampered telecommunication/ICT devices from the market;

4 to consider solutions to be used to differentiate between authentic/genuine and counterfeit or tampered telecommunication/ICT devices, e.g. establishing national reference databases of authorized equipment and strengthening support for industry initiatives;

5 to conduct awareness campaigns for consumers on the adverse impact of counterfeit and tampered products and telecommunication/ICT devices on the environment and on their own health, as well as on the degraded reliability, QoS and performance of such telecommunication/ICT devices;

6 to consider making available means for consumers to verify the authenticity of telecommunication/ICT devices,

invites Sector Members

to collaborate with governments, administrations and telecommunication regulators in combating counterfeit and tampered telecommunication/ICT devices,

invites all the membership

1 to participate actively in ITU studies relating to combating counterfeit and tampered telecommunication/ICT devices by submitting contributions;

2 to take the necessary actions to prevent or detect tampering of unique telecommunication/ICT device identifiers, in particular regarding cloned telecommunication/ICT devices;

3 to collaborate and share expertise in this area.