ITU-T Technical Report

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QTR-CICT
Survey report on counterfeit ICT devices in Africa region

Technical Report ITU-T QTR-CICT

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Abstract

The survey on Counterfeit ICT Devices in Africa was aimed at gathering information on challenges, use cases and efforts in place to address the problem of counterfeit ICT devices and collect information from Member States in the region to progress the on-going study on Counterfeit ICT devices, in ITU-T Study Group 11 and ITU- D Study Groups.

The survey explored the perspectives of Africa on counterfeit ICT devices. It also provides background information on the national initiatives to combat ICT counterfeit devices. The report of the survey is organized into five thematic blocks, as a result of responses obtained from the survey. These themes are:
- Common perceptions of counterfeit ICT devices
- Available Laws, Regulations and Enforcement
- Impact Assessment on counterfeit ICT devices
- Existing measures and techniques to combat counterfeit ICT devices
- ITU involvement and a possible creation of a regional group of ITU-T SG11

Conclusions from the findings showed among others that:
- Counterfeit ICT devices are commonly understood to mean "fake and substandard".
- ICT devices perceived to have been counterfeited are mobile phones, tablets and personal computers.
- Affordability and availability are the major reasons for the larger market and higher patronage of counterfeit ICT devices in the Africa Region.
- ITU's involvement in addressing the problem of counterfeit ICT devices through its standardisation work is essential.
- Conformity Assessment Schemes can be used one of the tools to combat counterfeit ICT devices.
- Member States recommend the establishment of an ITU-T SG11 Regional Group for Africa. They would support and participate in such group's activities.

It is therefore concluded from these findings that establishing ITU-T SG11 Regional Group for Africa to provide the regional views and influence ICT standards developments activities, particularly on counterfeit ICT devices, Conformance and Interoperability Testing and other related topics aimed at bridging the ICT digital divide is of essence. This report also recommends improved public sensitization and awareness creation on the negative impacts of counterfeit ICT devices as well as the development of regulatory frameworks to combat counterfeit ICT devices. The report should be used to progress the work currently on-going in ITU-T SG11 Question 8 and Question 11 as well as ITU-D SG 1 & SG 2.

Summary

This technical report contains a survey on Counterfeit ICT Devices in Africa which was aimed at gathering information on challenges, use cases and efforts in place to address the problem of counterfeit ICT devices and collect information from Member States in the Africa to progress the on-going study on Counterfeit ICT devices, in ITU-T Study Group 11 and ITU- D Study Groups. The report explored

the perspectives of Africa on counterfeit ICT devices and provides background information on the national initiatives to combat ICT counterfeit devices.

Change Log

This document contains Version 1 of the ITU-T Technical Report: "Survey report on counterfeit ICT devices in Africa region" approved at the ITU-T Study Group 11 meeting held in Geneva, 15 February 2017.

Keywords

Counterfeiting, ICT devices.

FOREWORD

The International Telecommunication Union (ITU) is the United Nations specialized agency in the field of telecommunications , 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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1. Abbreviations and acronyms

This Recommendation uses the following abbreviations and acronyms:

2G	Second Generation Wireless Telephony
3G	Third Generation Wireless Telephony
4G	Fourth Generation Wireless Telephony
C&I	Conformity and Interoperability
CSPro	Census and Survey Processing System
EMI	Electromagnetic Immunity
ICT	Information and Communications Technology
ITU	International Telecommunication Union
ITU-D SG1&2	International Telecommunication Union – Development Sector Study Group 1&2
ITU-TR	ITU – Technical Report
ITU-T SG11	International Telecommunication Union – Telecommunication Standardization Sector Study Group 11
QoS	Quality of Service
RF	Radio Frequency
SPSS	Statistical Package for Social Sciences
TRIPS	Trade-Related aspects of Intellectual Property Rights
WTO	World Trade Organization

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2. Acknowledgement

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3.   Background of the Study: Introduction

Globally, there is a common perception about the influx of counterfeit ICT devices in both developed and developing countries. The Africa Region is not an exception. The challenges posed by this menace to the present ICT age can be devastating – economically, socially, and environmentally. The lack of official study report in African region to trigger ITU's technical studies and possibly develop Recommendations that could influence decisions and policy directions, leading to solutions to combat counterfeit ICT devices was of interest in commissioning this survey.

During an ITU-T SG11 meeting held on 22 – 29 April, 2015, it was recognised that counterfeit ICT devices pose a lot of challenges in developing countries, particularly the Africa Region. Due to the absence or less available factual findings, SG11 endorsed a proposal to conduct a survey in Africa Region with the aim of gathering empirical information on the nature of the challenges, use cases and efforts in place to address such challenges posed by counterfeit ICT devices. This survey therefore, explored the perspectives of Member States from the Africa Region on the subject of counterfeit ICT devices. The survey was based on questionnaires sent to some selected twenty (20) African countries in the sub-region for which fourteen (14) Member States responded.

3.1.   Overview of Counterfeit ICT Devices

The WTO's Agreement on Trade-Related Aspects of Intellectual Property Rights (the TRIPS Agreement, 1994) defines counterfeit trademark goods as "any goods, including packaging, bearing without authorization a trademark which is identical to the trademark validly registered in respect of such goods, or which cannot be distinguished in its essential aspects from such a trademark, and which thereby infringes the rights of the owner of the trademark in question under the law of the country of importation" (footnote 14 to Article 51). The term "counterfeit" is therefore used in the TRIPS Agreement only in the trademark area. It refers to infringing goods which are defined more precisely than ordinary trademark infringements on the basis that the trademark is identical to or essentially indistinguishable from the original. This text does not touch on the intention behind the use of the counterfeit trademark. It defines a counterfeit product in terms of the closeness of the mark used to a registered product and applies to cases where the goods are the same as for which the trademark is registered. In practice, such infringing goods would typically include cases where a mark is slavishly copied, deliberately to give the impression of identifying a genuine product [1].

3.2.   Impacts of Counterfeit ICT Devices

Counterfeit products are not usually tested nor approved according to any regulatory requirements that may be applicable. The use of counterfeit products can be extremely dangerous. For example, there are reports of deaths due to the explosion of counterfeit batteries, cases of electrocution and fires caused by chargers, and documented instances of these devices containing high levels of hazardous substances such as lead and cadmium. Counterfeit equipment impact several sectors including manufacturers, operators, consumers and governments through loss of revenues, erosion of brand value, loss of goodwill, network disruptions, poor quality of service (QoS) delivery and risks to public health [2]. Each of these sectors needs to respond quickly and uniquely to address the challenges in order to successfully reduce counterfeiting.

Manufacturers of original devices invest huge sums of money in producing quality devices, only for these devices to get to the market and compete with the counterfeit devices. Manufacturers of counterfeit ICT devices do not pay royalties to the owners of patents and copy rights, denying such owners of their expected returns that triggered the investment. Counterfeit mobile devices pose QoS delivery issues. Studies conducted in India and Brazil have shown that such mobile devices failed standard call attempts, high call drop rates and handover failure [3]. Because counterfeit ICT devices are cheaper, consumers prefer to buy them at the expense of the original devices that are relatively

expensive. This directly impacts on the manufacturers' supply chain of genuine devices. In the mobile phone industry counterfeiters have taken advantage of the strong growth and have circumvented the International Mobile Equipment Identity (IMEI) thus shipping thousands of phones with duplicate IMEI through the unapproved national routes [4].

It is also reported that counterfeit equipment have high levels of hazardous substances like lead and cadmium. They are not subjected to extensive testing (i.e. health and safety, electromagnetic compatibility, low voltage) compared to genuine devices and are not normally type approved hence posing a very high safety risk to consumers. Those devices are normally sold without warranty and this denies the consumers the right to have their devices replaced in case they are faulty which is usually the case, thus counterfeit devices have shorter life span and therefore become expensive to the consumer in the long run.

Governments also lose huge sums of money from taxes because of the activities of counterfeiters in the sense that these products gain entry into the market through informal routes and therefore dealers of these devices do not pay duties and taxes. Government has to spend resources needed for other productive sectors to combat these illegal activities. Because counterfeit devices have shorter life span, they also create electronic waste and thus causing environmental and disposal problems to central governments and local authorities.

It is worth noting that whiles some countries, in the Europe, Asia and the US have implemented systems to combat counterfeit ICT devices to protect their markets, very less is known in the Africa Region. Ukraine in 2009 for instance implemented Automatic Information System for Mobile Terminal Registration (AISMTR) to protect her national market from imports of counterfeit mobile phones [5]. There are other negative impacts of counterfeit ICT devices such as cyber-security related threats, facilitating drug trade, terrorism, jeopardizing consumer privacy, impairing safety of digital transactions etc. [3].

3.3. Objectives of the Survey

The objectives of the survey were:
a) To gather information on challenges, use cases and efforts in place to address the problem of counterfeit ICT in Africa.
b) To consider a possible creation of a regional group of ITU-T SG11 in Africa to provide regional views on combating counterfeit ICT devices and C&I testing issues towards Bridging the ICT Standardization Gap between developed and developing countries.
c) To enhance awareness on the impacts of counterfeit ICT devices in the region.
d) To recommend best practices, including regulatory frameworks (in countries where there are none) as well as technical means to combat counterfeit ICT devices.
e) To identify and recommend possible initiatives the ITU could take towards the fight against counterfeit ICT devices.

4. Methodology

This section outlines the methodology used in obtaining the relevant data for analysis, conclusion and recommendations.

4.1. Design of the Study

The study employed both quantitative and qualitative techniques to enable the respondents express their views to aid the researcher with detailed data for analysis.

4.2. Population and Sample Size

The survey was conducted on African countries that are members of the ITU. Twenty (20) countries were randomly selected, out of which fourteen (14) Member States namely; Benin, Guinea, Uganda, Zambia, Sudan, Nigeria, Ghana, Kenya, Mozambique, Zimbabwe, Gambia, Ethiopia, Burundi and Tunisia responded. Respondents were mainly Regulators and Ministries, in charge of ICT.

4.3. Data type and data collection

Primary data was collected for the study with the administration of questionnaires to the respondents. The distribution of the questionnaires was possible with the aid of ITU Head Quarters in Geneva through its Africa Regional Office in Addis Ababa whilst respondents' responses were received via the Internet. The respondents to the questionnaires were mostly Officers from ICT Regulatory Authorities and Ministries in charge of Telecommunications/ICT.

4.4. Data Analysis and Findings

SPSS and CSPro, both statistical data management software were used to collate, process and analyze the data received. The results of this analytical process have been presented using relevant statistical formats such as tables, charts and percentages. The qualitative responses obtained were used to throw more light on the statistical findings.

4.5. Conclusions and Recommendations

Conclusions have been formed out of the findings per the results of the data analysis. Based on these, recommendations have been made to this report.

5. Data Analysis

This section presents the results of data obtained from the survey. The section is organized into five thematic blocks in perspectives of the study objectives. These include:
– Common perceptions of counterfeit ICT devices
– Available Laws, Regulations and Enforcement
– Impact Assessment on counterfeit ICT devices
– Existing measures and techniques to combat counterfeit ICT devices
– ITU involvement and possible creation of a Regional Group of ITU-T SG11

5.1. Common Perceptions of Counterfeit ICT Devices

5.1.1. The Perceived Understanding of a Counterfeit ICT Device

There are common perceptions over the definition and understanding of counterfeit ICT devices in the Africa Region. The survey explored such perceptions with respect to whether a counterfeit ICT device also means either of the following: substandard device, fake device, unregistered device or un-authorized device. Fifty percent (50%) of the respondents indicated their understanding of a "counterfeit ICT device" to mean a "fake device". The figure below presents the results.
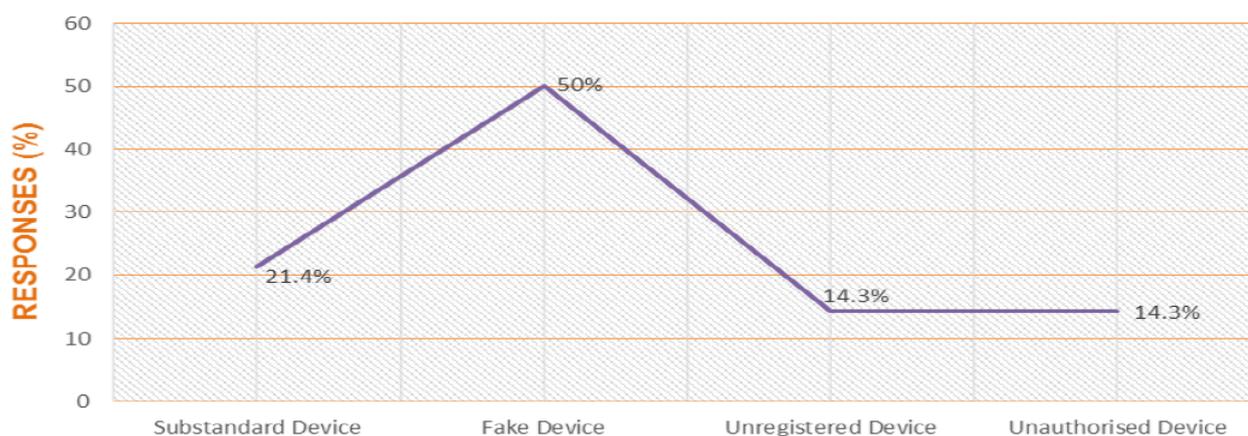
Figure 1 — Understanding of Counterfeit ICT Device (Source: Survey Responses)

5.1.2. Member States' Definition of Counterfeit ICT Device

When respondents were asked to indicate whether their countries have a specific definition for counterfeit ICT Device, only three countries representing 21% were in the affirmative. However, 79% of the remainder representing 11 countries had no definitions. The respondents who responded that there were definitions in their countries did not state what the definitions were however.

**Table 1 — Country Specific Definition of a
Counterfeit ICT Device (Source: Survey responses)**

Responses	No. of Responses	(%) Responses	Cumulative Percentage (%)
Yes	3	21.4	21.4
No	11	78.6	100
Total	14	100	0

5.1.3. Known Counterfeit ICT Device among Member States

Responses to identify specific types of ICT devices known to have been counterfeited indicated that in general, mobile (2G, 3G & 4G enabled) phones and tablets were the most known counterfeited ICT devices in Africa. The chart below depicts the responses obtained. It could be observed from the chart that 2G, 3G/4G enabled mobile phones (also known as smart phones) as well as tablets were known to be the most counterfeited ICT device commonly found in the markets. The results of this analysis could be found on Figure 2 below.
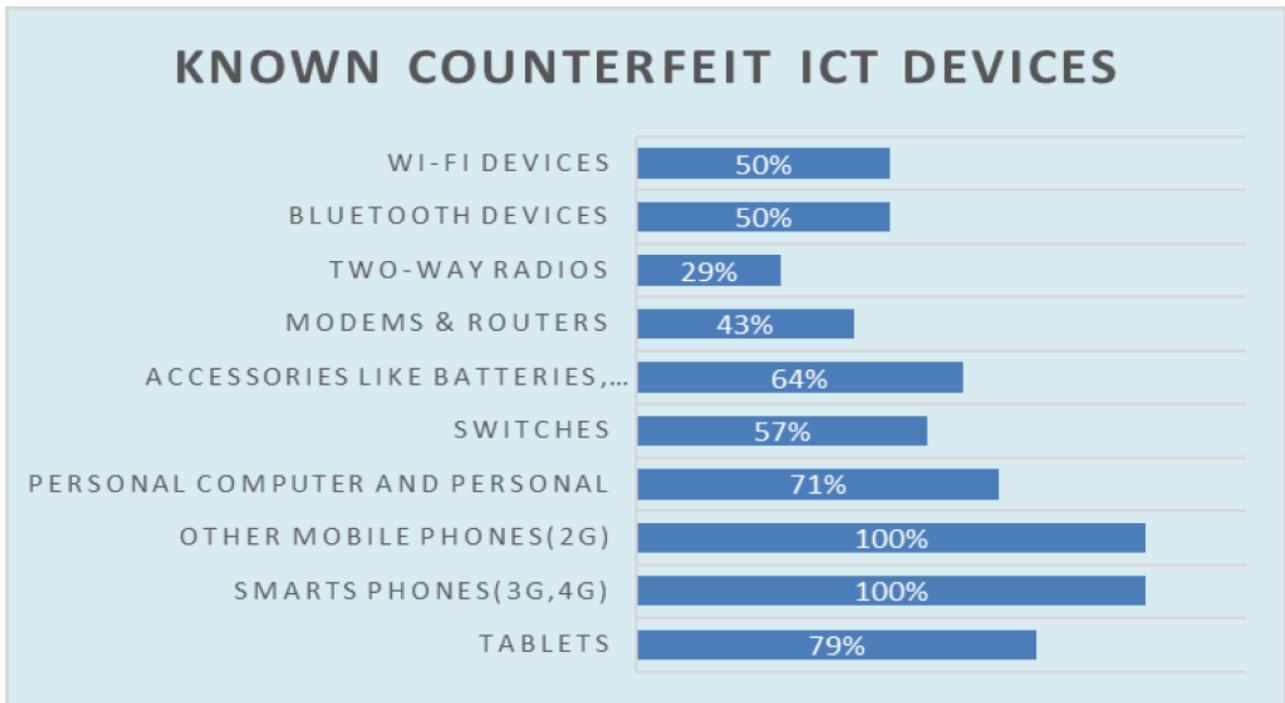
Figure 2 — Known Counterfeit ICT Devices (Source: Survey Responses)

5.1.4. Patronage of Counterfeit ICT Device among Member States

Responses as to why patronages of counterfeit ICT devices are perceived to be on the upsurge revealed that there are "availability" of such devices in the market. Also "affordability" followed as the next influencing factor. Thus, people patronize the counterfeit ICT devices because they are available and affordable in the market. Figure 3 below presents the summary of such analysis.
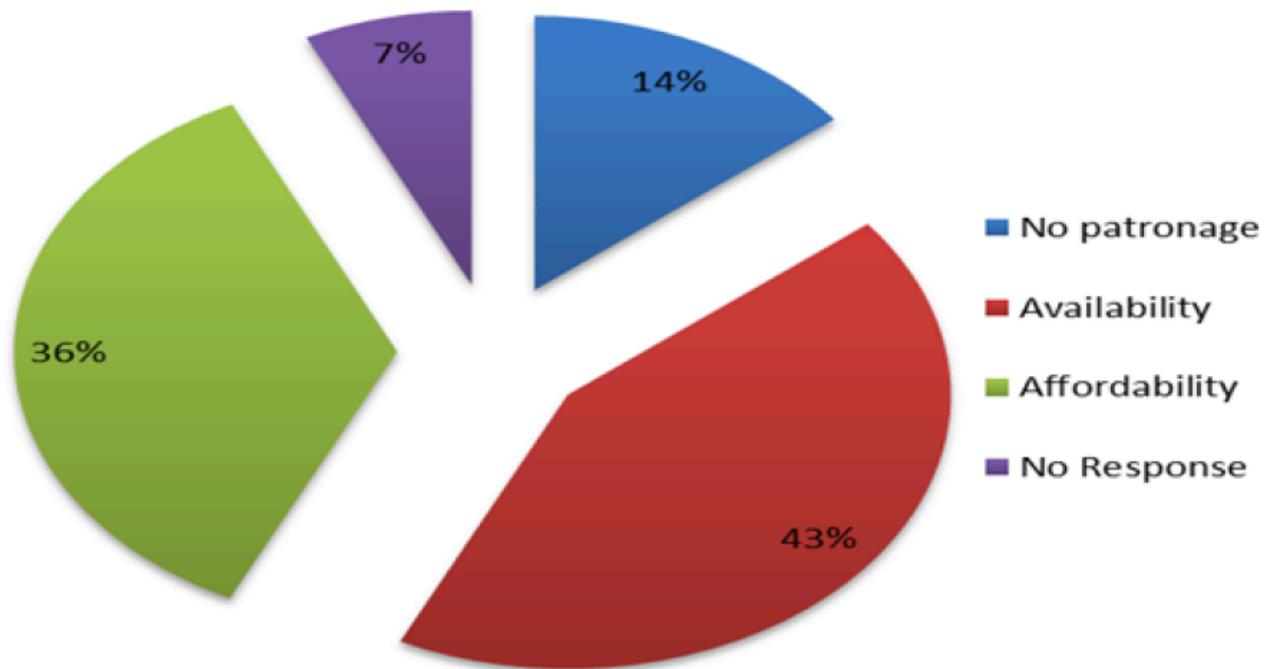
Figure 3 — Reasons for Patronage of Counterfeit ICT Devices in Africa Region (Source: Survey Responses)

5.2. Policies, Laws and Regulations Including Conformity Assessment Laws

5.2.1. Policies, Laws & Regulations on Counterfeit ICT Devices

Table 2 below presents the responses on countries that have national policies, laws and regulations for manufacturing, importation, distribution and usage of ICT devices, which are aimed at combating counterfeit ICT devices. The results indicate a 100% in the affirmative. In Kenya, handling of stolen mobile devices is a crime under "Section 322 of the Penal Code" while Substandard communication devices are prohibited under "Section 9 of the Standards Act, CAP 496".

**Table 2 — Laws and Regulations for Combating
Counterfeit ICT Devices (Source: Survey Responses)**

Responses	No. of Respondents	Percentage (%)	Cumulative Percentage
Yes	14	100.0	100.0
No	0	0	0
Total	14	100	100

5.2.2. Effectiveness of Laws and Regulatory Frameworks

On the assessment of the effectiveness of those existing laws based on a scale of 1 to 5 with 5 being highly effective and 1 being not effective, 50% of the respondents indicated that their national laws and regulations were effective, 21% of them indicated that their national laws and regulations were highly effective. It was however interesting to also know that 14% of the respondents acknowledged low effectiveness of their national laws with the same percentage being neutral. The analyses of these responses are contained in Figure 4 hereunder.
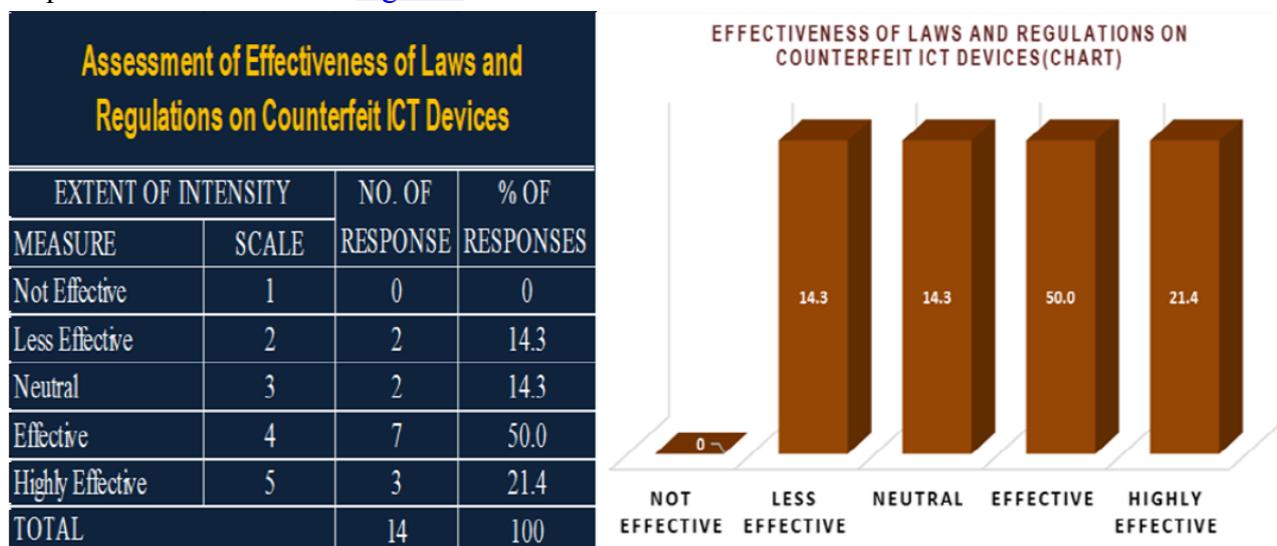
**Figure 4 — Assessment of Effectiveness of Laws and Regulations
on Counterfeit ICT Devices (Source: Survey Responses)**

5.2.3. National Bodies to Fight Against Counterfeit ICT Devices

Table 3 shows responses to whether there were national bodies to fight against counterfeit ICT devices. The results indicate a 100% in the affirmative. That is, all the respondents answered yes – *that there were anti-counterfeiting bodies in place*. The responses also indicated that in most of these countries, the fight against counterfeit in general is made up of stakeholders from Copyright Authorities, Anti-Counterfeit Agencies, National Standards Authorities, Police Service, Revenue Authorities and ICT/Telecom Regulators.

**Table 3 — National Bodies to Fight Against
Counterfeit ICT Devices (Source: Survey Responses)**

Responses	No. of Responses	% of Responses
Cumulative %	Yes	14
100.0	100.0	No
0	0	0

On the assessment of the effectiveness of such national bodies to fight against counterfeit ICT devices based on a scale of 1 to 5 with 5 being highly effective and 1 being not effective, 36% of the respondents indicated that their national bodies were effective in the fight against counterfeit ICT devices whilst 14% indicated that their bodies were not effective. Figure 5 presents these findings.
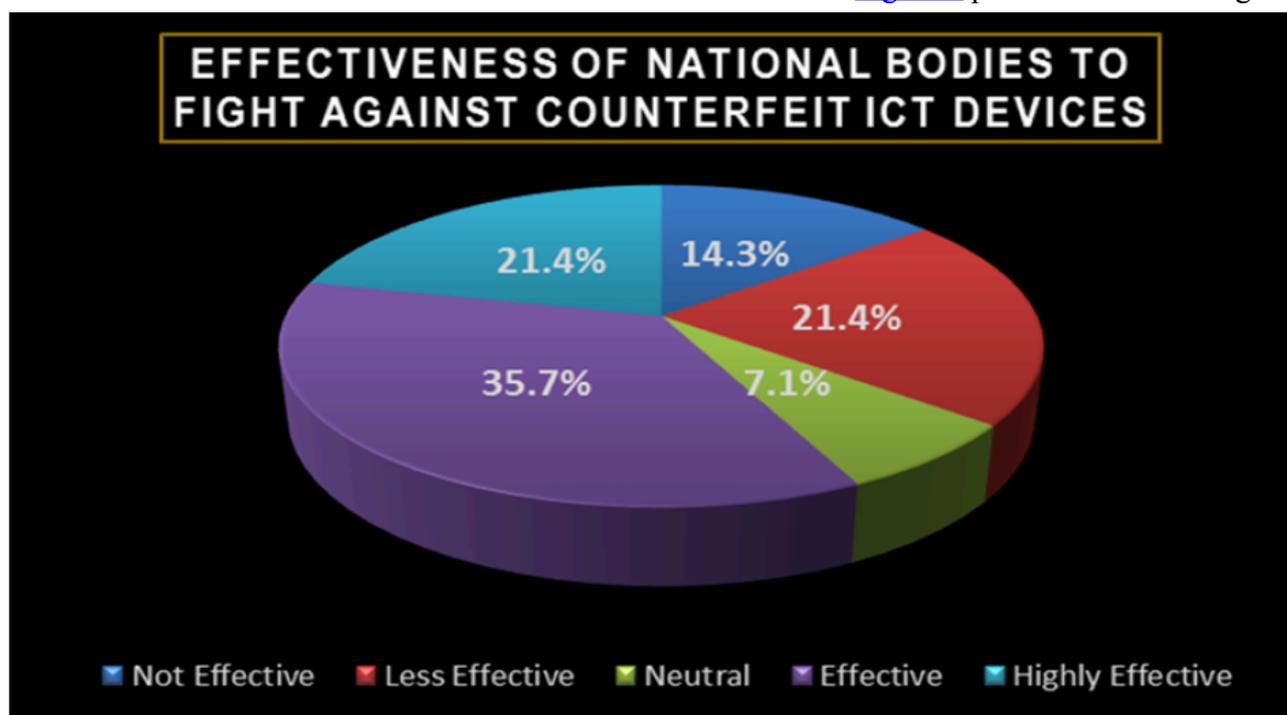
**Figure 5 — Effectiveness of National Bodies to Fight Against
Counterfeit ICT Devices (Source: Survey Responses)**

5.3.   Conformity Assessment Laws and Regulations

On this issue, 79% of the respondents said that there were laws and regulatory framework that established requirements for ICT devices and services to be legally imported and supplied in the market place whilst 21% of respondents, representing 3 Member States have no such laws and regulations. Figure 6 below shows this assessment while Table 4 presents a list of countries and their relevant laws, regulations and guidelines.
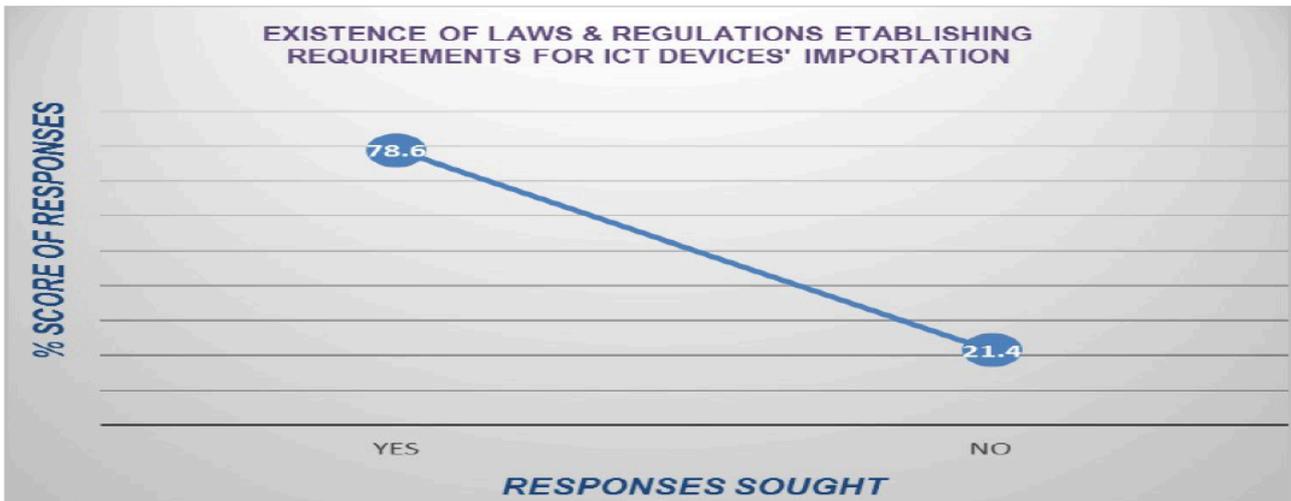
Figure 6 — Existence of Laws & Regulations Etablishing Requirements for ICT Devices Importation (Source: Survey Responses)

Table 4 — Examples of Existing Conformity Assessment Laws/ Regulations/Guidelines in Member States (Source: Survey Responses)

COUNTRY	EXISTING LAW/REGULATIONS/GUIDELINES
Uganda	Minimum Specifications for STBs And IDTVs, Minimum Standards for Telecom Devices Type Approval Guidelines
Gambia	Type approval regulation approved
Nigeria	NCC Act, 2003; Type Approval Regulations; Type Approval Guidelines
Mozambique	Type approval regulation approved in 2009 Ethiopia Standards for short Range devices, Technical Specifications for 2G and 3GTerminals Technical Specifications for corded and cordless Telephones and PABX systems
Ghana	Electronic Communications Act, 2008 (Act 775), Electronic Communication Regulations, (LI 1991 of 2011), Type Approval Guidelines, Technical Specifications for 2G and 3G terminals including other short range devices, Minimum Specification for STBs and IDTvs
Kenya	Kenya Information and Communications (Import, Type Approval and Distribution of Communications Equipment) Regulations, 2010.
Sudan	MRA with Accredited test labs

5.4.   IMPACT ASSESSMENT

This section considered both the negative and positive impacts (if any) of counterfeit ICT devices. The data obtained is presented as per the analysis below.

5.4.1.   Negative effects of counterfeit ICT devices

Responses on the negative effects of counterfeit ICT devices showed "infringement on property and copy rights or trademark" and "threat to the public health and safety" as the two effects that adversely impact the use of counterfeit ICT devices, recording 23% each. Figure 7 depicts the analysis of responses obtained.
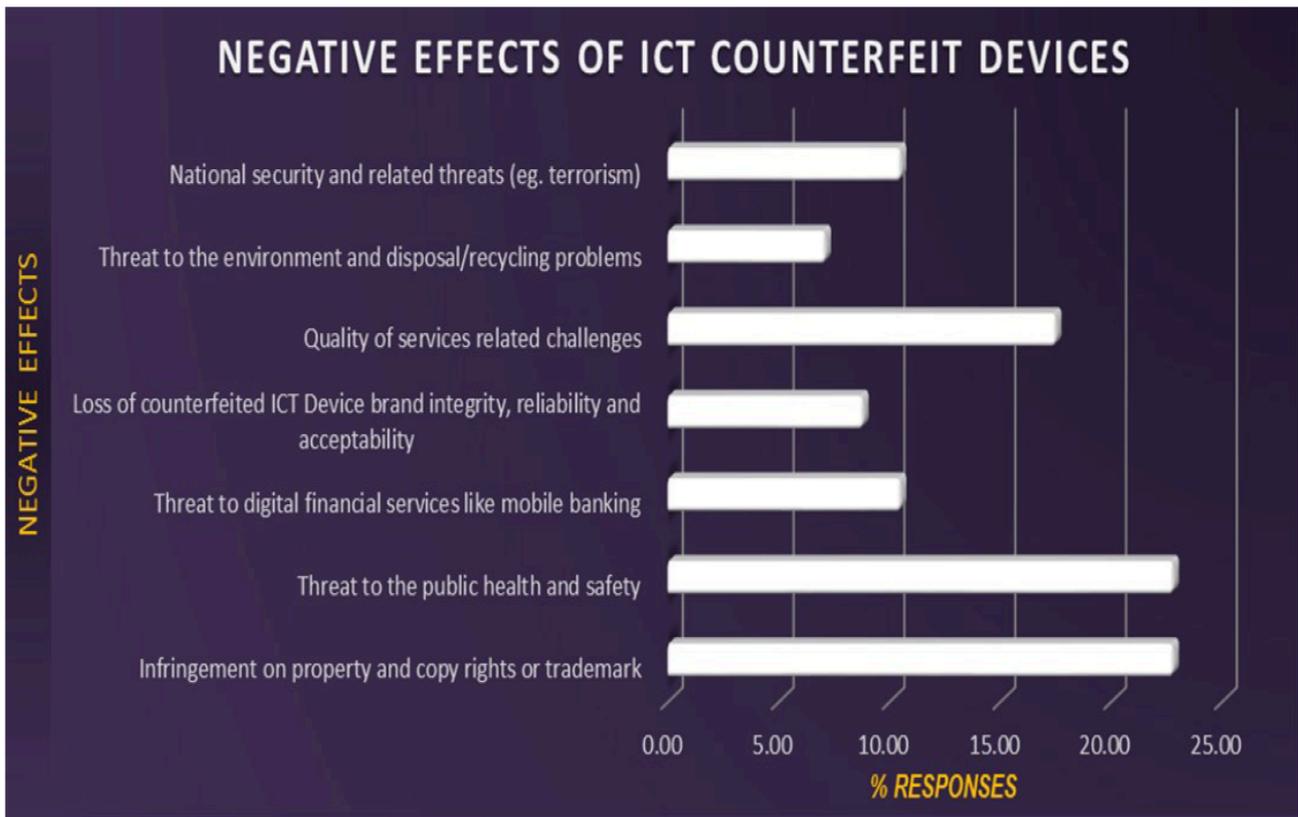
Figure 7 — Negative Effects of ICT Counterfeit Devices (Source: Survey Responses)

5.4.2.   Perceived positive effects of counterfeit ICT devices

Responses that were sought to identify whether there is/are any positive effect(s) on counterfeit ICT devices recorded as high as 57% for "affordability" and 29% for "increased universal access to ICT and internet". Figure 8 is a depiction of the responses obtained. The Reason accounting for this were though, not sought for, it may include the uptake of social media by the youth in the region hence encouraging counterfeiters to invest in such affordable ICT devices.
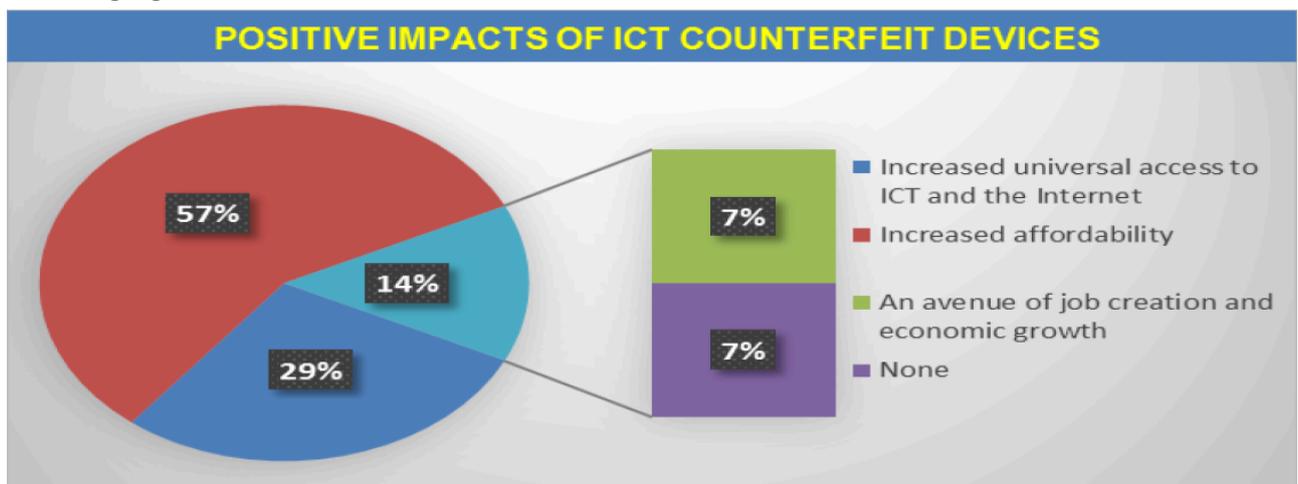
Figure 8 — Positive Impacts of ICT Counterfeit Devices

5.5.   Existing Measures and Techniques to Combat Counterfeit ICT Devices

This section considers existing measures and techniques that Member States have deployed aimed at combating counterfeit ICT devices in their countries. The researcher's questionnaires explored the feedback of this issue from the perspective of public awareness creation, technical measures such as testing and device authentication.

5.5.1.   Awareness creation and Sensitization

On this, 71% representing 10 respondents said their countries have public awareness and sensitization programs on counterfeit whilst 29% representing 4 Member States indicated in the negative. Table 5 presents respondents' views.

Table 5 — Existence of Public Awareness Programme (Source: Survey Responses)

Responses	No. of Responses	% of Responses
Yes	10	71.4
No	4	28.6
Total	14	100

5.5.2.   Perceived level of Awareness Creation and Sensitization

On the assessment of the perceived public awareness and sensitization against counterfeit ICT devices based on a scale of 1 to 5 with 5 being very high level of awareness and 1 being very low level of awareness, 36% of Member States responded that their level of public awareness and sensitization against counterfeit ICT devices were very high whilst 7% indicated that there were very low public awareness and sensitization programmes. However, as depicted on Figure 9 below, there was "NO RESPONSES" from 29% of the responding countries.
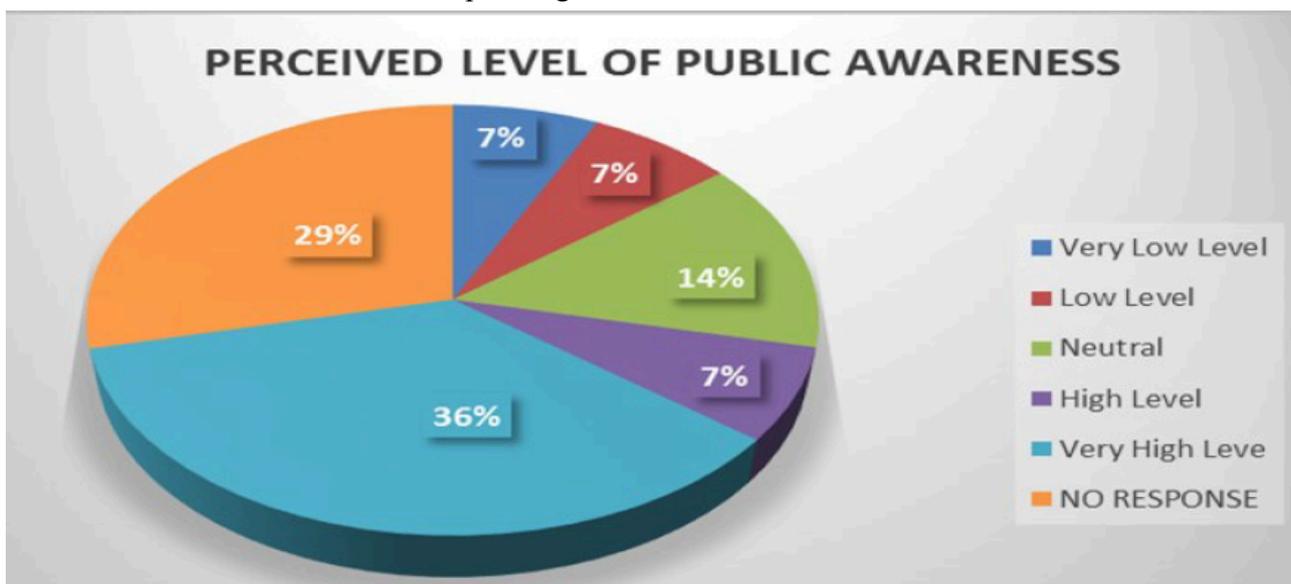
Figure 9 — Perceived Level of Public Awareness (Source: Survey Responses)

5.5.3.   Need and Extent of Public Education

All of the Member States embraced the need for public education on counterfeit ICT devices as evidenced in the yes/no responses shown below in Table 6.

Table 6 — Need for Public Education on Counterfeit ICT Devices

Responses	No. of Responses	% of Responses
Yes	14	100
No	0	0
Total	14	100

The extents of such needs for public education were also assessed and 57% of the respondents recommended that there should be highly intensive public education on counterfeit ICT devices in the region as could be seen in Figure 10 hereunder.
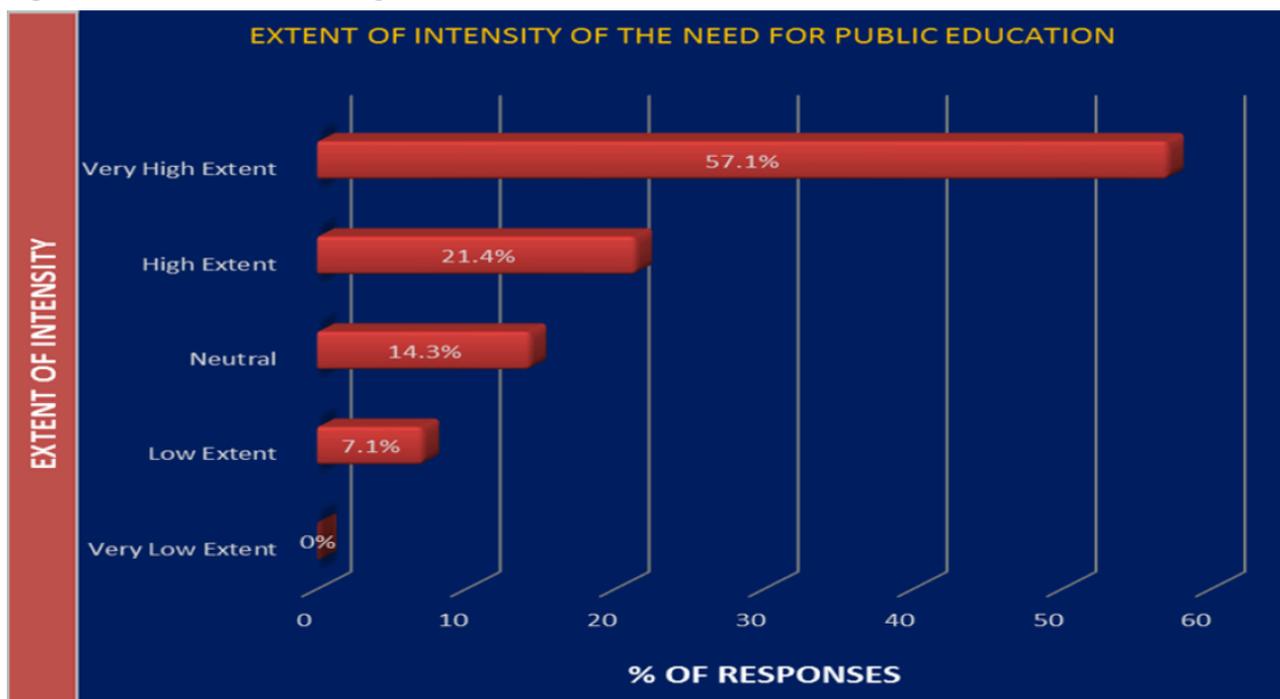
Figure 10 — Extent of Intensity of the Need for Public Education (Source: Survey Responses)

On the issue of ICT anti-counterfeiting fora, which has the potential to support the awareness creation, educate the masses, and act as platforms to help implement policies and laws to check the proliferation of counterfeit ICT devices within the region, 43% of the respondents indicated that they had such fora in place in their countries. However, the remaining 57% without such fora is not encouraging requiring serious attention.

For countries where there are such fora, only two of such respondents could state such forum. For example, in Nigeria, there is no permanent forum but occasionally stakeholders are brought together for the purpose while in Kenya the forum is normally initiated by the Regulator with the involvement of the operators, suppliers and government agencies.

Table 7 — Existence of Anti-Counterfeit Forums (Source: Survey Responses)

Responses	No. of Responses	% of Responses
Yes	6	42.9
No	8	57.1
Total	14	100

5.6.   Technical Measures

5.6.1.   Verification of ICT Device Authentication

On the verification of device authenticity, 64% representing 9 respondents said their countries have no procedures to authenticate ICT devices whilst 36% representing 5 Member States indicated in the affirmative. The data found is analyzed in Table 8 below.

Table 8 — Verification of ICT Device Authenticity (Source: Survey Responses)

Responses	No. of Responses	% of Responses
Yes	5	35.7
No	9	64.3
Total	14	100

5.6.2.   Measures in Place to Verify the Authenticity of Devices

Responses to identify measures in the place to verify the authenticity of ICT devices showed that "Testing" and "Market Surveillance Activities "were the dominant verification mechanisms used to determine the authenticity of ICT devices. This is represented by Figure 11 below with percentage figures of 29% and 22% respectively.
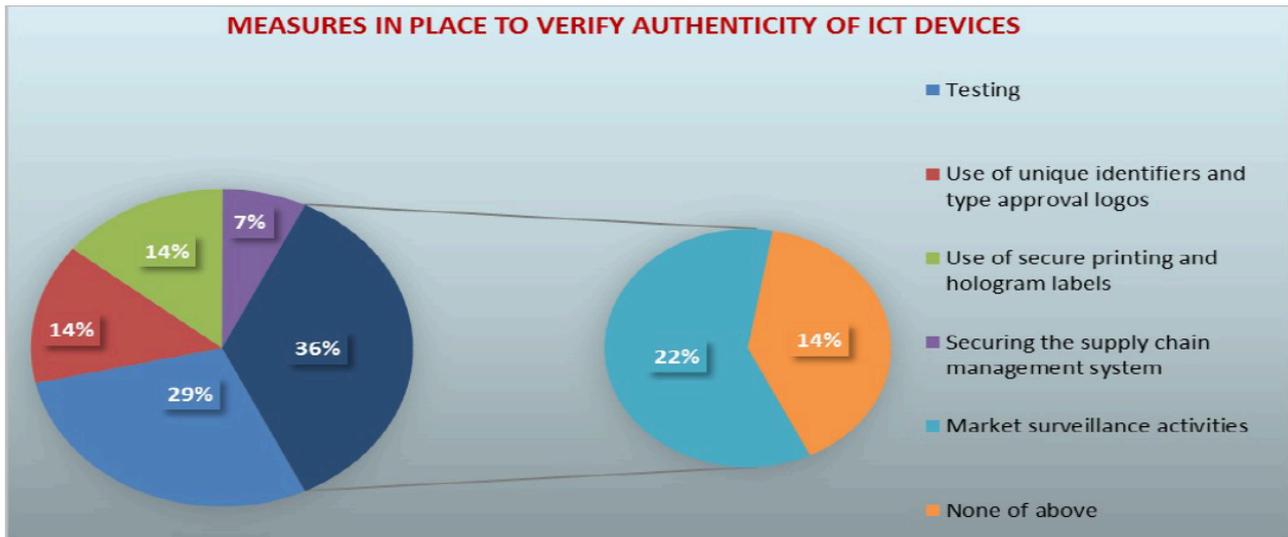
**Figure 11 — Measures in Place to Verify Authenticity
of ICT Devices (Source: Survey Responses)**

5.6.3.   Conformity Assessment Process to Check Market Entry

The conformity assessment schemes adopted to check market entry of ICT devices were also explored and responses received showed that "Testing & Certification" followed by "Type Approvals" with both assessment schemes receiving 38% and 29% responses respectively are the most widely used. Figure 12 below depicts the analysis of responses obtained.
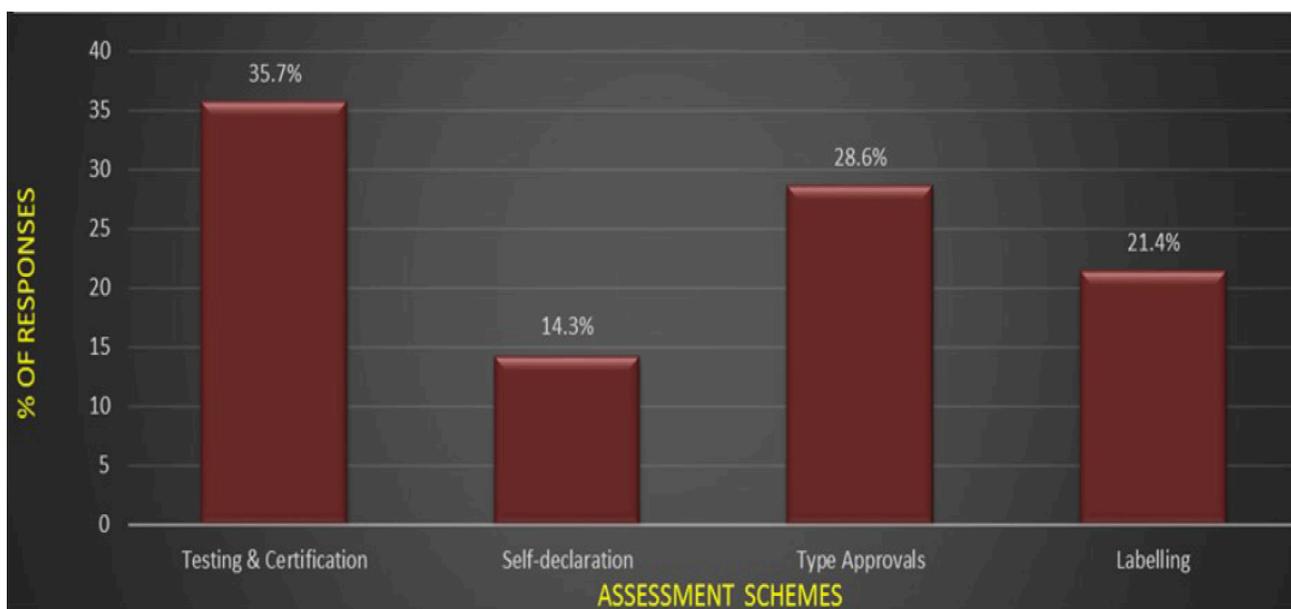
**Figure 12 — Conformity Assessment Schemes to
Check Market Entry (Source: Survey Responses)**

5.6.4. Testing Laboratory

On the Testing Labs, 79% representing 11 respondents said their countries have no such ICT Testing Labs whilst 21% representing 3 Member States responded in the affirmative. All the 3 countries affirmed that their labs were capable of performing device authentication. Response from Sudan indicates that the country performs RF Parameter and EMI Testing (Emission) whereas Nigeria indicated a light testing scope on Mobile Phones. This analysis is presented on Table 9.

Table 9 — ICT Devices' Testing Lab Capability (Source: Survey Responses)

Responses	Existence of Texting Labs		Capability of Testing Labs	
Resoonses	(No. of Responses)	% of Responses	(No. of Responses)	% of Responses
Yes	3	21.4	3	21.4
No	11	78.6	N/A	N/A
Total	14	100	100	100

5.6.5. Conformity Assessment to Combat Counterfeit ICT Devices

This section looks at the issues of whether or not conformity assessment schemes can be used to combat counterfeit ICT devices. In all, 79% of the respondents said "yes" whilst 21% responded in the negative. This is contained in Table 10 below.

**Table 10 — Can Conformity Assessment Counterfeit
ICT Devices? (Source: Survey Responses)**

Responses	No. of Responses	% of Responses
Yes	11	78.6
No	3	21.4
Total	14	100

5.7. ITU Involvement and the Creation of Regional Group

A question was posed as to the possibility of creating an ITU-T SG11 **Regional Group** for Africa to address and provide the ITU with regional views on ITU-T SG11 studies, including Combating Counterfeiting of ICT devices as well as Conformity and Interoperability testing. The responses showed that there is the need to create such a group. This can be seen from the Table 11 below with 100% "yes" responses from all the 14 Member States.

Table 11 — Need to Establish an ITU-T SG11 Regional Group (Source: Survey Responses)

Responses	No. of Responses	% of Responses
Yes	14	100
No	0	0
Total	14	100

In addition, 86% of the respondents indicated that they would participate in the group (see Table 13) whilst 79% as in Table 12, also answered "yes" to submitting a joint contribution to the meeting of ITU-T SG11 (June/July 2016) for the creation of such a regional group.

Table 12 — Submission of Joint Contribution Towards Creation of Africa Regional Group 11 (Source: Survey Responses)

Responses	No. of Responses	% of Responses
Yes	11	78.57
No	2	14.29
N/A	1	7.14
Total	14	100

Table 13 — Participation in a Regional Gruop 11 (Source: Survey Responses)

Responses	No. of Responses	% of Responses
Yes	12	85.7
No	2	14.3
Total	14	100

On ITU's involvement in addressing the problem of counterfeit ICT devices through standardization work, as many as 93% (see Table 14) responded "yes" to the question.

Table 14 — ITU-T Standardisation Work to Address Counterfeit ICT Devices (Source: Survey Responses)

Responses	No. of Responses	% of Responses
Yes	13	92.9
No	1	7.1
Total	14	100

On initiatives that the ITU, could take in the area of ICT counterfeiting, it observed that the initiatives presented on Figure 13 are all relevant to be considered by ITU.
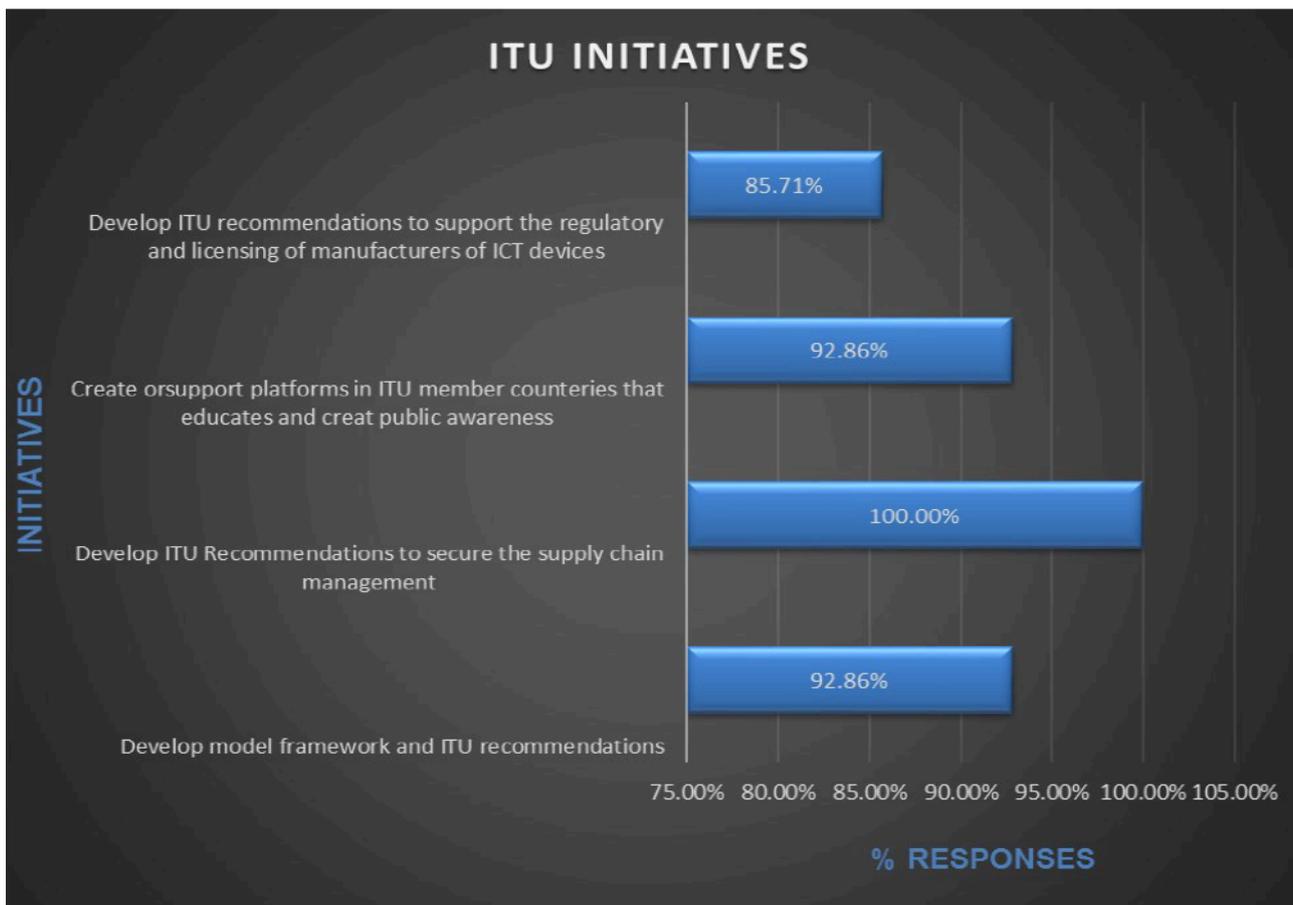
Figure 13 — ITU Initiatives (Source: Survey Responses)

6. Findings

This section presents the findings from the data analysis in clause 5 above which was presented using relevant statistical tables, charts and percentages. The findings are outlined below.

a) Though, there are no Member States specific definitions for counterfeit ICT devices, the terms "Fake" and "Sub-standard" are understood to mean "Counterfeit". From Figure 1, it can be seen that while 50% of the respondents understand counterfeit to mean "Fake", 21% also said counterfeit is the same as "Sub-standard". Findings in Table 1 show that 79% representing 11 Member States had no specific definitions for counterfeit ICT devices. The 3 countries that responded in affirmative to have such definitions failed to state such definitions.

b) Mobile phones are perceived to be the most counterfeited ICT devices in the region. This is true with all categories of mobile phone devices namely; *2G, 3G, 4G and tablets*. Personal computers also rank high in the perception on counterfeit ICT devices.

c) Counterfeit mobile phones are easily patronized because of their affordability and availability in the markets.

d) There are existing and effective laws, regulations and national anti-counterfeiting forums in place to combat ICT devices in the Africa markets. But it was interesting to note that 28% - (14% + 14%) - respondents were not convinced on the level effectiveness of their national laws to combat ICT counterfeit.

e) Though Member States responded positively to existence of public awareness and sensitization programs on counterfeit ICT devices, it was interesting to know that all of the Member States also recommended for a highly intensive public education programmes to be in place.

f) On ICT anti-counterfeiting forums, which have the potential to support the awareness creation and act as platforms to help implement policies and laws to check the proliferation of

counterfeit ICT devices within the region, it is worth noting that 57% of respondents without such forums is not encouraging and requires serious attention.

g)   Member States have Laws and Regulatory Frameworks that establish the requirements for ICT devices to be legally imported and supplied in the market place. In addition, "Testing" and "Market Surveillance activities" dominate verification mechanisms for the authenticity of ICT devices. Both mechanisms recorded only 50% of total responses, indicating that much more have to be done in the region.

h)   "Testing and Certification" and "Type Approvals" are the dominant assessment schemes adopted to check market entry of ICT devices in the region.

i)   Majority of Member States in the region have no "ICT testing laboratory". This represents 79% (11 countries).

j)   Majority of Member States in the region confirmed that conformity assessment schemes can be used to combat counterfeit ICT devices". This represents 79% (11 countries).

k)   All of the Member States are in favor of creating an ITU-T SG11 Regional Group for Africa with over 79% indicating that they would support submitting a join contribution to the meeting of ITU-T SG11 (June/July 2016) for such a group to be established and would participate in the group activities.

l)   Majority of Member States are in favor of the need for ITU's involvement in addressing the problem of counterfeit ICT devices through its standardization work.

m)   The following four initiatives were recommended as relevant to be considered by ITU:
   •   Develop model framework and ITU Recommendations
   •   Develop ITU Recommendations to secure the supply chain management
   •   Create or support platforms in ITU member countries that educates and create public awareness
   •   Develop ITU recommendations to support the regulatory and licensing of manufacturers of ICT devices.

7.   Conclusions & Recommendations

7.1.   Conclusions

Based on the findings presented in clause 6, the following conclusions have been arrived at.

a)   Counterfeit ICT devices are considered "fake and substandard" as per the understanding of the respondents in the Africa Region.

b)   ITU's involvement in addressing the problem of counterfeit ICT devices through its standardization work is essential.

c)   ICT Devices perceived to have been counterfeited are mobile phones and personal computers. The reasons causing this situation were not identified however. In the researcher's view, it is believed that the advent of social media and its acceptability by majority of the African youth could be among the key reasons for counterfeit mobile phones and personal computers. Also smart phones, tablets and personal computers are the most portable ICT devices used for modern data communications. As such there are high demands for them and counterfeiters have taken advantage of the demand.

d)   Counterfeit mobile phones are easily patronised because of their affordability and availability in the markets. It is the view of the researcher that in this modern day, people cannot move without access to communication services. Therefore, once people can easily get access to counterfeit phones, due to their affordability, they would acquire and use them irrespective of the negative effects on health, safety and the environment.

e)   The existence of policies, laws, regulations and national anti-counterfeiting fora show the preparedness of Member States to fight against the influx of counterfeit ICT devices.

f)   Much public awareness could be explored with the use of national ICT anti-counterfeiting fora.

g) Member States have Laws and Regulatory Frameworks for "Testing" and "Market Surveillance activities" before and after ICT devices are imported and supplied. This is evident in the application of "Type Approvals" procedures and other assessment schemes.

h) Majority of Member States in the region have no "ICT testing laboratory". This requires an investment in the areas of ICT testing laboratories.

i) Conformity assessment schemes can be used to combat counterfeit ICT devices.

j) Member States recommend the establishment of an ITU-T SG11 Regional Group for Africa and would support and participate in such group activities.

7.2.   Recommendations

a) Since most of the Member States in the Africa Region have no definitions for counterfeit ICT devices, it is recommended for the ITU to adopt the definition in the TRIPS agreement or develop its own standard definition for counterfeit ICT devices to help the industry and avoid the seaming confusion.

b) Manufacturers of genuine products should take into account in their production, the financial constraint in developing countries particularly those in the Africa Region. They could produce authentic devices that are "affordable", ensuring their "availability" to aid combating ICT devices.

c) There should be effective implementation of laws and regulations including effective awareness creation and sensitization to make counterfeit ICT equipment production, distribution and usage not attractive. Also national anti-counterfeiting forums to support the awareness creation and act as platforms to help implement policies and laws to check the proliferation of counterfeit ICT devices within the region should also be encouraged.

d) Much more need to be done on Market Surveillance activities and Type Approvals in the region. For example, there should be constant validation of ICT devices at the ports of entry before they are allowed in the market place. The Ukrainian solution could be a very good approach to deter/check those devices that come through the unapproved routes. This will require a well-coordinated and committed effort among stakeholders like customs, police, regulators, standard and IPR authorities

e) ICT equipment testing laboratory is required in this region to authenticate devices and give assurance to the general public. The ITU and other donor partners in this case should help by supporting Member States to establish same. This should be Government, or private sector led initiatives, at least for the benefit of the citizenry.

f) There is the need for ITU-T SG11 regional group for Africa to be established to provide the regional views to influence ICT standards development, particularly on the subject of counterfeit ICT devices, Conformance, Interoperability testing and other related topics.

g) There should be sub-regional or regionally harmonized ICT standards to facilitate regional trade. In this way, countries that have testing laboratories could have mutual recognition arrangements (MRA) at least, to enable those without labs benefit from the few established ones in the region. This could reduce the immediate huge cost of investing in building test labs while considering long term plans to expand existing facilities.

h) The initiatives contained in the conclusion are recommended as relevant for ITU's consideration.

Annex A

Tables

(This annex forms an integral part of this Technical Report.)

**Table A.1 — Assessment of Effectiveness of National Bodies to
Fight against Counterfeit ICT Devices (Source: Field Data Report)**

Scale of Effectiveness		No. of Responses	Percentage Score (%)	Cumulative Percentage Score (%)
Measure	Scale			
Not Effective	1	2	14.3	14.3
Less Effective	2	3	21.4	35.7
Neutra	3	1	7.1	42.8
Effective	4	5	35.7	78.5
Highly Effective	5	3	21.4	99.9
Total		14	100	

**Table A.2 — Responses on the Existence of Laws Regulations Establishing
Requirements for ICT Devices' Importations (Source: Survey Responses)**

Responses	No. of Responses	Percentage of Responses
Yes	11	78.6
No	3	21.4
Total	14	100

Table A.3 — Negative Effects of ICT Counterfeit Devices (Source: Survey Responses)

Effects	Responses	
	No. of Responses	% of Responses
Infringement on property and copy rights or trademark	13	22.80
Threat to the public health and safety	13	22.80
Threat to digital financial services like mobile banking	6	10.50
Loss of counterfeited ICT brand integrity, reliability and acceptability	5	8.80
Quality of services related challenges	10	17.50
Threat to the environment and disposal/recycling problems	4	7.10
National security and related threats (e.g. terrorism)	6	10.50
Total	57	100.00

Table A.4 — Positive Impacts of ICT Counterfeit Devices (Source: Survey Responses)

Impacts	Reponses	
	No. of Responses	% of Responses
Increased universal access to ICT and the Internet	4	28.6
Increased affordability	8	57.1
An avenue of job creation and economic growth	1	7.1
None	1	7.1
Total	14	100

Table A.5 — Perceived Level of Public Awareness (Source: Survey Responses)

Level of Awareness		No. of Responses	% of Responses
Measure	Scale		
Very Low Level	1	1	7.1
Low Level	2	1	7.1
Neutra	3	2	14.3
High Level	4	1	7.1
Very High Level	5	5	35.7
No Response	-	4	28.6
Total		14	100

Table A.6 — Known Counterfeit ICT Devices (Source: Survey Responses)

ICT Devices	No. of Responses		Total	% of Responses (Yes)
	Yes	No		
Tablets	11	3	14	78.57
Smart Phones (3G, 4G)	14	0	14	100.00
Other mobile Phones (2G)	14	0	14	100.00
Personal Computer and personal	10	4	14	71.43
Switches	8	6	14	57.14
Accessories like batteries, earpiece, and chargers	9	5	14	64.29
Modems & Routers	6	8	14	42.86
Two-way Radios	4	10	14	28.57
Bluetooth Devices	7	7	14	50.00
Wi-Fi devices	7	7	14	50.00

**Table A.7 — Measures in Place to Verify Authenticity
of ICT Devices (Source: Survey Responses)**

Verification Measures	No. of Responses	% of Responses
Testing	4	28.6
Use of unique identifiers and type approval logos	2	14.3
Use of secure printing and hologram labels	2	14.3
Securing the supply chain management system	1	7.1
Market surveillance activities	3	21.4
None of above	2	14.3
Total	14	100

Table A.8 — Conformity Assessment Schemes to Check Market (Source: Survey Responses)

Assessment Schemes	No. of Responses	% of Responses
Testing & Certification	5	35.7
Self-declaration	2	14.3
Type approvals	4	28.6
Labelling	3	21.4
Total	14	100

Table A.9 — ITU Initiatives (Source: Survey Responses)

Initiatives	No. of Responses	Total	% of Responses (Yes)

	Yes	No		
Develop model framework and ITU recommendations	13	1	14	92.86%
Develop ITU Recommendations to secure the supply chain management	14	0	14	100.00%
Create or support platforms in ITU member countries that educates and create public awareness	13	1	14	92.86%
Develo ITU recommendations to support the regulatory and licensing of manufacturers of ICT devices	12	2	14	85.71%

Appendix I

Questionnaire: ITU Survey on Counterfeit ICT Devices in Africa Region

(This appendix does not form an integral part of this Technical Report.)

PART 1: TO BE COMPLETED BY ICT MINISTRIES/REGULATORY AUTHORITIES
PART 2: TO BE COMPLETED BY OPERATORS & DEALERS IN ICT DEVICES
PART 3: TO BE COMPLETED BY CONSUMER GROUPS

PLEASE SUBMIT YOUR REPLY BY 15 MARCH 2016 TO:
Isaac BOATENG, vice-chairman ITU-T SG11 (isaac.boateng@nca.org.gh; tsbsg11@itu.int)

I.1.   PART 1: [TO BE COMPLETED BY ICT MINISTRIES/REGULATORY AUTHORITIES]

FORM TO BE FILLED IN BY THE FOCAL POINT

It is my consent to complete the following questionnaires with the assurance that the information provided herein shall be treated confidentially and will be solely used for the purpose of this survey.

COUNTRY:

Name of Respondent:

Your job title:

Name of Organisation:

Which of the following ICT class does your organisation belong to?
–   ICT Regulatory Agency
–   Ministry in charge of ICT

EMAIL ADDRESS:

Tel:

Please tick (✓) your response in the box preceding or following it, where applicable.

GENERAL ISSUES ON ICT AND COUNTERFEIT DEVICES

a) What is your understanding of a ***counterfeit*** ICT device? (Please tick(✓) all that applies).

– Sub-standard device.
– Fake device.
– Unregistered device.
– Unauthorised device.
– Others, *please specify*: _____
   1) Is there a definition of ***counterfeit*** ICT device in your country and if so where is this definition contained?
– Yes.
– No.
   *If **Yes**, please specify*: _____
   1) Are you aware of any counterfeit ICT device in your country?
– Yes.
– No.
   1) Which of the following ICT devices do you know have been counterfeited? *Please tick (✓) all that applies in the table below*.
– Tablets
– Smart phones (3G, 4G)
– Other mobile phones (2G)
– Personal computers and Note Books
– Switches
– Accessories like batteries, earpiece, and chargers.
– Modems and Routers
– Two-way radios
– Bluetooth devices
– Wi-Fi devices
– Others (*please specify below*): _____
   1) Do you believe that there is patronage of counterfeit ICT devices in your country? If so, in your view, what is the motive for the patronage? Please tick all that applies
– There is not patronage in my country
– Availability
– Affordability
– Multi-functionality
– Others, *please specify*: _____
   1) What have been the ***negative*** effects of counterfeit ICT devices in your country? *Please tick (✓) all that applies in the table below*.
– Infringement on property and copy rights or trademarks.
– Threat to public health and safety.
– Threat to digital financial services like mobile banking.
– Loss of the counterfeited ICT brand integrity, reliability and acceptability.
– Quality of service related challenges
– Threat to the environment and disposal/recycling problems
– National security related threats (e.g. terrorism)
– Other socio-economic effects., *please specify*: _____
   1) Do you have any public awareness programme on counterfeit ICT devices in your country?
– Yes.

- No.

[Please skip question List 8 a) if you answered No to question List 7 1) above]

a) If **Yes** to question List 7 1), what do you perceive to be the level of public awareness?
   (Please indicate a number on a scale of 1 to 5, with 5 being Very high and 1 being very low).
- 1
- 2
- 3
- 4
- 5
   1) Do you consider there is a need for public education on the importation, distribution and usage of counterfeit ICT devices and the problems they pose in your country?
- Yes.
- No.

[Please skip question List 10 a) if you answered No to question List 9 1) above]

a) To what extent do you consider the need for such public education described in List 9 1) above?
   (Please indicate your rating by circling a number on a scale of 1 to 5, with 5 being highly intensive and 1 being not intensive).
- 1
- 2
- 3
- 4
- 5
   1) Do you perceive any positive impact of counterfeiting ICT devices and accessories, if so which?
   (Please tick (✓) all that applies).
- Increased universal access to ICT and the Internet
- Increased affordability
- An avenue of job creation and economic growth
- None
- Others, (please specify): _____
   1) Are there any ICT **anti-counterfeit forums** in your country?
- Yes.
- No.

If **Yes**, please list them

a) Is there any national body in your country to fight against the proliferation of the counterfeit ICT devices?
- Yes.
- No.

If Yes, please specify which: _____

a) If **Yes**, how effective is this national body? (*Please indicate a number on a scale of 1 to 5, with 5 being highly effective and 1 being highly ineffective to indicate your rating on List 13 a) above.*)
- 1
- 2
- 3
- 4
- 5

1) Are there national policies and laws or statutory enactments on the manufacturing, importation, distribution and usage of ICT devices in your country?
- Yes.
- No.

*If **Yes**, please list the main ones*:

a) If **Yes** to question List 15 1) above, how effective are these laws and statutory enactments in combating counterfeit ICT devices in your country? (*Please indicate a number on a scale of 1 to 5, with 5 being highly effective and 1 being not effective*).
- 1
- 2
- 3
- 4
- 5

1) Is there any legal framework and regulation which protects the intellectual property rights of manufacturers and authorised dealers of ICT devices in your country?
- Yes.
- No.

If **Yes**, which one(s)?

a) If **Yes**, what measures have been put in place to enforce the framework and regulation? *Please specify below*:
   1) _____
   2) _____
   3) _____

b) Is the authenticity of ICT devices verified in your country?
- Yes.
- No.

1) If **Yes**, what measures are in place to verify? (*Please tick (✓) all that applies*)
- Testing
- Use of unique identifiers and type approval logos
- Use of secure printing and hologram labels
- Securing the supply chain management systems
- Market surveillance activities
- Databases and blocking
- Others, *please specify*: _____

1) Do you have information about legally sold ICT Devices (Smartphones, 2G Phones)?
- Yes.
- No.

1) If **Yes**, please provide the following time series of value of sales (in USD) and/or units sold:

Item sold	2008		2009		2010		2011		2012		2013		2014	
	USD	Units	USD	Units	USD	Units	USD	Units	USD	Units	USD	Units	USD	Units
Total Smartphone s (all brands)														
Older phones (2G all brands)														

CONFORMITY AND INTEROPERABILITY

a)   Is there any legal and regulatory framework which establishes technical requirements for ICT devices and services to be legally imported and supplied in the marketplace?

−   Yes.
−   No.

    1)   If *Yes*, Please specify below:

        i)   _____
        ii)   _____
        iii)   _____

    2)   Which of these Conformity Assessment Schemes is/are adopted for ICT devices' market entry in your country? *Please tick (✓) all that applies in the table below.*

−   Testing & Certification
−   Self-declaration
−   Type approvals
−   Labelling
−   Use of proxies such as ISO/IEC, FCC, etc.

    1)   Do you have any ICT testing laboratory in your country?

−   Yes.
−   No.

    1)   If *Yes* to List 24 1), please specify the scope of testing.

        i)   _____
        ii)   _____
        iii)   _____

    2)   Is the testing laboratory and process capable of device authentication?

−   Yes.
−   No.

    1)   Do you think Conformity Assessment Schemes can be used to combat counterfeit ICT devices?

−   Yes.
−   No.

ADDRESSING COUNTERFEIT ICT DEVICE PROBLEM REGIONALLY

a)   Do you think there is a need to establish an ITU-T SG11 **Regional Group** for Africa to address and provide the ITU with regional views on ITU-T SG11 studies, including Combating Counterfeiting of ICT devices and addressing Conformity and Interoperability issues?

−   Yes.
−   No.

    1)   Would you participate in the work of such a group?

−   Yes.
−   No.

    1)   Would you be interested in submitting a joint contribution from African ITU Members to the meeting of ITU-T SG11 (June/July 2016) to request the establishment of such a Regional group

−   Yes.
−   No.

ADDRESSING COUNTERFEIT ICT DEVICE PROBLEM GLOBALLY

a)   Is your Country a signatory to any intellectual property right and ICT anti-counterfeit international convention?

−   Yes.
−   No.

1) Do you think ITU may help in addressing the problem of counterfeit ICT devices through standardization in ITU-T?
- Yes.
- No.
   1) What initiatives the ITU, as a UN body, could take a lead in the area of ICT counterfeiting? Please check what applies:
- Develop model framework and ITU Recommendations to combating ICT counterfeiting
- Develop ITU Recommendations to secure the supply chain management (from manufacturing, importation, distribution and marketing).
- Create or support platforms in ITU member countries that educate and create public awareness of the influx of counterfeit ICT devices and the dangers they pose.
- Develop ITU Recommendations to support the regulation and licensing of manufacturers of ICT devices.
- Others, *please specify*: _____

I.2.   PART 2: [TO BE COMPLETED BY OPERATORS & DEALERS IN ICT DEVICES]

FORM TO BE FILLED IN BY THE FOCAL POINT

It is my consent to complete the following questionnaires with the assurance that the information provided herein shall be treated confidentially and will be solely used for the purpose of this survey.

COUNTRY:

Name of Respondent:

Your job title:

Name of Company/Organisation:

Which of the following ICT class does your organisation belong to?
- ICT Operating/Recognised Operating Agency
- ICT Device Dealer/Distributor

EMAIL ADDRESS

Tel:

Please tick (✓) your response in the box preceding or following it, where applicable.

GENERAL ISSUES ON ICT COUNTERFEIT DEVICES

a)   What is your understanding of a **counterfeit** device? (*Please tick (✓) all that applies*).
–   Sub-standard device.
–   Fake device.
–   Unregistered device.
–   Unauthorised device.
–   Others, *please specify*: _____
    1)   Are you aware of any counterfeit ICT device in your country?
–   Yes.
–   No.
    1)   Which of the following ICT devices do you know or perceive to have been counterfeited?
         (*Please tick (✓) all that applies in the table below*).
–   Tablets
–   Smart phones (3G, 4G)
–   Other mobile Phones (2G)
–   Personal computers and Note Books
–   Switches
–   Accessories like batteries, earpiece, and chargers.
–   Modems and Routers
–   Two-way radios
–   Bluetooth devices
–   Wi-Fi devices
–   Others (*please specify below*): _____
    1)   Do you believe that there is patronage of counterfeit ICT devices in your country? If so, in
         your view, what is the motive for the patronage? (*Please tick (✓) all that applies*)
–   There is no patronage
–   Availability
–   Affordability
–   Multi-functionality
–   Others, *please specify*: _____
    1)   What have been the negative effects of counterfeit ICT devices in your country? (*Please
         tick (✓) all that applies in the table below*).
–   Infringement on property and copy rights or trademarks.
–   Threat to public health and safety.
–   Threat to digital financial services like mobile banking.
–   Loss of the counterfeited ICT brand integrity, reliability and acceptability.
–   Quality of service related challenges
–   Threat to the environment and disposal/recycling problems
–   National security related threats (e.g. terrorism)
–   Other socio-economic effects, *please specify*: _____
    1)   Do you have any public awareness programme on counterfeit ICT devices in your
         country?
–   Yes.
–   No.

[Please skip question List 7 a) if you answered No to question List 6 1) above]

a)   If **Yes** to question List 6 1), what do you perceive to be the level of public awareness on
     counterfeiting in your country?
     (*Please indicate a number on a scale of 1 to 5, with 5 being Very high and 1 being very low*).

- 1
- 2
- 3
- 4
- 5

 1) Do you consider there is **need for better public education** on the effects of counterfeit ICT devices and the problems they pose

- Yes.
- No.

[Please skip question List 9 a) if you answered No to question List 8 1) above]

a) To what extent do you consider there is the need for such public education described in List 8 1) above?
(*Please indicate your rating by indicating a number on a scale of 1 to 5, with 5 being highly intensive and 1 being not intensive*).

- 1
- 2
- 3
- 4
- 5

 1) Do you perceive any positive impact of counterfeiting ICT devices and accessories, if so which?
(*Please tick (✓) all that applies*).

- Increased universal access to ICT and the Internet
- Increased affordability
- An avenue of job creation and economic growth
- None
- Others, (*please specify*): _____

 1) Is there any ICT **anti-counterfeit forum** in your country?

- Yes.
- No.

 1) Is there any national body in your country to fight against the proliferation of the counterfeit ICT devices?

- Yes.
- No.

 1) How effective is this national body? (*Please indicate a number on a scale of 1 to 5, with 5 being highly effective and 1 being highly ineffective*)

- 1
- 2
- 3
- 4
- 5

 1) Are you aware of national policies and laws or statutory enactments on the manufacturing, importations, distribution and usage of ICT devices in your country?

- Yes.
- No.

 1) If **Yes** to question List 14 1) above, in your opinion how effective are these laws and statutory enactments in combating counterfeit ICT devices in your country? (*Please indicate a number on a scale of 1 to 5, with 5 being highly effective and 1 being not effective*)

- 1

- 2
- 3
- 4
- 5

  1) Are you aware of any legal framework and regulation which protects the intellectual property rights of manufacturers and authorised dealers of ICT devices in your country?
- Yes.
- No.

  1) If *Yes*, what measures have been put in place to enforce the framework and regulation? *Please specify below*:
     i) _____
     ii) _____
     iii) _____
  2) Does your company verify the authenticity of ICT devices?
- Yes.
- No.

  1) If *Yes* to List 17 2) above, what measures are in place to verify? (*Please tick (✓) all that applies*)
- Testing
- Use of unique identifiers and type approval logos
- Use of secure printing and hologram labels
- Securing the supply chain management systems
- Market surveillance activities
- Databases and blocking
- Other, *please specify*: _____

  1) Do you have information about legally sold ICT Devices (Smartphones, 2G Phones)?
- Yes.
- No.

  1) If *Yes*, please provide the following time series of value of sales (in USD) and/or units sold:

Item sold	2008		2009		2010		2011		2012		2013		2014	
	USD	Units	USD	Units	USD	Units	USD	Units	USD	Units	USD	Units	USD	Units
Total Smartphone s (all brands)														
Older phones (2G all brands)														

CONFORMITY AND INTEROPERABILITY

a) Are you aware of any legal and regulatory framework which establishes technical requirements for ICT devices and services to be legally imported and supplied in the marketplace?
- Yes.
- No.

  1) If *Yes* to List 21 a), please specify below:
     i) _____
     ii) _____
     iii) _____

2) Which of these Conformity Assessment Schemes is/are adopted for ICT devices' market entry in your country? (*Please tick (✓) all that applies in the table below.*)
– Certification
– Self-declaration
– Type approvals
– Labelling
– Use of proxies such as ISO/IEC, FCC, etc.
1) Are you aware of any ICT Testing laboratory in your country?
– Yes.
– No.
1) If *Yes*, please specify the scope of testing below.
i) _____
ii) _____
iii) _____
2) Is the testing laboratory and process capable of device authentication?
– Yes.
– No.
1) Do you think Conformity Assessment Schemes can be used to combat counterfeit ICT devices?
– Yes.
– No.
1) Do you recommend the creation of a ITU regional group of SG11 in Africa to address and provide regional views on ICT Counterfeiting?
– Yes.
– No.
1) Do you think the ITU may help in addressing the problem of counterfeit ICT devices through Standardization?
– Yes.
– No.
1) What initiative the ITU, as UN body, could take a lead in the area of ICT counterfeiting? Please check what applies:
– Develop framework and ITU Recommendations to combating ICT counterfeiting
– Develop ITU Recommendations to secure the supply chain management (from manufacturing, importation, distribution and marketing).
– Create or support platforms in ITU member countries that educate and create public awareness of the influx of counterfeit ICT devices and the dangers they pose.
– Develop ITU Recommendations to support the regulation and licensing of manufacturers of ICT devices.
– Others, *please specify*: _____

I.3. PART 3: [TO BE COMPLETED BY CONSUMER GROUPS]

FORM TO BE FILLED IN BY THE FOCAL POINT

It is my consent to complete the following questionnaires with the assurance that the information provided herein shall be treated confidentially and will be solely used for the purpose of this survey.

COUNTRY:

Name of Respondent:

Your job title:

Name of Consumer Organisation:

EMAIL ADDRESS

Tel:

Please tick (✓) your response in the box preceding or following it, where applicable.

GENERAL ISSUES ON COUNTERFEIT ICT DEVICES
a)   Is your organisation a consumer group for users of ICT devices in your country?
−   Yes.
−   No.
      1)   If **Yes**, which group(s) of users belong to your organisation?
−   Corporate consumers
−   Household consumers
−   Both
−   Other; *please specify*: _____
      1)   What is your understanding of a **counterfeit** ICT device? (*Please tick (✓) all that applies*).
−   Sub-standard device.
−   Fake device.
−   Unregistered device.
−   Unauthorised device.
−   Others, *please specify*: _____
      1)   Are you aware of any counterfeit ICT device in your country?
−   Yes.
−   No.
      1)   Are methods to identify counterfeit ICT devices publically known to the consumer group you represent?
−   Yes.
−   No.
      1)   If **Yes** to question List 5 1) above, what are the methods known to you and other consumers?
−   Checking of device description/specifications on manufacturer's website.
−   Checking device authentication and certification from websites of national ICT authorities.
−   Checking the device unique identifier.
−   Buying from authorised dealers.
−   Other, *please specify*: _____
      1)   Which of the following ICT devices do you know or perceive to have been counterfeited? (*Please tick (✓) all that applies in the table below.*)
−   Tablets
−   Smart phones (3G, 4G)
−   Other mobile Phones (2G)
−   Personal computers and Note Books
−   Switches
−   Accessories like batteries, earpiece, and chargers.
−   Modems and Routers
−   Two-way radios
−   Bluetooth devices
−   Wi-Fi devices
−   Others (*please specify below*): _____
      1)   Do you believe that there is patronage of counterfeit ICT devices in your country? If so, in your view, what is the motive for the patronage? (*Please tick (✓) all that applies*)
−   There is no patronage
−   Availability
−   Affordability
−   Multi-functionality

- Others, *please specify*: _____
  1) What have been the negative effects of counterfeit ICT devices in your country?
     (*Please tick (✓) all that applies in the table below.*)
- Infringement on property and copy rights or trademarks.
- Threat to public health and safety.
- Threat to digital financial services like mobile banking.
- Loss of the counterfeited ICT brand integrity, reliability and acceptability.
- Quality of service related challenges
- Threat to the environment and disposal/recycling problems
- National security related threats (e.g. terrorism)
- Other socio-economic effects, *please specify below*: _____
  1) Do you have any public awareness programmes on counterfeit ICT devices in your country?
- Yes.
- No.

[Please skip question List 11 a) if you answered No to question List 10 1) above]
a) If **Yes** to question List 10 1), what do you perceive to be the level public awareness in your country?
   (*Please indicate a number on a scale of 1 to 5, with 5 being Very high and 1 being very low*).
- 1
- 2
- 3
- 4
- 5
  1) Do you consider there is need for better public education by Authorities in your country on the effects of counterfeit ICT devices and the problems they pose?
- Yes.
- No.

[Please skip question List 13 a) if you answered No to question List 12 1) above]
a) To what extent do you consider there is the need for such public education described in List 12 1) above?
   (*Please indicate your rating by indicating a number on a scale of 1 to 5, with 5 being highly intensive and 1 being not intensive*).
- 1
- 2
- 3
- 4
- 5
  1) Is there any ICT *anti-counterfeit* forum in your country?
- Yes.
- No.
  1) Is there any national body in your country to fight against the proliferation of the counterfeit ICT devices?
- Yes.
- No.
  1) How effective is this national body?
     (*Please indicate a number on a scale of 1 to 5, with 5 being highly effective and 1 being highly ineffective*)
- 1

- 2
- 3
- 4
- 5
    1) Do you perceive any positive impact of counterfeiting ICT devices and accessories, if so which?
    (*Please tick (✓) all that applies*).
- Increased universal access to ICT and the Internet
- Increased affordability
- An avenue of job creation and economic growth
- None
- Others, (*please specify*): _____
    1) Are you aware of national policies and laws or statutory enactments on the manufacturing, importations, distribution and usage of ICT devices in your country?
- Yes.
- No.
    1) *If Yes* to question [List 18 1)](#) *above*, in your opinion how effective are these laws and statutory enactments in combating counterfeit ICT devices in your country?
    (*Please indicate a number on a scale of 1 to 5, with 5 being highly effective and 1 being highly ineffective*).
- 1
- 2
- 3
- 4
- 5
    1) Are you aware of any legal framework and regulation which protects the intellectual property rights of manufacturers and authorised dealers of ICT devices in your country?
- Yes.
- No.
    1) If *Yes*, what measures have been put in place to enforce the framework and regulation? Please specify below:
        i) _____
        ii) _____
        iii) _____
    2) Do you and your members verify the authenticity of ICT devices in your country before purchase or usage?
- Yes.
- No.
    1) Are the members of the consumer group you represent informed of the dangers posed by counterfeit ICT devices?
- Yes.
- No.
    1) If *Yes* to questions [List 22 1)](#), how informed are they? (*Please indicate a number on a scale of 1 to 5, with 5 being highly informed and 1 being not informed*).
- 1
- 2
- 3
- 4
- 5

1) Do you recommend the creation of a ITU regional group of SG11 in Africa to address and provide regional views on ICT Counterfeiting?

– Yes.
– No.

1) Do you think the ITU may help in addressing the problem of counterfeit ICT devices through Standardization?

– Yes.
– No.

1) What initiative the ITU, as UN body, could take a lead in the area of ICT counterfeiting? Please check what applies:

– Develop framework and ITU Recommendations to combating ICT counterfeiting
– Develop ITU Recommendations to secure the supply chain management (from manufacturing, importation, distribution and marketing).
– Create or support platforms in ITU member countries that educate and create public awareness of the influx of counterfeit ICT devices and the dangers they pose.
– Develop ITU Recommendations to support the regulation and licensing of manufacturers of ICT devices.
– Others, *please specify*: _____

Appendix II

Raw Data File

(This appendix does not form an integral part of this Technical Report.)

The raw data which forms the responses from the fourteen (14) ITU Member States is contained in TD 1199 (GEN/11).

Bibliography

[1] WTO – TRIPS Definition on Counterfeit Devices" as cited in ITU Technical Report on Counterfeit ICT Devices, December 2015.

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[3] MMF Counterfeit Phones EN," [Online]. Available: http://spotafakephone.com/docs/eng/MMF_CounterfeitPhones_EN.pdf.

[4] Framework for Combating the Importation, Supply and Use of Counterfeit / Substandard Terminals in The EACO Member States," EACO, Kigali.

[5] Ukraine's 2009 Automatic Information System for Mobile Terminal Registration (AISMTR) as cited in ITU Technical Report Counterfeit ICT Devices.".