# ITU SURVEY REPORT ON COUNTERFEIT ICT DEVICES IN AFRICA REGION



# PRESENTATION TO THE SG11 RG-AFR

{Pulhor - Ssaac Boaleng}



# **ISAAC BOATENG**

Vice Chairman, ITU-T Study Group 11

(National Communications Authority – Ghana)

isaac.boateng@nca.org.gh



### **BACKGROUND OF THE STUDY**



### INTRODUCTION

- Globally, the increased influx of counterfeit ICT devices in the markets of both the developed and developing countries is of a common perception.
- ITU-T SG11, Question 8 Terms of Reference for Study Period 2012-2016 is concerned with this so-called menace and the challenges it poses to the present ICT age – economically, socially, and environmentally.
- Official study report in African region to trigger ITU's technical studies to influence decisions and policy directions leading to strategic approaches to deal holistically with the issue was of interest in commissioning this survey.

### **OBJECTIVES OF THE SURVEY**



To gather information on challenges, use cases and efforts in address the problem of counterfeit ICT in Africa.

- 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 issues towards Bridging the ICT Standardization Gap between developed and developing countries.
- □ To enhance awareness on the impacts of counterfeit ICT devices in the region.
- To recommend for best practices including regulatory frameworks (in countries where there are none) and technical methodologies to combat counterfeit ICT devices.
- To identify and recommend possible initiatives ITU could take towards the fight against counterfeit ICT devices.

### **METHODOLOGY**



4/3/2017

Design of the Study – both quantitative and qualitative techniques.

O Population and Sampling Size - African countries that are members of the ITU formed the population with a sample size of 20 countries randomly selected, out of which 14 Member responded. Respondents were mainly executives of Regulators and Ministries, in charge of ICT.

O 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.



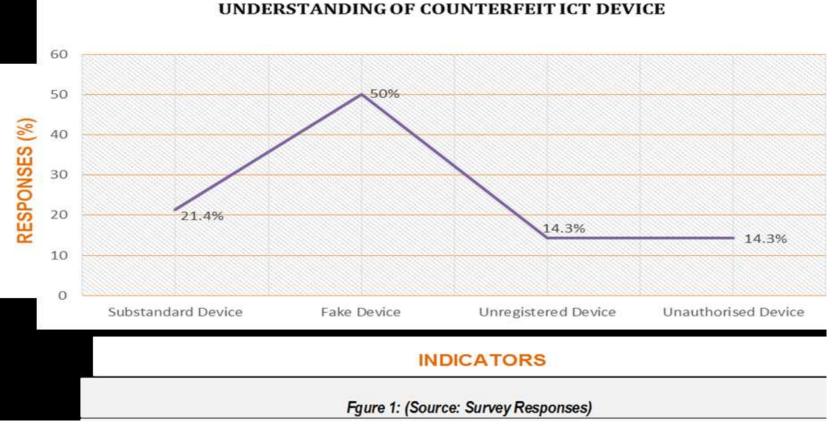
#### Data Analysis Themes.

- 1. Common perceptions of counterfeit ICT devices.
- 2. Available Laws, Regulations and Enforcement.
- 3. Impact Assessment on counterfeit ICT devices.
- 4. Existing measures and techniques to combat counterfeit ICT devices.
- 5. ITU involvement and possible Creation of a Regional Group of ITU-T SG11.





#### Perceived Understanding of a Counterfeit ICT Device



- The survey explored the common percep-tions in the Africa Region with respect to whether a counterfeit ICT device is under-stood to mean either of the following: substandard device, fake device, unregis-tered device or un-authorized de-vice.
- Half (50%) of the respondents indicated their understanding of a "counterfeit ICT device" to mean a "fake device".



Member States' Definition of Counterfeit ICT Device

### COUNTRY SPECIFIC DEFINITION OF COUNTERFEIT ICT DEVICE

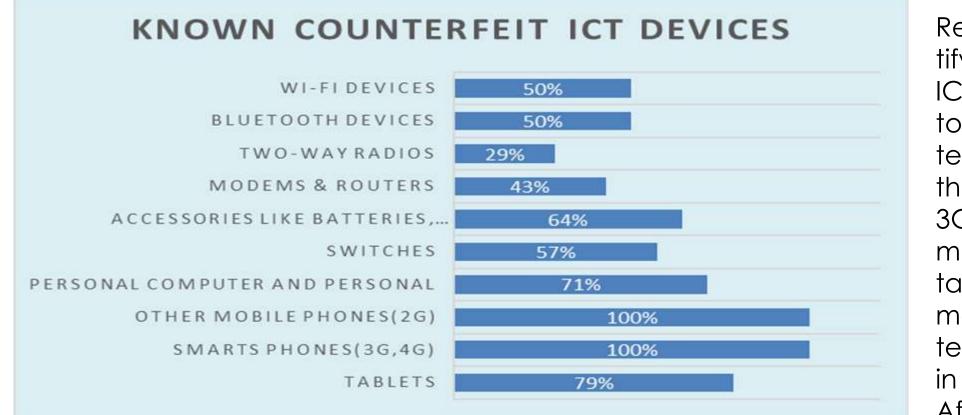
RESPONSES	NO. OF RESPONSES	(%) RESPONSES	CUMULATIVE PERCENTAGE (%)		
Yes	3	21.4	21.4		
No	11	78.6	100		
Total	14	100	0		
Table 1: Source: Survey responses					

Responses from only three countries (21%) says yes, they have definitions with the remaining 79% of the (11 countries) having no such definition for what a counterfeit ICT device is. However, the those who said there were definitions in their countries did not even state what such definitions were.

8



#### Known Counterfeit ICT Device among Member States

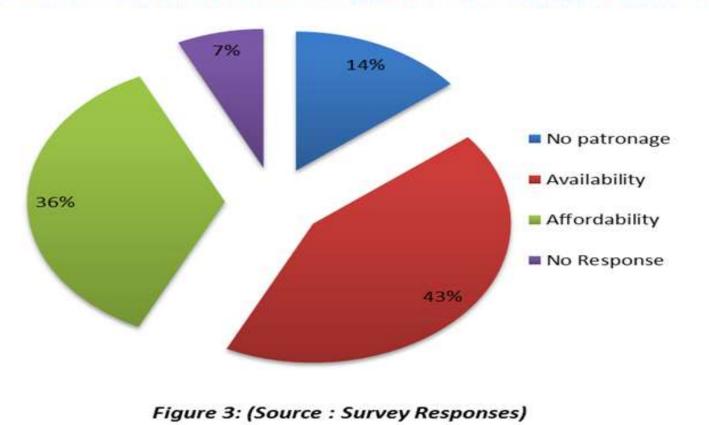


Responses to identify specific types of ICT devices known to have been counterfeited indicated that in general; 2G, 3G & 4G enabled mobile phones and tablets were the most known counterfeited ICT devices in the markets of Africa. 9

#### Figure 2: (Source: Survey Responses)



#### Patronage of Counterfeit ICT Device among Member States



Reasons for Patronage of Counterfeit ICT Devices in Africa Region

The Patronage of counterfeit ICT devices is on the increase because of their availability and affordability in the markets of the surveyed Member States.



### ANALYSIS OF DATA POLICIES, LAWS AND REGULATIONS INCLUDING CONFORMITY ASSI LAWS



**Policies, Laws & Regulations on Counterfeit ICT Devices** 

Laws and Regulations for Combating Counterfeit ICT Devices

Desponses	No. of	Percent	Cumulative		
Responses	Respondents	(%)	Percent		
Yes	14	100.0	100.0		
No	0	0	0		
Total	14	100	100		
Table 2: (Source: Survey Responses)					

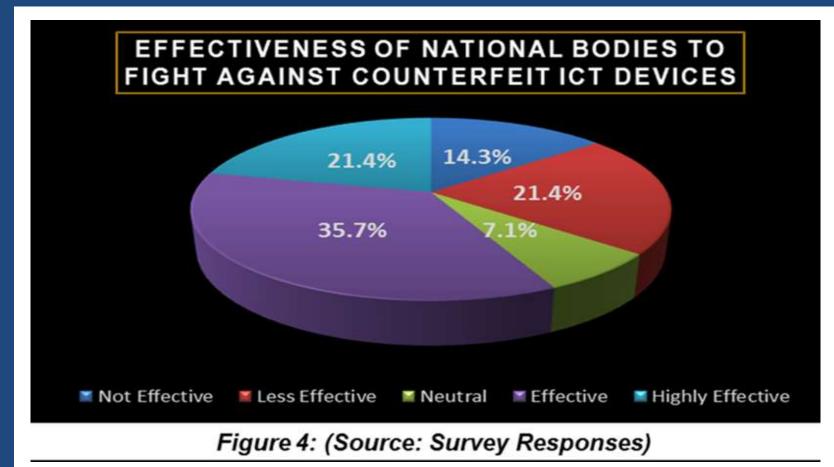
Table 2 presents the responses on countries that have national policies, laws and regulations for manufacturing, importation, distribution and usage of ICT devices, which are aimed at combating counterfeit ICT devices. The analysis show 100% yes response.

### ANALYSIS OF DATA POLICIES, LAWS AND REGULATIONS INCLUDING CONFORMITY ASSI



#### **Policies, Laws & Regulations on Counterfeit ICT Devices**

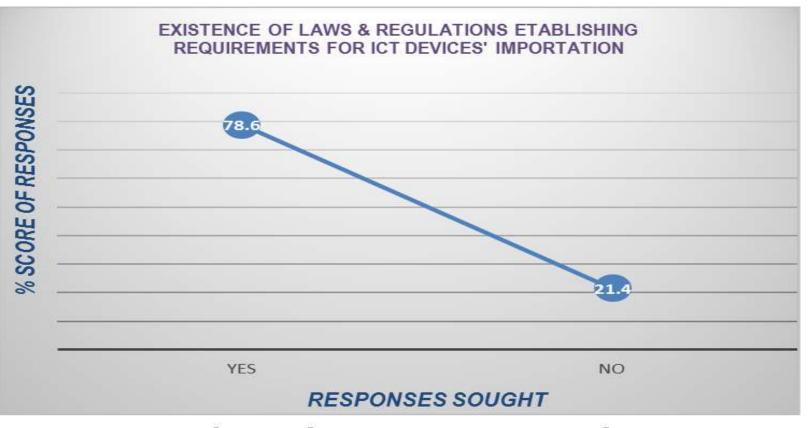
LAWS



The effectiveness of such national bodies to fight against counterfeit ICT devices was assessed. 22% of the respondents indicated that their national bodies were highly effective, 36% said effective whilst 14% indicated that their bodies were not effective - with the remaining **7%** being neutral. 12

POLICIES, LAWS AND REGULATIONS INCLUDING CONFORMITY ASSI LAWS

#### Existence of Conformity Assessment Laws and Regulations



issue, 79% On this 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 5 shows this assessment while Table 5 presents a list of countries and their relevant laws, regulations and guidelines

4/3/2017

Figure 5: (Source : Survey Responses)

NEGATIVE EFFECTS OF ICT COUNTERFEIT DEVICES



#### **IMPACT ASSESSMENT**

#### Negative Effect of Counterfeit ICT Devices

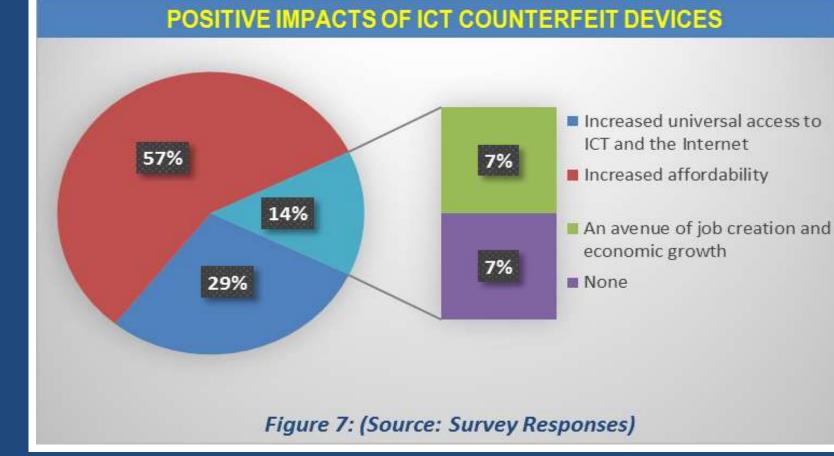
#### 10.50National security and related threats (eg. terrorism) 7.10Threat to the environment and disposal/recycling problems 17.50 Quality of services related challenges Loss of counterfeited ICT Device brand integrity, reliability and 8.80 acceptability 10.50 Threat to digital financial services like mobile banking 22.80 Threat to the public health and safety 22.80 Infringement on property and copy rights or trademark 0.00 5.00 20.00 25.00 10.0015.00 % RESPONSES

Analysis of responses the negative on effect 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 6: (Source: Survey Responses)

#### **IMPACT ASSESSMENT**

### Perceived positive effect of counterfeit ICT devices



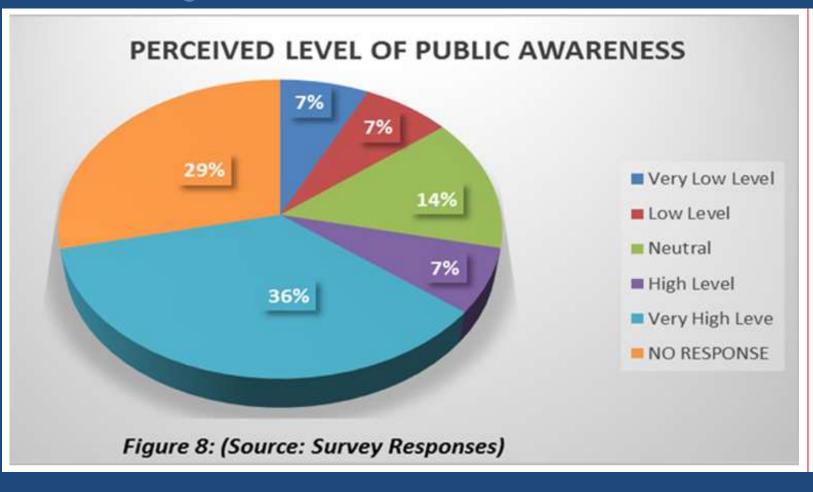
#### The analysis of responses that were sought to identify positive effect(s) on counterfeit ICT devices recorded as high as 57% for "affordability" and 29% for "increased universal access to ICT and internet".

The Reason accounting for this were though, not sought for, it may include the uptake of social media by the youth, encouraging counterfeiters to invest in such affordable ICT devices.



# EXISTING MEASURES AND TECHNIQUES TO COMBAT COUNTERFEIT ICT DEVICES

#### Perceived level of Awareness creation and sensitization



In the analysis assessing perceived level of public awareness and sensitization on counterfeit ICT devices in the Africa Region:

- 36% of Member States responded that their level of public awareness and sensitization on counterfeit ICT devices were very high.
- 7% of respondents indicated that there is very low public awareness and sensitization programmes. 16

# ANALYSIS OF DATA EXISTING MEASURES AND TECHNIQUES TO COMBAT COUNTERFEIT ICT DEVICES

#### The Need and Extent of Public Education

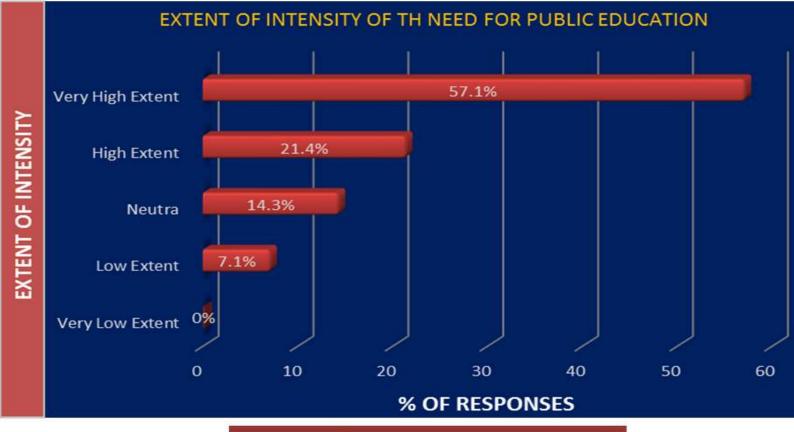


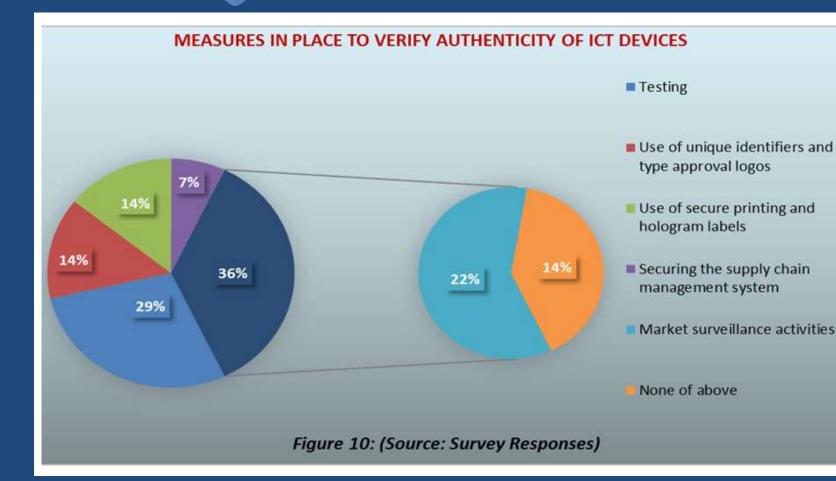
FIGURE 9: (Source: Survey Responses)

- A 100% yes response was received from all Member States that were surveyed on the need for public education on counterfeit ICT devices.
- 57% of the respondents recommended highly intensive public education on counterfeit ICT devices in the region (Figure 9).
- With regard to the existence of ICT anti-counterfeiting forums, the responses show that 43% of the respondents had such forums in place in their countries





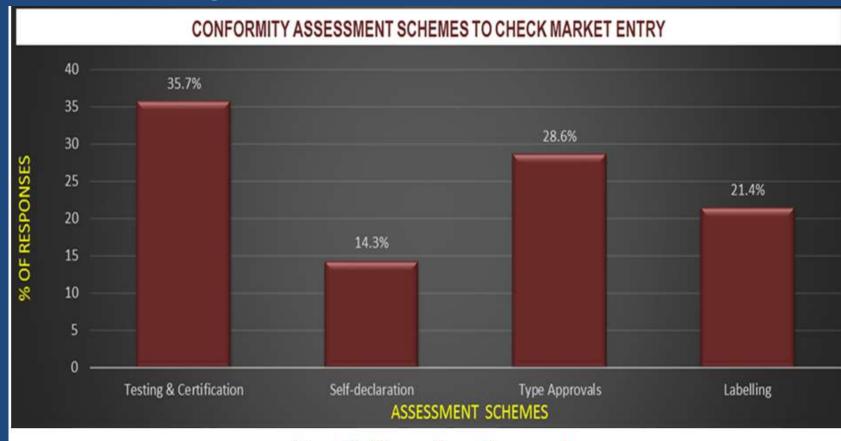
#### Verification of ICT Device Authentication



- Regarding the authenticity of device verification, 9 (64%) responding countries have no procedures with only 36% being 5 Member States says yes, they have procedure to do authentication.
- Responses identifying existing measures in the place to verify the authenticity of ICT devices showed that "Testing" and "Market Surveillance Activities "were the dominant verification mechanisms used among Member States (See Figure 10).



#### □ Conformity Assessment Process to Check Market Entry



conformity The 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

4/3/2017

Figure 11: (Source: Survey Responses)



#### Testing Laboratory & Conformity Assessment to Combat Counterfeit ICT Devices

- Reponses analysed with regard to existence of Testing Labs in the responding countries shows that:
- Only 21%, representing 3 Member States were in the affirmative; adding that their labs were capable to perform device authentication. Sudan & Nigeria are two of these three. Sudan performs RF Parameter and EMI Testing (Emission) whereas Nigeria applies a Light Testing Scope on Mobile Phones.
- Interestingly, 11 (i.e. 79%) responding Member States said they have no such ICT Testing Labs.
- 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



4/3/2017

### ITU INVOLVEMENT AND THE CREATION OF REGIONAL GROUP

Analysis of responses for 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 issues.

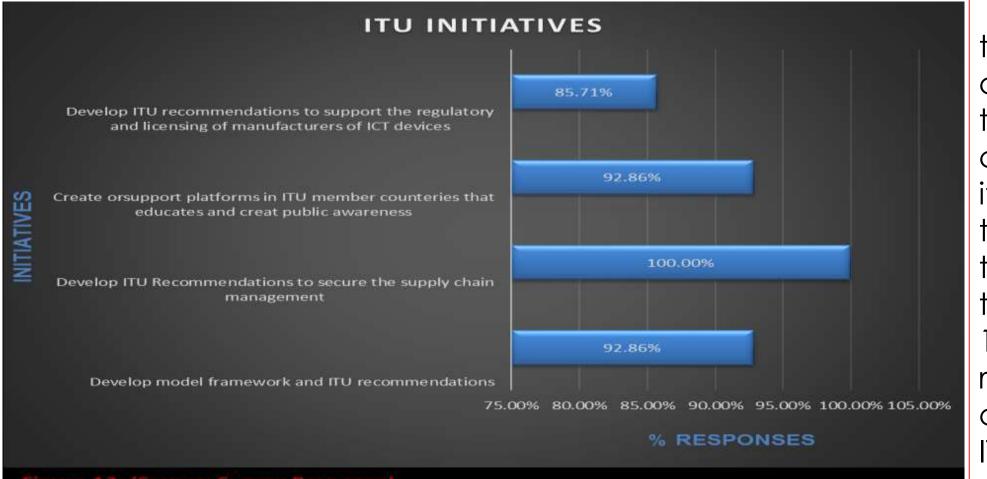
□This analysis showed that all respondents agreed to the need to create such group.

In addition, 86% of the respondents indicated that they would participate in the group whilst 79% 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.

 93% of Response indicates the need of ITU's involvement in addressing the problem of counterfeit ICT devices through its standardization work.



#### Testing Laboratory



On initiatives that the ITU, could take in the area of ICT counterfeiting, i† observed that the initiatives presented on Figure 12 all are relevant to be considered by ITU.

4/3/2017

Figure 12: (Source: Survey Response)



- The terms "Fake" and "Sub-standard" are understood to mean "Counterfeit".
- The 3 countries that responded in affirmative to have such definitions failed to state such definitions.





- Mobile phones and personal computers are perceived to be the most counterfeited ICT devices in the region.
- Testing and Type Approvals are the dominant assessment schemes adopted to check market entry of ICT devices in the region.





- There are existing and effective laws, regulations and national anticounterfeiting forums in place to combat ICT devices in the Africa markets.
- O 28% respondents were not convinced on the level effectiveness of their national laws to combat ICT counterfeit.
- Member States also recommended for a highly intensive public education programmes to be in place.



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





- Majority of Member States in the region have no "ICT testing laboratory".
  - This represents 79% (11 countries).
- 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).
- All of the Member States are in favor of creating an ITU-T SG11 Regional Group for Africa
- 79% would participate in the group activities



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

#### 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.



O https://www.itu.int/dms\_pub/itu-t/opb/tut/T-TUT-CCICT-2017-PDF-E.pdf



