Counterfeit ICT Devices, Conformance and Interoperability Testing Challenges in Africa
Cairo, Egypt on 5-6 April 2017.

THE WEST AFRICA REGIONAL SYSTEM TO COMBAT COUNTERFEIT DEVICES PROJECT

ELH MAMAN LAMINOU, WATRA, elmlami@hotmail.com
AGENDA

I. WATRA IN THE GLANCE

II. THE WEST AFRICA REGIONAL SYSTEM TO COMBAT COUNTERFEIT DEVICES PROJECT
WATRA IN THE GLANCE

• West Africa Telecommunication Regulators Assembly (WATRA), established in November 2004
• Membership: fifteen (15) countries with through independent National Regulatory Authorities (NRAs) and departments
• Headquarters in Abuja, Nigeria.
WATRA IN THE GLANCE

WATRA’S Role: WATRA’s primary aim is to foster liberalisation and completion through the establishment of modern legal and regulatory structures for telecommunications delivery in West Africa towards a common, virile common telecommunications markets.
WATRA IN THE GLANCE

• **WATRA’s Mission:** To promote rapid and even development of telecommunications in West Africa towards attaining globally competitive standards while facilitating accelerated development of telecommunications infrastructure and provision of services at affordable rates in the sub-region and encourage standardisation and harmonisation of policy, legal and regulatory framework.

• **WATRA’s Vision:** An ICT enabler for the sub-region with telecommunications service delivery of international standards available to all at affordable price.
THE REGIONAL SYSTEM TO COMBAT COUNTERFEIT DEVICES PROJECT

- Liberalisation of telecommunications sector open to private
- Establishment of modern legal and regulatory structures for telecommunications delivery
- Explosion of mobile users and the number of mobile telephone users is increasing every day, the penetration rate is more than 100% in most of countries
- One of the consequences of the development of telecom sector in the world and particularly in West Africa is the proliferation of counterfeit ICT equipment and accessories.
Positive impact of counterfeit devices
Negative impact of counterfeit devices

Counterfeit mobile phone and accessories negatively impact society by, among other things:

• lowering the quality of service of mobile telecommunication services, thus impacting the experience of consumers and businesses;

• creating a safety hazard for consumers due to use of defective or inadequate components or materials;

• raising cybersecurity-related threats;

• jeopardizing consumer privacy;

• impairing the safety of digital transactions;
Negative impact of counterfeit devices

- evading applicable taxes and duties and hence negatively impacting government tax coffers;
- creating risks to the environment and consumer health due to the use of hazardous substances in the manufacturing of these devices;
- facilitating the drug trade, terrorism, and other local and international criminal activity;
- causing economic harm given the market distortion caused by the unfair competition and deceptive practices; and
- damaging the trademarks of companies who manufacture the original products.
Negative impact of counterfeit devices

• Counterfeit products, because of their poor assembly and use of poor quality components, contain hazardous substances that are banned in many countries under the restriction of hazardous substances or national equivalent legislation.

• Some studies conducted in other countries have confirmed the existence of hazardous substances in counterfeit mobile phones.

• In addition, the use of phones with duplicate/fake/missing international mobile equipment identity (IMEI) numbers can present threats to national and personal security as they are difficult to trace on the network.

• Justifications for this project are because counterfeit devices are sources of the following problems:
Negative impact of counterfeit devices

- **Health and Safety Risks**: Higher power emissions, Risk of battery explosion
- **Lost Government Revenues**: Lost tax revenues, Lost custom revenues, Investment needed to fight corruption
- **Security Risks**: Use of cloned device for criminal act, Use of stolen phone for criminal act
- **Degraded Customer Experience**: Lower quality of service, Non-compliance with standards, No approval process or quality control
- **Socio-economic Impacts**: Infringement of IPR, Revenue loss for legal distributors, Lower investment in the sector
- **Environmental Risks**: Use of hazardous substance, Equipment disposal problems
WATRA PROJECT TO COMBAT COUNTERFEIT DEVICES IN WEST AFRICA

Proposed System

The proposed system will consist of an integrated Information Technology solution aimed to combat counterfeit devices proliferation in West Africa as well as enhancing increase state tax revenues from device import, the enforcement of intellectual property rights.
WATRA PROJECT TO COMBAT COUNTERFEIT DEVICES IN WEST AFRICA

WATRA SOLUTION

• Different solutions can be implemented at country level (depending on country needs and regulations): Blacklist based EIR, Whitelist based EIR and CID.

• The list of blacklisted and whitelisted devices can be shared among countries through the WATRA central database

• The list of blacklisted can be shared and synchronized with the GSMA worldwide Central IMEI database
WATRA PROPOSAL TO COMBAT COUNTERFEIT DEVICES IN WEST AFRICA

Objectives of the Project

• Combat the counterfeit devices in order to improve the quality of services of mobile network, healthy mobile services, to increase states tax revenue from device import. Other justifications for this project include:
  • Fight against phone theft
  • Block devices with invalid IMEIs
  • Unified whitelist at country level
  • Blacklist integrated with GSMA worldwide DB
  • Fight against illegal device import
  • Increase state tax revenues from device import
  • Completely prevents IMEI cloning
  • The use of data by Law Enforcement Agencies across the region;
  • the enforcement of intellectual property rights
  • The creation of jobs across the region.
WATRA PROJECT TO COMBAT COUNTERFEIT DEVICES IN WEST AFRICA

Expected Outcome
The project initiative is expected to deliver the following outcomes:

• Fight against phone theft
• Block devices with invalid IMEIs
• Unified whitelist at country level
• Blacklist integrated with GSMA worldwide DB
• Fight against illegal device import
• Increase state tax revenues from device import
• Completely prevents IMEI cloning
• The use of data by Law Enforcement Agencies across the region;
• the enforcement of intellectual property rights
• The creation of jobs across the region.
WATRA PROJECT TO COMBAT COUNTERFEIT DEVICES IN WEST AFRICA

Beneficiaries
The citizens, telecoms operators, devices vendors and governments of Member States within the region will benefit immensely from the proposed system with the following benefits not limited such as:

• Fight against phone theft
• Block devices with invalid IMEIs
• Unified whitelist at country level
• Blacklist integrated with GSMA worldwide DB
• Fight against illegal device import
• Increase state tax revenues from device import
• Completely prevents IMEI cloning
• The use of data by Law Enforcement Agencies across the region;
• the enforcement of intellectual property rights
• The creation of jobs across the region.
WEST AFRICA REGIONAL DATA NETWORK TO COMBAT COUNTERFEIT DEVICES

GSMA
- IMEI Database
- Devices blacklisted worldwide

WATRA
- Regional Central EIR
  - Blacklisted Devices
  - Whitelisted Devices

Country 1
- Local Central EIR
  - Blacklisted Devices
  - Whitelisted Devices

Country 2
- Local Central EIR
  - Blacklisted Devices
  - Whitelisted Devices

Country ...
- Local Central EIR
  - Blacklisted Devices
  - Whitelisted Devices

Country 15
- Local Central EIR
  - Blacklisted Devices
  - Whitelisted Devices

Mobile Operator A1
- Device A (whitelisted)
- Device D (blacklisted)

Mobile Operator B1
- Device D (blacklisted)
- Device C (white/whitelisted)

Mobile Operator A2
- Device C (white/whitelisted)
- Device B (blacklisted)

Mobile Operator B2
- Device B (blacklisted)
- Device E (white/whitelisted)

Mobile Operator A15
- Device E (white/whitelisted)
- Device B (blacklisted)

Mobile Operator B15
- Device B (blacklisted)
WATRA PROPOSAL TO COMBAT COUNTERFEIT DEVICES IN WEST AFRICA

Scope
The Project shall initially be piloted in selected countries with high rate of mobile users and will be implemented in two phases:

- **Phase 1:** Implementation of regional data base and pilot countries
  - Establishment of a regional database connected to the GSMA data and ITU data through Internet or a Wide Area Network (WAN) link;
  - The regional database will hold a current copy of the Country database with real time updates and data on the country database;
  - Any country can query the regional database through Internet or WAN link.

- **Phase 2:** Development and installation of national database
  - Establishment of national database at Country that desire to have a similar system for use within the country.
  - Interconnection national database to the regional system
  - Entertain request to assist with implementation of a National System
Methodology and Sustainability: Methodology to be employed in this project shall include the following:

- **Project Activities**
- The main project activities will include but not limited to the following;
- **Feasibility Report and Project Cost**
- - Identify Stakeholders;
- - Survey of national systems in Member States;
- - Establish minimum standards for compliance;
- - Identify Member States needing assistance to meet minimum standards;
- - Capacity Building

- **Contract Agreement and Signing**

- **Implementation**
- - Provide Technical Assistance, Capacity Building & Training;
- - Deploy and setup a Data Centre;
- - Data Gathering
- - Harmonisation of standards of data;
- - Customisation of solution;
- - Pilot Testing in Member States;
- - Launch and Go Live;
- - Project Signoff and Closure
WATRA PROPOSAL TO COMBAT COUNTERFEIT DEVICES IN WEST AFRICA

- The components of the system, which will also include the incorporation of appropriate software life-cycle management module in each of the components of the System, are as follows:
  - WATRA Central database
  - National database in each country

- The Solution will have:
  - Central database \textit{blacklist}
  - Central database \textit{whitelist}
  - Central database for Control Illegal Devices (CID)
WATRA PROPOSAL TO COMBAT COUNTERFEIT DEVICES IN WEST AFRICA

Implementation Steps

• Presentation of Concept to ECOWAS WATRA ICT Task Force
• Needs Analysis and Feasibility Report and Project Cost Assessment visits to Member States;
• Development of a Project document that will contain:
  • i) The model System;
  • ii) The technical specifications based on the report of scoping tour and specifications by ICT Task Force.
• Meeting of regulators, customs, telecoms Experts to ratify Project Document
• Meeting of customs Directors-General approval
• Meeting of telecoms regulators Directors-General approval
• Presentation to the relevant WATRA /ECOWAS Committee on telecoms to formally take over the Project, presentation of the project to the ECOWAS Council of Ministers.
WATRA PROPOSAL TO COMBAT COUNTERFEIT DEVICES IN WEST AFRICA

Expertise and Operational Capacity

ECOWAS and WATRA Experience: ECOWAS Commission and WATRA have vast experience in project management as they have successfully implemented and executed similar projects within the region, e.g. ECOWAS Passport Integration and the computerization of customs data under the Automated System of Customs Data (ASYCUDA) Project. ECOWAS adheres to the World Bank criteria of project management.
WATRA PROPOSAL TO COMBAT COUNTERFEIT DEVICES IN WEST AFRICA

Capability to Undertake Project

• WATRA and ECOWAS together with a carefully chosen IT Solution Provider and Systems Integrator should both have the capacity and ability to undertake this project.

• WATRA and ECOWAS will adhere to globally accepted standards for analysis, design, project management and quality assurance.
WATRA PROPOSAL TO COMBAT COUNTERFEIT DEVICES IN WEST AFRICA

• Funding

The project is expected to be funded through PPP by administrations (Customs, Telecom regulators), private (telecom operators, devices vendors). Funding for facilitation will be taken care of by ECOWAS and Development partners.

• Assistance Required

WATRA requires financial assistance from partners to accomplish this project.
conclusion

LET WORK TOGETHER TO STOP THIS
ELH MAMAN LAMINOU
elmlami@hotmail.com

THANK YOU VERY FOR YOUR ATTENTION