

# Fighting Counterfeiting, Fraud, & Device Theft

Progress, Challenges, & Emerging Use cases.

# OUTLINE

## 1. Introduction

- a. UCC Mandate & Other provisions
- b. Shared EIR (CEIR) Overview

## 2. CEIR Functionality

- a. Existing Capabilities
- b. Current Status in the Country

## 3. Proposed CEIR Capabilities

- a. Emerging Use Cases and Needs

## 4. Conclusion



# Mandate



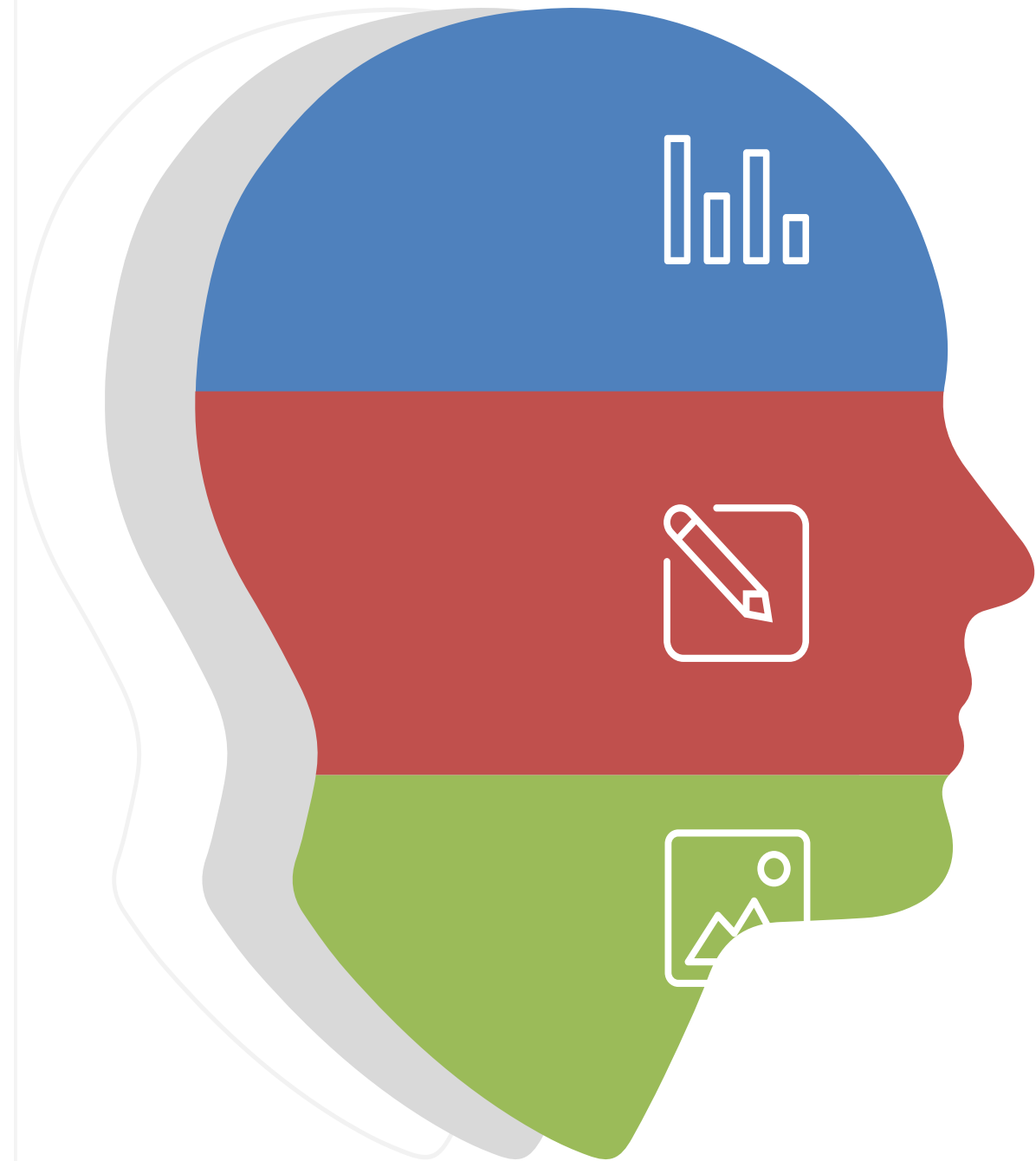
## UCC is mandated by;

- Uganda Communications Act of 2013
- Uganda Communications CEIR Regulations, 2019.
- Uganda Communications Equipment Type Approval Regulations, 2019
- Uganda Communications CERT Regulations, 2019.

## Other relevant laws;

- Data Protection and Privacy Act, 2019.
- Data Protection and Privacy Regulations, 2019.

# Objectives



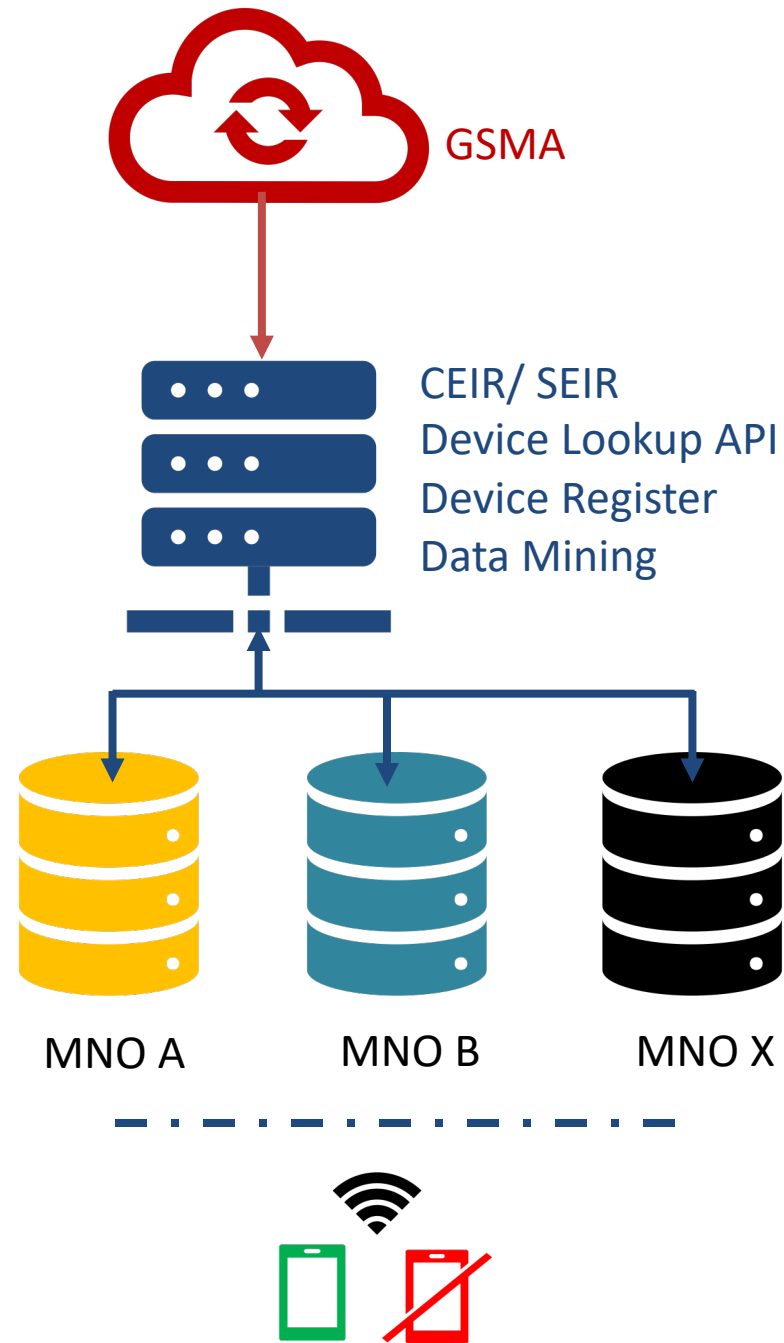
## The Main objective;

To curtail the importation, distribution, sale, installation and use of counterfeit communications devices in Ugandan.

## Other Objectives:

- ✓ to combat the use of communication devices for crime.
- ✓ to protect consumer safety and health.
- ✓ to discourage theft of communication devices in Uganda.
- ✓ to improve Quality of Service (QoS) and Quality of Experience (QoE).

# Overview



- GSMA Integration
  - GSMA TAC Database (**YES**)
  - GSMA International Blacklist – Download (**NO**)
  - GSMA International Blacklist – Contributor (**NO**)
- CEIR/ SEIR
  - CEIR Core System
  - Device Lookup Service API
  - Device Register System (Logging)
  - Data Mining System (Insights)
- MNO EIRs/ CUDB
  - 05 MNOs (MTN, Airtel, Lyca, Hamilton, UTCL)
  - 2G, 3G, 4G, 5G – supported
- Consumers
  - Prevalent use of Dual-SIM devices

# Benefits



## Benefits of Shared EIR/ Central EIR.

- a) Efficient Resource Utilization
- b) Enhanced Network Security
- c) Real-time Data Updates
- d) Reduced Redundancy
- e) Simplified Roaming
- f) Scalability
- g) Streamlined Regulation and Compliance
- h) Data Analytics and Insights:
  - i) Faster Response to Security Threats
  - j) Consistency and Accuracy
  - k) Reduced Operational Overhead
  - l) Future-Proofing:

# Capability



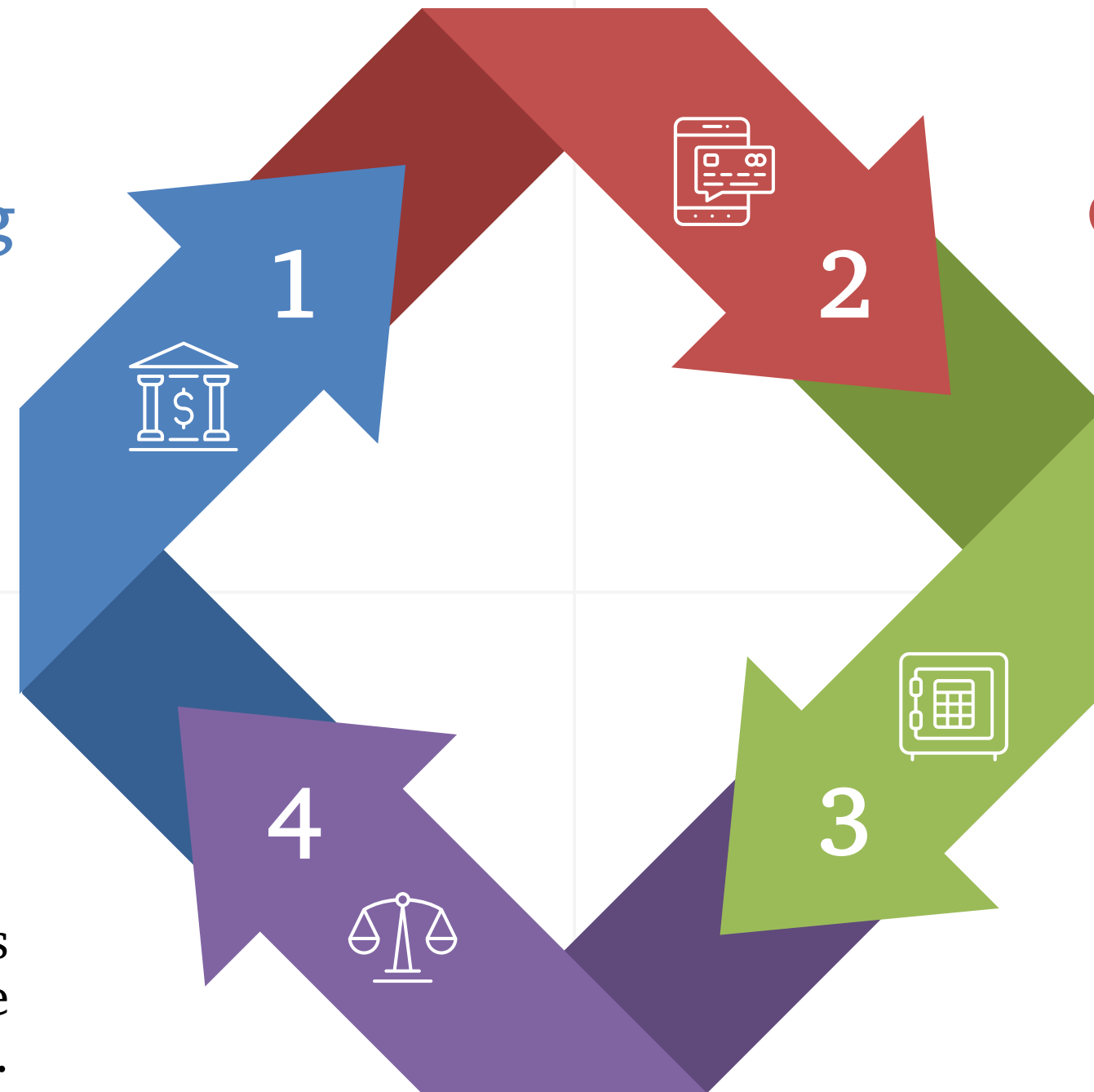
## CEIR Capabilities.

- a) Lists (Colored, National & Nominated Lists)
- b) Device Barring based on IMEI/ MSISDN
- c) Cloned device management
- d) Logging Combinations (IMEI, IMSI, MSISDN, CGI)
- e) Basic fraud analysis
- f) Data Mining – Market Insights & Reports
- g) Locking IMEI to IMSI & Vice Versa
- h) Notifications & Alerts

# Status

## Installation and Testing

Equipment Acquisition,  
Installation, Configuration,  
Testing and Acceptance



## Coordinated Operation

- Operation & Maintenance,
- Market Analysis & Insights
- Stakeholder Coordination

## Stakeholder Engagement

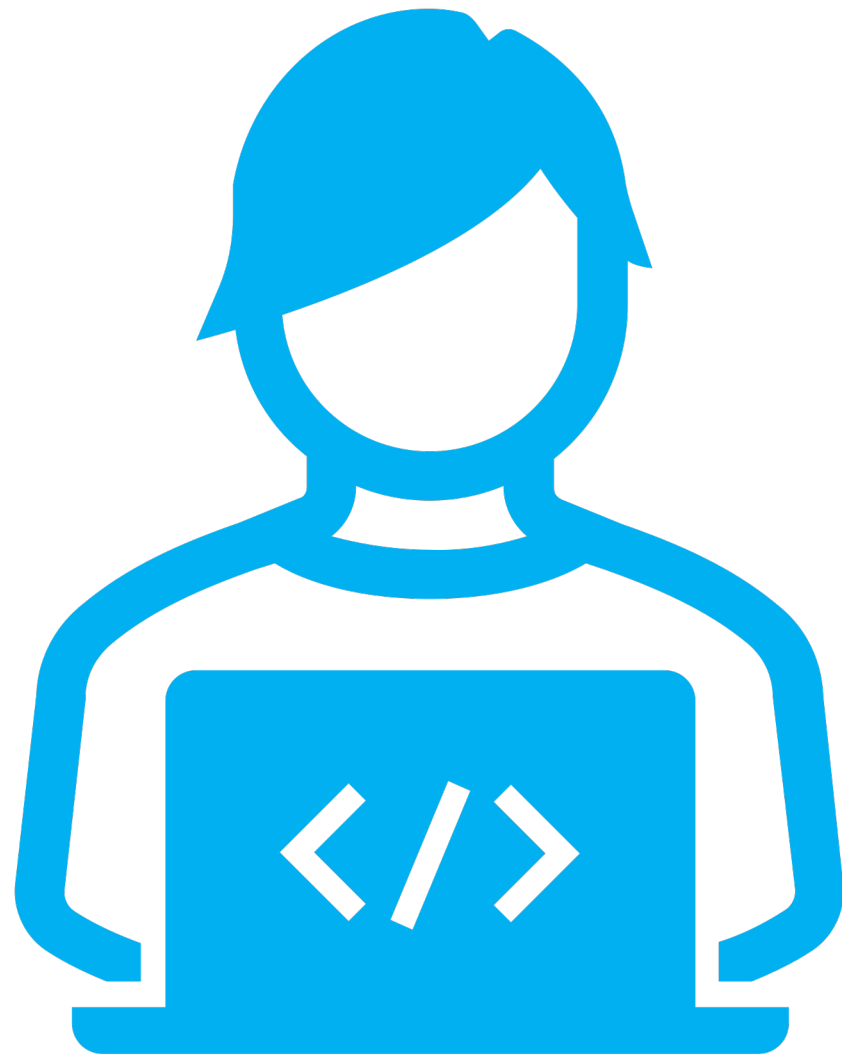
- Consumers (*awareness & education*), Manufacturers, Vendors, Distributors, Operators, Business Community, Other government MDA's.

## Denial Access

Multi-phased denial of access  
considering - Market insights like  
Device demographics, cost, etc.



# Use Cases



## Emerging CEIR Use Cases.

- a) Open APIs – (More data like SIM registration & LBS data)
- b) Support more Permanent Equipment Identifiers (PEI).
- c) Fraud management
- d) Market intelligence (Numbering & Device usage, ICT adoption measurement, Device demographic, Network utilization, SIM ownership, Device mobility, Device financing initiatives, etc.)
- e) Device end-of-life estimates for e-waste management plans.
- f) Inter-state synchronization e.g., EAC region.
- g) Type approval integration & device registration.
- h) Integration with customs for tax assurance.
- i) Immigration Control

*Thank You*

UGANDA COMMUNICATIONS COMMISSION