Device Crime Update

Fighting Counterfeit Device

4th October, 2018

Prepared by: Chris Li, Outreach Director, IMEI Blacklist Service

The GSMA represents the interests of mobile operators worldwide

The GSMA was founded in 1987

12 Offices worldwide:

London | Dubai | Atlanta | Brussels | Barcelona | Hong Kong | Brasilia | Buenos Aires | Sao Paulo | Nairobi | New Delhi | Shanghai

The GSMA represents the interests of mobile operators worldwide

Uniting nearly **800 mobile operators**

With **300+ companies** in the broader mobile ecosystem

GSMA events, attract over **200,000+ delegates** from across the global annually

The GSMA works to deliver a regulatory environment that creates value for consumers by engaging regularly with:

Ministries of Telecoms

Telecoms regulatory authorities

International & non-governmental organisations

Connecting **24,000+** industry Experts
Exclusively for GSMA Members, InfoCentre² is your place to connect with a global community of industry experts

GSMA Working Groups provide frameworks and standards in commercial, operational and technical matters that help maintain and advance mobile industry ecosystems

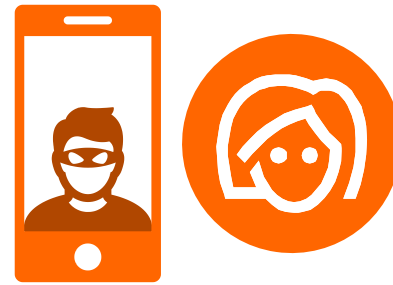**Eight billion+** Mobile connections worldwide

Device Crime and Fraud

Counterfeit Devices

Manufacturer loss $

Poor performance

Safety concerns

No warrantee

Illegal Import

Government taxation loss $

Un-level playing field for legitimate device providers

Device Theft

Consumer loss $

Personal injury

Buying stolen goods

Insurance claims

Insurance fraud

Subscription Fraud

Operator loss $

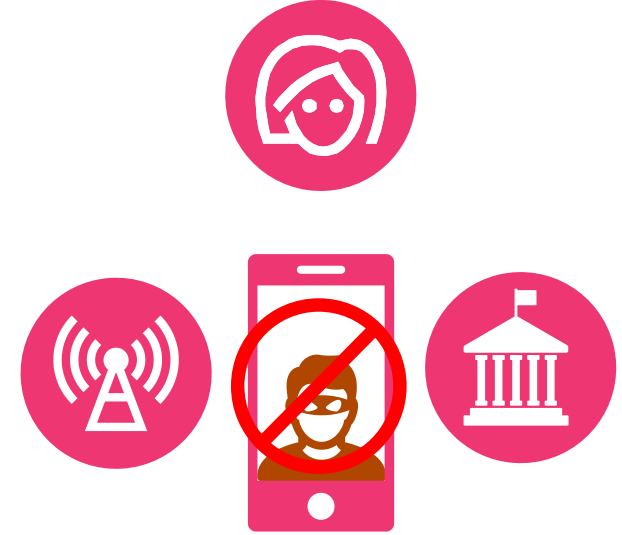# Counterfeiting requires an international strategic response

Prevention at Source
Enforce bona-fide
manufacturing practice

High value
effort

Boarder Protection
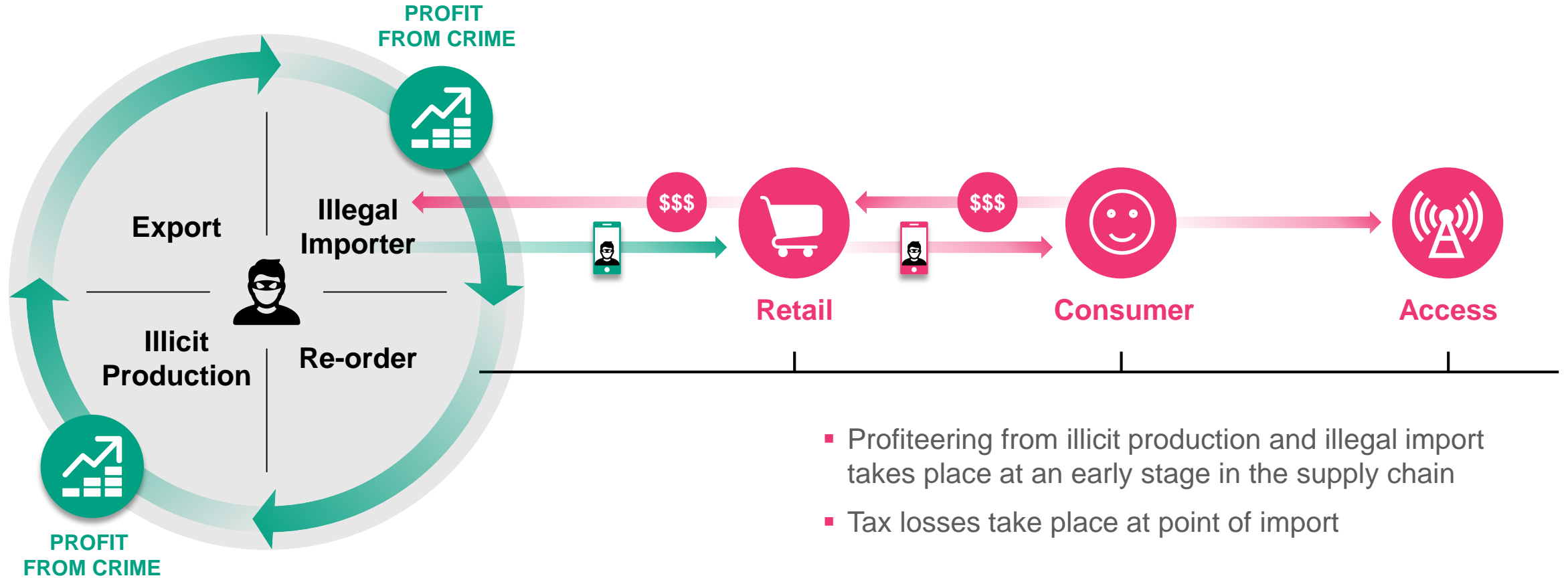Enforce legal export
and import

Multiple
efforts

Local protection
Implement local
counter measures

Multiple high
cost efforts

Illegal Import and Counterfeit Ecosystem

PROFIT FROM CRIME

Export

Illegal Importer

Illicit Production

Re-order

PROFIT FROM CRIME

$$$

Retail

$$$

Consumer
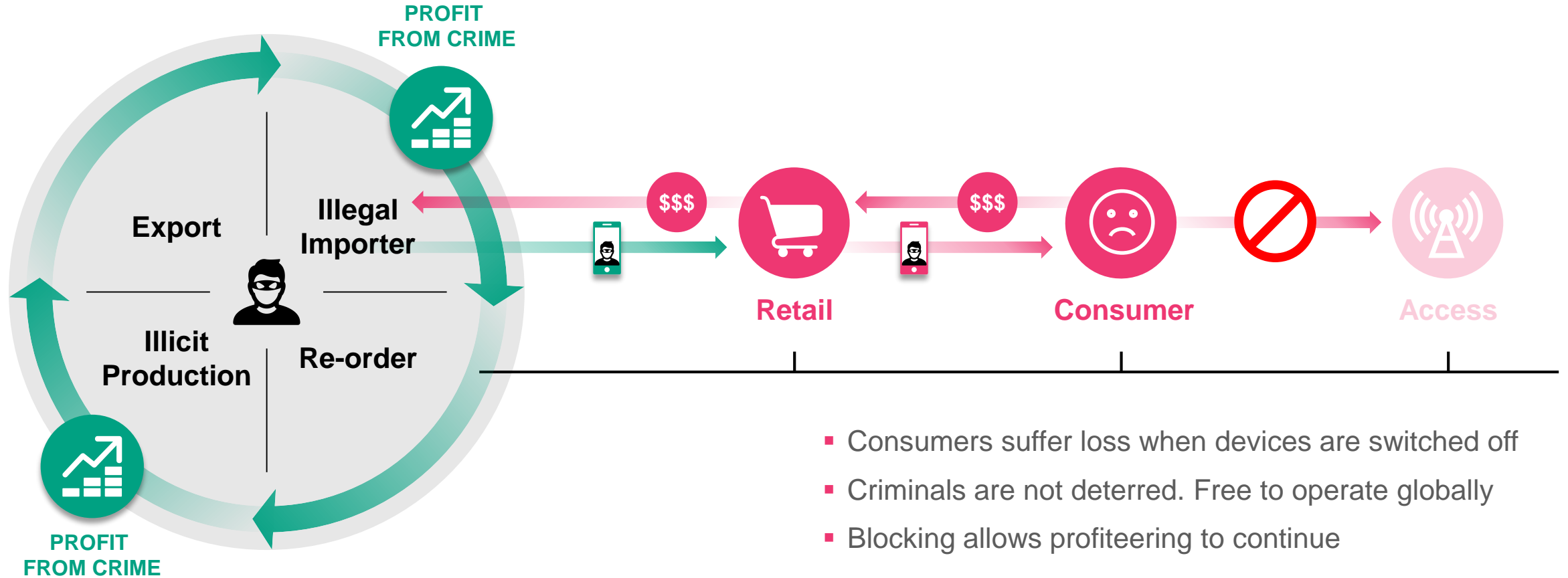
Access

- Profiteering from illicit production and illegal import takes place at an early stage in the supply chain

- Tax losses take place at point of import

Blocking does not deter profiteering from counterfeiting and fraud

PROFIT FROM CRIME

Export

Illegal Importer

Illicit Production

Re-order

PROFIT FROM CRIME

$$$

Retail

$$$

Consumer

Access

- Consumers suffer loss when devices are switched off
- Criminals are not deterred. Free to operate globally
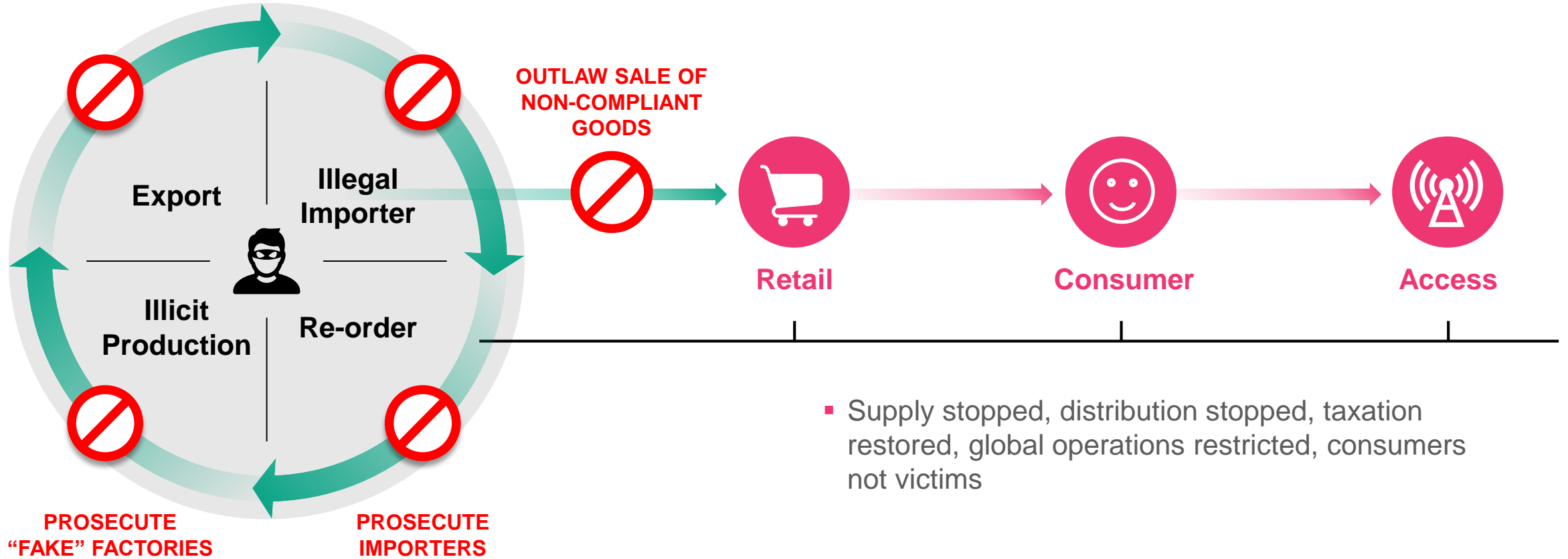- Blocking allows profiteering to continue

Illegal Import and Counterfeit Ecosystem

CUSTOMS AGENCIES SCREEN EXPORTS VS GSMA WHITE LIST

CUSTOMS AGENCIES SCREEN IMPORTS VS GSMA WHITE LIST

OUTLAW SALE OF NON-COMPLIANT GOODS

Export

Illegal Importer

Illicit Production

Re-order

PROSECUTE "FAKE" FACTORIES

PROSECUTE IMPORTERS

Retail

Consumer

Access

- Supply stopped, distribution stopped, taxation restored, global operations restricted, consumers not victims
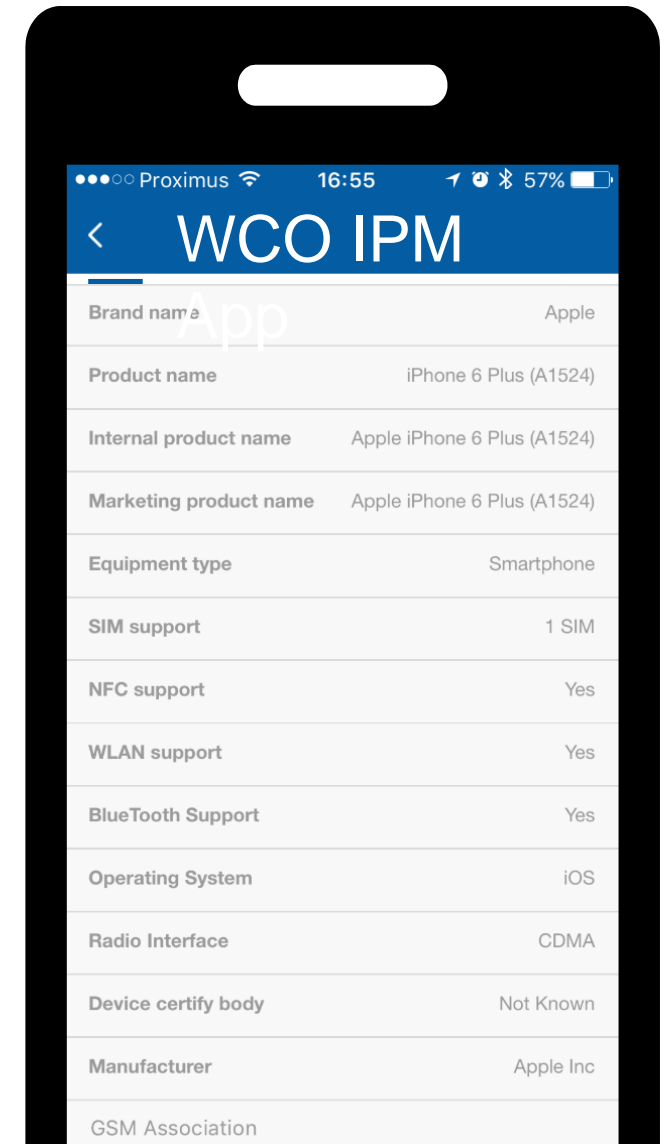
GSMA support of Export/Import Control

The GSMA provides the global White List

- Direct to any Customs Agency

- The World Customs Organisation (WCO)

- WCO provides customs checking
  tools including the GSMA White List
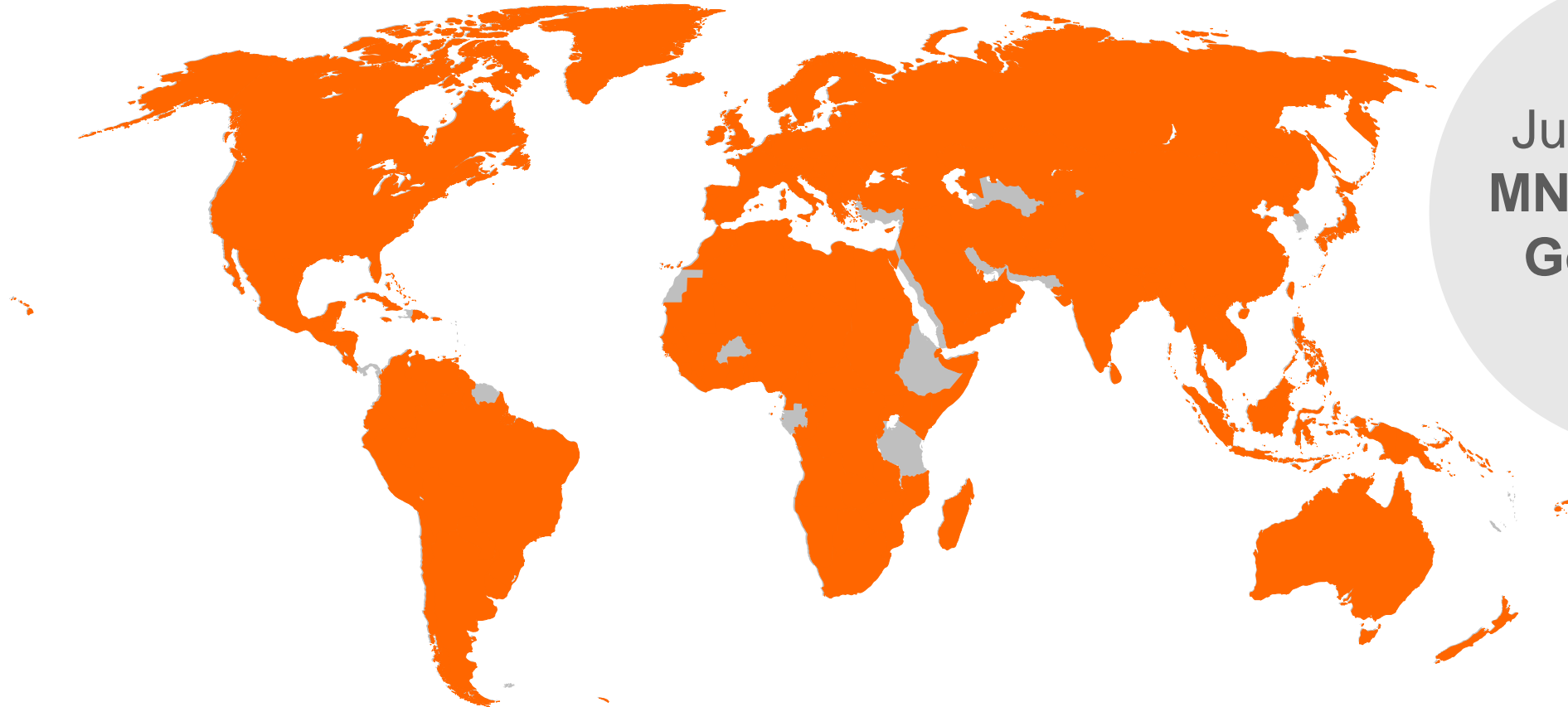
- Solutions exist but usage is poor

The GSMA request ITU and member state support
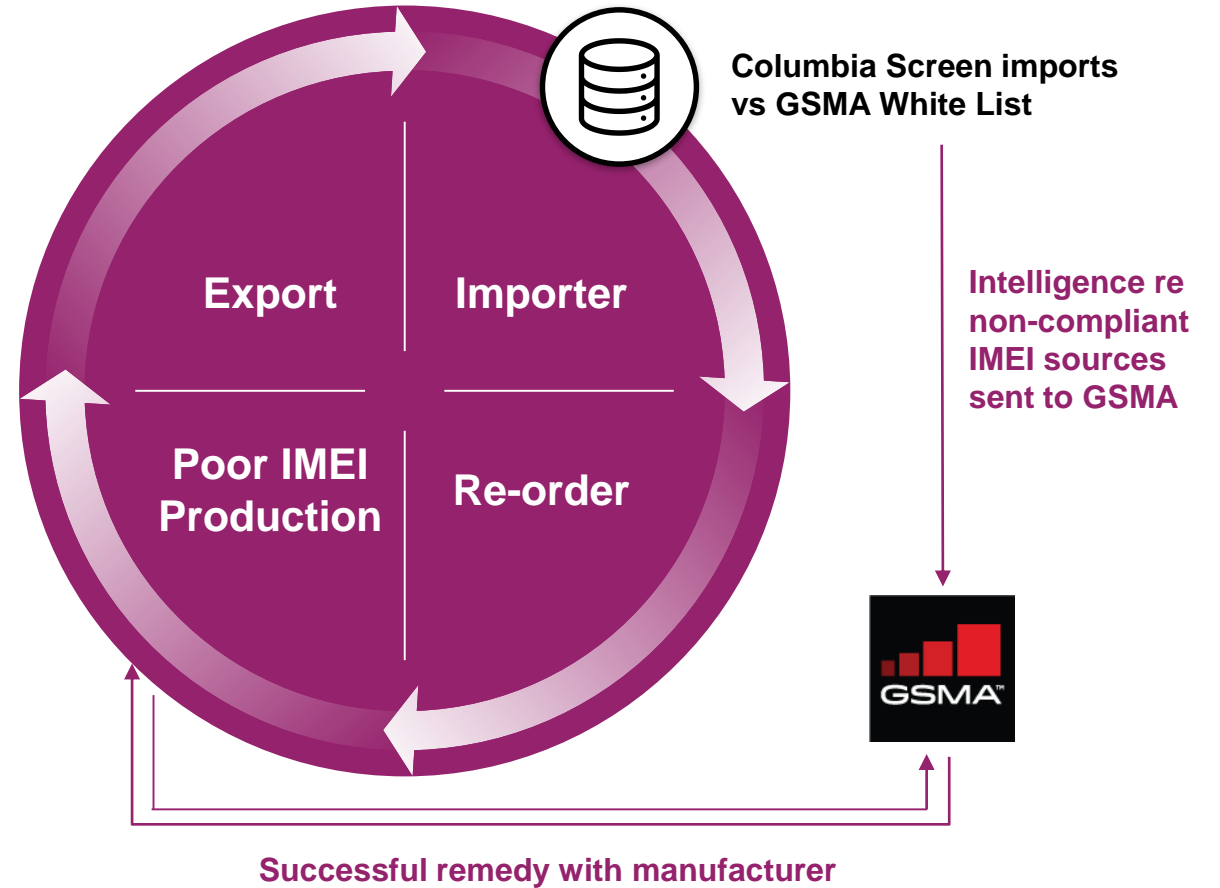of WCO tools

GSMA White List Availability

Just over **700 MNOs and 100 Govt / Reg / LEAs**

IMEI Misuse Correction

- The GSMA have strict legal terms and conditions governing IMEI production

- Illicit organisations seek to evade any identity system

- The GSMA is successful in remedy when provided information

The GSMA requests member states provide information on IMEI misuse
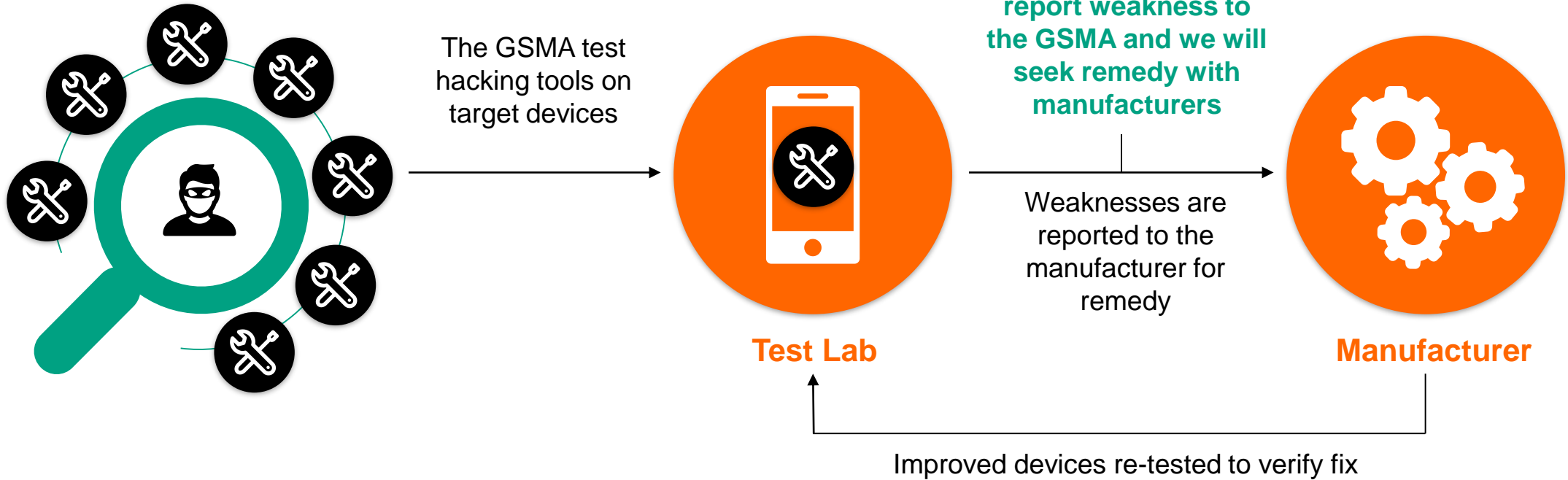
Export

Importer

Poor IMEI Production

Re-order

Columbia Screen imports vs GSMA White List

Intelligence re non-compliant IMEI sources sent to GSMA

Successful remedy with manufacturer

IMEI Reprograming
GSMA IMEI Security Testing

The GSMA is now monitoring IMEI hacking tools

The GSMA test hacking tools on target devices

Member states may report weakness to the GSMA and we will seek remedy with manufacturers

Weaknesses are reported to the manufacturer for remedy

Test Lab

Manufacturer

Improved devices re-tested to verify fix

Local blocking options

- Each operator runs pre-regulation amnesty whitelist

- Allow IMEIs from selected whitelists. Block all other devices

- Block stolen devices via the GSMA Black List, the only globally available information exchange

Operator amnesty whitelists

Customs Screened Imports Duty Paid

Nationally Certified Devices

GSMA White List Registered TAC/IMEI

GSMA Black List

Operator access screening
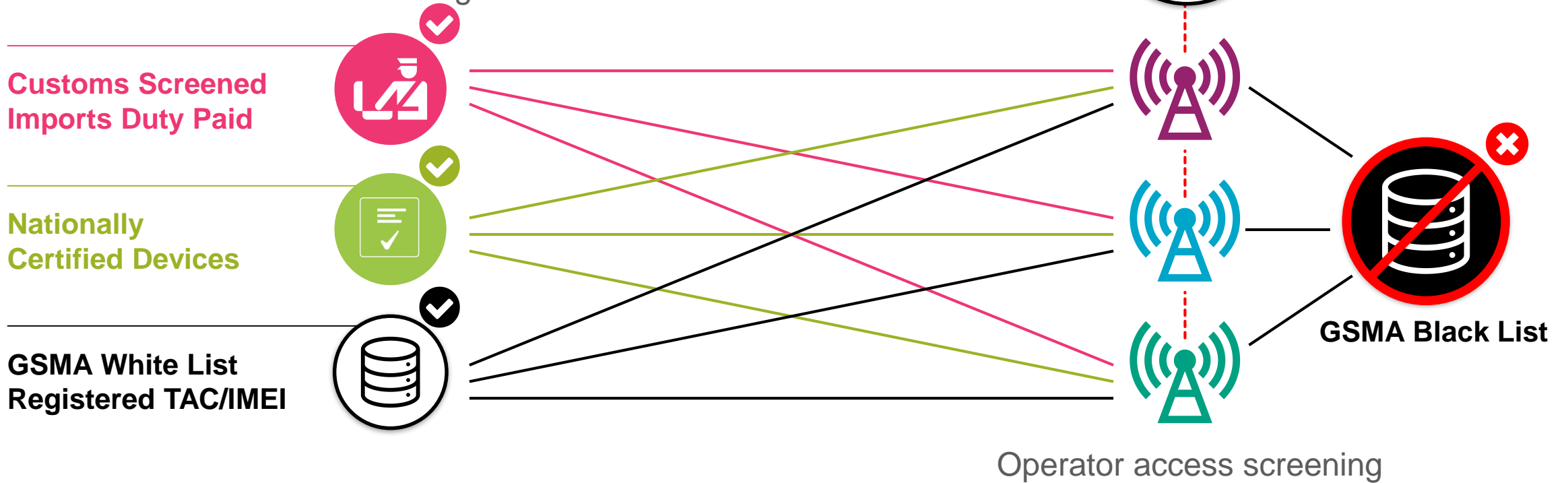
GSMA support

Global tools and information

- ✓ Manages the GSMA White List
- ✓ Manages the GSMA Black List
- ✓ Provides GSMA White List to customs agencies
- ✓ Provides retail screening services
- ✓ Provides information to law enforcement
- ✓ Secures remedy over IMEI misuse with manufacturers
- ✓ Provides secure IMEI implementation design principles
- ✓ IMEI security weakness reporting facility
- ✓ IMEI security testing service

Country support

Countries have powers of enforcement

- ✓ Custom Agencies
- ✓ Law enforcement agencies
- ✓ Intelligence concerning abuse

- ▪ **Awareness and cooperation is building**
- ▪ **The GSMA encourages adoption of its facilities**

The Role of Law Enforcement

- **The law defines the crime / fraud and the basis for action**

- **It is vital to enforce anti-counterfeiting laws**

- **It is vital to enforce tax / duty evasion laws**

- **Introduce law and penalties for sales of devices where duty is unpaid**

- **Introduce law concerning IMEI**

  - Outlaw IMEI reprogramming

  - Outlaw duplicate IMEI

  - Outlaw mal-formed or unauthorized IMEI

- **Certification considerations could include testing devices against existing GCF global test standards**

Existing global best practise tells us to successfully halt the growth of counterfeit devices

- **Prosecution of sources and removal of profit eliminates the problem**

- **Blocking at consumer end allows fraudsters to operate freely in different territories**

- **Create appropriate law underpinning enforcement**

- **Conduct public information campaigns**

- **Share information internationally between enforcement agencies to eliminate sources and distribution**

- **Use existing global GSMA White List and Black List information tools**

- **Send detailed information of IMEI misuse and security issues to the GSMA**

- **Keep local measures simple, in-expensive, non-punitive to consumers; focus your efforts at the source, the early stage of the supply chain**

Additional Resources

GSMA Mobile Policy Handbook

- Counterfeit Device https://www.gsma.com/publicpolicy/handbook/consumer-protection#3

- Mobile Device Theft https://www.gsma.com/publicpolicy/handbook/consumer-protection#12

GSMA Report - Safety, privacy and security across the mobile ecosystem

- https://www.gsma.com/publicpolicy/safety-privacy-security-across-mobile-ecosystem