Overview of ITU-T activities on combating counterfeiting and stolen ICT

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Anatel - Brazil

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Plenipotentiary conference – PP
Resolution 188 – Combating counterfeit and tampered telecommunication/information and communication technology devices

Resolves

to explore all ways and **means to combat counterfeit** and tampered telecommunication/ICT devices in order **to protect ITU members** and other stakeholders **from their negative impacts**,

invites Member States

…

4 **to work in close collaboration with relevant stakeholders, such as, WTO, WIPO and WCO**, on activities relating to combating counterfeit and tampered telecommunication/ICT devices, **including restricting the trading, export/import and circulation of these telecommunication/ICT devices internationally**

instructs the Directors of the three Bureaux

2 to assist all the membership, considering relevant ITU-T recommendations, and **collaborate with other telecommunication/ICT SDOs and regional and international organizations** related to combating counterfeiting, in taking the necessary actions to prevent and detect the tampering (unauthorized changing) and/or replication of unique telecommunication/ICT device identifiers:
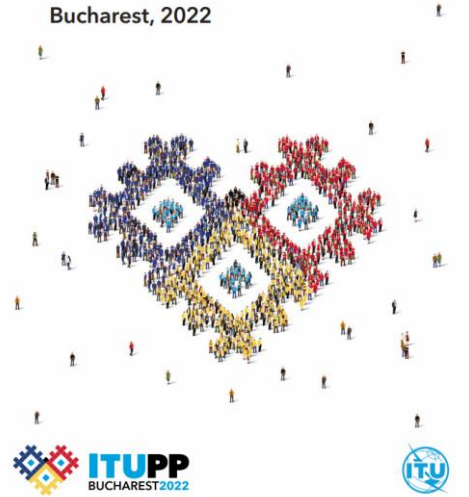
Key achievements: Counterfeit & ICT theft (2017-2022)

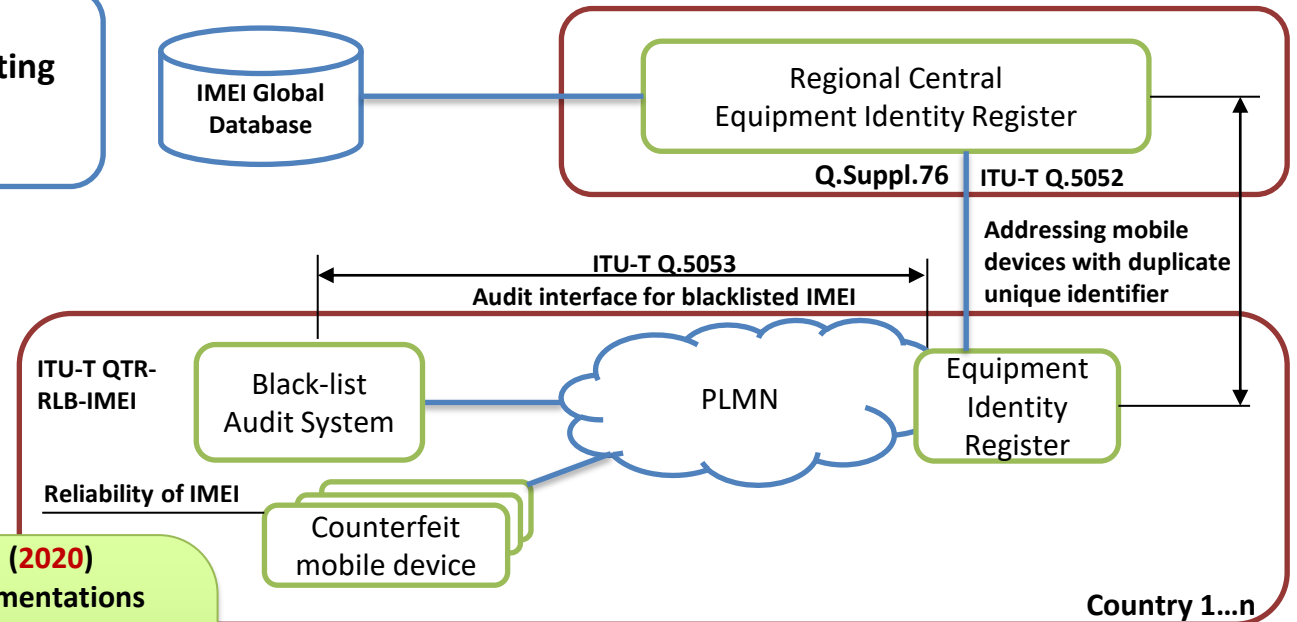## Combating counterfeiting of ICT devices

Resolution 96 of WTSA-16
ITU Telecommunication Standardization Sector studies for combating counterfeit telecommunication/information and communication technology devices

- **Technical Report on Counterfeit ICT Equipment (2015)**
- **QTR-CICT - Survey report on counterfeit ICT devices in Africa region (2017)**
- **ITU-T Q.5050 "Framework for solutions to combat counterfeit ICT devices" (2019)**
- **Questionnaire on Reliability of International Mobile Equipment Identity (IMEI) – (2019)**

ITU-T Q.5052 "Addressing mobile devices with a duplicate unique identifier" (2020)
ITU-T Q Suppl.73 "Guidelines for Permissive versus Restrictive System Implementations to address counterfeit, stolen and illegal mobile devices" (2021)
ITU-T Q Suppl.74 "Roadmap for the Q.5050-series - Combat of Counterfeit ICT and Stolen Mobile Devices" (2021)
ITU-T Q.Suppl.75 "Use cases on the combat of counterfeit ICT and stolen mobile devices" (2021)
ITU-T Q.Suppl.76 "Common approaches and interfaces for data exchange between CEIR and EIR" (2023)
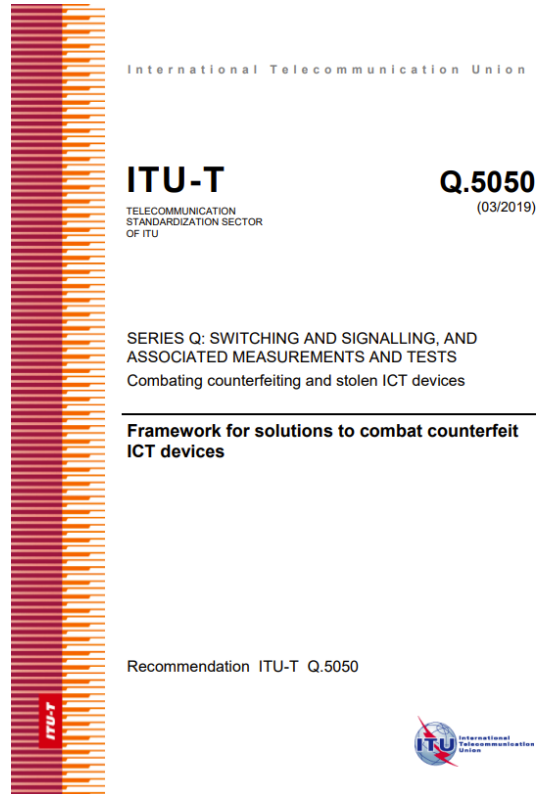
Resolution 97 of WTSA-20
Combating mobile telecommunication device theft

IMEI Global Database

Regional Central Equipment Identity Register

Q.Suppl.76 | ITU-T Q.5052

Addressing mobile devices with duplicate unique identifier

ITU-T Q.5053
Audit interface for blacklisted IMEI

ITU-T QTR-RLB-IMEI

Black-list Audit System

PLMN

Equipment Identity Register

Reliability of IMEI

Counterfeit mobile device

Country 1...n

Combating the use of stolen ICT devices

- **ITU-T Q.5051 "Framework for combating the use of stolen mobile devices" (2020)**

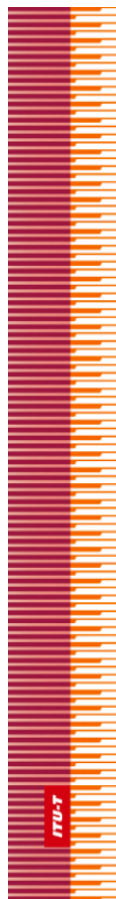# ITU-T Q.5050 "Framework for solutions to combat counterfeit ICT devices" (2019)

International Telecommunication Union

ITU-T   **Q.5050**
(03/2019)

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

SERIES Q: SWITCHING AND SIGNALLING, AND
ASSOCIATED MEASUREMENTS AND TESTS
Combating counterfeiting and stolen ICT devices

**Framework for solutions to combat counterfeit
ICT devices**

Recommendation ITU-T Q.5050

It describes a reference framework, with high-level challenges and requirements that should be considered when deploying solutions to combat the circulation and use of counterfeit ICT devices

ITU-T Q.5051 "Framework for combating the use of stolen mobile devices" (2020)
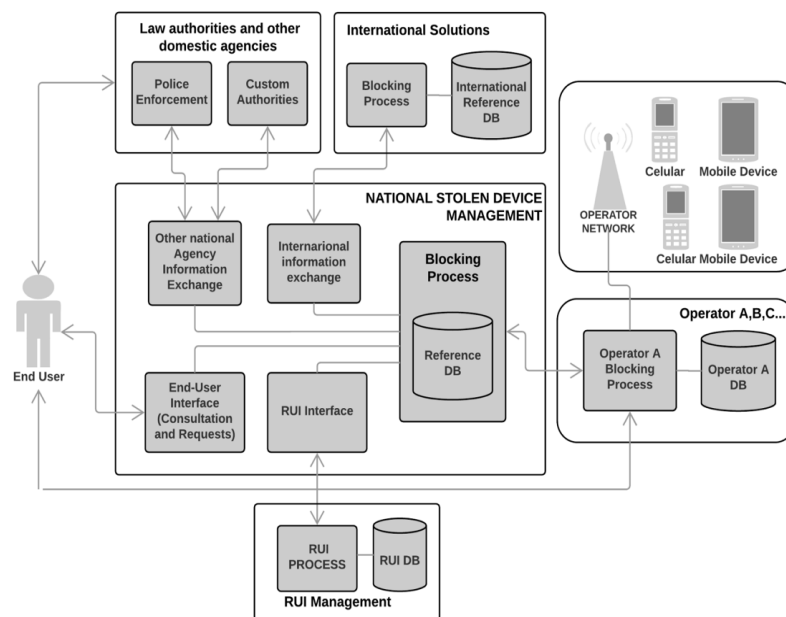

International Telecommunication Union

ITU-T   **Q.5051**
(03/2020)

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

SERIES Q: SWITCHING AND SIGNALLING, AND
ASSOCIATED MEASUREMENTS AND TESTS

Combating counterfeiting and stolen ICT devices

Framework for combating the use of stolen mobile devices

Recommendation ITU-T Q.5051

It is important not only to combat the use of Stolen Mobile Devices, but also to prevent the devices with unauthorized reprogrammed unique identifiers from returning to the network.
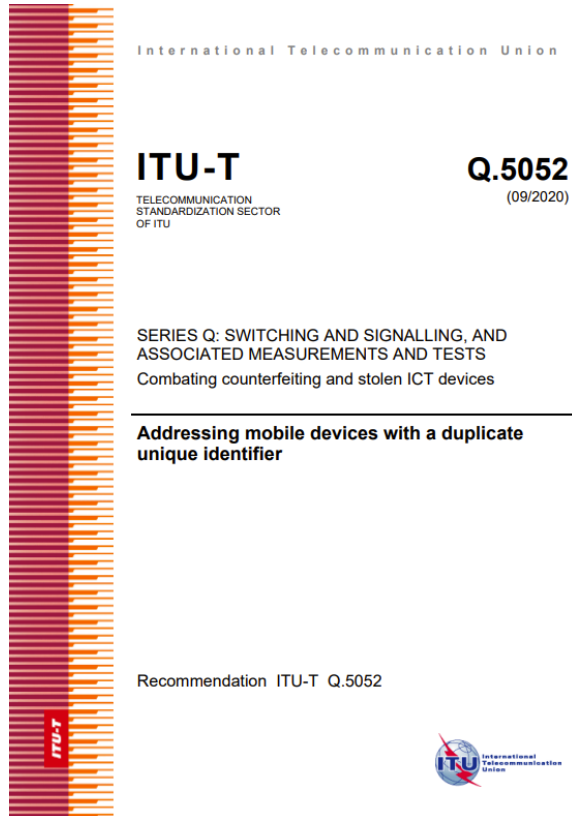
The global database should provide appropriate information if available (e.g. device characteristics, country where the device was stolen, date of event, etc.).

If the stolen device identifiers were found in multiple countries, the global database should provide that information in its results.

This global database should be available to all stakeholders from anywhere in the world to verify whether a device has been reported stolen.
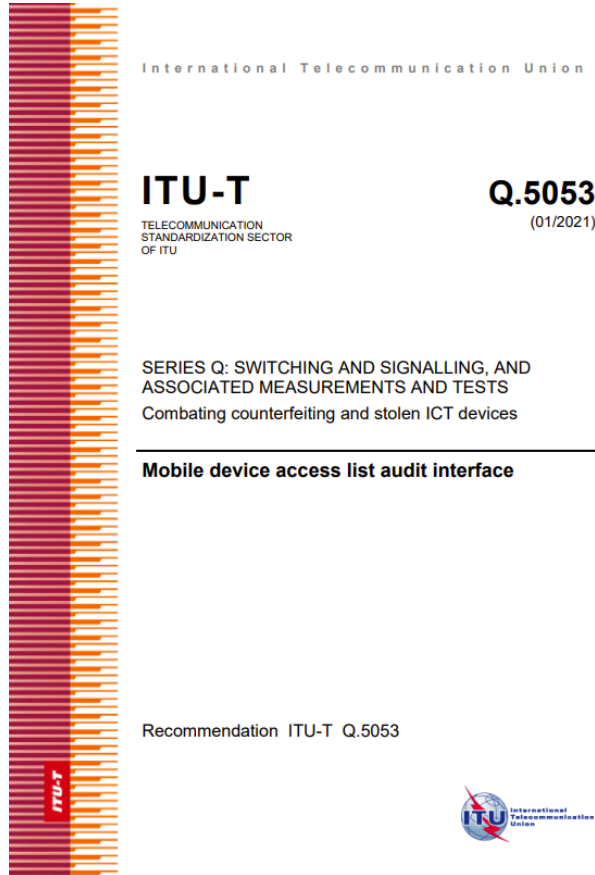
ITU-T Q.5052 "Addressing mobile devices with a duplicate unique identifier" (2020)

International Telecommunication Union

ITU-T   Q.5052

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

(09/2020)

SERIES Q: SWITCHING AND SIGNALLING, AND ASSOCIATED MEASUREMENTS AND TESTS
Combating counterfeiting and stolen ICT devices

Addressing mobile devices with a duplicate unique identifier

Recommendation ITU-T Q.5052

It identifies challenges and proposes mechanisms to enable the detection of mobile devices with duplicate identifiers present on operator networks, as well as recommending mechanisms for validating the legitimacy of such devices

The detection mechanisms for duplicate unique identifiers (UIDs) defined in this standard are based on post-processing mobile network data to identify devices for blocking purposes based on criteria defined by individual national regulatory bodies.

ITU-T Q.5053 "Mobile device access list audit interface" (2021)

International Telecommunication Union

ITU-T   **Q.5053**
(01/2021)

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

SERIES Q: SWITCHING AND SIGNALLING, AND
ASSOCIATED MEASUREMENTS AND TESTS
Combating counterfeiting and stolen ICT devices

Mobile device access list audit interface

Recommendation ITU-T Q.5053

In some countries, international mobile equipment identities (IMEIs) to be restricted (blocked list), thus blocking access to the mobile network, or to be allowed (permitted list) by the mobile network operators (MNOs), may be provided by a telecom authority or law enforcement agency (LEA) via mobile device identifier database (MDID).

This standard describes different types of methodologies and interfaces to check and reconcile the mobile device access list used by the MNOs to comply with the regulations for the mobile device access list audit system (MDALAS).

ITU-T Q Suppl.74 "Roadmap for the Q.5050-series - Combat of Counterfeit ICT and Stolen Mobile Devices" (2021)

Provide an overall index and relation of the ITU-T Q.5050-series of Recommendations.

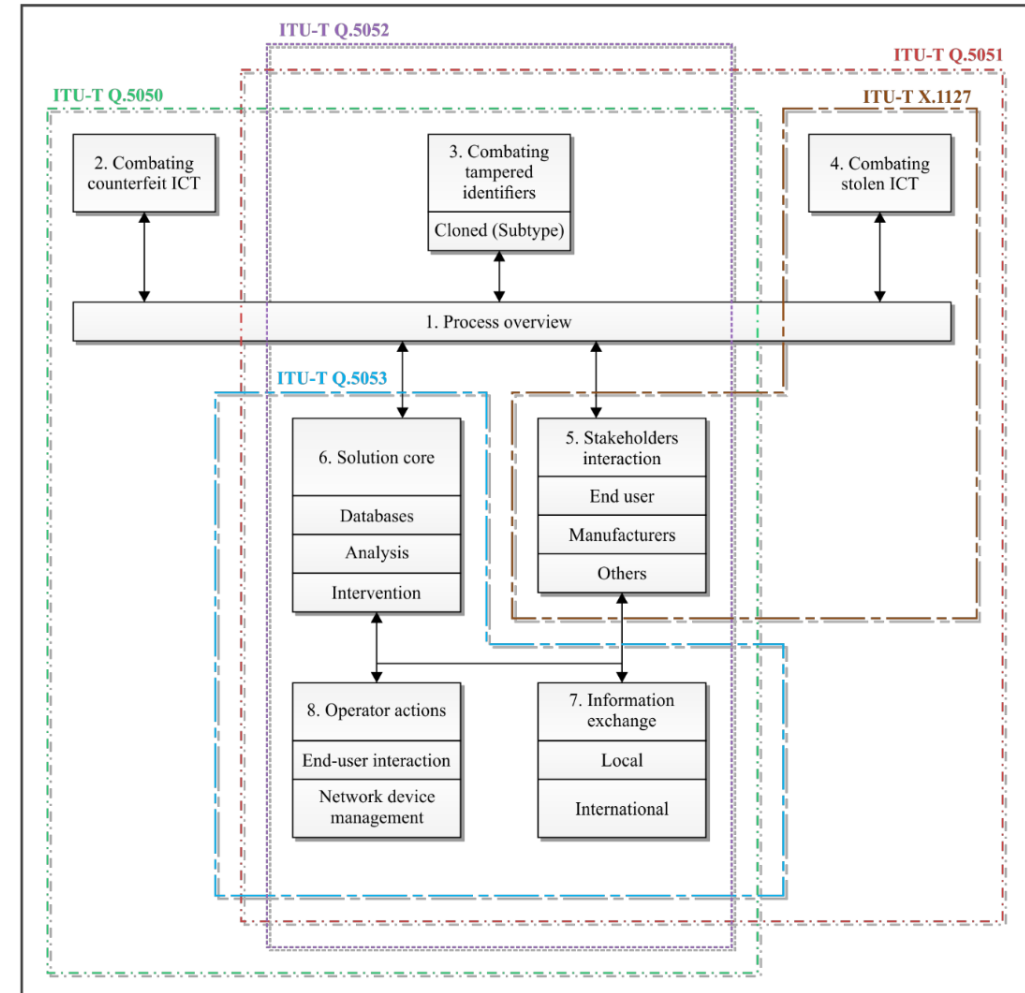# ITU-T Q.Suppl.75 "Use cases on the combat of counterfeit ICT and stolen mobile devices" (2021)

International Telecommunication Union

ITU-T

Series Q
Supplement 75
(12/2021)

TELECOMMUNICATION
STANDARDIZATION SECTOR
OF ITU

SERIES Q: SWITCHING AND SIGNALLING, AND
ASSOCIATED MEASUREMENTS AND TESTS

Use cases on the combat of counterfeit ICT and stolen mobile devices

ITU-T Q-series Recommendations – Supplement 75
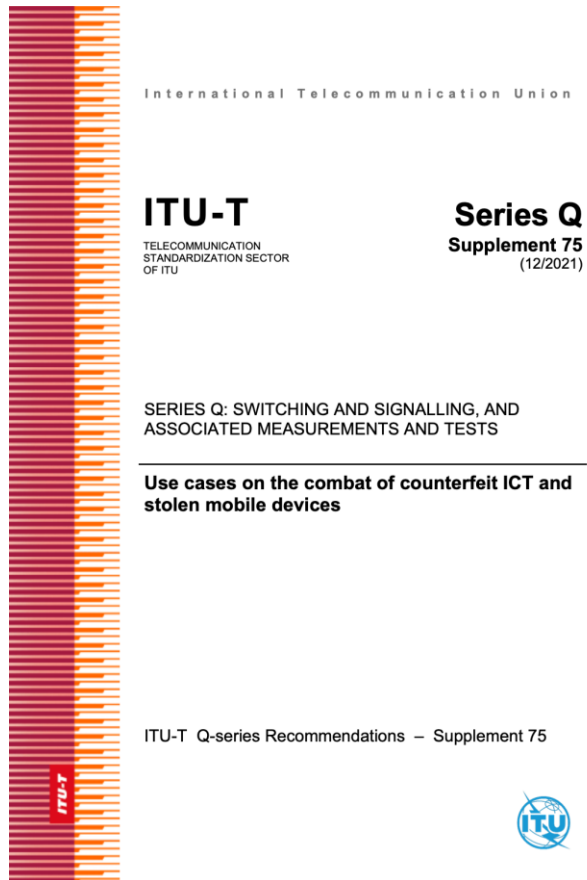
Collects use cases provided by ITU Members that reflects challenges, opportunities and results on the combat of counterfeit ICT and stolen mobile devices.

ITU announces call for updating use cases on the combat of counterfeit ICT and/or stolen mobile devices and implementation of Central Equipment Identity Register (CEIR)

TSB Circular 181

ITU-T Q.Suppl.76 "Common approaches and interfaces for data exchange between CEIR and EIR" (2023)

ITUPublications
Recommendations

International Telecommunication Union
Standardization Sector

Supplement
ITU-T Q Suppl. 76 (10/2023)

SERIES Q: Switching and signalling, and associated measurements and tests

Supplements to ITU-T Q-series Recommendations

Common approaches and interfaces for data exchange between the central equipment identity register and the equipment identity register

It aims to identify current industry approach on the data exchange between CEIR and EIR and propose common approaches and interfaces on this topic.

Note:
CEIR – Central Equipment Identity Register

Technical Report QSTR-MCM-UC: Use Cases on the combat of Multimedia Content Misappropriation (2023)

Draft new Technical Report ITU-T QSTR-MCM-UC (ex. TR-MCM-Use-Cases)

Use Cases on the combat of Multimedia Content Misappropriation

Summary

This Technical Report aims to collect use cases from ITU Members that reflects challenges, opportunities, and results on the combat of multimedia content misappropriation and, with this information compendium, assist ITU members in engaging this problem. To facilitate this information collection, this document proposed a template to be used when including information from new sources, that can either be members state engaging the problem or solution providers.

Keywords

Challenges, Counterfeit receivers, Multimedia content misappropriation, Tampered software, Use-cases.

It aims to collect use cases from ITU Members that reflects challenges, opportunities and results on the combat of multimedia content misappropriation and, with this information compendium, assist ITU members in engaging this problem.
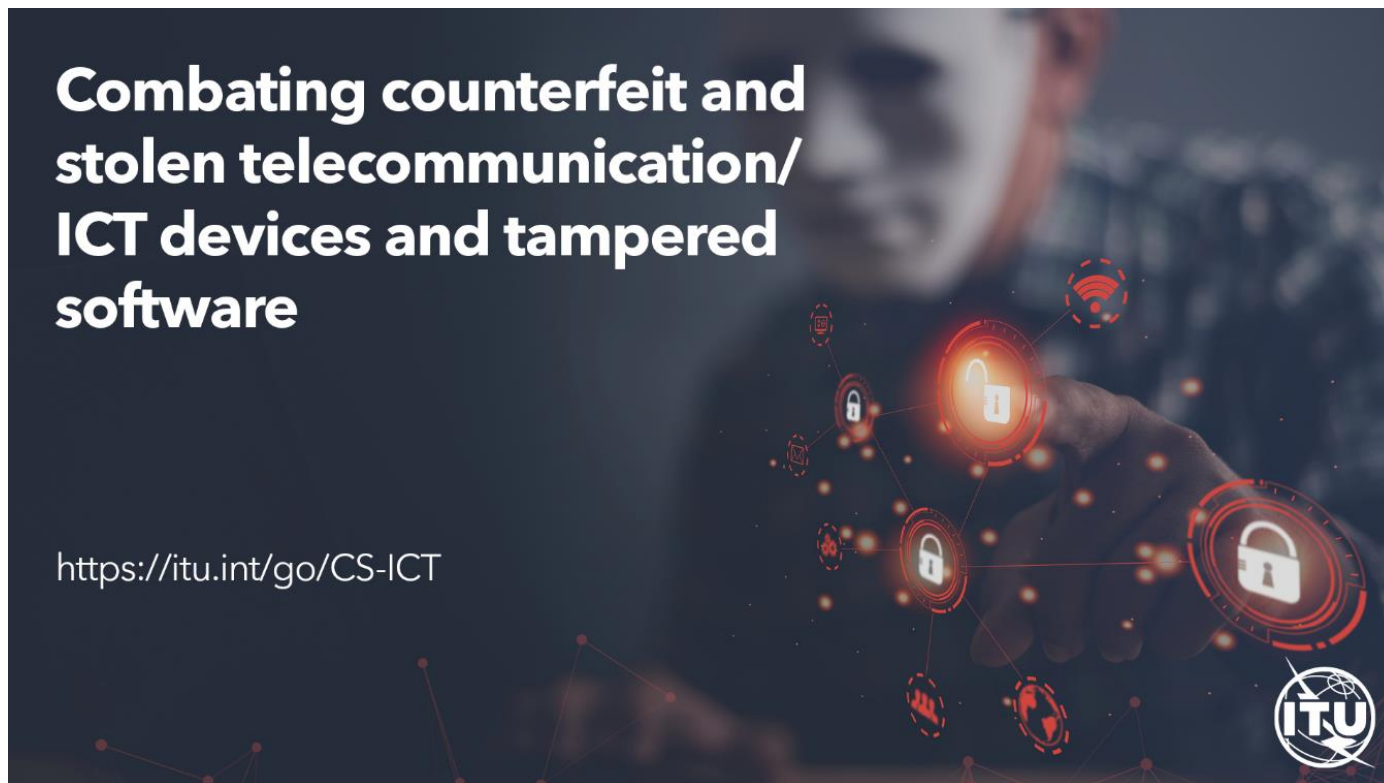
Table of Contents

Ongoing ITU-T SG11 activities

- Draft Recommendation ITU-T Q.5054 (ex. Q.CCF-CCSD) "Consumer centric framework for combating counterfeit and stolen ICT mobile devices". *It provides a consumer centric framework through unified platform combining all scenarios for combating counterfeit and stolen devices as covered in ITU-T Q.5050 Recommendation Series.*

- Draft Recommendation Q.CEIR "Technical requirement, interfaces and generic functions of CEIR". *It provides detailed technical description of the CEIR system, its requirements, interfaces and basic functions that should be provided by the system and also some optional features.*

- Draft Supplement Q.GIR "Technical requirement and implementation strategy for Global International Mobile Equipment Identity Registry". *It contains the requirement for implementation of Global IMEI Registry and suggests strategy through which it could be implemented.*

- Draft Technical Report TR-CF-QoS "Impact of Counterfeit Mobile devices on Quality of Service". *It aims to study the negative effects and impact of counterfeit mobile devices on network's quality of service along with the negative effects and service degradation experienced by the mobile subscribers*

- Draft Supplement Q.Sup.CFS-AFR (ex.TR-FCM) "Guidelines on combating counterfeit and stolen mobile devices in African region". *It proposes a guideline to combat the circulation and use of counterfeit and stolen mobile devices in the African region, based on the Q.5050 series and also the African region members' experiences.*

- Draft Recommendation *Draft recommendation Q.FC-MCM: "Framework for combating Multimedia Content Misappropriation". It contains a reference framework with requirements and actions that should be considered when deploying solutions to combat multimedia content misappropriation.*

How about to join the battle ?!

ITU-T portal on the topic:

Combating counterfeit and stolen telecommunication/ ICT devices and tampered software

https://itu.int/go/CS-ICT

http://itu.int/go/CS-ICT

Next ITU-T SG11 Meeting:

Geneva, 1-10 May 2024
Announcement
Registration

Deadline for contributions:
18 April 2024 - Via DDP

Deadline for fellowships:
20 March 2024
Fellowship form
e-fellowship form

Draft agenda
Draft time plan

Remote participation
Delegate | Moderator Guides

Webcast: Live | Archives

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