

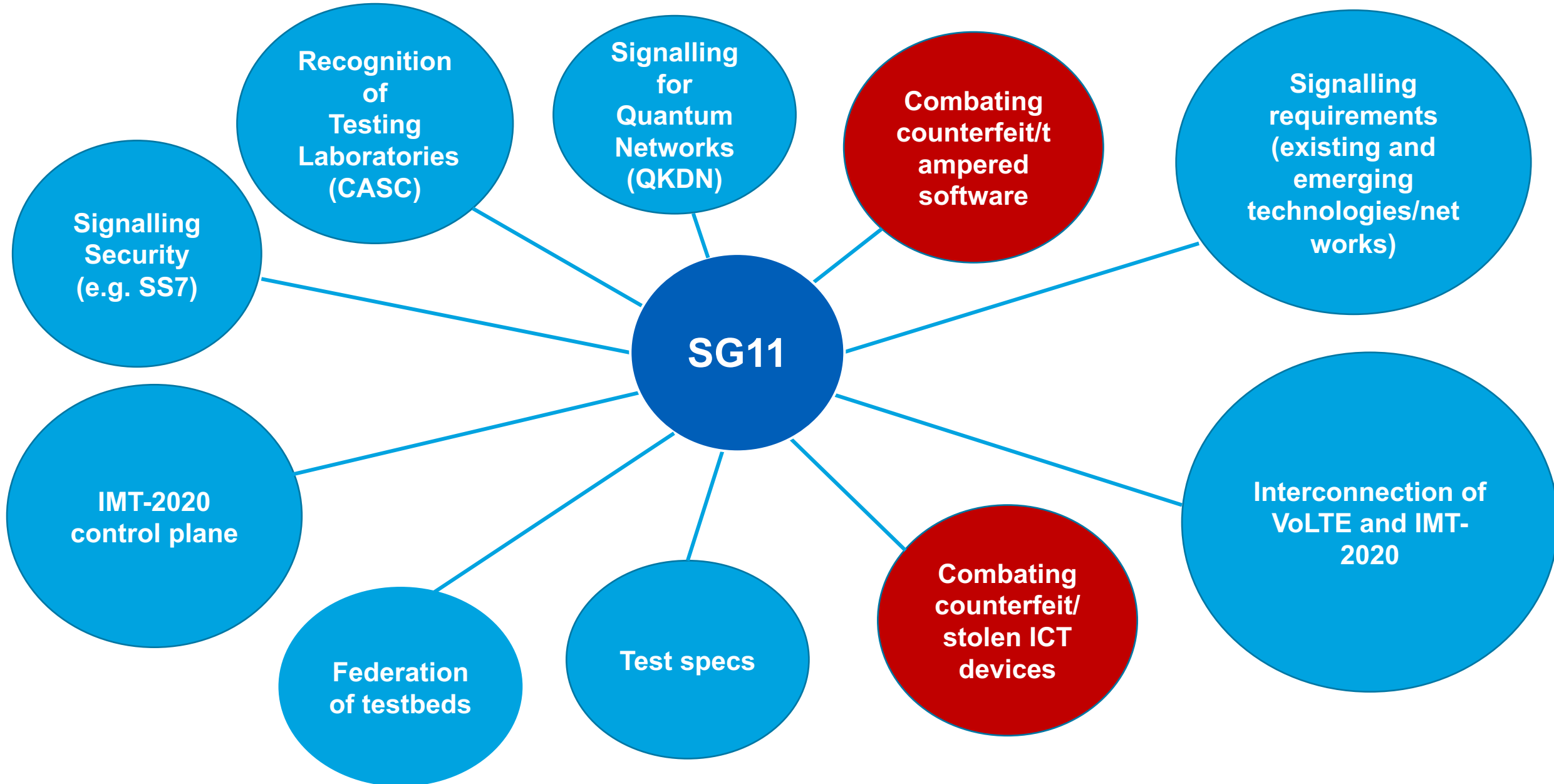
# ***Overview of ITU-T SG11 activities on Combating counterfeiting and stolen ICT***

***João Alexandre Zanon***  
*Vice-Chairman SG11 - Chairman WP4/11*  
*Anatel - Brazil*

October 2023



# Key directions of study of ITU-T SG11



***Combating counterfeiting  
and stolen ICT***

# ITU-T SG11

## Signalling requirements, protocols, test specifications and combating counterfeit telecommunication/ICT devices

Among other areas of responsibility, ITU-T SG11 is a **lead group on combating counterfeiting of ICT devices as well as combating the use of stolen ICT devices.**

Also, ITU-T SG11 studies issues related to combating counterfeit or tampered telecommunication/ICT software

<b>WP4/11</b>	<b>Combating counterfeit telecommunication/ICT devices/software and mobile device theft</b>
<b><u>Q15/11</u></b>	Combating counterfeit and stolen telecommunication/ICT devices
<b><u>Q17/11</u></b>	Combating counterfeit or tampered telecommunication/ICT software

<http://itu.int/go/tsg11>

# SG11 Workshop series on combating counterfeiting and stolen ICT

## [SG11 workshops \(2022-2023\)](#)

ITUWebinars

### Combating counterfeit and stolen telecommunication/ICT devices and tampered software

*Episode 1: Existing challenges and solutions on combating counterfeiting of ICT devices*

15 February 2023  
15:00-17:00, CET

<https://itu.int/go/WB-CS-01>



ITUWorkshops

### Combating counterfeiting and stolen ICT devices

*Episode 2: Global approaches on combating counterfeiting of telecommunication/ICT devices and mobile device theft*

13 October 2023  
9:30-17:30, CEST  
Geneva, Switzerland

<https://itu.int/go/WS-CS-02>



Third ITU-T Study Group 11  
Regional workshop for Africa

## Counterfeit ICT devices, conformance and interoperability testing challenges in Africa

30 September 2019  
Tunis, Tunisia

Third ITU-T Study Group 11  
Regional Workshop for Africa

## Counterfeit ICT Devices, conformance and interoperability Testing challenges in Africa

30 September 2019  
Tunis, Tunisia



ITUWebinars

## Combating counterfeit and irregular mobile devices: how to address the problem

A Joint ITU/MWF Webinar

31 May 2021  
15:00 - 18:15 CEST

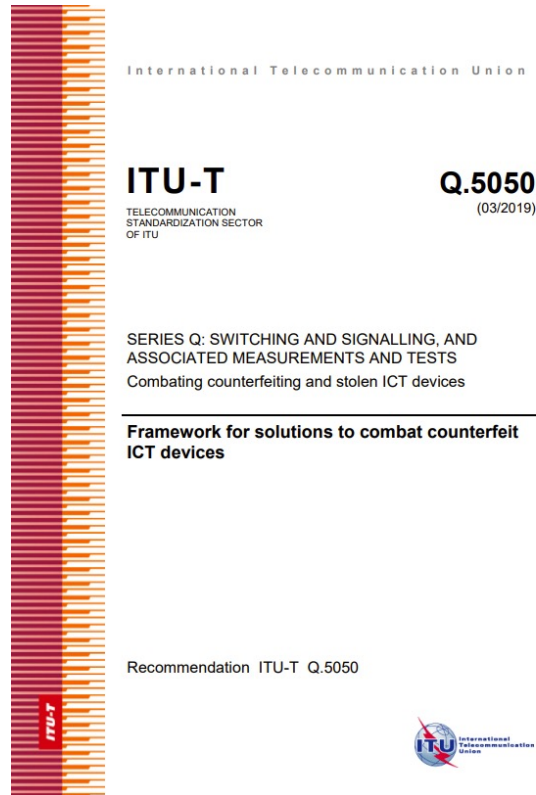
<http://itu.int/go/WCC-MD>



## SG11 past events on combating counterfeiting and stolen ICT

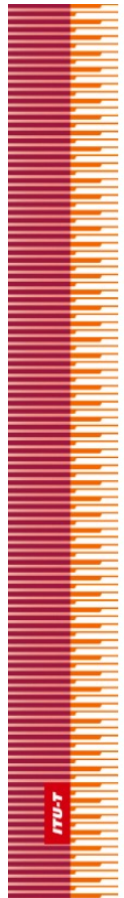
[SG11 workshops \(2017-2021\)](#)

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



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

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OF ITU

Q.5051

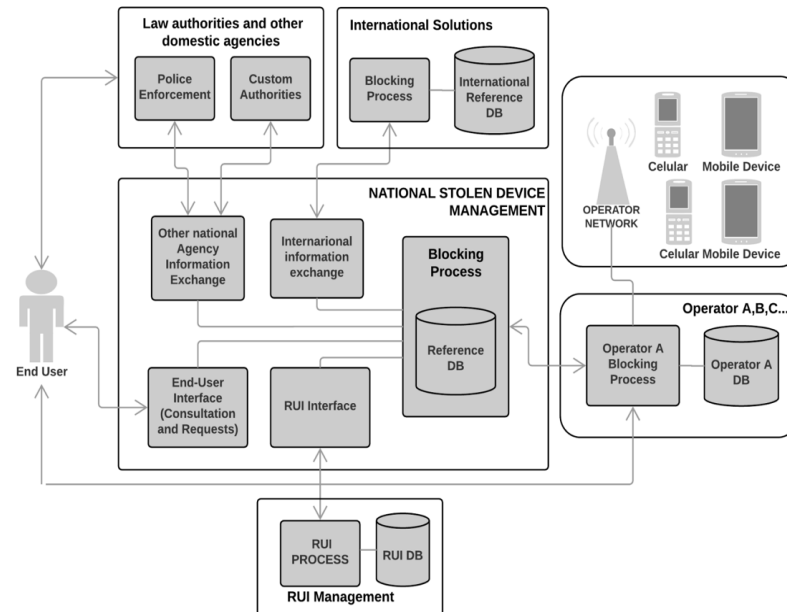
(03/2020)

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.

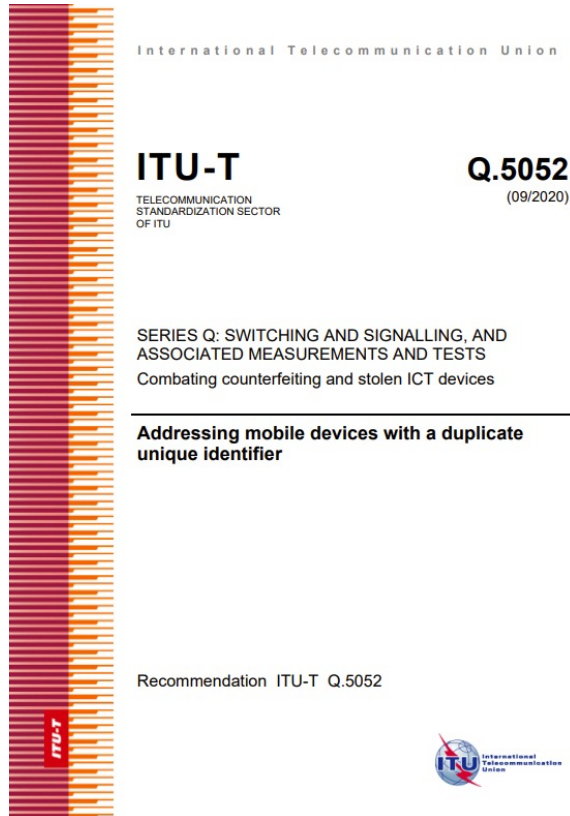
The **global database** should provide appropriate information if available (e.g. device characteristics, country where the device was stolen, date of event, etc.).

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.



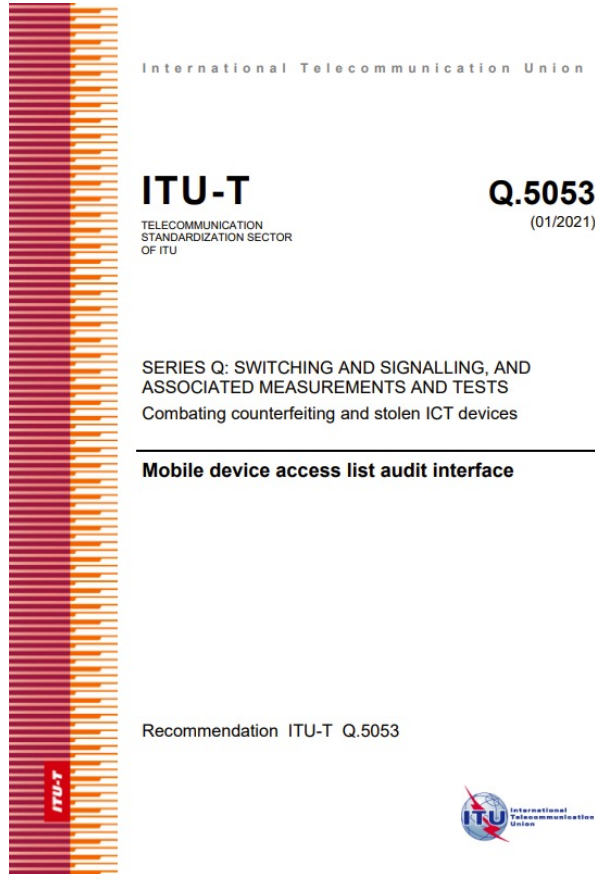
# ITU-T Q.5052 “Addressing mobile devices with a duplicate unique identifier” (2020)



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)



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.

International Telecommunication Union


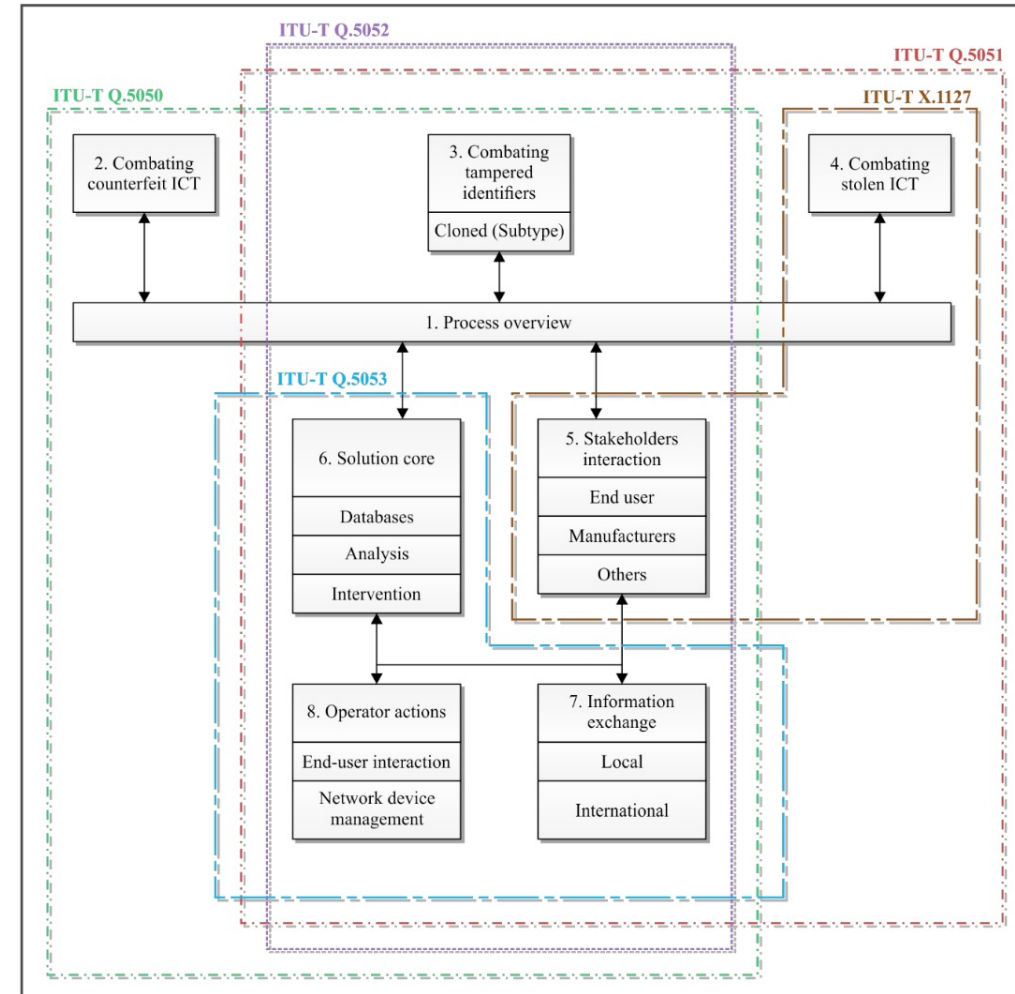
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**Series Q**  
**Supplement 74**  
(03/2021)

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

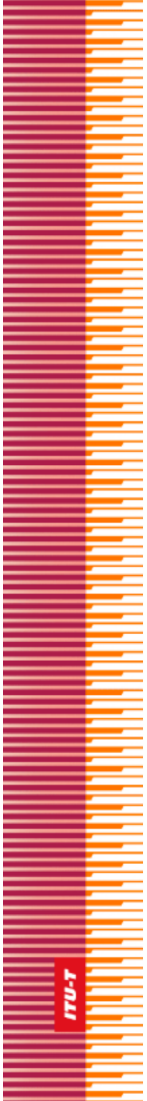
**Roadmap for the ITU-T Q.5050-series – Combat  
of counterfeit ICT and stolen mobile devices**

ITU-T Q-series Recommendations – Supplement 74

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

Collects use cases provided by ITU Members that reflects challenges, opportunities and results on the combat of counterfeit ICT and stolen mobile devices.



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**Series Q**  
**Supplement 75**  
(12/2021)

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

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

ITU-T Q-series Recommendations – Supplement 75



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# 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)

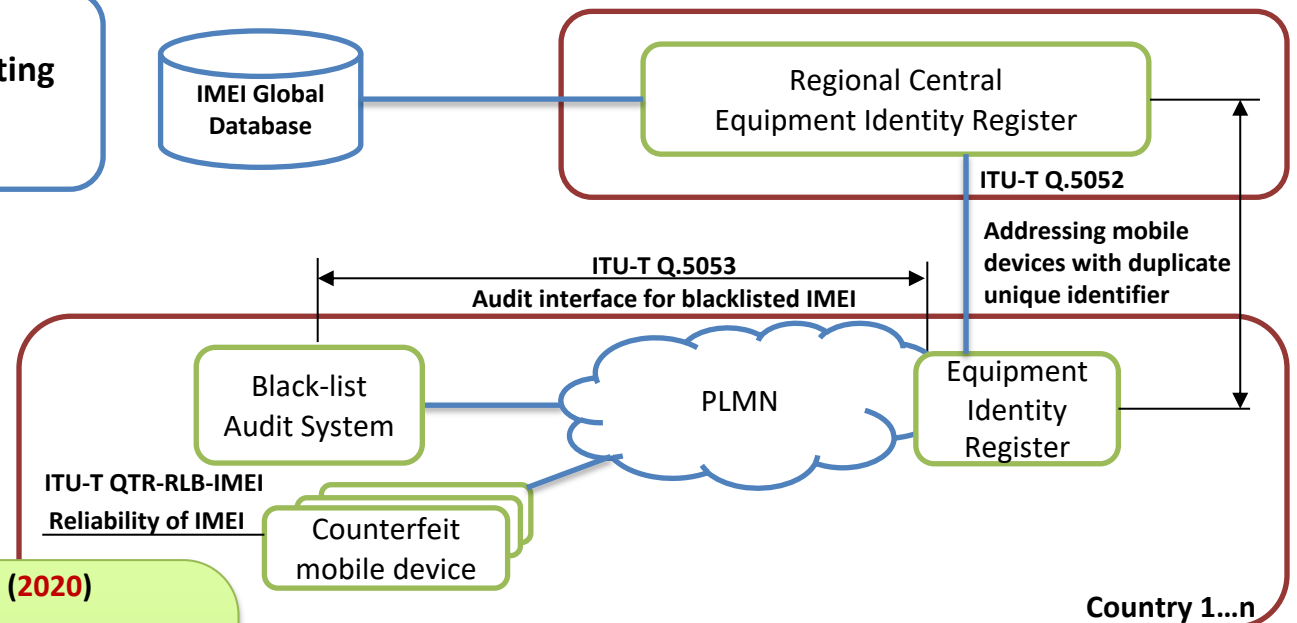
ITU-T Q Suppl.73 “Guidelines for Permissive versus Restrictive System Implementations to address counterfeit, stolen and illegal mobile devices” (2021)

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)

### **Resolution 97 of WTSA-20**

Combating mobile telecommunication device theft



## Combating the use of stolen ICT devices

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

# Ongoing activities

- **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 Recommendation Q.CCF-CCSD** “Consumer centric framework for combating counterfeit and stolen ICT mobile devices”. *It will provide 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 Supplement Q.Sup.CEIR-EIR-int** “Common approaches and interfaces for data exchange between CEIR and EIR”  
*It aims to identify current industry approach on the data exchange between CEIR and EIR and propose common approaches and interfaces on this topic.*
- **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”. *Contains a reference framework with requirements and actions that should be considered when deploying solutions to combat multimedia content misappropriation.*
- **Draft Technical Report TR-MCM-Use-Cases**: *Use Cases on the combat of Multimedia Content Misappropriation: 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.*

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## Combating counterfeit and stolen telecommunication/ICT devices, software

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### Background

ITU-T SG11 is a lead Study Group on developing standards related to combating counterfeiting and stolen ICT devices. Particularly,

- [Question 15](#) of ITU-T Study Group 11 (Q15/11) "Combating counterfeit and stolen telecommunication/ICT devices" is addressing the growing problem of counterfeited telecommunication/ICT products and devices, which is adversely affecting all stakeholders in the ICT field (vendors, governments, operators and consumers).
- [Question 17](#) of ITU-T Study Group 11 (Q17/11) "Combating counterfeit or tampered telecommunication/ICT software" which will study appropriate possibilities to combat counterfeit or tampered ICT software.

Cooperation among ITU T study groups, between ITU-T and ITU-D as well as with external bodies outside the ITU (in particular with SDOs), will be required to gather a complete information in this regard. Q15/11 and Q17/11 welcome contributions to progress standardization in these fields.

For any further information, contact ITU-T SG11 Secretariat at [tsbsg11@itu.int](mailto:tsbsg11@itu.int).



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

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