



Editor

DRAFT PRELIMINARY APT COMMON PROPOSAL
PROPOSED MODIFICATION TO WTSA-16 RESOLUTION 97
Combating mobile telecommunication device theft

Abstract

This document proposes to revise Resolution 97 to enhance study on reliable and distributed global telecommunication devices information sharing solutions utilizing emerging technologies, such as DLT, to help combating mobile telecommunication device theft.

Introductio

WTSA-20 Resolution 97 for “Combating mobile telecommunication device theft” is intended to promote research on possible technologies, solutions and guidelines for the anti-theft work of ICT devices through cooperation among international organizations and SDOs.

As one of emerging technologies, DLT is bringing more and more innovative solutions for various industries, such as finance, communication, identity authentication, etc. Based on the technical advantages, including (i) distributed data consistency, (ii) preventing data tampering, and (iii) supporting multiparty trusted data sharing, DLT can help to develop reliable and distributed global telecommunication devices information sharing infrastructure to combating telecommunication/ICT devices theft.

Some governments, operators and manufacturers of mobile devices, are actively exploring distributed and security information sharing solution of ICT devices by utilizing DLT. In China, DLT has officially joined other emerging technologies such as AI and IoT in underpinning the systems China uses to manage the flow of information in the coming years. In Europe, Deutsche Telekom has created a pilot project based on SAP Cloud Platform Blockchain, which has proved successful. It allows multiple parties to share, identify and disable stolen devices using a shared ledger of mobile devices more easily.

Several ITU-T study groups (e.g. Study Groups 11,13 and 16) are actively conducting DLT related study of Recommendations, technical reports and methodologies, including applying DLT in distributed information sharing and security. ITU is also actively cooperating with other SDOs to exchange and explore DLT based technical solutions to address more communication problems.

It is necessary to study global telecommunication devices information sharing solutions utilizing emerging technologies, such as DLT, to combating import and sale of stolen ICT devices from the market .

Proposal

APT members propose to revise Resolution 97 to enhance study on reliable and distributed global telecommunication devices information sharing solutions utilizing emerging technologies, such as DLT, to combating import and sale of stolen ICT devices from the market.

MOD

RESOLUTION 97 (Hyderabad, 2020)
Combating mobile telecommunication device theft
(Hammamet, 2016; Hyderabad 2020)

The World Telecommunication Standardization Assembly (Hyderabad, 2020),
recalling

- a) Resolution 189 (Rev. Dubai, 2018) of the Plenipotentiary Conference, on assisting Member States to combat and deter mobile device theft;
- b) Resolution 188 (Rev. Dubai, 2018) of the Plenipotentiary Conference, on combating counterfeit telecommunication/information and communication technology (ICT) devices;
- c) Resolution 174 (Rev. Busan, 2014) of the Plenipotentiary Conference, on ITU's role with regard to international public policy issues relating to the risk of illicit use of ICTs;
- d) Resolution 79 (Rev. Buenos Aires, 2017) of the World Telecommunication Development Conference (WTDC), on the role of telecommunications/ICTs in combating and dealing with counterfeit telecommunication/ICT devices;
- e) Resolution 64 (Rev. Buenos Aires, 2017) of WTDC, on protecting and supporting users/consumers of telecommunication/ICT services,

recognizing

- a) that governments and industry have implemented actions to prevent and combat mobile device theft;
- b) that manufacturers, operators and industry associations have been developing a range of technological solutions and governments have been developing policies to address the mobile device theft problem;
- c) that the theft of user-owned mobile devices may lead to the criminal use of telecommunication/ICT services and applications, resulting in economic losses for the lawful owner and user;
- d) that measures to combat mobile device theft adopted by some countries rely on unique device identifiers, such as International Mobile Equipment Identity, and therefore tampering with (changing without authorization) unique identifiers can diminish the effectiveness of these solutions;
- e) that some solutions to combat counterfeit telecommunication/ICT devices can also be used to combat the use of stolen telecommunication/ICT devices, in particular those devices whose unique identifiers have been tampered with for the purpose of re-introducing them to the market;
- f) that studies on combating counterfeiting, including of telecommunication/ICT devices, and the systems adopted on the basis on those studies, can facilitate the detection and blocking of devices and prevention of their further use,

considering

- a) that technological innovation driven by ICTs has significantly modified the ways in which people access telecommunications;
- b) that the positive impact of mobile telecommunications and the development generated by all related services have increased the penetration of mobile telecommunication/ICT devices;

- c) that the widespread use of mobile telecommunications in the world has also been accompanied by a rise in the problem of mobile device theft in developing countries¹;
- d) that the act of mobile device theft can sometimes have a negative impact on the health and safety of citizens and on their sense of security;
- e) that problems that occur around the crimes related to mobile device theft have become a worldwide issue, since these stolen devices are often very easily resold on the international markets;
- f) that the illicit trading of stolen mobile devices constitutes a risk to consumers and causes loss of revenue for the industry;
- g) that some governments have implemented regulations, law-enforcement actions, policies and technological mechanisms to prevent and combat mobile device theft;
- h) that some manufacturers of mobile devices, as well as operators, offer solutions for consumers, such as free anti-theft applications, with the aim of reducing the rate of mobile device theft,
- i) that some governments, operators and manufacturers of mobile devices, are exploring distributed and security information sharing solution for mobile devices by utilizing emerging technologies to prevent stolen devices from entering the market,

aware

- a) of the related ongoing work in ITU Telecommunication Standardization Sector (ITU-T) Study Group 11 on combating counterfeit and mobile device theft;
- b) of the related work ongoing in ITU-T Study Group 17 on security mechanisms;
- c) of the related work ongoing in ITU-T Study Group 13 and 16 on applying emerging technologies including Distributed Ledger Technology (DLT) in distributed information sharing solution,

resolves

1 that ITU-T should explore all applicable solutions and develop ITU-T Recommendations to combat and deter mobile device theft, offering all interested parties a forum for encouraging discussion, member cooperation, the exchange of best practices and guidelines and the dissemination of information on combating mobile device theft;

2 that ITU-T should, in collaboration with the relevant standards organizations, develop solutions to address the problem of duplication of unique identifiers;

3 that ITU-T Study Group 11 should be the lead study group at ITU-T on activities relating to combating mobile telecommunication device theft,

resolves to instruct the Director of the Telecommunication Standardization Bureau, in collaboration with the Directors of the Radiocommunication Bureau and Telecommunication Development Bureau

1 to compile information on best practices developed by industry or governments and promising trends in combating mobile device theft;

2 to facilitate, in collaboration with industry organizations and standards development organizations (SDOs), the standardization and dissemination of Recommendations, technical reports and guidelines to combat mobile device theft and its negative effects, specifically regarding the exchange of identifiers of mobile devices reported stolen or lost, and to prevent lost or stolen mobile devices from accessing mobile networks;

3 to consult with the Sector's relevant study groups, manufacturers of mobile devices, manufacturers of telecommunication network components, operators, telecommunication SDOs as well as developers of promising technologies related to these matters, in order to identify

¹ These include the least developed countries, small island developing states, landlocked developing countries and countries with economies in transition.

existing and future technological measures, both software and hardware, to mitigate the consequences of the use of stolen mobile devices;

4 to provide assistance, within ITU-T's expertise and within available resources, as appropriate, in cooperation with relevant organizations, to Member States, if so requested, in order to reduce mobile device theft and the use of stolen mobile devices in their countries,

instructs Study Groups 11 and 17 of the ITU Telecommunication Standardization Sector, within their mandates and in collaboration with other interested study groups

1 to develop Recommendations, technical reports and guidelines to address the problem of mobile telecommunication device theft and its negative effects;

2 to study any possible solutions to combat the use of stolen mobile telecommunication devices with tampered (changed without authorization) identities and to prevent them from accessing the mobile network, e.g. develop a distributed global identifier sharing infrastructure for mobile telecommunication device by utilizing emerging technologies to prevent tampering of device identities;

3 to study any technologies that can be used as a tool for combating mobile telecommunication device theft;

4 to draw up a list of identifiers used in mobile telecommunication/ICT devices,

invites Member States and Sector Members

1 to take all necessary measures to combat mobile telecommunication device theft and its negative effects;

2 to cooperate and share expertise in this area;

3 to participate actively in ITU studies relating to the implementation of this resolution by submitting contributions;

4 to take the necessary actions to prevent or discover and control tampering (unauthorized changing) of unique mobile telecommunication/ICT device identifiers and prevent tampered devices from accessing mobile networks.