

## Telcordia® Device Registry

Telcordia® Device Registry is a next-generation, centralized registry of mobile devices. Using sophisticated data collection and analysis, this innovative solution addresses a variety of current and emerging challenges caused by increasing theft of mobile devices, growing numbers of illegal mobile phones, and ongoing threats to national security.

### 001

Reduce mobile device theft

### 002

Recapture import duties and VAT revenue

### 003

Reduce national security risks from unauthorized mobile device usage

- ▶ Mobile phone crime is on the rise. Today, industry experts estimate that as many as 20% of all mobile devices are illegal or not authorized. This rampant criminal activity leads to serious issues — from private property and tax revenue losses, to national security threats — and it can no longer be ignored.

Attempts to take on mobile phone theft using traditional Equipment Identity Registers (EIRs) rely on static data such as a device's International Mobile Equipment Identity (IMEI). This limited approach has not been able to deter fast-moving criminals from quickly offloading or reprogramming stolen phones, even when IMEI blacklists are shared through a central EIR. And it has not been able to protect consumers from device manufacturers who mass-produce and distribute fake black market handsets. Even more problematic is the ineffectiveness of the EIR-based approach in deterring the use of anonymous devices that cannot be tracked in the execution of serious crimes, such as kidnappings and terrorist attacks.

#### **NEXT-GENERATION, CENTRALIZED DEVICE REGISTRY**

Telcordia Device Registry provides a novel solution for fighting mobile crime. Using centralized, next-generation architecture, Device Registry maintains extensive and constantly updated device- and subscription-related information, including IMEI as well as International Mobile Subscriber Identity (IMSI) and Mobile Subscriber ISDN Number (MSISDN) for all networks in a country. These IMEI-IMSI-MSISDN triplets, along with cross-references to the national number portability database, provide comprehensive data that enable virtual 'fingerprinting' and forensic analysis for detecting — and stopping — criminal activity.





more effective method for detecting black market, counterfeit, and illegally imported phones, providing governments with a valuable opportunity to increase revenues from customs duties and taxes.

### STAY AHEAD OF THE CRIMINALS WITH INTEGRATED DATA COLLECTION

Telcordia Device Registry is a flexible and complete solution with comprehensive interface integration for data collection, analytics, reporting, and enforcement functions that encompasses national regulators, mobile operators, handset vendors, and mobile content ecosystem parties. This industry partnership approach delivers a highly adaptable solution that can address both current and changing threats — and that means you can stay one step ahead of even the fastest-moving criminals.

### LEVERAGE ACCURATE, REAL-TIME DATA TO DETECT MOBILE CRIME

Device Registry captures real-time mobile registration data by connecting to each mobile operator's existing internal databases and network elements such as the Home Location Register (HLR), Mobile Switching Centers (MSCs), and any existing EIR, Client Provisioning (CP), and Device Management (DM) entities. It also connects to external blacklists such as the GSMA IMEI database and any regional blacklist databases. Access to existing national number portability databases allows Device Registry to obtain information on telephone numbers that have been ported and the mobile networks that are currently serving them.

Device Registry does not rely on customer-provisioned information, which often leads to inaccurate data. Instead, it focuses on the types of accurate, real-time data that can be used to stop mobile phone criminals in their tracks.

### KEEP HANDSETS IN THE RIGHT HANDS WITH ANTI-THEFT TOOLS

The Telcordia solution stores and analyzes MSISDN, IMSI, and IMEI data associated with each mobile device. These triplets can be used for establishing a chain of custody for each handset, tracking of devices with illicit IMEI, detecting counterfeit devices including clones, and offering anti-theft services. As part of the anti-theft service offering, subscribers have the ability to lock and unlock their devices to specific SIMs using self-selected PIN codes. Other subscriber interfaces include device theft reporting, insurance queries, and VAT payment reporting.

Device Registry also provides interfaces to government entities that can use the information for law enforcement, national security, customs and taxation, and regulatory purposes. In addition, it features special handset manufacturer interfaces for device activation, import registration, and bulk theft reporting.

### AT A GLANCE

- Telcordia Device Registry delivers a sophisticated and centralized mobile device registry that can:
- Reduce mobile device theft
- Recapture import duties and VAT revenue
- Reduce national security risks from unauthorized mobile device usage
- Minimize black market counterfeit devices.



## KEY INDUSTRY BENEFITS

Device Registry combats crime, boosts security, and protects revenue for a wide variety of stakeholders, including:

### Law Enforcement

- Reduce phone theft by disabling stolen phones.
- Identify anonymous subscribers and establish chain of custody in prepaid markets to deter criminal activities that rely on hiding caller identities.
- Combat counterfeiting and Intellectual Property Rights (IPR) infringement.
- Protect legitimate manufacturers from unfair black market competition by blocking unauthorized devices.

### National Security

- Protect domestic communications networks by controlling the use of unauthorized devices.
- Facilitate intelligence gathering and monitoring by tracking devices throughout their lifecycles.

### Mobile Operators

- Stop revenue loss and revenue leakage due to device theft.
- Identify and retain owners of prepaid subscriptions.
- Track segmentation of mobile devices.
- Upsell existing services and develop new products, including anti-theft services to grow ARPU.
- Protect networks from uncertified and unapproved devices.

### Regulatory

- Enforce mobile equipment laws and regulations.
- Enforce mandatory device certification regimes.

### Customs and Taxation

- Confirm and collect import duties and VAT payments.

### Insurers

- Reduce costs of stolen devices with efficient anti-theft services.
- Improve modeling of mobile phone risk profiles.

## COMBAT MOBILE CRIME — AND WIN

With Telcordia Device Registry, you don't have to just accept device theft, revenue loss, or security threats. You can fight back with an integrated, real-time solution to detect suspicious activities and help stop mobile phone-related crime before it even happens, boost the profitability of your operations — and help build a safer, more secure world.

## GET IT RIGHT

• With the expertise to solve the world's most complex communications challenges, Telcordia is known for helping its customers get it right so they can reap the greatest business benefits. Our Interconnection Solutions are part of our broad offering of products and services designed to help you operate more efficiently, drive revenues, and deploy innovative new services.



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