

The benefits of device intelligence for operators

Tyler Smith, GSMA Senior Product Director



We play a vital role in the use of mobile device identifiers

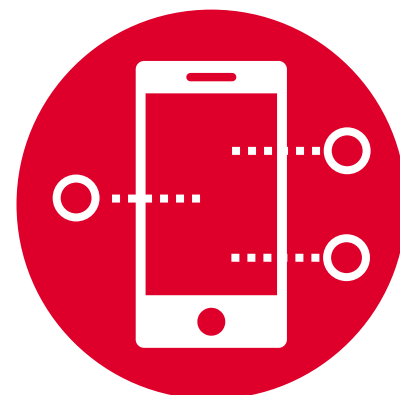
TAC Allocations

The GSMA manage the industry's global device identity scheme, called TAC. TAC is an 8-digit code which identifies all connected equipment types at product / brand level



Device Identifiers

The GSMA holds highly accurate and unique data for over 8 billion devices for identification and verification purposes



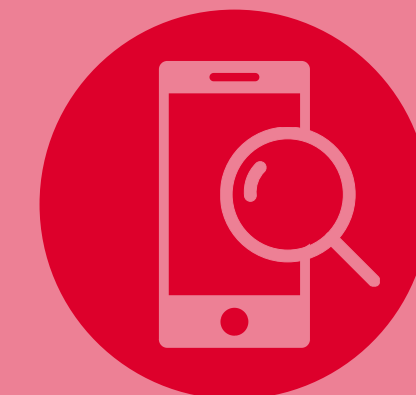
Device Status

Flag devices you own to indicate i) theft ii) fraud status to help block their use iii) trade iv) repair, v) subject to an ownership or financial claim



Device Check

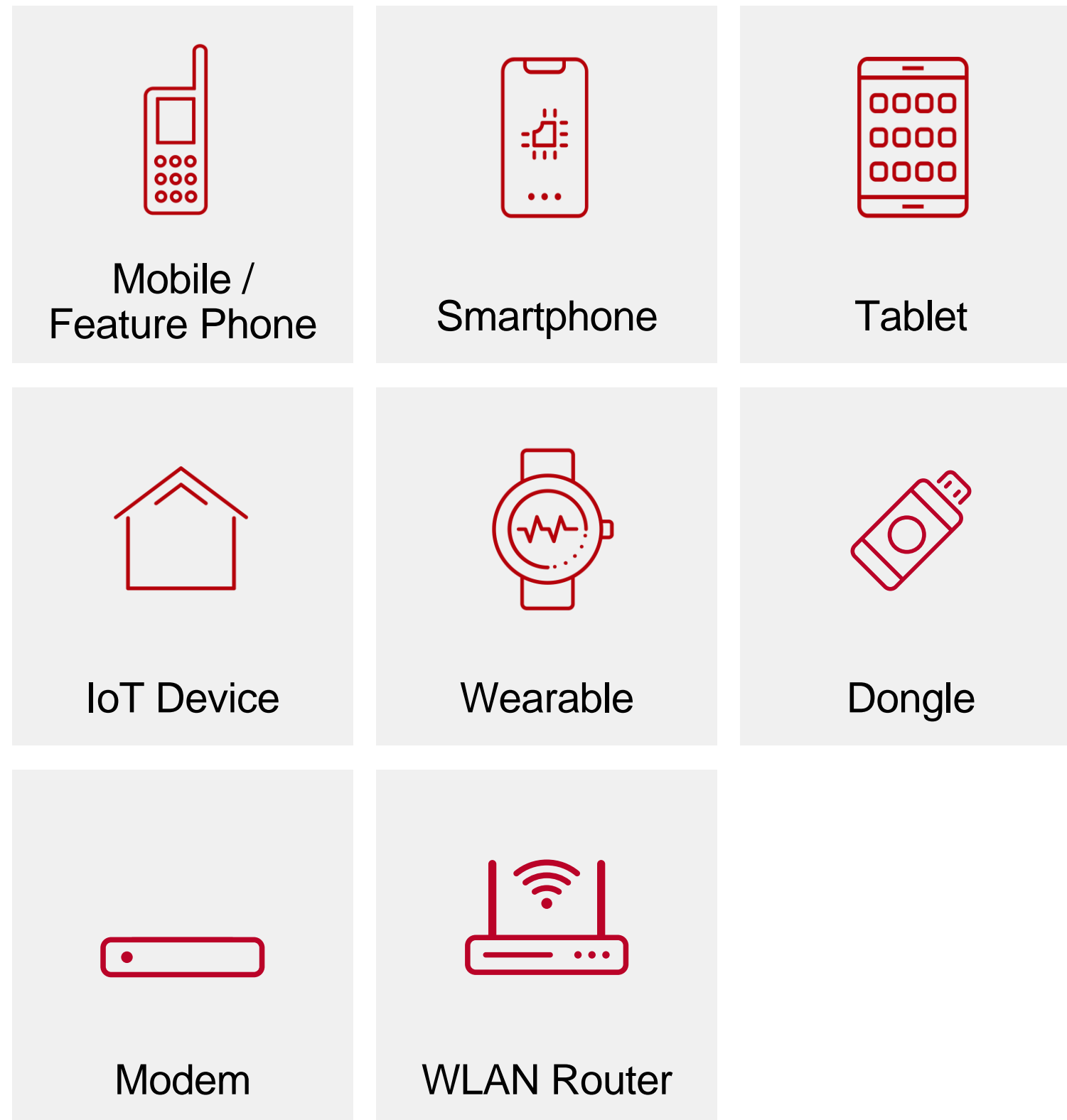
Check the status and history of an IMEI for real time ecommerce valuation purposes, and to identify fraudulent / irregular claims



TAC = Type Allocation Code | OEM = Original Equipment Manufacturers | IMEI = International Mobile Equipment Identity

Our Data Primary Source

- We hold the records of over 200K+ Type Allocation Codes
- Details of over 8 Billion devices



Type Allocation Code (TAC)

86	916102	991292	0
Reporting Body Identifier	Type Identifier indicating brand owner and device model allocated by Reporting Body	Unique Number assigned to individual devices by the manufacturer	Check Digit A function of the other digits [calculated by the manufacturer]

International Mobile Equipment Identifier (IMEI)







The 8-digit **TAC** identifies the brand owner, model and marketing name

The 15-digit **IMEI** identifies the individual device when seen on a network

Device Category	Available device attributes / properties
Device Identification	Manufacturer, consumer recognized marketing name, model name, brand name, year released
Hardware Information	Device type (M2M device, Tablet, Smartphone, Watch, etc.), screen size, chipset, CPU, clock speed, RAM, VoLTE enabled, IoT endpoint, IoT enabler, IoT controller
Operating System	OS name and minimum OS version (e.g. Android 8, iOS 11, etc.)
Network Protocols	2G, 3G, 4G, 5G, LTE Category, VoLTE, VoWiFi
Browser	Name, version, rendering engine, etc.
HTML5	CSS, HTML5 properties
Multimedia	Streaming, Audio, Video codecs, Bluetooth

GSMA's device data overview

Our device intelligence is used in several industry sectors

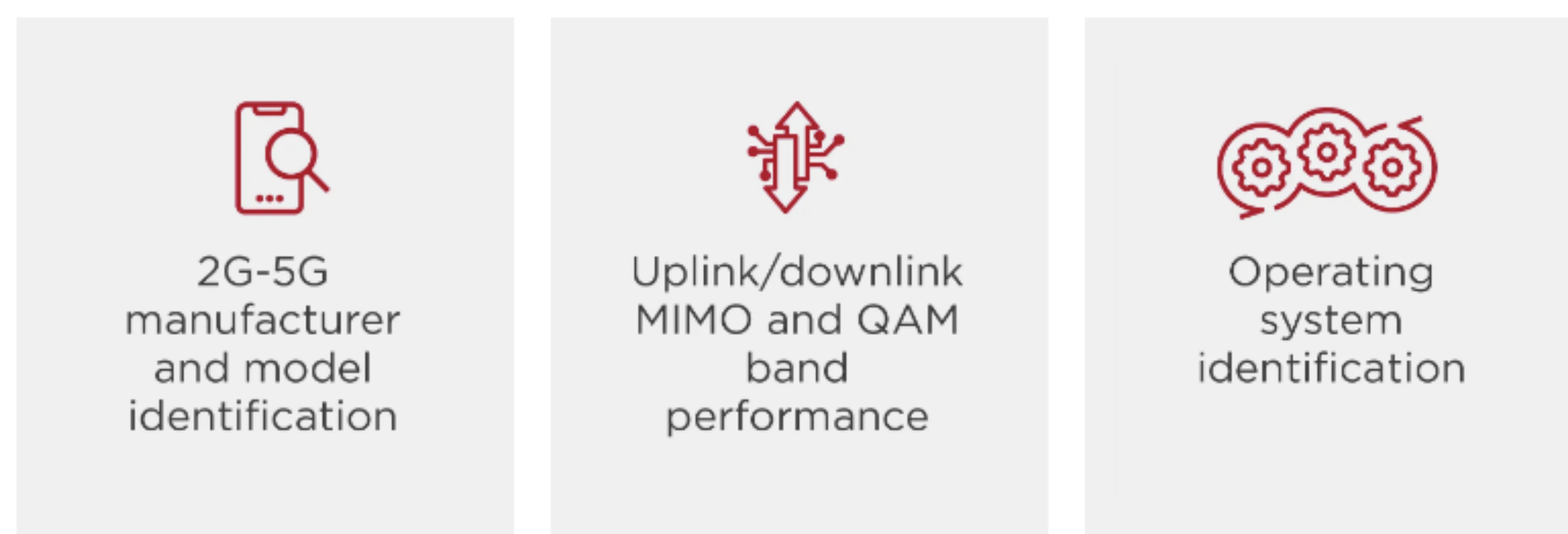
-  Device Traders
-  Government and Regulators
-  Insurers
-  MNO/MVNO
-  Mobile Application/Software
-  Retailers

Benefits to customers

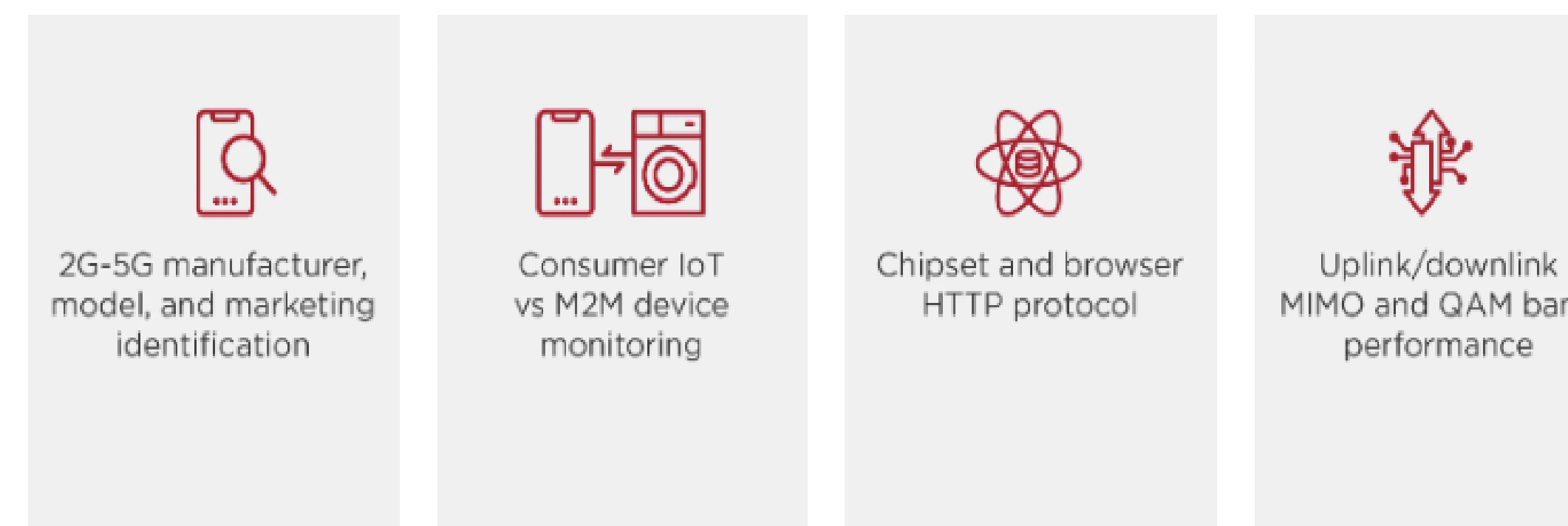
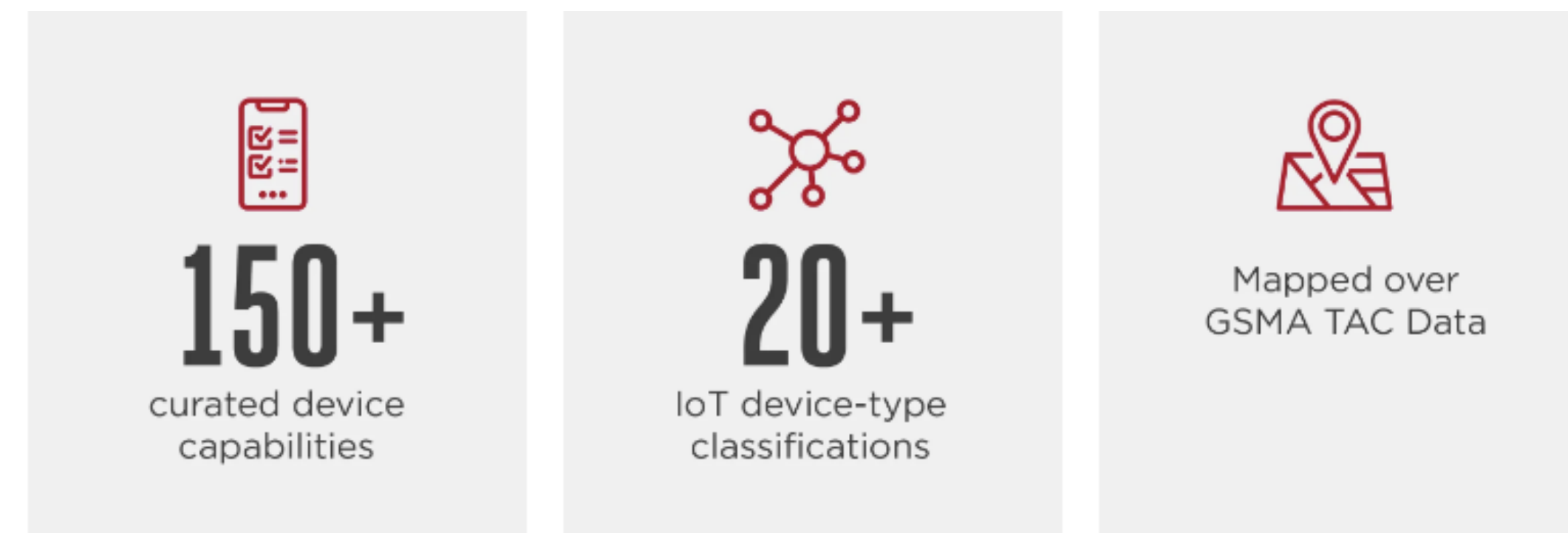
- Accurate and fast device identification on networks assists in network rollout / sunsetting of proper subscription rates
- Quickly verify device legitimacy at ports of entry
- Integration of our device data with internal analysis and workflows brings incremental value, i.e., determining an upsell campaign or valuation of a device

GSMA TAC based data service types

GSMA Device Database



GSMA Device Map





Service delivery and data ingestion

- **Secure end point connection**
 - ✓ Daily updates
 - ✓ Automation of file retrieval
 - ✓ Delta reporting
- **General Web Portal Access**
- **Scoping real-time API for tighter and more seamless integrations**