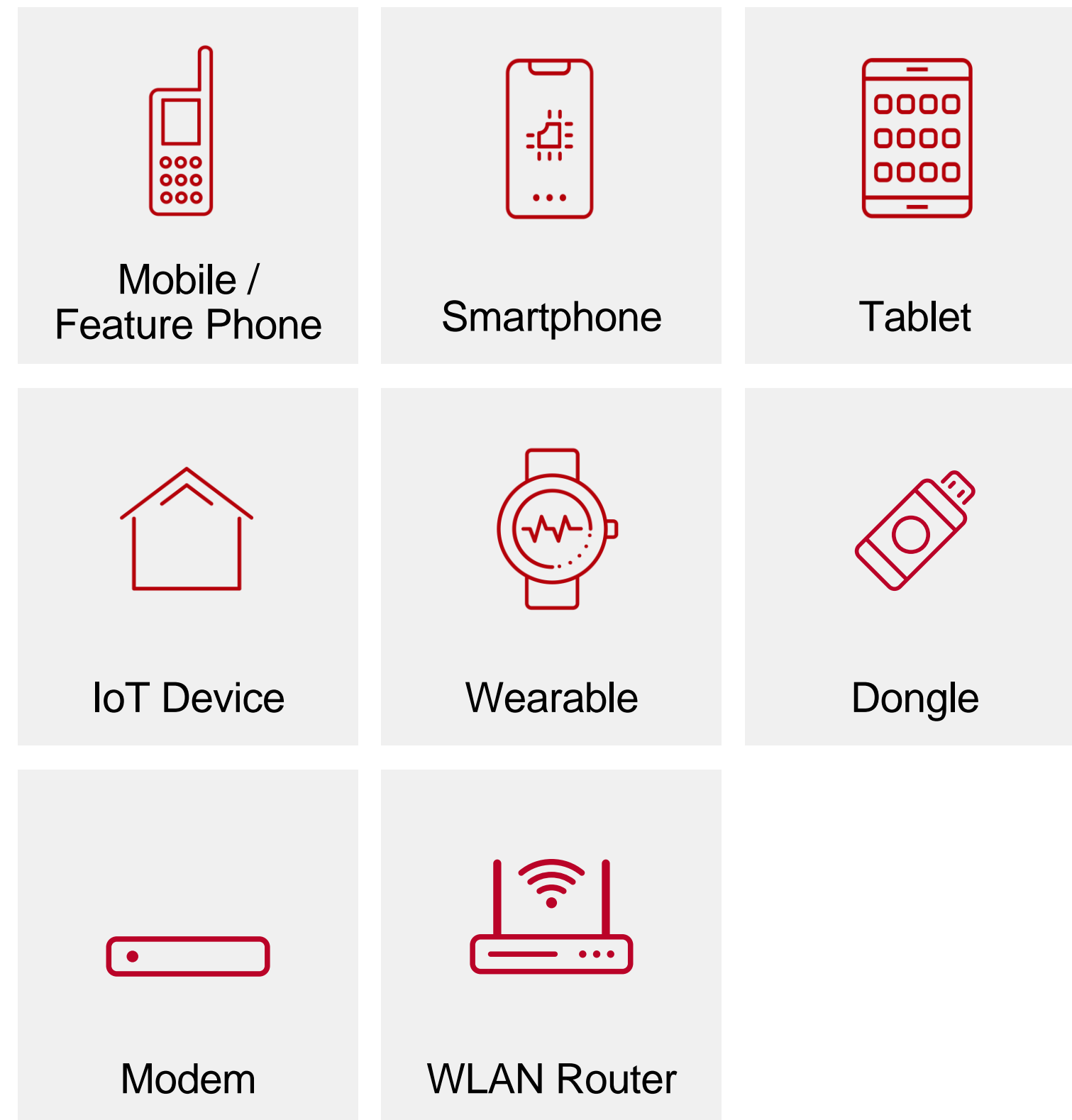GSMA
Services Showcase
LIVE

The role of device identification in the fight against counterfeit devices

Tyler Smith, GSMA Senior Director

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TAC Primary Data Source

- **Over 200k + Type Allocation Codes**
- **Over 8 billion devices**

Mobile / Feature Phone	Smartphone	Tablet
IoT Device	Wearable	Dongle
Modem	WLAN Router	

Type Allocation Code (TAC)		Serial Number	Check Digit
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	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 recognised 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

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GSMA Device Information services

GSMA Device Database

10,000+ device models launched every year	**10,000+** device models in the database	**1** global source of device manufacturers
2G-5G manufacturer and model identification	Uplink/downlink MIMO and QAM band performance	Operating system identification

GSMA Device Map

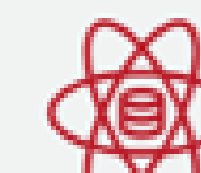|		
150+ curated device capabilities	**20+** IoT device-type classifications	Mapped over GSMA TAC Data
2G-5G manufacturer and model identification	Uplink/downlink MIMO and QAM band performance	Consumer IoT vs M2M device monitoring	Chipset and browser HTTP protocol

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How Government entities benefit from GSMA data

Stakeholders

- Customs

- Law Enforcement

- Regulators

- Investigators

- National Law Institutes

Typical use cases

- Validate the device information you have or have been provided is correct

- Device is compliant with global standards, legitimate TAC / IMEI

- Device homologation schemes

- Customs assessment

- Identification of core purpose or use case of a mobile device

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Service Delivery

- **Secure end point connection**
    - Daily updates
    - Automation of file retrieval
    - Delta reporting

- **General Web Portal Access**

- **Currently scoping API delivery for tighter and more seamless integrations**

- **Please report invalid or non-compliant TAC to GSMA for remediation efforts via GSMA TAC Challenge process**

TAC Challenge

GSMA