

GSMA TAC Allocation



TAC CAN ONLY BE ALLOCATED BY THE GSMA THROUGH THEIR APPOINTED REPORTING BODIES.

Device brand owners and manufacturers need the Type Allocation Code (TAC) to create the first 8 digits of the International Mobile Equipment Identity (IMEI), the number that identifies each unique mobile device on all GSM networks. There are important rules that govern TAC allocation which can be found at <https://imeidb.gsma.com>

The TAC and IMEI are also the references operators use to block stolen devices from accessing networks. Today it is not just phone theft that needs to be tackled but also subscription fraud, insurance fraud, smuggling and the production of counterfeit phones which have a negative impact on consumers who risk lower quality, safety, security, and environmental health and privacy assurances. Governments are effected as they forego tax and duties and must contend with increased crime, whilst the trademarks and brands of industry players are harmed.

GSMA believes multi-stakeholder collaboration is vital to help combat these issues starting with operators blocking devices with invalid IMEI using the GSMA's global TAC list of all legitimate device identity number ranges.

TAC: TYPE ALLOCATION CODE	SERIAL NUMBER	CHECK DIGIT
86 916102	991292	0

IMEI: INTERNATIONAL MOBILE EQUIPMENT IDENTITY



GSMA IMEI SERVICES

THE GLOBAL SOURCE OF IMEI DATA

As the only body authorised by 3GPP to allocate TAC (Type Allocation Code) for all GSM mobile device identities globally, the GSMA is the source of authoritative and complete IMEI data.

We provide organizations with a range of products that harness the unrivalled accuracy of our data to provide the device intelligence you need.

www.gsma.com



GSMA Device Database



DIRECT ACCESS TO THE TAC DATA YOU NEED FOR DEVICE VALIDATION, ANALYTICS, NETWORK OPTIMIZATION AND MORE

With over 10,000 device models launched every year, keeping track of devices on networks and interrogating the devices' characteristics is highly complex. GSMA Device Database identifies the manufacturer and model as well as other key characteristics of a mobile device from its TAC, thus benefitting many business applications. For example:

- Identifying the type of device in use to offer appropriate services or customer offers
- Help in remote management of devices for software and configuration
- Clarifying network resource usage by device
- Identifying operating systems
- Providing a reference to the legitimate OEM/Brand Owner and device model when assessing counterfeit devices
- Determining authentic device characteristics for real time valuation or insurance purposes

GSMA Device Map



HIGH ACCURACY DEVICE INTELLIGENCE WITH 120+ DATA POINTS OVERLAYING THE TAC FOR ADVANCED CUSTOMER INSIGHT

The GSMA allocated TAC together with the additional 100 device data characteristics and attributes provides a unique and rich level of insight to enable businesses to generate advanced analytics and operational metrics. For example:

- Identification of device and service usage patterns to plan network deployment
- Optimization of the customer experience through a deeper understanding of active devices and features on your network
- Customer support and troubleshooting based on knowledge of the unique features of each customer's device
- Boost business insight with better metrics and richer data analysis
- Increase ARPU and reduce churn through better device portfolio management

For more information please visit www.gsma.com

GSMA Device Check



WITH GSMA DEVICE CHECK YOU CAN FIND OUT INSTANTLY WHETHER A DEVICE HAS BEEN REPORTED LOST OR STOLEN THROUGH THE WORLD'S MOST ACCURATE REGISTRY OF DEVICE STATUS.

Businesses benefiting from the vibrant pre-used mobile devices market need to protect themselves against the risk of handling stolen or fraudulent devices. This can damage reputations and impact operational margins.

GSMA Device Check provides up to 10 years' of a device's history as well as the device model information and capabilities. It gives you access to a comprehensive registry of device information which can benefit your business in a variety of ways:

- Helps resellers identify and eliminate stolen devices before they can enter supply chains
- Confirms the true device model for authenticity and to help calculate device value
- Discourages device theft by reducing the value of a stolen device
- Confirms the network operator that reported the device stolen or lost, which helps with repatriation to the rightful owner

GSMA Device Check is a tried and tested product, used by retailers, resellers, insurers and law enforcement agencies worldwide.



GSMA Operator Blacklisting



GSMA BLACKLIST EXCHANGE EMPOWERS MOBILE OPERATORS TO BLOCK STOLEN DEVICES TO REDUCE THE VALUE OF DEVICE CRIME.

The GSMA enables data about stolen devices to be exchanged between operators so they can block a device both in-country and internationally. As stolen devices are often trafficked abroad, both national and international collaboration is required.

Here is how it works:

- A customer reports a device as lost or stolen
- The operator verifies that they know the consumer and their device and blocks it on their network
- The phone's IMEI is shared by the operator to GSMA and added to the reported lost or stolen GSMA IMEI database.
- The GSMA then shares the aggregated list with all participating operators, enabling them to block the devices from their own network.
- A device can be unblocked if the original blocking operator verifies that its customer has recovered the device



**HANDSET THEFT
TAKES PLACE**



**USERS REPORTS DEVICE
THEFT TO THEIR OPERATOR**



**OPERATOR SHARES STOLEN
IMEI (OWN BLACKLIST)
WITH GSMA IMEI DATABASE**



**OTHER CONTRIBUTING
OPERATORS DOWNLOAD THE
FLAGGED STOLEN IMEIs**



**STOLEN DEVICE
CANNOT BE USED
IN OTHER COUNTRIES**

The GSMA encourages all operators to understand the benefits and take advantage of this free service.



PathFinder

GSMA PathFinder, powered by Neustar is a real-time telephone number information service that authoritatively identifies the world's in-use fixed and mobile numbers by operator, corrected with updates from the 4.6 billion phone numbers, subject to portability.

It provides one access point to critical information so that aggregators, businesses and mobile operators can:

- Reduce costs eliminating incremental fees and optimizing commercial agreement rates
- Increase traffic delivery success for greater campaign and ecommerce results
- Increase confidence through use of a carrier grade, proven solution
- Seamless access data and new portability countries with continuous updates using a standardized interface

neustar®

10,000 
CARRIERS WORLDWIDE

240 
COUNTRIES & TERRITORIES
WITH NUMBERING
INFORMATION IN
PATHFINDER

20Bn 
CUSTOMER INTERACTIONS
ANNUALLY ACROSS
THE WORLD

600+ 
MILLION
SOCIAL NETWORK
PROVIDER QUERIES PER
MONTH

**PATHFINDER HELPS ROUTE
MESSAGESS GLOBALLY**

Connecting you to the people
you care about

**PATHFINDER HELPS VERIFY
USER IDENTITIES**

Authenticates users, allowing them to create
online accounts through SMS verification

**PATHFINDER HELPS BUSINESSES
COMMUNICATE WITH THEIR CUSTOMERS**

Automated notifications and alerts. Customers
get updates about flight delays, package
deliveries and more.



IMEI
Services

**FOR THE HIGHEST QUALITY
DEVICE IDENTITY DATA,
GO STRAIGHT TO
THE SOURCE**



PathFinder

**POWERING ACCESS TO
8.6+ BILLION OF THE
WORLD'S PHONE NUMBERS**