

# Trusted Connectivity Alliance: Industry Insights 2021

## Global adoption of eSIM technology continued to build in 2021

- ▶ Uptake of eSIM functionality increased across consumer, enterprise and machine-to-machine (M2M) verticals.
- ▶ TCA member data shows that eSIM profile transactions rose by **54%** in 2021.

eSIM profile transactions refer to the number of times a mobile network operator profile was downloaded to a device.

## Increasing eSIM adoption enabled by a well-established global infrastructure

- ▶ TCA members saw strong ongoing investment in eSIM Subscription Manager (SM) platforms.
- ▶ Infrastructure now utilised by all major Tier 1 and Tier 2 operators.
- ▶ Operators are now increasingly activating and managing eSIMs to authenticate and onboard new customers.

eSIM Subscription Manager (SM) platforms enable the remote provisioning and lifecycle management of eSIMs.

## Automotive and IoT use-cases drive increases in eSIM shipment volumes

- ▶ Trusted Connectivity Alliance members report **337 million** eSIM shipments for 2021.
- ▶ Increases in eSIM shipment volumes were mainly driven by use-cases across automotive and IoT verticals.

**9%** year-on-year increase

TCA members reported **38% growth** in M2M eSIM shipments, demonstrating accelerating adoption of cellular connectivity across IoT use-cases.

**38%** growth

## There was also sustained growth across the consumer eSIM segment, but volumes were tempered by:

- The impact of economic sanctions and broader geopolitical trends on the global smartphone market.
- The delay of new device launches and the reduction of shipped units due to the widely publicised worldwide chip shortage.

- ▶ eSIM momentum is anticipated to continue
- ▶ TCA forecasts that the total available market for eSIMs will see double-digit growth in 2022.

▶ TCA is committed to working with key industry stakeholders to develop and advance enabling specifications that promote secure, scalable and interoperable eSIM deployments.

## 5G SIM deployments gain significant momentum

- ▶ TCA member data showed substantial increases in 5G SIM shipments in 2021.
- ▶ This builds on advances made in 2020, which marked the first year of widespread 5G SIM deployments.
- ▶ The 'Recommended 5G SIM' as defined by TCA promotes the highest levels of security, privacy and functionality in 5G networks to maximise operator investments and support 5G use-cases.

## Market for traditional SIM form factors remains significant

- ▶ TCA estimates that the total available SIM<sup>1</sup> market globally in 2021 was **4.35 billion units**.
- ▶ But volumes have been affected by the ongoing chip shortage

<sup>1</sup>Includes removable SIM and soldered SIM for M2M form factors. Excludes eSIM.

A breakdown of data collected through TCA's member monitoring process is available via an annual subscription. For more information, please contact [info@trustedconnectivityalliance.org](mailto:info@trustedconnectivityalliance.org)

## About Trusted Connectivity Alliance

Trusted Connectivity Alliance (TCA) is a global, non-profit industry association working to enable trust in a connected future. The organisation's vision is to drive the sustained growth of a connected society through trusted connectivity which protects assets, end user privacy and networks.

TCA members are leaders within the global Tamper Resistant Element (TRE) ecosystem and work collectively to define requirements and deliverables of a strategic, technical and marketing nature. This enables all stakeholders in our connected society to benefit from the most stringent secure connectivity solutions that leverage TCA members' expertise in tamper proof end-to-end-security.

## TCA members:
