

# Trusted Connectivity Alliance: eSIM Industry Insights 2024

→ Trusted Connectivity Alliance (TCA) is the industry association estimated to represent approximately 98% of the global eSIM hardware market.

→ TCA is the only organisation to offer a quantitative global view of eSIM shipments, providing both actual and forecast data. This offers unparalleled and authoritative intelligence into the ongoing development of the eSIM ecosystem.

## A Landmark Year of Growth for the Global eSIM Ecosystem

▶ eSIM shipment volumes collectively reported by TCA members surpassed **half a billion units** increasing

↑ **35%** year-on-year

to reach **503 million units**

TCA estimates that the total available market for eSIM was **514 million units**

▶ Growing availability of eSIM-enabled devices was matched by rising consumer adoption.

Consumer eSIM profile downloads increased **↑ 56%** year-on-year

eSIM profile downloads - also known as eSIM profile transactions - refer to the number of times a mobile operator profile was downloaded to a device.

## Improved Economic Conditions and Continued Innovation Drive eSIM Growth

- The eSIM market was positively impacted by:**

  - Improving economic conditions that saw demand for smartphones and mobile subscriptions recover.
  - The launch of new eSIM-only devices, eSIM-enabled mid-range models and 5G smartphones.
- North America once again led in consumer eSIM adoption due to the prominence of eSIM-only devices and because operators continued to pursue 'digital-first' strategies.**
- Profile downloads more than doubled in Asia, while Europe also saw strong uptake.**
- Increased consumer uptake was supported by ongoing investment in the enabling infrastructure.**

  - Number of deployed consumer eSIM SM platforms rose by **18%**

eSIM Subscription Manager (SM) platforms enable the remote provisioning and lifecycle management of eSIMs.
- TCA members also reported significant M2M eSIM adoption.**
- Looking ahead, the release of GSMA's eSIM IoT Specification (SGP.32) stands to accelerate the use of eSIM technology across IoT use-cases.**

“ Our latest data offers the clearest demonstration yet of the extent to which eSIM technology is now being harnessed across the global digital economy. ”

*Bertrand Moussel, Chair of the TCA Board*

TCA's market data also provides exclusive statistical insight into the broader SIM ecosystem, with other key industry trends in 2024 including:

## Strong Global Momentum for 5G SIM

▼ The TCA Recommended 5G SIM / eSIM promotes the highest levels of security, privacy and functionality in 5G and 5G SA networks to maximise operator investments and support key use-cases.

TCA members reported **↑ 68%** year-on-year growth in units in 2024.

↑ Volumes were strongest in North America.

↑ Europe also saw robust growth as it emerges as a leading region for the rollout of 5G SA deployments.

## 'Traditional' SIM Market Remains Significant Amid Ongoing Evolution

▼ TCA estimates that the total available market for SIM\* was **3.7 billion units** in 2024

→ The market continues to be shaped by accelerating digitalisation as eSIM adoption increases in key geographies such as North America.

→ Local players are strengthening market share across lower-cost categories in India, China, and across the Pacific and MEA regions.

\* Includes removable SIM and soldered SIM for M2M form factors. Excludes eSIM.

## Enhanced Sustainability Across the Mobile Ecosystem

▼ **37%** of all SIM volumes collectively reported by TCA members were in the half SIM format.

▼ **A third of SIM volumes in Europe** were manufactured using eco-friendly raw materials.

▼ This reflects the trend of significantly reducing plastic waste and associated emissions.

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, 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 provide 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.