

Trusted Connectivity Alliance: eSIM Industry Insights 2025

→ Trusted Connectivity Alliance (TCA) is the industry association estimated to represent approximately 85% of the eSIM hardware market.

Through its market monitoring process, TCA is the only trusted source of global SIM and eSIM shipment, platform and transaction data.

Global eSIM Growth Accelerates in 2025

▶ TCA members estimate that the total number of eSIMs shipped globally in 2025 grew by 18%, reaching a new annual high of 605 million

▶ Growth was complemented by a significant increase in consumer and IoT eSIM activations

Consumer eSIM profile downloads increased

↑ 43% year-on-year

↑ 18% year-on-year to reach 605 million units

TCA members collectively shipped 523 million eSIM units

Increasing Ubiquity of eSIM-Enabled Devices Drives Consumer Awareness and Adoption

▼ The ongoing rise in eSIM shipment volumes was supported by the growing availability of eSIM-enabled devices, including:

- Increasing number of low and mid-range smartphone models.
- Launch of flagship eSIM-only handsets across more global markets outside of North America.

▼ Robust growth in consumer eSIM adoption continued across all regions globally:

- Uptake remained strongest in North America.
- Adoption effectively doubled across the Middle East and Africa (MEA) and South America – demonstrating increasing traction across emerging markets.

Market Transition to SGP.32 to Enable IoT Use Cases is Underway

▼ GSMA's eSIM IoT Specification (SGP.32) stands to significantly accelerate the use of eSIM technology across IoT use-cases.

▼ TCA data shows that the market transition to SGP.32 is well underway.

Strong increase in the number of eSIM Subscription Manager (SM) platforms that support profile downloads in accordance with SGP.32

TCA's data also provides statistical insight into the ongoing transformation of the broader SIM ecosystem. Key market developments in 2025 included:

Traditional SIM Market Remains Highly Resilient

3.5 billion units TCA estimates that the total available market for 'traditional' SIM* was 3.5 billion units in 2025.

↑ 6%

TCA members increased delivered SIM volumes by 6% year-on-year, with growth across:

- Mature markets in Europe and the Middle East.
- Developing markets throughout Africa and Asia.

5G SIM Deployments See Sustained Growth

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

TCA members reported

↑ 33% year-on-year growth in deployments of the Recommended 5G SIM.

↑ Volumes were highest in India and North America – while Europe saw continued increases.

↑ MEA saw the most impressive percentage growth globally, highlighting 5G demand across emerging markets.

Sustainability Push Across the Mobile Ecosystem Continues

▼ 45% of all SIM volumes collectively reported by TCA members were in the half SIM format.

Over 40% of SIM volumes in Europe were manufactured using eco-friendly raw materials.

▼ Sustainability push was also seen in emerging markets:

- SIM volumes manufactured using eco-friendly raw materials doubled in MEA in 2025, with half SIM shipments also up 40%.

A full breakdown of data collected through TCA's market monitoring process is available via an annual subscription. For more information, please contact 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 evolved from the SIMalliance, reflecting the continued expansion of the global SIM industry and the need for broader collaboration.

Its members are leading providers of secure connectivity solutions for consumer, IoT and M2M devices. This spans Tamper Resistant Element (TRE) technologies including SIM, eSIM, integrated SIM, embedded Secure Element (eSE) and integrated Secure Element (iSE), as well as hardware and software provisioning and other personalisation services.

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