

Recently published by the GSMA, the **SGP.31 eSIM Internet of Things (IoT) Architecture and Requirements Specification** details the architecture and requirements for remote provisioning of embedded Universal Integrated Circuit Cards (eUICCs), or eSIMs, in Network Constrained and/or User Interface (UI) Constrained IoT Devices.¹

As an active collaborator in GSMA's Working Group 7 (WG7)—who is responsible for drafting new IoT specifications—IDEMIA experts have been involved in the process from day one.

Given IDEMIA's expertise and eSIM connectivity solutions that are compliant with the newly-issued GSMA specification, the company is well-positioned to help customers future-proof their connectivity by supporting legacy as well as new GSMA architectures.

SGP.31: the IoT market game-changer

Since 2016, eSIM has revolutionized cellular IoT deployments, giving service providers the ability to activate and change profiles remotely without truck rolls—making cellular IoT more affordable and scalable.

While the current Machine-to-Machine (M2M) solution has been effective for a closed market that was mostly driven by the automotive sector, this long-awaited new specification promises to be a game-changer to open the IoT market, significantly facilitating the global deployment of all cellular IoT projects, particularly those relying on low power networks and devices.

According to Juniper Research, the global value of the cellular IoT market is expected to reach \$61 billion by 2026; rising from \$31 billion in 2022 and boosted in part by Low Power Wide Area (LPWA) solutions like Narrow Band-Internet of Things (NB-IoT) and Long-Term Evolution Machine Type Communication (LTE-M), which are projected to be the fastest-growing cellular IoT technologies in the next four years.²

The new eSIM IoT specification will leverage the benefits of the two existing GSMA eSIM remote provisioning specifications tailored to the M2M and Consumer markets and fill the gaps when it comes to IoT use cases.

It will introduce a simple and cheaper integration model, inspired by the Consumer specification while, at the same time, providing an improved remote management functionality that is used in the M2M specification.

Most importantly, GSMA's new specification will enable IoT service providers to embrace the connectivity and flexibility offered by eUICCs by:

- Accelerating Time to Market (TTM)
- Democratizing the use of eSIM so that more IoT service providers, beyond major actors like car manufacturers, can benefit from the flexibility of eSIM connectivity
- Simplifying architecture and integrations
- Limiting dependencies on third parties, notably at the manufacturing stage
- ->> Facilitating remote fleet management throughout the fleet's life cycle
- Enabling the use of technologies and communication channels for low power networks and devices such as those without SMS capabilities or requiring alternatives to HTTPS

In the days following the announcement of the new specification, IDEMIA has already deployed an IoT connectivity solution in partnership with several major actors in the mobile industry, replicating use cases defined by SGP.31.

At IDEMIA, we support existing and new customers in the launch of new cellular IoT projects based on the new GSMA specification as well as the migration or retention of legacy architectures.

Over the past 10 years, IDEMIA has successfully embedded millions of eUICC chips in different devices and deployed major projects in both M2M and Consumer markets, with more than 160 eSIM platform wins across the globe. In addition, IDEMIA is a firm proponent of an always-on cloud-based approach to support the growth of eSIM connectivity.

Earlier this year, IDEMIA entered into a global collaboration with Microsoft to deliver next-generation eSIM and connectivity solutions for both consumer and M2M/IoT devices.⁴

For more information or to schedule a meeting, please reach out to us and select the topic "connectivity offers".

¹ https://www.gsma.com/esim/resources/sgp-31-esim-iot-architecture-and-requirements/

² https://www.juniperresearch.com/press/cellular-iot-market-value-to-exceed-61b-globally

³ https://www.youtube.com/watch?v=b57YlpJofUw

⁴ https://www.idemia.com/press-release/idemia-collaborates-microsoft-provide-next-generation-esim-connectivity-services-2022-01-25