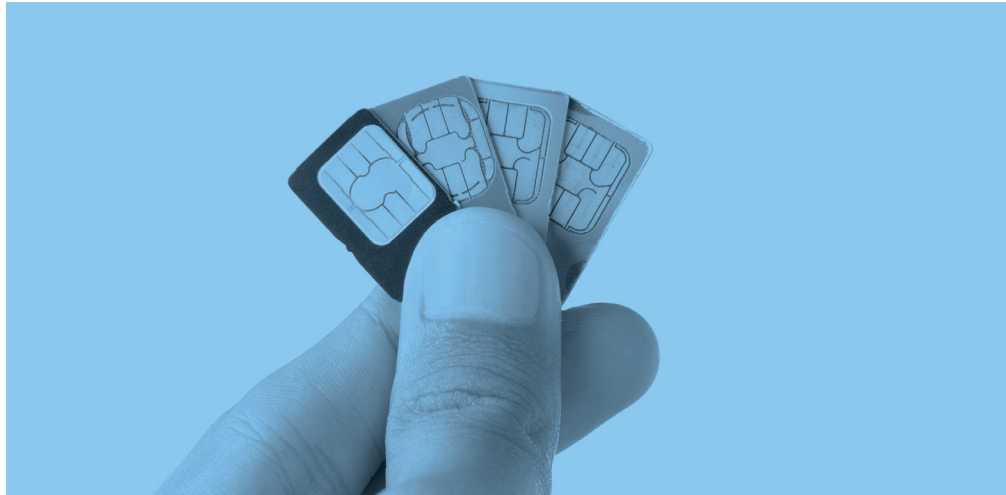




Connected Living

Future IoT Networks



SIM Management Capability

SIM Management refers to the management of a profile and a subscription, as well as the capability to utilise the SIM's secure client to store confidential information, such as user identity information, payment credentials, biometrics for authentication or other personal information, such as health or other records.

Both the traditional SIM (Subscriber Identity Module) card and the GSMA Embedded SIM (eUICC – embedded Universal Integrated Circuit Card) are important enablers for various IoT operator capabilities. The GSMA Embedded SIM Specification, in particular, is set to play an important role in the IoT market, reducing costs for customers, streamlining global device delivery and after sales service processes, and aiding the development of the second hand market for connected products by allowing remote re-provisioning of operator profiles, especially in the automotive and consumer electronics sectors.

Using the SIM for IoT

There are many potential ways in which conventional SIMs and SIMs that can be remotely provisioned (underpinned by the GSMA Embedded SIM Specification) can enable various platform IoT services:

- **Support the development of split billing services, especially in the automotive sector.**
- **Support for end-to-end security through the provision of a range of cryptography services to IoT and M2M devices, even if they use short-range wireless technologies.**

- **A SIM can be used to store small amounts of sensitive data, for example, personal ID, core health data, or keys.**
- **Support for personal identification, enabling individuals to access and personalise services; as well as allowing access to data and physical premises.**
- **A SIM can be twinned with other devices, allowing multiple devices, such as a wellness device, a smart watch and a car, to be linked to the same identity.**
- **Authentication for financial and smart meter transactions.**

In each case, the following capabilities will be required: management of subscriptions, management of operator profiles and management of the SIM's secure element. While the management of subscriptions is central to the delivery of traditional mobile voice and data services, the business models for remote profile management (defined as loading, activation and de-activation of operator credentials on to the SIM so that a subscription can be activated) are not yet fully developed. Mobile network operators will also need to continue developing the capabilities and business models required for the use of the SIM's secure client to store confidential information.

Next steps

Further work on Embedded SIM and remote provisioning continues as part of the GSMA Connected Living Programme.

For more information, please get in touch with the GSMA's Remote Provisioning team at connectedliving@gsma.com