

Real-world solutions to key connectivity problems

Want to deliver a seamless eSIM experience?

How Vodafone are driving growth through the broad adoption of eSIMs

Find out how straightforward digital authentication technology can unlock mass eSIM adoption and bring growth as well as sustainable benefits to mobile operators.

The growth of eSIM is good news for the mobile industry, as the technology allows for fully digitised and faster processes, with the potential to cut per-unit costs, plastics usage and greenhouse gas emissions. For individual customers, eSIM can improve the user experience by providing an easy, fast and secure means to set up connectivity.

Which is why Vodafone is one of the pioneers of an industry-wide push to make the transition from physical SIM cards to eSIMs. According to GSMA Intelligence, the global number of eSIM smartphone connections will double in 2023 and double again in 2024, with North America leading the way. By the end of 2025, there will be around 1 billion eSIM smartphone connections globally.

Fabrice Denis, Principal Manager Services & Platforms at Vodafone says, *“The exponential growth will come with the support of eSIM in mid to low-end consumer devices coupled with a superior digital eSIM activation journey.”* This is where GSMA eSIM Discovery comes in.

“The exponential growth will come with a superior digital eSIM activation journey”

How is Vodafone using GSMA eSIM Discovery?

To deliver the optimum user experience, Vodafone and its SM DP+ (subscription management data) partner, Thales, are harnessing GSMA eSIM Discovery, a Root SM-DS (subscription management discovery service) launched by the GSMA to get new connections up and running across 14 markets.

It automatically provides eSIM-supported devices with the SM-DP+ address of the mobile operator, enabling the end-user to activate the eSIM with a single click. Vodafone requires all the eSIM consumer devices it sells to support SM-DS as per the GSMA specifications.



“From Vodafone’s perspective, we find its use in our direct distribution provides the best customer experience, by giving an almost no-touch device activation experience.”

Fabrice Denis, Principal Manager Services & Platforms at Vodafone Group



How does GSMA eSIM Discovery work?

An industry-specified method for remote provisioning of eSIMs in handsets and IoT (Internet of Things) devices, the GSMA's solution uses the eUICC Identifier (EID) to match the eSIM with the owner's purchased network operator

profile. The eSIM device then seamlessly acquires the eSIM profile from the correct operator, thereby activating cellular connectivity.

For both consumer and enterprise devices

This kind of discovery process is equally applicable to both consumer and enterprise devices. When a business is issuing large numbers of staff with smartphones, for example, the subscription activations need to be as straightforward and as seamless as possible.

"When a customer orders a new device from Vodafone, they no longer need to wait for an additional letter to arrive with a physical SIM card and PIN code. Thanks to the SM-DS

mechanism, the customer can simply switch on their new device and activate the eSIM immediately." Fabrice Denis, Principal Manager Services & Platforms at Vodafone.

Also, the convenience offered by the combination of eSIM and SM-DS goes beyond the initial account activation. For example, if an individual loses their phone, they can use eSIM to be up and running immediately with a replacement phone.

The advantages of eSIM for mobile operators



Helps reduce their impact on the environment – far less plastic and transportation is needed – along with less cost



Access to new sales channels, for example, a buyer of an eSIM-enabled laptop can be offered a Vodafone subscription as soon as they switch the device on



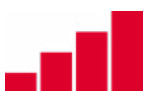
Reach distribution agreements with a wide range of device manufacturers, as well as online and in-store retailers, to bundle a cellular subscription in with a device – which can be activated via an eSIM



Capitalise on international roaming revenues. For example, when a foreign visitor arrives in Greece with an eSIM smartphone, they get the opportunity to subscribe to a prepaid Vodafone tariff plan for the duration of their stay



A single customer account and mobile number across multiple devices, such as a smartwatch, a smartphone, a tablet and a laptop – without the need for a physical portfolio of small SIM cards



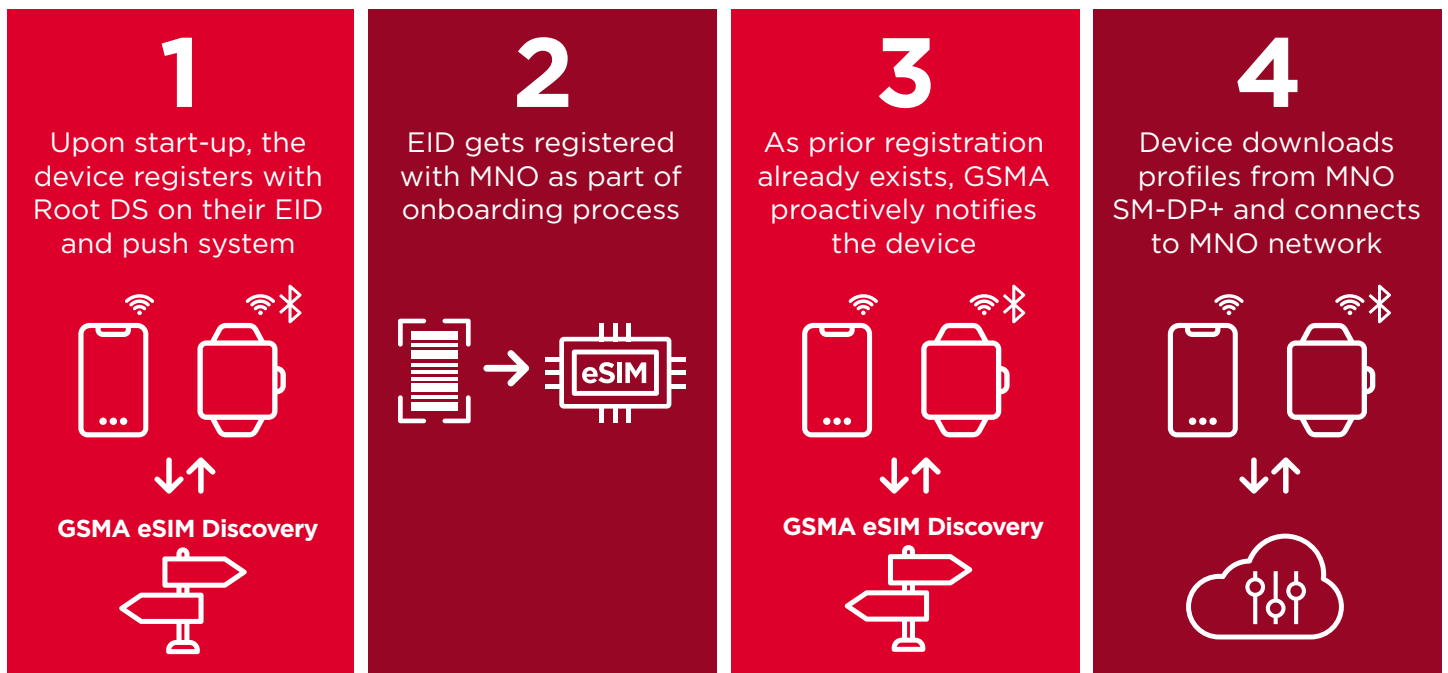
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Fabiola Frantzis Head of eSIM Discovery services,
Product Marketing, Thales

More automation to come

The next version (Version 3) of the GSMA Discovery Service will introduce support for push functionality. In effect, that means the eSIM profile is pushed out to the device, rather than relying on the end-user to initiate the process. Vodafone says this mechanism will further enhance the user experience by “providing immediate response on devices, not only for the initial connectivity but also in the lifecycle of the device when a new or an update of the eSIM is needed.”

“With push notifications, the device will immediately be notified that a profile is waiting to be downloaded. Enabling faster assistance and higher customer satisfaction. On the other hand, push notifications drastically reduce the amount of queries received by the discovery server. This translates into higher efficiency and reliability of the service,” says Fabrice Denis.



Enabling and enhancing the IoT

The rising adoption of consumer IoT devices, such as connected smartwatches, tracking devices and connected vehicles, is another driver of demand for eSIMs. As they often lack displays, these devices tend to depend on an SM-DS mechanism, and by extension, the GSMA’s Discovery Service. Vodafone regards SM-DS as a core element in providing a superior activation for IoT devices.

“The IoT market will also be a driver to eSIM Discovery adoption as it can be perceived as the easiest way to activate an IoT device,” says Fabiola Frantzis, Head of eSIM Discovery services, Product Marketing at Thales.

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