



# Subscription Manager - **Thales SMDS Connect**

Maximizing the reach and  
activation of eSIM capable devices

# Contents

03

Succeeding in the context of digital transformation

03

Helping MNOs and OEMs embrace the fast growing embedded SIM (eSIM) ecosystem

04

Building on GSMA standards for eSIM activation

04

Accelerating eSIM activation via the GSMA Root Discovery Service

05

Adopting the right strategy for a dynamic market with multiple OEMs' Discovery Services

06

What is the impact for MNOs?

06

Thales SMDS Connect: maximizing the reach and activation of eSIM capable devices

07

The benefits for MNOs

# Succeeding in the context of digital transformation

With digital transformation now redefining a host of industries, Mobile Network Operators (MNOs) and device makers (OEMs) must adapt fast. As traditional sources of revenue are challenged, business models need to evolve to claim new territory in the digital market and attract additional customers.

Right across this diverse and changing landscape, there is a simple, consistent truth: delivering a successful and seamless digital customer journey is imperative if promising business opportunities are to be grasped.

Above all else, MNOs and OEMs must meet consumer expectations regarding connectivity for their mobile devices, smartphones and companion devices, anytime and anywhere, through multiple channels, in-store and online. At the same time, dramatic development of the Internet of Things (IoT) also demands secure connectivity, delivered and managed remotely.

## Helping MNOs and OEMs embrace the fast growing embedded SIM (eSIM) ecosystem

In both the consumer and IoT domains, MNOs must also recognize that a significant change is underway in terms of how connectivity is enabled. In addition to the traditional SIM, new form factors are being deployed. Offering enhanced

functionality, eSIM solutions support the need for secure remote activation, in accordance with specifications defined by the GSMA.



**337 Mu**  
eSIM shipments for 2021 <sup>(1)</sup>



**More than 260 MNOs Worldwide**  
already support eSIM capable devices <sup>(3)</sup>



**1.4 billion**  
eSIM capable devices in Europe by 2030 <sup>(4)</sup>

Source: <sup>(1)</sup> TCA (Trusted Connectivity Alliance), <sup>(2)</sup> ABI Research - eSIM in the Consumer & M2M markets Q3 2022, <sup>(3)</sup> GSMA - eSIM: market progress, consumer behaviour and adoption to 2030, <sup>(4)</sup> Wiki Consult

# Building on GSMA standards for eSIM activation

Just like the traditional removable SIM, embedded SIMs rely on common standards to create the foundations for a fully interoperable ecosystem. The GSMA's standards therefore address all the elements of a smooth and trusted digital journey for end users, and encompass three key components:

- The means by which subscriptions (profiles) are downloaded securely to an eSIM
- The application on the device - the Local Profile Assistant (LPA) managing interaction with the eSIM (including profile download request, subscription activation from the server and more), which enables consumers to manage subscriptions from their mobile devices

## ■ Secure communication between the server and the eSIM

With the emergence of eSIMs, MNOs have the opportunity to encourage new types of device to connect to their networks and strengthen customer loyalty. At the same time, OEMs can innovate, adding new features and extending their product portfolios with eSIM capable devices. Put simply, the easier it is to add cellular connectivity features to devices and the easier it is for end users to connect with them, the greater the number of devices that will be connected to cellular networks.

---

## Accelerating eSIM activation via the GSMA Root Discovery Service

This is precisely where the GSMA Root Discovery Service comes into play. Built on GSMA standards, offered by the GSMA and powered by a Thales platform, it enables a seamless approach to connecting devices with subscriber profiles.

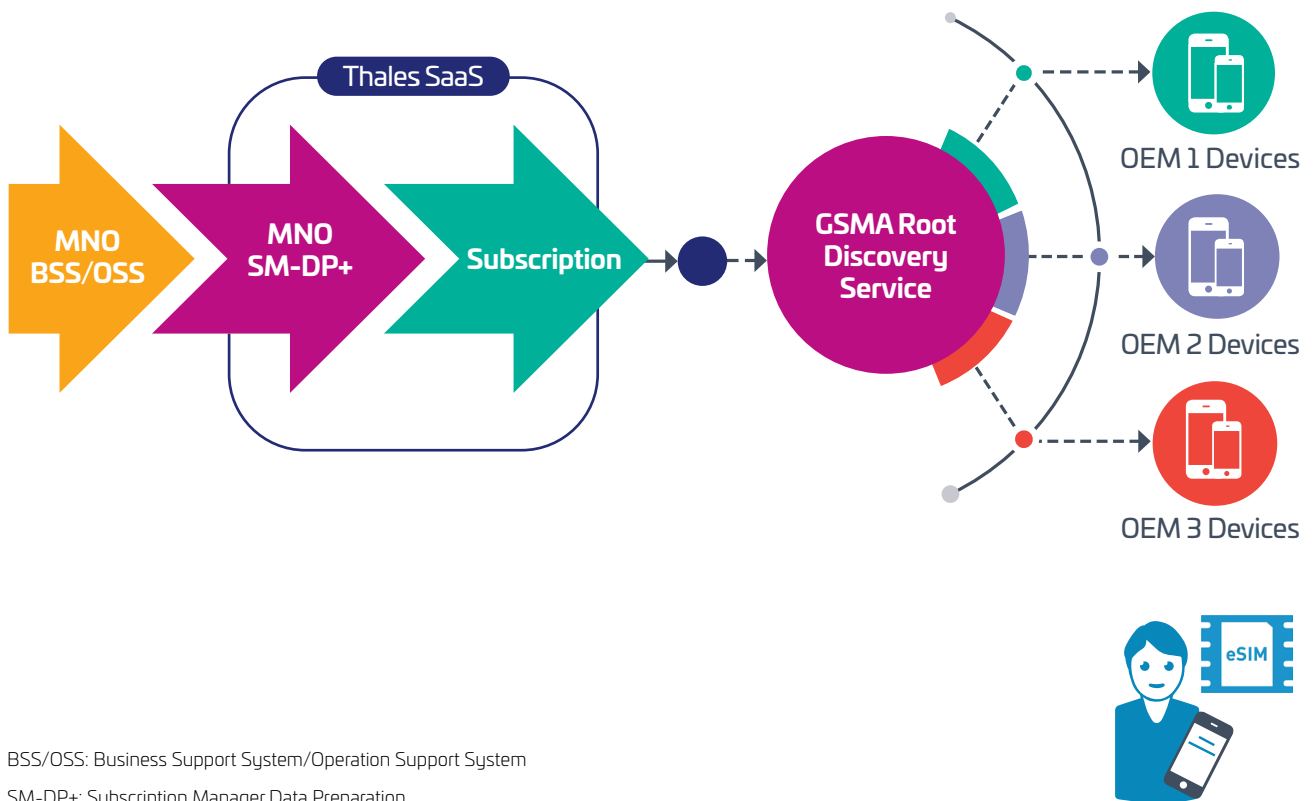
Using the GSMA Root Discovery Service, MNOs can download and activate their subscriptions to all eSIM capable devices. The bottom line is a seamless connectivity experience for end users, with a comprehensive choice of mobile subscriptions available, whatever the channel, in-store and online. OEMs can ensure that all their eSIM capable devices are ready to be provisioned by MNOs.

End users can purchase eSIM capable devices from any vendor and, after they have subscribed with an MNO either online or in-store, the corresponding profile can be retrieved directly from the Root Discovery Service. For MNOs, the experience is equally



straightforward. By connecting to the Root Discovery Server via their Subscription Management platform for Data Preparation (also known as SM-DP+), MNOs can download and activate subscriptions on eSIM capable devices, seamlessly and securely, in response to requests from end users.





## Adopting the right strategy for a dynamic market with multiple OEMs' Discovery Services

Reflecting the benefits provided for MNOs, OEMs and end users, the GSMA Root Discovery Service framework is quickly gathering momentum. Furthermore, alongside the opportunities offered by the GSMA solution, some OEMs have identified the potential to differentiate themselves from competitors and further promote eSIM capable devices to MNOs by launching their

own Discovery Services. Such OEMs are essentially seeking to replicate the Discovery Service framework within their own commercial environment.

# What is the impact for MNOs?

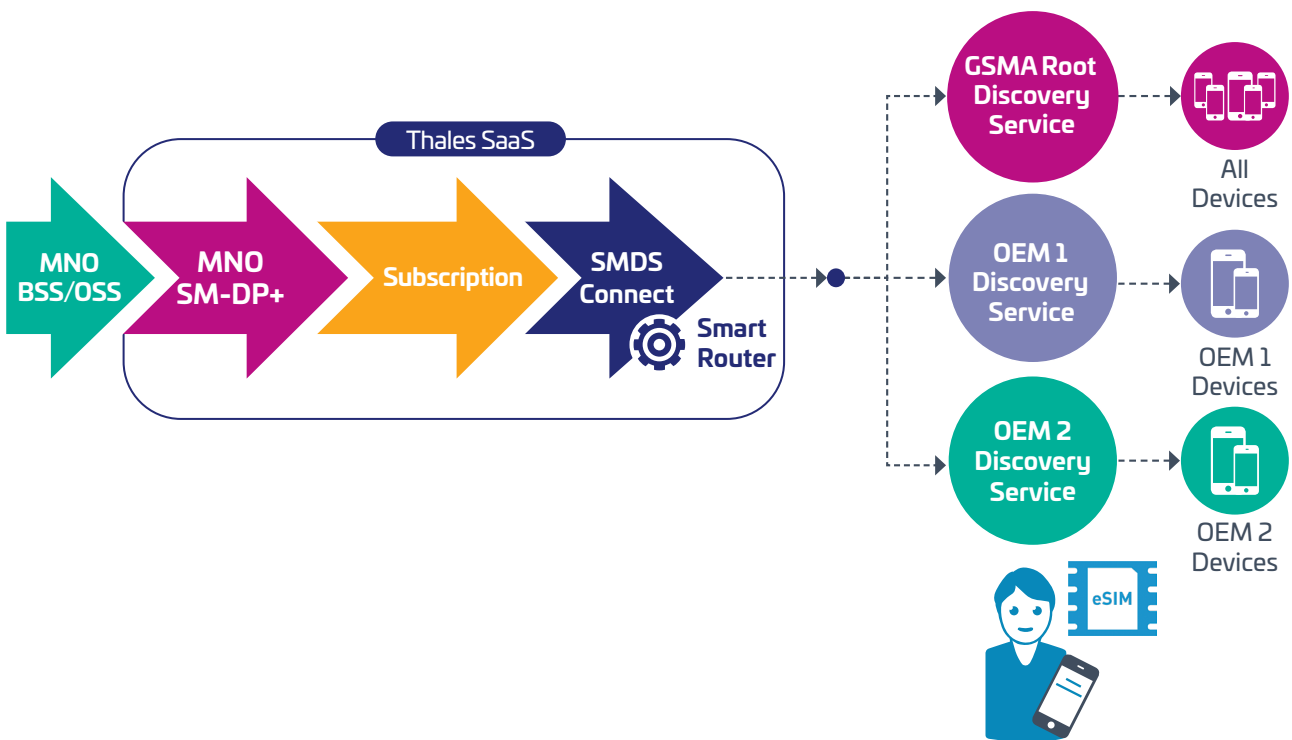
For MNOs, the prospect of multiple OEMs' Discovery Services presents new challenges. To maximize their potential to attract new customers, it is vital that MNOs have the ability to reach and activate securely the entire population of eSIM capable devices.

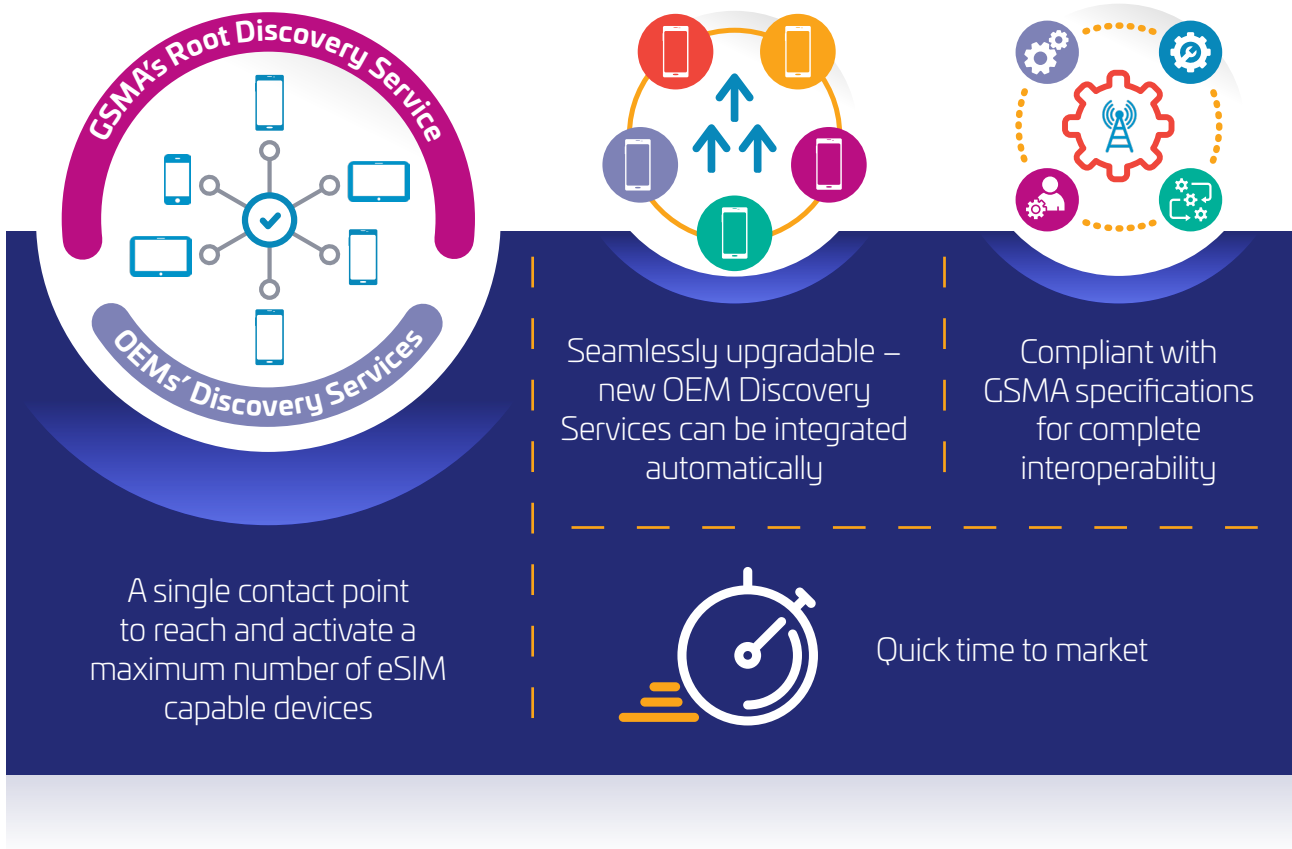
MNOs therefore need the technical capability to connect to all OEMs' Discovery Services, as well as the GSMA's Root Discovery Service.

## Thales SMDS Connect: maximizing the reach and activation of eSIM capable devices

To meet this critical requirement for MNOs, Thales offers the SMDS Connect smart router. This proven solution enables an MNO's backend system to automatically connect to and use the GSMA Root Discovery Service and all other deployed OEM Discovery Services (subject to commercial agreement between the MNO and OEM). As a result, MNOs can be confident they are maximizing their ability to reach and activate eSIM capable devices, and therefore reach customers, seamlessly and securely.

Building on the strong foundations of the GSMA Root Discovery Service and fully compliant with GSMA specifications, Thales' SMDS Connect can embrace all OEM Discovery Services, ensuring MNOs have the potential for 360° access to the critical, fast growing market of eSIM capable devices.





## The benefits for MNOs

- A single point of contact to reach and activate the maximum number of eSIM capable devices through:
  - GSMA's Discovery Service framework
  - OEMs' own Discovery Services
- Seamlessly upgradable – new OEM Discovery Services can be integrated automatically, as soon as a commercial agreement is signed
- Quick time to market
- Compliant with GSMA specifications for complete interoperability

The GSMA chose Thales to deploy and operate its Root Discovery Service. Building on this expertise and experience, Thales can also support both OEMs and MNOs seeking to deploy and operate their own Discovery Services. Significantly, the company can integrate and manage all the technology bricks needed to meet business-critical objectives: reaching and activating the entire population of eSIM capable devices,

seamlessly and securely, within a framework that is fully compliant with GSMA specifications.

Our **award-winning solutions** have been adopted by major MNOs and key industry players worldwide. Responsible for more than 360 projects, we are the world leader for Remote SIM Provisioning platforms, employed in both consumer and IoT/M2M environments.

We lead the creation of new specifications and collaborate with the **GSMA** and other key industries to enable streamlined deployment of eSIM Subscription Management Platforms. Digital security is part of the company's DNA, facilitating trust for all stakeholders in the eSIM ecosystem, including MNOs and device makers.

[More information](#)

# THALES

Building a future we can all trust

> [Thalesgroup.com/Mobile](https://Thalesgroup.com/Mobile) <



© Thales 2022. All rights reserved. Thales, the Thales logo, are trademarks and service marks of Thales and are registered in certain countries. 19 October 2022.

