Solution Brief

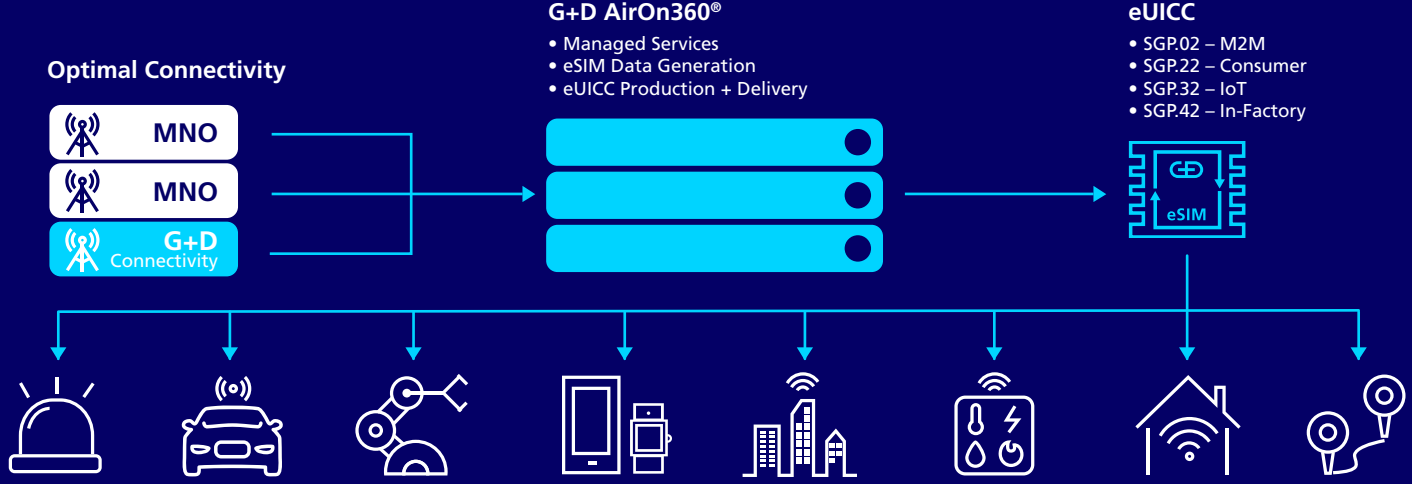
G+D's Remote SIM Provisioning solutions driving excellence in eSIM management

Remote SIM Provisioning (RSP) is transforming how SIM profiles are managed across a range of devices, from cars and consumer electronics to industrial IoT solutions. Developed and standardized by the GSMA, RSP enables the seamless download and management of SIM profiles over the air, without the need to physically insert or replace SIM cards.

This brochure provides a concise comparison of the key GSMA standards that shape the RSP landscape:

- **SGP.01/SGP.02:** Focuses on Machine-to-Machine (M2M) use cases, enabling the remote management of SIM profiles for vehicles and industrial systems.
- **SGP.21/SGP.22:** Tailored for consumer devices, such as smartphones and tablets, facilitating ease of use and enhanced flexibility for end users.
- **SGP.31/SGP.32:** Designed for the evolving IoT ecosystem, addressing the unique requirements of connected devices in multiple verticals.
- **SGP.41/SGP.42:** Aims to standardize In-Factory Profile Provisioning (IFPP), optimizing the production process by enabling devices to be pre-loaded with profiles before deployment.

By understanding the nuances of each standard, stakeholders can make informed decisions about the best solutions for their specific needs.



	M2M	Consumer	IoT	In-Factory
GSMA standards	**SGP.01:** eSIM Remote Provisioning Architecture **SGP.02:** Remote Provisioning Architecture for eUICC Technical Specification	**SGP.21:** RSP Architecture **SGP.22:** RSP Technical Specification	**SGP.31:** eSIM IoT Architecture and Requirements **SGP.32:** eSIM IoT Technical Specification	**SGP.41:** IFPP Architecture and Requirements **SGP.42:** IFPP Technical Specification
Scope	Remote provisioning and management of the Embedded UICC (eUICC) in machine-to-machine devices.	Remote provisioning and management of the eUICC in consumer devices.	Remote provisioning and management of the eUICC in IoT network constrained and/or user interface constrained devices.	Process and download eUICC profiles to consumer and IoT devices during the production process.
First publication	2013	2015/2016	2023/2024	To be finalized (2024)
Use cases	For cars and for devices with limited resources or without a direct user interface.	For devices with user interface such as consumer devices.	For cars and for devices with limited resources or without a direct user interface.	For cars and all devices that should be network enabled immediately.
Examples	Vehicles, smart meters, sensors, and more.	Smart phones, tablets, wearables, and more.	Vehicles, smart meters, sensors, tracking devices, wearables and more.	Vehicles, smart phones, tablets, wearables, smart meters, sensors, and more.
RSP type	Push – eSIM administration process is centrally managed.	Pull – eSIM loading and administration process is user initiated.	Push – eSIM loading and administration process is server driven.	Push – eSIM loading is processed during the device production.
Key architecture elements	**SM-DP:** Subscription Manager-Data Preparation. **SM-SR:** Subscription Management-Secure Routing.	**SM-DP+:** Subscription Manager-Data Preparation+. It combines SM-DP and SM-SR functionalities. **LPA:** Local Profile Assistant. Located on the device. **SM-DS:** Subscription Manager-Discovery Server (optional).	**SM-DP+** **SM-DS** **IPA:** IoT Profile Assistant, similar to LPA. Located on the device (IPAd) or in the eUICC (IPAe) **eIM:** eSIM IoT Remote Manager. It administrates the eUICC lifecycle	**SM-DPf:** Subscription Manager-Data Preparation for IFPP. **In-Fab Library:** eUICC-data library, processed on the production server.
Communication technology	SMS-based communication	IP-based communication	IP-based communication, multiple IoT protocols	IP-based communication
Market acceptance and application	Mainly used in the automotive industry to enable the eCall function and telematics services.	Mainly used and supported by consumer device OEMs.	Successor to the M2M eSIM. Supports 5G and NB-IoT. It is used by IoT device OEMs and the automotive industry.	Mainly used and requested by the smart metering, IoT device and automotive industries.
Availability	**Yes**	**Yes**	Yes	Yes, as pre-standard solution by G+D.
G+D's RSP solution	**AirOn360® M2M**	**AirOn360® RSP**	**AirOn360® IoT**	**AirOn360® In-Factory eSIM**

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About Giesecke+Devrient

Giesecke+Devrient (G+D) is a global SecurityTech company headquartered in Munich, Germany. G+D makes the lives of billions of people more secure. The company shapes trust in the digital age, with built-in security technology in three segments: Digital Security, Financial Platforms and Currency Technology.

G+D was founded in 1852 and today has a workforce of more than 14,000 employees. In the fiscal year 2023, the company generated a turnover of 3 billion euros. G+D is represented by 123 subsidiaries and joint ventures in 40 countries.

Further information: **www.gi-de.com**

Giesecke+Devrient

Giesecke+Devrient Mobile Security Germany GmbH
Prinzregentenstrasse 161
81677 Munich
Germany

www.gi-de.com
connectivity@gi-de.com

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