



eSIM technology by Giesecke & Devrient supports Vodafone's implementation of eSIM specification

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Giesecke+Devrient

Munich, March 2, 2016 – Giesecke & Devrient (G&D) has delivered the embedded SIM (eSIM) management solution for Vodafone Group's first implementation of the industry-agreed Remote SIM Provisioning specification.

AirOn, G&D's eSIM management solution secures the lifecycle management of eSIMs. It has been developed in accordance with the Remote Provisioning specification, which was the first output from the GSMA's industry-backed Consumer Remote SIM Provisioning initiative to secure a common and interoperable specification for using eSIMs in companion consumer mobile devices.

Vodafone will soon launch the Samsung Gear S2 classic 3G smartwatch in Germany. It is one of the first devices in any market to contain an embedded eSIM based on the new industry-agreed specification.

Carsten Ahrens, Head of the Telecommunication Industries division at G&D: "We have been driving the eSIM development from the beginning and are proud to be the partner of Vodafone. Smart devices will increasingly be shipped with an eSIM. The eSIM will be a key component for the Internet of Things. Thanks to the eSIM, smart devices such as smartwatches, fitness trackers, and data glasses, which don't offer space for a conventional SIM card, can be connected to the mobile network even more easily. We are pleased to be part of Vodafone's initiative to offer mobile customers even more convenience when dealing with multiple devices."

As with removable SIM cards, eSIM security is based on what is referred to as a SIM chip: a built-in security module. The eSIM profile is encrypted during installation. Asymmetrical algorithms ensure end-to-end encryption of the entire transmission between Vodafone servers and the module. Each device can therefore only decrypt and install the eSIM profile assigned to it. As a result, the eSIM satisfies the highest security requirements, in the same way as the removable SIM cards.

As Ahrens explains: "The eSIM works as a high-security microcomputer where sensitive data is kept highly encrypted in the eSIM memory and, in turn, can only be accessed with the corresponding key. The data is therefore effectively protected from manipulation and copying attempts."