

# German Companies Develop Prototype eIDAS Implementation for the BSI

HJP Consulting GmbH, cv cryptovision GmbH and Governikus GmbH & Co KG have implemented one of the first prototypes for an electronic ID card based on the eIDAS token specification.

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The "Regulation on electronic identities and trust services (eIDAS)" published by the European Union in July 2014 forms the legal basis for the secure handling of electronic transactions between businesses, citizens and public authorities or institutions within the EU. The French Agence nationale de la sécurité of systèmes d'information (ANSSI) and the German Federal Office for Information Security (BSI) have jointly developed the smart card specification (BSI TR-03110 Version 2.20). It is based on the technology that is already used in the German identity card.

Given these developments, the BSI commissioned the POSeIDAS project to HJP Consulting, cv cryptovision and Governikus. The project aimed to provide a prototype eIDAS server and a simulation environment for simulating the functions of an eIDAS token and the implementation of eIDAS functions on a chip card.

HJP provided the simulation environment for simulating the eIDAS functions based on BSI TR-03110. This open source smart card simulator – PersoSim – was developed by HJP and certified by the BSI. PersoSim emulates the functions of an electronic identity card and is already used by eID client developers and the BSI among others. PersoSim now includes features such as Chip Authentication in version 3, pseudonyms signatures and attribute extensions (ERA). The new features represent a complete eIDAS token according to BSI TR-03110. "With POSeIDAS we have successfully realized the first global implementation of the new security features for future ID cards." says Holger Funke, HJP Consulting.

The Governikus KG delivered an open source version of an eID server and a corresponding eID client that are used for the verification of the interoperability of the electronic identities (Proof of Concept) within the eIDAS regulation. Starting with the eID server and the eID client that already supported the infrastructure of the online ID function of the German ID card, the extensions for the eIDAS token were implemented successively to support all requirements given by the Technical Guideline BSI TR-03110 version 2.20.

cryptovision delivered the first implementation of the new eIDAS functions on a chip card. The implementation is based on the product "ePasslet Suite", a modular Java Card-based application suite for multi-functional national ID documents, which is already used in over 20 eID projects worldwide. ePasslet Suite provides a set of Java Card applets for passports, eID cards, electronic driving licenses, signature cards and other applications, and is also the foundation for the implementation of the eIDAS functionality. Therefore the innovative eIDAS functions can soon be used for international eID document projects in a very flexible manner.

## About cryptovision

cryptovision a world-leading specialist for cryptography and electronic identity solutions. From small devices like citizen e-ID cards, all the way to large scale IT infrastructures, more than 150 million people worldwide make use of cryptovision products every day across such diverse sectors as defense, automotive, financial, government, retails and industry. Based on its 15 year market experience and broad background in

modern cryptographic techniques, such as Elliptic Curve Cryptography, all cryptovision products provide the most state-of-the-art and future-proof technologies. The company specializes in lean add-on components which can be integrated into nearly any IT system to gain more security in a both convenient and cost-effective manner.

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