Consortium develops a digital identity for EMIL

Put simply, when we refer to "digital identities" we're talking about an ID card for the Internet. In our private lives, this makes it possible to sign digital contracts with municipalities or service providers, whether for cell phones or car rentals. The potential in business life is even greater, as this is precisely where tying up contracts and carrying out the associated legal ID checks on contracting partners is part and parcel of everyday work.

Participation in the "showcase of secure digital identities" innovation competition

Robert Bosch GmbH, the Telekom Innovation Labs of Deutsche Telekom AG, Jolocom GmbH, msg systems ag, ZF Car eWallet GmbH, Fraunhofer IAO and the city of Jena have joined forces in a consortium led by targens GmbH for the "EMIL" project (eIDAS ecosysteM Identity seLf-sovereign) as part of the "showcase of secure digital identities" ("Schaufenster Sichere Digitale Identitäten") innovation competition organized by the German Federal Ministry for Economic Affairs and Energy. The consortium aims to be selected for the implementation phase in order to standardize the subject of digital identity, put it into practical use and develop new business models. The group is being supported by its associated partners – the city of Ulm and Nimbus GmbH – and its media partners, 0711 Digital GmbH and YAEZ GmbH.

Project goals

The project partners set themselves the goal of establishing legally recognized, all-purpose digital identities that can be used in mobile applications for individuals, legal entities and objects. The identities are managed autonomously by the individual, legal entity or owner of the object in line with the concept of "self-sovereign identity" (SSI). "EMIL" is designed to create an open ecosystem for digital identities that are based on distributed ledger technologies such as blockchain. Users themselves are free to choose any identity provider they wish (interoperability). The identity provider manages (and shares) identity-related information. It authenticates users and provides identity data relating to them. For example, in Germany, Bundesdruckerei issues passports and identity cards.

Plans have been made for three showcase projects that will use the example of the fictional person Emil to test the practicability of the standards that have been drawn up and their technical implementation. Specifically, the focus is on platforms for master data management, e-government and mobility services – the applications the consortium believes are the most important for digital identities.

E-government

For instance, the city of Jena is contributing its "Smart Quarter" – a project devoted to smart living. Residents of the "Smart Quarter" are to be given the opportunity to manage their day-to-day life on a fully digital basis. An integrated delivery service for shopping and a digital doctors' practice are being considered. In medical contexts in particular, doctors need to be sure they are carrying out virtual remote treatment on the right patients.

Mobility services

Mobility platforms are currently being developed by a wide range of companies. Services range from booking rides to renting cars or e-scooters. However, all platforms face the challenge that potential customers need to create a user account with their personal data for every offering. This puts potential customers off from entering into contracts. The consortium partners believe an all-purpose ID will help out in this regard, too.

Master data management

Today, master data is stored and updated by companies in various systems multiple times over and often manually. Each company invests a great deal of time and money to ensure it has up-to-date, correct and complete data. The software solution based on decentralized methods that Bosch is developing within the context of its strategic advance engineering project "Economy of Things" and is now also contributing to "EMIL" offers a number of benefits:

▶ Sovereignty: The owner continues to have control of data (self-sovereign identity)
▶ Integrity: Unique identification of everyone involved, and authenticity of information shared
▶ Cost-efficiency: Automation reduces the manual workload for certificate validation and updates (cost savings and the highest data quality)
▶ Compatibility: Existing, internal systems can continue to be used

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