

## STORK - Secure idenTity acrOss boRders linKed. European Union

### GENERAL INFORMATION

#### Background information of the service

STORK is a co funded European Commission Large Scale Pilot programme under the Competitiveness and Innovation Programme. The policy framework most relevant to STORK is the "i2010 - A European Society for growth and employment" initiative, which has classified eID interoperability as a key factor for economic growth and employment in the EU. STORK is possibly the largest eID project in Europe in the public domain.

The STORK project is implemented by a consortium of 34 partners, including 18 EU Member and Associated States, as well as a number companies and organizations from the private, academic and civil society sectors.

The project aims at implementing an EU wide interoperable system for recognition of eID and authentication that will enable businesses, citizens and government employees to use their national electronic identities in any Member State. It will also pilot transborder eGovernment identity services to gain practical experience on how to roll out such services, and to better identify the benefits and challenges that an EU wide interoperability system for recognition of eID will bring.

The STORK interoperable solution for electronic identity (eID) is based on a distributed architecture that will pave the way towards full integration of EU e-services while taking into account specifications and infrastructures currently existing in EU Member States. The solution provided is intended to be robust, transparent, safe to use and scalable, and should be implemented in such a way that it is sustainable beyond the life of the pilot.

#### Specific objectives

The STORK project is working to establish trust, and an organisational and technological framework that will allow MS to integrate foreign eID in national eGOV services. The overall goal is to integrate the several eID cards available in Europe, as well as other qualified certificates, so that they are all acceptable in all MS, regardless of where they have been issued.

The project will deliver a process flow and common specifications to provide the common basis for the applications on which the pilots will be built. These real life cases are designed to demonstrate the STORK interoperability concept and a range of key high impact services for citizens and businesses.

The five application pilots aim to deliver viable services while thoroughly testing the proposed interoperability architecture and verifying that the framework functions in the real world.

### Resources

The common core of the interoperability platform for eIDs is being developed by Austria,

Belgium, Germany, Spain, Italy and Portugal. Each of the other participating member states will add the software required for the integration of their national eID infrastructures.

## Implementation

The implementation of the five pilots is scheduled to be launched at the end of May 2010 and will run for a period of 12 months.

The pilots will test the common specification on eID for several applications that have a substantial impact on eGovernment across Europe, including:

- Cross-border Authentication for Electronic Services, a demonstrator showing that cross-border electronic services can operate in a number of Member States; to be tested on the Belgium's LIMOSA, German service-bw, Austrian help.gv portal, Portuguese Portal do Cidadão and Estonia's integrated citizen portal.
- Safer Chat, to promote safe use of the Internet by children and young people. The objective is to build a platform for a safer online environment where people can communicate on-line using their eIDs.
- Student Mobility, to facilitate people who want to study in a different Member State. It enables foreign students to get access to any online administrative service offered by a particular University using their national eID card of origin for identification purposes.
- Electronic Delivery, to develop cross-border mechanisms for secure online delivery of documents based on the existing domestic infrastructure. The ability to conclude transactional processes electronically is an essential component of eGovernment, and also requested by the Service Directive.
- Change of Address, to assist EU citizens move and settle in other EU countries. It will not include only eID integration but will also allow the citizen to automatically send his new address details to the country in which he previously resided.

## Results

Based on the common specifications developed in this project, building on typical process flows developed for this pilot, based on a solid understanding of the state-of-the-art of relevant government services in Europe and of eID technologies and services development, the project will result in:

- A number of operational pilots that are expected to continue after the life time of the project. Through a continuous evaluation during the project, the pilots are expected to evolve into viable services, by the end of the project.
- Common specifications and building blocks that are potentially applicable to Member States or associated countries outside the pilot consortium. Common building blocks will be shared under the EUPL license.
- Reference materials including guidelines, manuals, educational materials and dissemination actions for the benefit of interested stakeholders. This will enable relevant authorities and bodies to implement (or replicate) interoperable solutions.

STORK results are of considered of value and interest to the a number of defined

stakeholder groups, including: selected European Commission Directorates, Services and projects; Public Administrations of EU Member, Associated and Candidate states at the national, regional and local levels; European Industry including large, medium, and small companies and associations in the ICT sector that manufacture, supply and consult on infrastructure and end user related products for eID; academia, researchers, scientists, media, civil society, and citizens.

### Lessons learned & Conclusions

The Project is currently under implementation, which means that it is still premature to extract final lessons and conclusions.

However, a major and significant conclusion that can already been drawn based on experience to date is that in spite of a multitude of varying organisational, cultural, legislative and technological systems amongst all the MS, these differences can be solved in a user friendly and secure way.

The only real requirement is the will of all governments to achieve this goal. It has been a breakthrough to have 18 MS working together and agreeing on a set of common specifications allowing for the interoperability of eID solutions across-Europe.

### Links and References

<http://www.eid-stork.eu>

### Complementary documentation

A wide selection of information, resources and news is available on the STORK Project Website at <http://www.eid-stork.eu>.

A full listing of approved project deliverables, together with reference materials on the project can be downloaded from the STORK Materials section of the site ([https://www.eid-stork.eu/index.php?option=com\\_processes&act=show\\_process&Itemid=60&id=312](https://www.eid-stork.eu/index.php?option=com_processes&act=show_process&Itemid=60&id=312)).

### SPECIFIC INFORMATION

#### Characteristics contributing to the service´s confidence

Citizens and companies tend more than often not to have trust in their own national governments.

Trust and confidence have been the underpinning criteria for the design of the STORK solution with a major focus applied to addressing issues of security and privacy of data. Thus the infrastructure which the project is establishing for eID interoperability seeks to

elevate the national circle of trust to the European level.

Service providers are also more apt to feel secure to establish new e-relations when a national government is guaranteeing that a real person stands behind submitted ID data.

#### **Characteristics contributing to the service´s security**

From the start, the achievement of security has been an integral part of the design of the platform. Security criteria such as minimal disclosure, confidentiality and integrity led the project to choose a user-centric approach, which guarantees that the user always remains in control of which ID data to share, and to which institutions such data can be disclosed.

#### **Accessibility aspects of the service**

Access to the platform is limited to the service providers included in the pilots. Access to the citizens of the participating EU member states will be available via the Internet once the platform has been integrated and launched in the respective services. An evaluation of the platform's accessibility standards will be performed during the test phase.

#### **Usability aspects of the service**

User friendliness is considered a key factor in the success of the project. The project team therefore includes usability experts whose opinion is being taken into account during the design and pre-launch phases of the pilots.

Evaluation by real users is planned by the end of the exploitation phase.

#### **eInclusion aspects of the service**

The success of the platform in enabling larger numbers of people to use national eID solutions will lead to a higher acceptance of, and confidence in, national eIDs amongst EU citizens. Increased usage of eID will hopefully encourage service providers to launch additional services that in turn, will again encourage higher usage of eIDs and increased interest by otherwise excluded, untrusting or ambivalent users.

The very achievement of cross border interoperability of eID authentication is in itself a major contributor to improving eInclusion by enabling increasing numbers of citizens to access eServices online, thus helping to overcome exclusion, and improve quality of life, social participation and cohesion.

#### **Aspects of the service dealing with citizen´s participation**

The STORK pilots were selected for a limited participation by citizens, and with a focus on involving "open minded" citizens such as students, youngsters, professionals, etc.

Each pilot project is undertaking specific targeted activities to stimulate the participation of these citizens as much as possible.

#### **Some information on the usage of the service**

The service cannot be used yet as it has not entered the implementation phase. Real usage will however be one of the main criteria for evaluation of the success and sustainability of the project.

#### **Level of satisfaction related to the service**

The service cannot be used yet as it has not entered the implementation phase. The level of satisfaction of real users will be one of the main criteria for evaluation of the success and sustainability of the project.

#### **Multiple platform-related aspects of the service**

The service is intended to be integrated into existing online portals. The solution is based on open standards; Java and SAML require special mention as they can be implemented on any Unix/Linux platform, as well as on Windows based ones.

Some portals however use other standard technologies, especially php, which is likewise supported.

#### **Multichannel-related aspects of the service**

As the service is intended for integration into existing online portals, mobile devices may be used insofar as they are able to connect to the Internet.

#### **Multilinguism- related aspects of the service**

The cross border platform will communicate with the user in the language of the country of his eID, normally his native language.

#### **Reengineering features of the service**

The STORK eID interoperability platform will deploy cross-border process flows which are in effect an entirely new way for citizens to interact and register at foreign eGOV portals.

#### **Areas of the service related to simplification**

The pilots included in the project (Cross Border Authentication Platform, SaferChat, Student Mobility, eDelivery and Change of Address) will allow authentication through the Internet; thus avoiding the requirement of physical presence of the user and also contributing substantially to a reduction of administrative burden both for users and service providers.

## **Service integration aspects**

The platform is designed for easy integration in the pilots. As it only affects the authentication and registration components of the respective application, it will not affect the application's main functions in any way.

## **Characteristics of effective service**

As the service allows access through the Internet, the full integration of different applications can be achieved, thereby providing users with a one-stop-shop model for their needs.

If and when full integration has not been yet achieved, the user will still be able to achieve his goals within a period of one hour.

## **Service interoperability issues**

The Cross-border Interoperability of eIDs in Europe is the central goal of the project, and will be achieved with the STORK platform. The result can furthermore be integrated into any service.

## **Technical neutrality of the service**

The core of the platform is built with Java - the most interoperable product on the current market, which offers transparency to operating systems, DBMS, etc.

The messages to be interchanged are standard SAML messages, also an important standard on the market, which is supported with the majority of software development environments.

Furthermore, we will also integrate with php and .net environments, so that even within the limited scope of the project, we will have included over 95% of the environments installed in the current market.

Any SW development will be open source and will be licensed as EUPL in order to make it available to all Public Administrations in Europe for their own benefit.

## **Use of open models and architectures**

The different governments participating in the project require the use of open models, standards and architectures, as well as the use of open source libraries, fully in line with the EU policy on licensing.

This requirement has been implemented, e.g. with the SAML standard, supported through the OpenSAML product and OCSP as certificate validation mechanism, supported with the open source Bouncy Castle product.

### **Reusability aspects of the service**

Although the actual scope of the project includes 5 pilots, the platform is designed to be scalable, and could easily be extended to more Service Providers. MS not taking part in the pilot will be able to adopt the interoperability platform on eID by reutilizing the SW components put at their disposal by STORK.