

eID in Belgium

In 2001, the Belgian government decided to provide all Belgian citizens with an electronic ID card as part of a wider programme aimed at improving and modernizing its eGovernment services. To implement this challenging project, the National Register appointed Zetes to manage the project and multiple partners involved. In addition, Zetes designed, produced and personalized a state of the art identity document plus implemented a highly secured site. To date, over 20 million cards have been produced using Zetes' solution.

When the National Register launched its modernization programme, it was the most ambitious and wide ranging eID project in the world for its time. No other country had attempted such a large scale implementation to make the eID a mandatory document for all the Kingdom's citizens over 12. Since then, use of the eID has been extended to include foreign residents in Belgium, children under 12 and a number of additional public and private applications. The eID has become an important tool for interaction between citizens and the authorities, to secure online transactions and facilitate e-business.

Finding a trusted partner capable of handling the high technical and security requirements

One of the biggest challenges of implementing the eID lay with the appointment of an appropriate partner capable of managing every stage required. Until then, production of paper based identity documents was handled separately, by specialist security printers. When identity documents became electronic, a requirement to find an integrator capable of handling all the technical aspects

Key figures

- **2 million** cards delivered per year
- Over **20.000.000** cards delivered to date
- BOT over **15 years**
- First cards delivered only **6 months** after the contract was signed

A few dates for the project – 2002>2015

- **2002**: contract awarded to Zetes
- **2003**: pilot phase with 19 municipalities
- **2004**: roll-out to all 589 municipalities
- **2007**: start of the production of the resident cards
- **2009**: start of the production of the Kids-card and first renewal
- **2014**: second renewal

arose. The production of identity cards for citizens also requires a high degree of security for the management of sensitive citizen data. In Zetes, the Belgian authorities found a company capable of both implementing and managing the highly secure production and

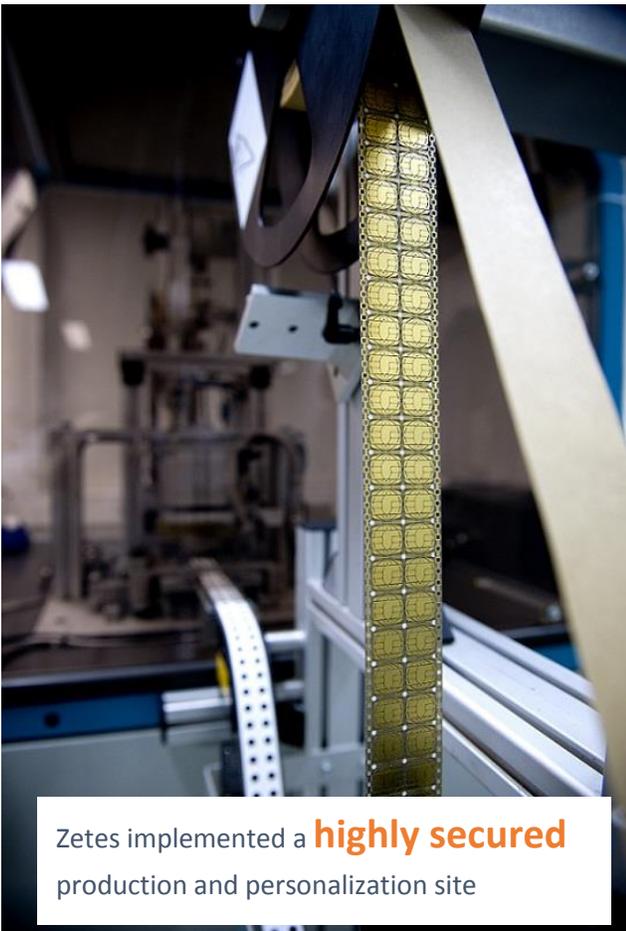


personalization stages. These capabilities led to Zetes' engagement to provide the polycarbonate cards, personalization services and secure transportation of sensitive documents to the municipalities with full traceability.

Several other suppliers were involved in the project. In order to guarantee high levels of communication and project co-ordination between these partners, Zetes was also appointed to manage the entire project, from the initial citizen request for an eID, to the final distribution of cards.

BOT model: payment per document and initial investments born by the producer

The Belgian eID project was delivered as a Build, Operate & Transfer contract. Under these terms, Zetes agreed to bear the upfront implementation costs for the entire infrastructure, which would then be repaid over a fixed timeframe, based on the number of documents issued. This model had the advantage of requiring no up-front investment from the Belgian government. In addition, at the end of the contract, Zetes can, if required by the



Technical features

The Belgian eID is a secure **polycarbonate** card with an embedded **contact chip card**. The latter holds two different certificates for:

- Internet authentication - verifying the user's identity and permission to access the eID platform online;
- **Electronic signature capture**

relevant authorities, organize the final transfer of all hardware, machines and software licenses.

Production site operational in 5 months

The first cards were issued just 5 months after the contract was awarded to Zetes following a pilot phase involving 11 of the 589 municipalities. After this initial success, the project was rolled out to the entire Belgian region in 2004. Within 3 years, all citizens had received a new eID card and the first renewals began in 2009, after a 5 year validity period. A second card renewal phase commenced in 2014 and now, card validity has been increased to 10 years.

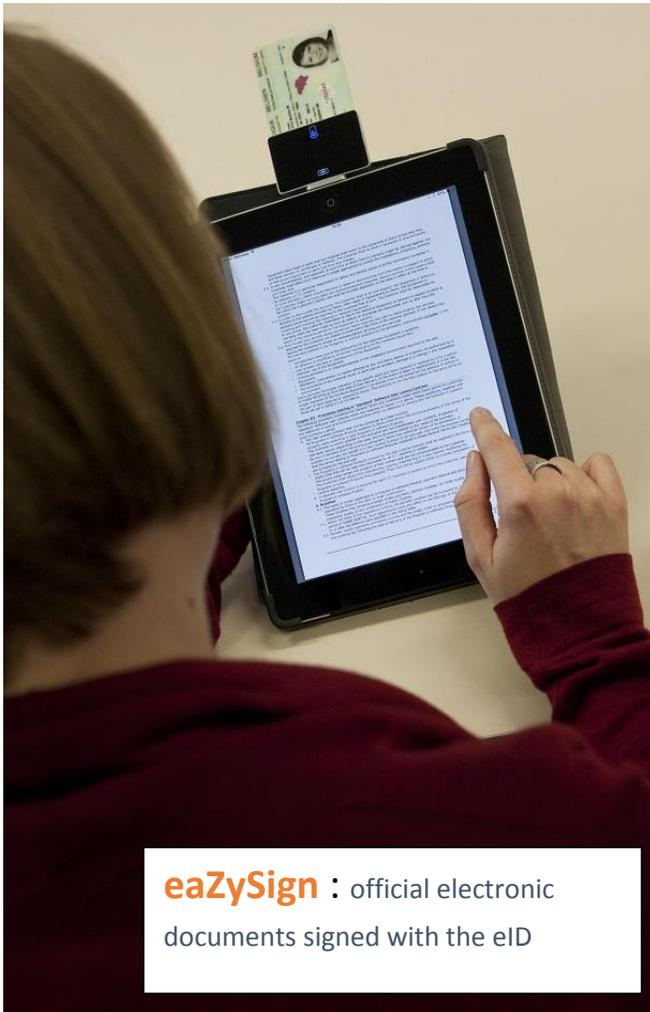
Overall, this project represents a significant additional achievement because in addition to maintaining high card issue rates, the project also involved the installation of a highly secured production and personalization site.

Protection of citizen data and privacy: cornerstones of the Belgian eID

Security is a central objective for any eID project and Zetes holds the ISO 27001 certification for the production and personalization of ID and travel documents. ISO 27001 is the only internationally recognized standard that defines security prerequisites for the implementation of an Information Security Management System (ISMS). Zetes' accreditation therefore provides the best possible guarantee that citizen data will always be handled according to the highest possible security standards.

For citizens, having the ability to review data held by the government online also gives each individual greater visibility over who has access to their personal information within the Belgian administration. The eID is therefore also a means to reinforce data privacy.





Numerous applications to interact with the authorities

Citizens can use their eID to access a number of eGovernment services, for example, submit an online tax declaration via Tax-on-Web, consult their personal files held by the National Register, file a police complaint or use e-Health and mobility applications. The full range of online services is available from www.my.belgium.be.

Allowing the private sector to enhance customer and online services

In the meantime, use of the eID has broadened to private applications and it no longer solely serves administrative purposes. From providing a connection to a secured platform, to its use as a loyalty card in a number of shops, the eID has become a tool that Belgians use on a regular basis. Today, the eID is also being used as a health card to access patient files in hospitals and pharmacies.

Zetes has also developed its own application, eaZySign, which is aimed at the private sector and makes use of the eID. This is an online electronic document authentication platform and provides the ability to authorise and sign official electronic documents in a legally binding, safe and user-friendly way. Although relevant for any industry, this iOS and Android compatible mobile solution is particularly suited to the insurance and banking sectors.

Engaging with citizens and society

The Belgian government has launched several campaigns to reassure its citizens that their eID offers more than just the most secure way to be identified, because using the card will also simplify their everyday lives. In 2013, it relaunched the “Ton eID, ça simplifie” campaign, initiated in 2009 to encourage citizens to use their electronic identity cards and to stimulate interest from software developers in developing new eID applications that exploit the card’s full potential. Belgians living abroad also have the ability to request an eID (or Kids-ID). Whilst this is not mandatory, it gives them the potential to access Belgian eGovernment applications online from anywhere.

Resident eID

In 2007, Zetes was also appointed to produce and personalize resident permits for Belgium. With security levels equivalent to the eID, resident permit cards contain both a contact and a contactless chip. Achieving this required adjustments to the design and technical features in order for the ID card comply with EU regulations governing identity documents for non-EU residents.



Kids-ID

In 2009, the Federal Service Internal Affairs also entrusted Zetes with the production and personalization of eID cards for Belgian children under 12. This document is not mandatory and primarily used by parents as a travel document within the European Union and in countries with whom Belgium has bilateral agreements. In addition, it allows children to access private and secured chat rooms on the Internet.

As a child's face changes more rapidly than that of an adult, the Kids-ID validity period was reduced to 3 years.

Continuously improving security standards

The eID project has evolved considerably over the years. Firstly, it is necessary to keep the card's security features up to date. This involves adaptations to the chip, as chips with greater memory capacity and more advanced security features become available. Secondly, the middleware and polycarbonate card itself have also evolved to comply with ever higher security standards and new computer platforms.

Electronic Proof-of-Delivery within 15 minutes

When Zetes was awarded a contract to produce the Belgian driving license by the Federal Public Service Mobility in 2012, the project involved in-house handling of the secure transport of documents using the ZetesExpress brand. Since the delivery points for this project were the same 589 Belgian municipalities used for the eID, ZetesExpress was also adopted for this project.

ZetesExpress guarantees:

- Ultrafast delivery: municipalities receive new licenses within 2 days of an application submission



- Almost immediate proof of delivery: confirmation that the eID has arrived is transmitted electronically within 15 minutes of delivery.

The importance of a well-structured national register

To run an eID project efficiently it is necessary to access reliable and up-to-date citizen data, which makes a well-structured, centralized national register mandatory. This is also why, in addition to eID production and personalisation services, Zetes offers Zetes CITIZ-ID, a solution for ministries that need to set up a register from scratch within a short timeframe.

Once established, the population register becomes the sole reference and an authentic information source for everything related to citizen identification. The main goal of a national register is to consolidate all relevant information linked to identity into a central and unique database. According to administrative requirements, this database will contain basic citizen identification information, as well as broader data regarding civil status and parent-child links.

