Coesys solution for electoral enrolment

Simple and efficient solutions for the security of electoral registers
Electoral commissions have the delicate task of maintaining reliable, up to date electoral registers as part of the preparations for an election.

This mission consists of several phases:
- Acquiring data (voter’s name, surname, date/place of birth, etc) in the field, for the most part using mobile units
- Processing the data locally, then centrally
- Searching for and eliminating duplicates

Gemalto has a wealth of experience in electoral enrolment, through deployment of various solutions:

- Centralized solutions, including processing paper forms using high speed scanners with character recognition tools. Gemalto has deployed these solutions in Algeria, Denmark, Morocco and Finland.

High speed scanning and verification in Algiers. Over 110,000 records are scanned and validated every week (June 2010) at the Algerian health insurance authority’s IT center.

- Decentralized solutions, using fixed or mobile units. These units consist of a laptop, a camera or webcam, a signature scanner, a fingerprint scanner and a printer (in cases where instant issuing of temporary voting cards is necessary). In addition to mobile enrolment units, Gemalto provides a comprehensive power supply system with a dedicated electronic card, which turns the enrolment unit into a standalone solution. The power supply system includes inverters, batteries and a recharging system which uses solar panels or a petrol generator.

Gemalto uses registration solutions developed for identity documents (identity cards, passports and driving licenses) in order to offer a solution tailored to the specific requirements of electoral enrolment. The Coesys electoral enrolment solution was developed specifically for electoral commissions who need to perform enrolment campaigns at regular intervals in order to prepare for elections.

The enrolment units are used by officials from electoral commissions to create new records and also to update existing ones.

The units support the following operations:
- Registration of new voters and the instant creation of an electoral card (or a provisional card, depending on the provisions of the legal framework in effect).
- Update of data for previously registered voters using the existing database (according to availability) with re-issue of electoral cards as necessary.
- Acquisition of biometric data (photo, fingerprints) and signatures. The fingerprints serve as a key to avoid duplication in the central database. The aim is to ensure that, for whatever reason, citizens are not able to register using several identities in order to vote more than once. Our solution implements a quality control to verify that the data has been captured correctly and to improve the photo according to ISO standard 19794-5, in order to ensure the best possible level of security for the holding of elections.
- Issuance of electoral cards with colour photo and a secure laminate.

Our solution is based on mobile registration units, which include equipment for capturing citizens’ administrative and biometric data. Optionally, a receipt can be issued to the citizens to serve as a provisional electoral card. These mobile units are robust and versatile as they can be recharged using solar panels or a generator.
Our solution sets itself apart from the rest of the market in the following ways:

- Robust mobile units, tested to US military standards (MIL-STD-810) and with a high level of self-sufficiency thanks to high-capacity compact batteries and a specially designed electronic card.
- A high level of ergonomics which is integrated upstream during the development of the software in order to facilitate the registration process and to increase the daily enrolment rate. The practical business processes are taken into account when tailoring the software in order to achieve maximum efficiency and to reduce the number of registration errors.
- Flexible interfaces to build the best suited data flows between the central system and the mobile stations, whatever the environment (connected/unconnected, local/central synchronization of the database, etc.).

The Coesys mobile enrolment unit on all fronts

The Coesys mobile enrolment unit is an integrated, stand-alone registration solution. It is a complete and fully operational system which incorporates all elements necessary for mobile registration campaigns, including camera and fingerprinting, laptop and associated software. An optional external battery has up to eight hours of charge. It can be recharged using mains electricity, solar panels or simply a vehicle battery.

Water and dust resistant, the protective case weighs between 10 and 18kg according to its options and protects its contents when on the move. This mobile unit is the portable version of the Coesys Enrolment solution. It is a perfect solution for mobile biometric registration campaigns. It can also be used as a temporary fixed solution for locations such as town halls, schools and other administrative buildings.

- A dedicated supply chain capable of managing rapid supply of components, assembly of kits, quality control and delivery within the shortest lead-times. This supply chain is underpinned by Gemalto’s industrial resources, with over 30 industrial facilities across the world.
- Knowledge transfer using specific training methods for effective upskilling of local employees, responsible for operating and maintaining the mobile units. Gemalto uses its own teams of instructors to ensure an efficient and speedy transfer of knowledge.

Gemalto’s electoral enrolment solutions have been tested in real-life situations in the context of several international calls for tender.
About Gemalto

Gemalto (Euronext NL 0000400653 GTO) is a world leader in digital security with pro forma 2009 annual revenues of €1,654 billion, more than 77 offices in 40 countries and some 10,000 employees, including 1,400 R&D engineers.

Gemalto manages 18 production sites, 30 personalization centres and 11 R&D centres.

Gemalto produced and personalized over 1.4 billion smart (microprocessor) cards in 2009.

Gemalto provides end-to-end digital security solutions, from the development of software applications through to design and production of digital security devices, such as smart cards, SIMs, bank cards, e-Passports and tokens, as well as the deployment of services on behalf of customers.

Gemalto and the public sector

Gemalto has considerable hands-on experience in the public sector, having participated in over 50 national projects worldwide, including many electronic identity card and passport programs.

Gemalto is also a partner in the world’s main e-Health programs, and has worked extensively with drivers’ licences, vehicle registration and tachograph cards.

Gemalto was formed in June 2006 as a result of the merger between Axalto and Gemplus.

For more information please visit our internet site www.gemalto.com