Gemalto Single Point of Contact

Enabling secure inter-country certificate exchange for inspection system updates
Disencumbering digital certificate management

Electronic Machine Readable Travel Documents (eMRTD) have gained rapid adoption in recent years. These documents support advanced security designed to ensure the protection of sensitive data stored on the chip, ranging from the holder’s biographic data to fingerprints and iris scans.

For European Union (EU) ePassports and other second-generation ePassports, sensitive data are protected against unauthorized or accidental access by an enhanced security protocol called Extended Access Control (EAC). EAC requires digital certificates read by terminals at passport inspection points to be exchanged between countries and renewed periodically. These digital certificates are obtained from the domestic or foreign electronic document issuer. They are stored in designated repositories hosted on dedicated, secure servers. Border management authorities must ensure that inspection systems can be granted Card Verifiable Certificates (CVCs) enabling their terminals to read sensitive data. Servers are queried periodically to check for renewals before the current certificates in use expire.

Despite the strong authentication enabled by EAC, management and distribution of keys and certificates can quickly become untenable for a country working with the 26 other EU member states, the four European Free Trade Association (EFTA) states and other countries outside Europe.

**ePassport Single Point Of Contact (SPOC)**

Single Point of Contact (SPOC) is a standardized interoperability mechanism developed under the direction of the EU. Serving as an interface for communications between member states, SPOC enables efficient online communication to carry out key certificate management tasks. SPOC is essentially a communications channel. The exchange of Document Verifier (DV) certificates with other nations is contingent upon each individual country’s SPOC, through which international DV certificate requests and DV certificates are channeled.
A domestic SPOC collates certificate requests from other SPOCs for delivery and processing by the domestic Country Verifying Certification Authority (CVCA). It also sends responses back to the requesting SPOC, on behalf of its domestic CVCA.

The same domestic SPOC is also responsible for relaying domestic DV requests to foreign SPOCs for processing by the foreign DV. It then gathers responses containing certificates from foreign CVCAs for relay to the domestic DV that initiated the request.

The complexity of managing certificate renewal, compounded by the sheer mass of foreign DVs to be certified (to allow them to read the foreign eMRTD in their own domestic inspection system) brings about the necessity of automated processes.

The greater benefit of SPOC lies in its capability to automate inter-country certificate exchange and guarantee that the update deadline of each participating nation is met.

SPOC can also be used for other purposes, such as the verification of biometric residence permits and EAC-enabled eID cards.

The Gemalto SPOC Solution
Whether you represent a member state of the EU or a country closely tied to EU member states, Gemalto is ideally placed to manage your SPOC implementation.

The components of our SPOC solution include:

- The SPOC Server, featuring an optimized proxy architecture that minimizes the number of services publishing to the communication server, increasing server efficiency and scalability. The integrated administration service maintains a database of countries, messages, administrators, trust anchors and current external DV certificates.
- The SPOC Certification Authority—a standardized Public Key Infrastructure that issues certificates and revocation lists used for communication security by the SPOC Server.
- The SPOC Log Server—used as the secure log archive of all messages and actions performed on the system.

Drawing on our extensive knowledge of electronic travel documents for EU nationals, we have developed a SPOC solution that is easy to deploy and simple to operate. Gemalto’s SPOC solution supports all EAC-enabled documents including ePassports, biometric residence permits and eID cards.

Interoperability is a critical success factor for certificate exchange at international level. As an integral part of streamlined EAC deployment the EU, SPOC simplifies inter-country certificate management. With contributions to over 20 national ePassport programs to date, Gemalto is ensuring that full SPOC interoperability allows the greatest number of governments to maximize the benefits of EAC’s advanced security.

Contact your Gemalto representative for more information on our SPOC solution.
EXPERTISE AT YOUR SERVICE. Gemalto is the world leader in digital security with 2012 annual revenues of €2.2 billion and 10,000 employees based in 43 different countries. In the public sector, Gemalto provides secure documents, robust identity solutions and services for governments, national printers and integrators in the service of citizens. Its products and solutions are deployed in more than 80 government programs worldwide.

Gemalto is contributing to more than 24 eID initiatives and 25 travel programs with specific expertise in border and visa management projects. The company is active in major eHealthcare schemes and numerous e-driving license and vehicle registration projects. Gemalto also collaborates with its clients to report and share best practices from around the world.