Public key infrastructure

Today's solutions use modern means to ensure access to information systems and data protection, including asymmetric key cryptography with its own Public Key Infrastructure (PKI). The entire PKI infrastructure is based on the PrimeKey EJBCA integrated certification authority which is ranked amongst the world's top Enterprise PKI solutions. EJBCA is currently deployed in several countries in the public sector, for example the Department of Defence and the Ministry of Finance in France, the police and public sector in Sweden, the Ministry of Health in Spain, the Tax Office in China, etc.

Chip Cards

Access to information systems is ensured by the use of intelligent chip cards. Chip cards are used both for authorization and authentication of users in the system as well as to conceal the contents and ensure the integrity of sensitive data in financial operations. For this purpose, several principles and asymmetric cryptography technology are used, such as electronic signatures, data encryption and communication between the client application and the server (SSL).

Our solution for chip cards has been designed and developed so as to allow for several electronic signature (ES) applications to be kept on a chip card along with an advanced electronic signature (AES). The AES application for a chip card has been certified by NSA as a safe product for the advanced electronic signature. The possibility of using the advanced electronic signature in our solution opens up new opportunities for the automation of postal operations and the future integration of new services.

In order to fully exploit the possibilities of new solutions for chip card applications, we have developed a custom library for access to chip cards, which implements PKCS#11 and PKCS#15. The new library complies with all the requirements prescribed by the Electronic Signature Act and also provides the possibility of using secure PIN entry devices for AES.