

Case Study: Banka Koper



A Keycorp MULTOS Solution for Value-added EMV

Banka Koper is one of the most dynamic banks in Slovenia, with over 50 years of experience in the industry and a strong regional presence. The bank headquarters are located in the port city of Koper, on the country's south-west coast, amidst a vibrant international-oriented economy.

Slovenia is a country of approximately 20,000 km² situated in central Europe and bordered by Italy, Austria, Hungary, Croatia and the Adriatic Sea. In 2004, it acceded to both NATO and the European Union. Slovenia's stable democracy and strong economy have provided an environment that has encouraged strong investment in infrastructure and technology. Its projects in these areas are held up as regional examples for central and eastern Europe.

In 1992 Banka Koper introduced Slovenia's first domestic payment card: the Activa Card for local debit and credit transactions. Today, the Activa Card system has eight participating banks, with more than 1 million issued cards, making it the strongest card system in Slovenia. Banka Koper is also an issuer for other MasterCard and Visa products.

In 1999 a number of major initiatives were taking place within the bank. The bank was in the preliminary stages of its EMV migration programme, transitioning the corporate payment system from a state agency to a commercial bank and planning a revitalisation of its retail banking approach. Banka Koper was looking

for a single technology platform that could meet all needs in all banking channels in all business areas.

The EMV card and MULTOS became the central piece of technology that would provide a secure, reliable and consistent interface to their customers across all communication channels.



The Solution

After significant investigation, MULTOS was chosen because of its open standard architecture and interoperability

- MULTOS is a true multi-application smartcard platform. Low OS overheads and compact applications maximise the space available for multiple applications
- Highest levels of security guaranteed. Keycorp's MULTOS platform has achieved ITSEC E6 (high) security evaluation. This covers application and data firewalls and the loading and deleting of applications—thus allowing multiple applications to reside on a single card
- One of the key features of MULTOS is the issuer-centric model for controlling the card enablement and applications on the card.
- Full smartcard lifecycle management. The MULTOS specification covers a complete smartcard platform, not just the OS or the APIs, but extending to card and application management. This means the system offers the most flexibility in the supply chain, in the applications and for any future requirements.
- Open and interoperable platform. The MULTOS specification is open to any party and is controlled by a consortium of the industry's leading players. Importantly, each MULTOS implementation undergoes an independent Type Approval to ensure inter-operability between implementations and compatibility to specifications.
- A proven solution with low risks. The MULTOS platform is well-suited to applications requiring high levels of security (such as EMV banking and ID). Many millions of MULTOS smartcards have been deployed in projects with similarly tough requirements—especially those looking to bring additional value to EMV programmes.

Combining EMV and Internet Security

Banka Koper's Maestral card programme provides everything necessary for conducting secure transactions via their i-Net Banka e-banking service, phone banking and electronic commerce for MasterCard SecureCode and Verified by Visa brands. Using the new Activa-Maestro EMV payment card and a portable (not connected) smart card reader the cardholder is able to generate a One-Time Password to authenticate themselves to the i-Net Banka service, giving true 2 factor authentication. MasterCard's CAP (Chip Authentication Program—see inset) technology provides the mechanism for this authentication.

The Burja card programme combines Banka Koper's new Activa-Maestro multi-application EMV payment card, with a PCSC reader to enable secure internet communications using PKI technology. As well as being used for authentication with i-Net Banka the Activa-Maestro card can be used with other web services using the same technology, such as: e-tax, e-administration, e-register and other e-services.

Implementation

Banka Koper's EMV solutions have been a collaborative effort involving:

- Keycorp's implementation of MULTOS smartcard technology
- Keycorp's M/Chip4 payment application for MULTOS
- Infineon's 32K crypto-controller solution
- Banka Koper's PKI solution
- MasterCard's on-card applications: MODS (MasterCard Open Data Storage) and CAP (Chip Authentication Program)
- TranSend's PocketServer
- Personalisation & card supply from multiple card manufacturers.
- Thales' Data Preparation hardware & software security systems
- One-Time Password readers from Vasco and Xiring.
- nCipher's PayShield secure hardware security platform for CAP authentication

Banka Koper has already issued more than 100,000 MULTOS cards for their initial EMV programmes. The introduction of the Maestral and Burja card programmes now brings several value-added applications to the cardholders for internet security and personal data storage.

In 2006 Banka Koper will be introducing *OneSMART* Web functionality to their cards. This will provide the card holder with additional tools to enhance web-browsing and e-commerce, such as: URL and password storage, automatic form filling of address and account details, and storage of general personal information.

About MasterCard's Chip Authentication Program

Chip Authentication Program (CAP) is a packaged smart card solution from MasterCard® that enables secure payments in both the physical and virtual worlds using MasterCard and Maestro® cards. A simple card reader forms an integral part of the package. CAP can be used with the card reader to generate one-time passwords for highly secure shopping over the Internet. The same approach can be used to secure MO/TO (Mail Order/Telephone Order) payments and remote banking transactions. The main business proposition for members is a single, common, cost-effective method for securing the delivery of all payment and banking services.

Keycorp Limited
 Level 5 Keycorp Tower
 799 Pacific Hwy Chatswood
 NSW 2067 SYDNEY Australia
 Tel +61 2 9414 5200
 Fax +61 2 9415 1363
 email: info@keycorp.net
www.keycorp.net