

# Contactless solutions on plastic and mobile



Card production & personalisation  
TSM service, NFC applications

Thinking in systems

# Card personalisation, TSM service, NFC applications

Állami Nyomda PLC, having large traditions in the production of security products, has been producing cards since 1998. The Corporation became one of the leading card manufacturers in the region over the past few years. Állami Nyomda PLC, produces contact, contactless chip and dual-interface bank cards both for Hungarian and foreign banks. Bank card production is based on a comprehensive, audited production and security protection. Állami Nyomda PLC, has the licenses not only for the production of VISA and MasterCard bank cards and for the personalisation of EMV identification, but it has the equipment for the production of PIN envelopes and monthly account balances, and their personalisation as well.

Among the most important references of Állami Nyomda PLC, are Hungarian card documents – including personal identification cards, vehicle registration cards, driving licenses and the Slovakian health insurance card. The Corporation provides full range of correspondence services for administrative institutions, banks, and insurance companies as well as public utility companies from printing to mailing. Állami Nyomda produced nearly five hundred million cards and has personalized tens of billions of forms over the last twelve years.

# Állami Nyomda PLC offers a full system solution

## **Production and personalisation of contact and contactless EMV chip bank cards**

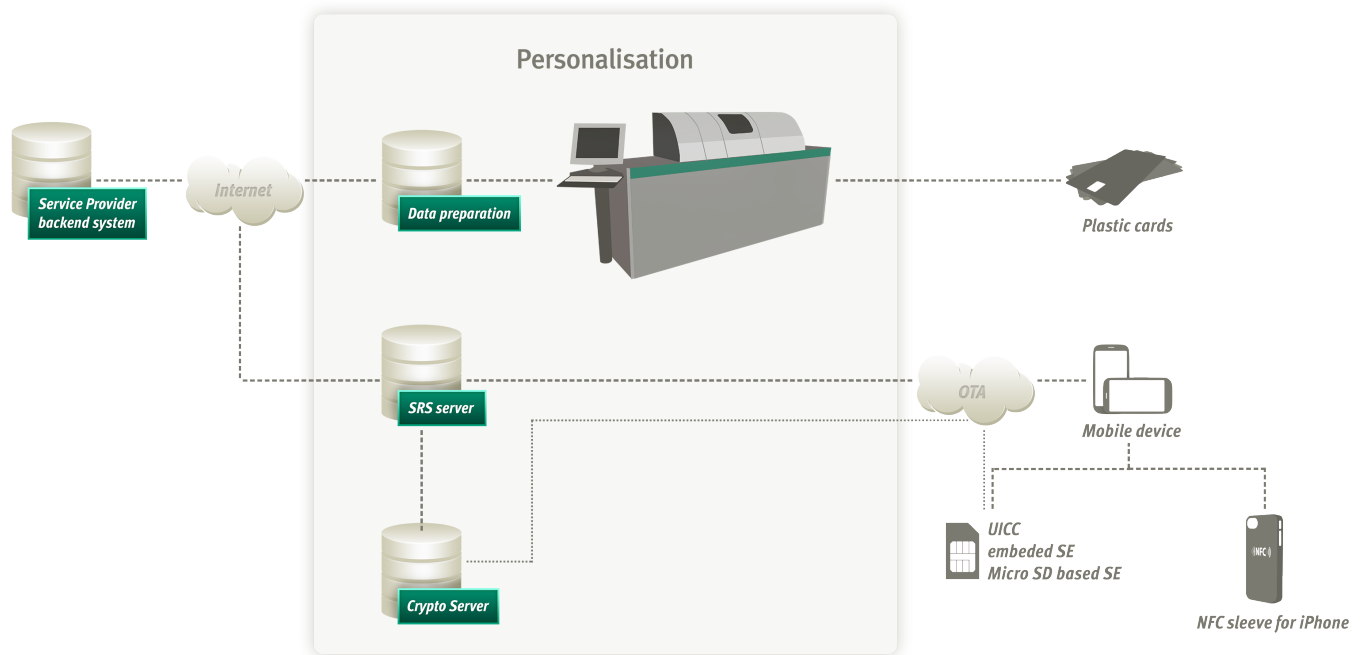
The bank card outsourcing service is based on a comprehensive, audited production and security protection. Our bank card production and personalisation meet the technical and security requirements compulsorily stipulated by international organizations. Állami Nyomda PLC, has MasterCard and VISA licenses for card production and our Corporation is ready to deliver MasterCard and VISA EMV chip bank cards as well. We undertake to plan and execute loyalty programmes applying chip technology, and to produce personalised letters; PIN envelopes for mailing of bank cards as well. Qualities of services are guaranteed by MasterCard CQM and AQAP 2110 certificates.

## **NFC card**

Állami Nyomda PLC, is ready to produce, visually and electronically personalise standard NFC cards; to encode chips; to develop applications running on them; and to plan and carry out the full NFC based system.

Extensive NFC systems will be built on NFC based contactless cards and NFC capable mobile phones as well, for which Állami Nyomda ensures Trusted Service Management (TSM).

## Personalisation service of Állami Nyomda – personalisation on plastic and mobile



The Secure Remote Scripting (SRS) system is considered to be the most significant element of our Mobile Development Directory's portfolio. As far as our system is concerned, TSM system services are mainly information technological services related to soft-card provisioning and personalisation. are mainly information technological services related to soft-card provisioning and personalisation.

With the help of the TSM system, we have many possibilities to issue any type of soft-cards on various mobile platforms. The system is responsible for the accuracy, security and optimal realization of the so-called issuing; including data preparation; pre-perso; personalisation; and life cycle management. In this way, it can operate on any type of mobile device with arbitrary form factor of Secure Element that is compatible with Global Platform standards. It can also function on any kind of GSM service provider network.

The system not only supports the issuance of such cards, as EMV cards (MasterCard PayPass, VISA Paywave), but is also capable of provisioning cards containing magnetic stripe data and optional Mifare or DESFire based cards as well (e.g. for access control).

### Supported Secure Element (SE) formats:

- UICC SIM card
- NFC MicroSD card
- SE embedded into the mobile phone
- SE embedded into an external accessory (e.g. NFC mobile phone sleeve)

### Supported mobile platforms:

- Android
- iOS

## Certifications

Certificates of Állami Nyomda PLC, guarantee that its products and services are in conformity with the accepted international standards.

### These are the following:

- Állami Nyomda PLC is a certified bidder and securities producer of the Hungarian Republic
- Certification of Állami Nyomda PLC as an authorized supplier to NATO (till NATO secret level)
- ISO 9001 quality management system certificate
- ISO 14001 environmental management system certificate
- ISO 27001 information protection certificate
- License for EMV MASTERCARD and VISA bank card production and personalization
- CWA 14641 High Security Printer certificate
- AQAP 2110 certificate
- MASTERCARD CQM certificate
- Visa Vendor Certification.

## Products

- Identity document
- Access, PKI card
- EMV bank card
- Loyalty card
- Transportation card

## Technologies

- contact
- dual interface
- contactless
- hybrid

- 2011 – MNO, NFC Pilot, TSM service – SE application development – mWallet development
- 2012 – Telenor Hungary, NFC Pilot, TSM service – SE application development – mWallet development

## References, mobile developments



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