



e-card Austria

Social security and citizen card in one

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Agenda

- Facts about Bell ID
- Healthcare market trends
- The e-card project

...100% dedicated to...



"Providing solutions to enable the Management of Cards/Tokens, Applications and Key Related Processes to any Organisation."

Card, Application and Key Management



- Northumbria University, UK
- Université de Technologie de Compiègne, F
- Dutch Association of Legal Councillors, NL
- ABN AMRO Bank, NL
- Dutch Houses of Parliament, NL
- Amsterdam Airport Schiphol, NL
- BC Card, Korea
- Heineken, NL
- Austria e-card, Austria
- OHRA Insurance, NL
- Ministry of Interior, Qatar
- KPN Telecom, NL
- PinkRocade, NL
- Northumbria University, UK
- ZERO-Mass Consortium, India
- Deutscher Sparkassen Verlag (DSV), Germany
- Royal Dutch Football Association (KNVB), NL
- University of Warwick, UK
- Boeing Company, USA
- First Investment Bank, Bulgaria
- CUETS, Canada
- NATO Supreme Headquarters, Belgium
- King Fahd University, Saudi Arabia
- Transportation Security Administration, USA
- General Services Administration, USA
- Ministry of Defence, NL
- DigiNotar, NL
- ING Bank, NL
- KT Corporation, Korea
- Macau SAR, China
- Hutchison Ports, United Kingdom
- Dutch Tax Authorities, NL





Healthcare market trends



Patients Data Card

- Digital certificates
- Medication history
- Emergency details
- E-admission + report
- E-referral + report
- E-prescription and others...



Health Care Professional Card

- Cryptographic keys
- Digital certificates and others...

Healthcare in different flavours

- Health care professional cards
- Patient cards
- Health cards/social security cards
- Health cards/citizen cards
- Electronic health records
- National ID cards/health care cards



- Aggravated privacy legislations;
- Simplification of current complex processes and procedures and reduction of bureaucracy;
- Improved convenience for cardholders/insurance members;
- Speeding up of diagnostic processes in hospitals and doctors' surgeries;
- Significant reductions in health care costs;
- Standardization of health care cards to allow cross-border transactions (e.g. pan-European acceptance of health cards)



- Results of German study, which surveyed 12,000 decision-makers (including hospitals, insurances, doctors, pharmacists and insurance members) (*Monitoring eHealth 2005/2006* (Issued by Wegweiser GmbH Berlin, www.wegweiser.de))
 - Qualified majority is positive about SC and associated applications.
 - Hospitals estimate a drastic reduction in their costs within 2-3 years.
 - 1/3 of the decision-makers from insurance companies estimate a drastic reduction in costs within 1-3 years.
 - Doctors see high value for managing electronic doctor letters, electronic patient files and electronic referral files (referral to specialists)
 - More than half of all doctors, pharmacists and patients surveyed expect an improved availability and transparency of health-related data
 - Analysts estimate that in some countries between €2 and €2½ can be saved per insurance member per year just by using e-prescriptions.



- Major IT infrastructure change
- Privacy concerns
- Complex environment
 - tens of thousands of pharmacies,
 - hundreds of thousands of doctors' and dentists' practices,
 - thousands of hospitals
 - hundreds of insurance companies
 - millions of patients
 - > all having to be linked together to form a new inter-operable smart card IT infrastructure.
- High performance, scalability and reliability expectations
- Several card types



- Multiple applications:
 - data storage applets,
 - e-prescriptions
 - e-keys,
 - e-patient history files,
 - medical documentation applets,
 - emergency applets
 - and perhaps in the future even electronic medical reports

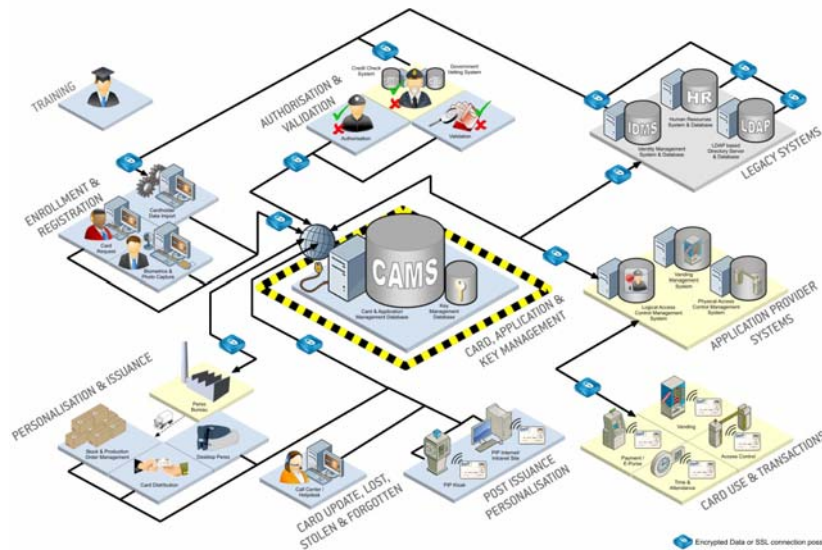


Multi Application Card

- Card stores content and is key to access services
- More data and applets stored on card
- Applications are on card
- Application Management knows what applications are placed on what cards and the relevant life-cycle status for each application
- PIP process places further applications on card

Multi Function Card

- Card is key to access services (key card principle)
- Less data stored on card
- Applications run in back office
- Application Management knows what applications are linked to what cards and the relevant life-cycle status for each application
- PIP process links further applications to a card



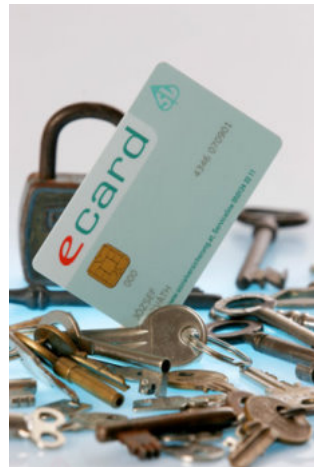


The e-card project

Austrian e-card is designed as 'key card'

e-card allows cardholder:

- Verification and secure access to back office applications
- Secure check of claim/ insurance status



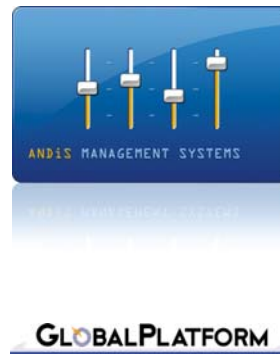
- Country-wide Social Insurance Card
- Total Costs: €116 million
- Issued and managed by Service Bureau 'Central Association of Austrian Social Insurance Institutions'
- SCMS, Application Management, Key Management and Mass Personalization Interface follow GlobalPlatform
- Card rollout start: May 2005 (approx. 70k cards per day). Rollout completed Nov. 2005
- Today: approx. 400,000 card transactions per day



- Reduce administrative costs of handling 40 million vouchers per year
- Fraud reduction
- Increase of medical treatment efficiency
- Migration to Citizen Card to allow access to eGovernment applications
- e-cards are prepared to comply with the Austrian Signature Law
- e-card is part of the Netc@rds Project



- Support of Global Industry Standards
- Multi-Application Management
- Post Issuance Personalization of new applications:
 - downloading of data, data structures, and cryptographic keys to the e-card
- Innovation and migration:
 - Simultaneous operation of several "generations" of smart cards with different scope of applications
- Introduction of new card types



- Two different Card Types
 - 8,200,000 Insurance Member e-cards
 - 30,000 administrative cards for medical staff in doctors' practices
- e-cards and administrative cards contain
 - ID Applications
 - Digital Signature Applications
- Back Side
 - European Health Insurance Card (EHIC)



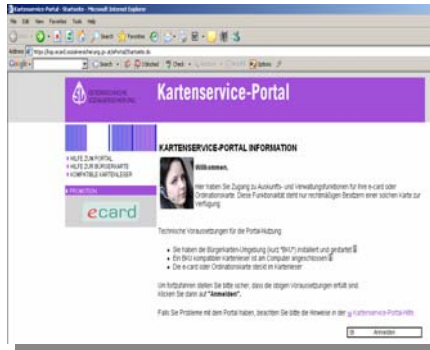
ANDiS provides complete infrastructure for

- Card Life Cycle Management
- Application Life Cycle Management
- Processes from personalisation to termination
- Central component for coordinating interface to
 - PKI
 - Personalisation
 - Letter shop
 - PIN/PUK mailing
- Post Issuance Personalisation
- Reporting / Statistics (daily reports about system status)



- | | |
|---|---|
| <ul style="list-style-type: none"> • Card Holder ID Application <ul style="list-style-type: none"> – Insurance number – 3 digit card sequence number – Name and title | <ul style="list-style-type: none"> • One digital cert. preloaded for e-card <ul style="list-style-type: none"> – Secure (qualified) electronic signature (SigLaw) for eGovernment and eCommerce applications – Social Security Signature for secure electronic transmission used by the application „substitution of health insurance vouchers“ |
| <ul style="list-style-type: none"> • E-card only (European health insurance card data) <ul style="list-style-type: none"> – ID of social insurance institution – 20 digit CIN – Expiry date – User group attribute (for future use: i.e. retirement ID) | <ul style="list-style-type: none"> • Two digital cert. preloaded for o-card <ul style="list-style-type: none"> – Same like e-card (without PIN) – Contract partner cert (with PIN) – Both for administration signature of Social Security for applications in the field of eSV Web Portal |

- PIP process enables e-card for eGovernment purposes
- PIP and SCMS infrastructure enables Austria to issue only ONE country wide card
- PIP process includes
 - Loading of 2 certificates
 - Creation of file structures on card
 - Change of file structures on card



- Common certificate
 - Used for encryption and authentication
 - 4 digit PIN protects access to card data
- Administration certificate
 - Used for signing
 - 6 digit PIN

-> 24/7 hours access to e-Government services

- Use of e-prescription applications to be used in hospitals and pharmacies
- Extending e-card for EU-wide acceptance
- Registration processes for social insurance (sign in / sign off of members)
- Secure transmission of personal medical data and diagnoses



Thank you for your attention

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