
European Electronic Identity Practices

Country Update of Austria

Speaker: Herbert Leitold

Date: 9 Nov 2004

PART I: Overview

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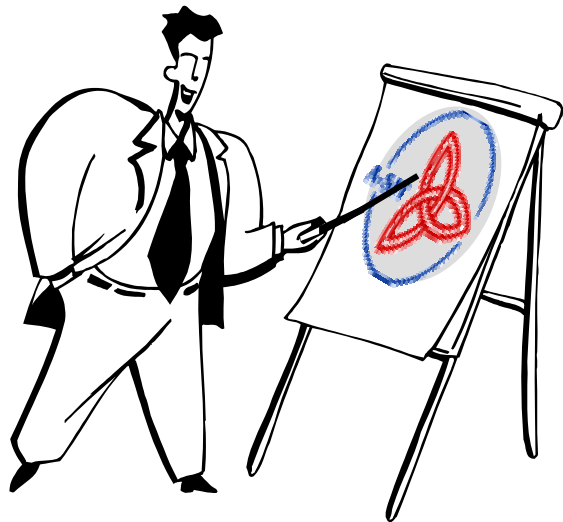
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(*Summary of questionnaire*)
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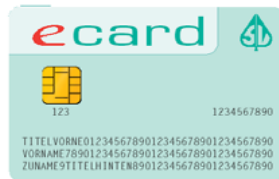
General aspects

- Legal basis in E-Government Law (enacted 2004)
- Citizen card consist of two elements
 - Identification
 - Identity link: Links unique identifier to the signature (certified by public authority, but not stored in the certificate)
 - Authentication
 - Electronic signature (qualified signature; *administrative signature* for a transition period until end of 2006)
- CA can be public or private
- Identification via sector-specific PINs
 - Prepared for integration of foreign eID tokens (legally and technically)
 - can be used in private sector (additional data protection)

Several smart-cards as “citizen card”



National ID card with chip
(under discussion) *Note:* Austrians not obliged to possess/carry any ID document



Health insurance card
roll out 8 million cards in 2005 (for each citizen)



ATM card / bank account cards
5 million cards, starting end of 2004

further initiatives:

- Mobile phones (server-based signature)
- CSPs issuing qualified certificates
- Austrian computer society member card
- new technologies (PDAs, cell phones, WIM)



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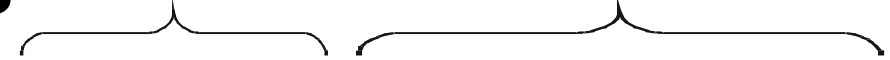
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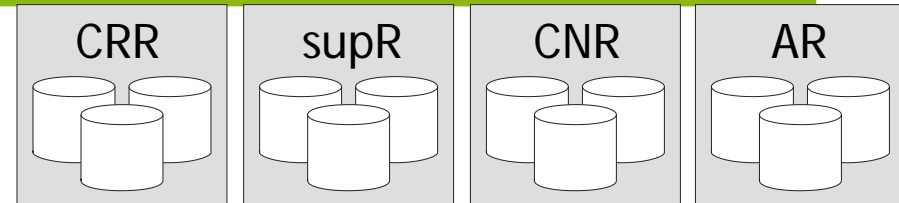
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Unique identifiers



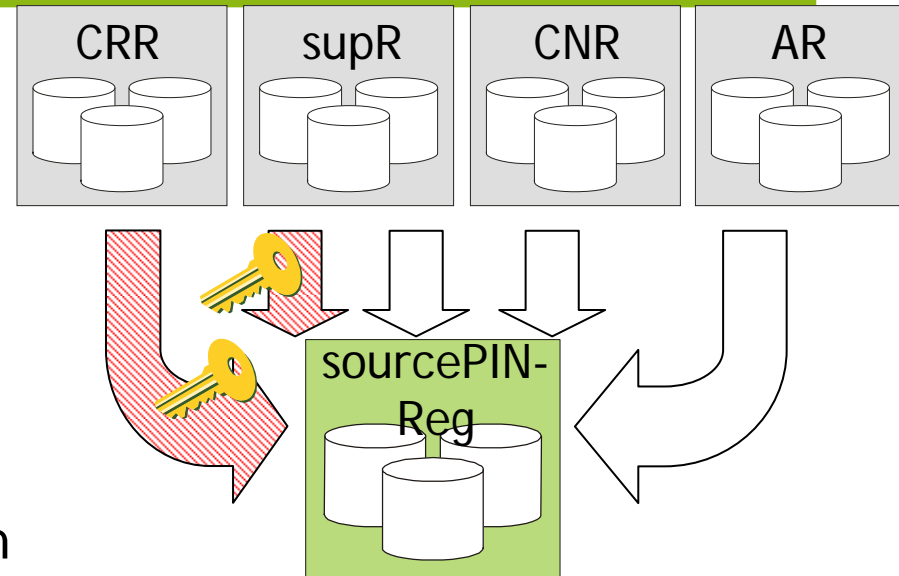
- Various unique IDs
 - Central Register of Residents (CRR)
 - Supplementary Register (supR)
 - citizens not registered in CRR (e.g. living abroad)
 - foreign eID
 - Register of Company Names (CNR)
 - Register of Associations (AR)
- To be combined to a homogeneous system
 - Data-protection to be considered





sourcePIN Register

- Source PINs
 - derived from unique IDs
 - strong encryption for physical persons
 - sourcePIN Register maintained by data-protection commission

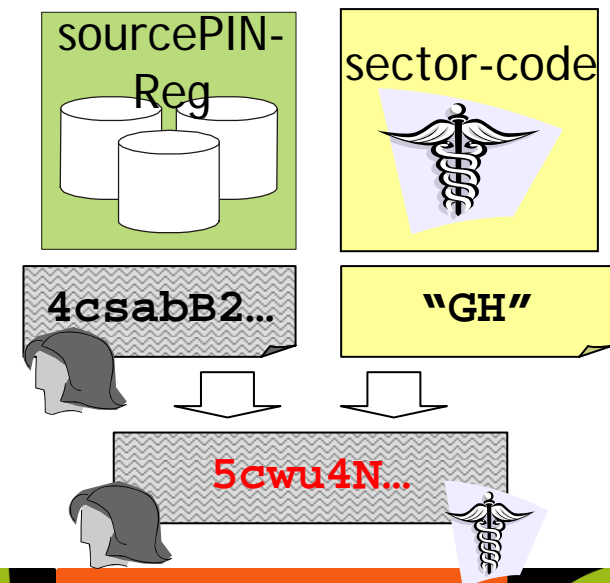


- Data-protection still not solved
 - replaced one unique ID (e.g. CRR) by another (sourcePIN)
 - cross-sectoral search possible

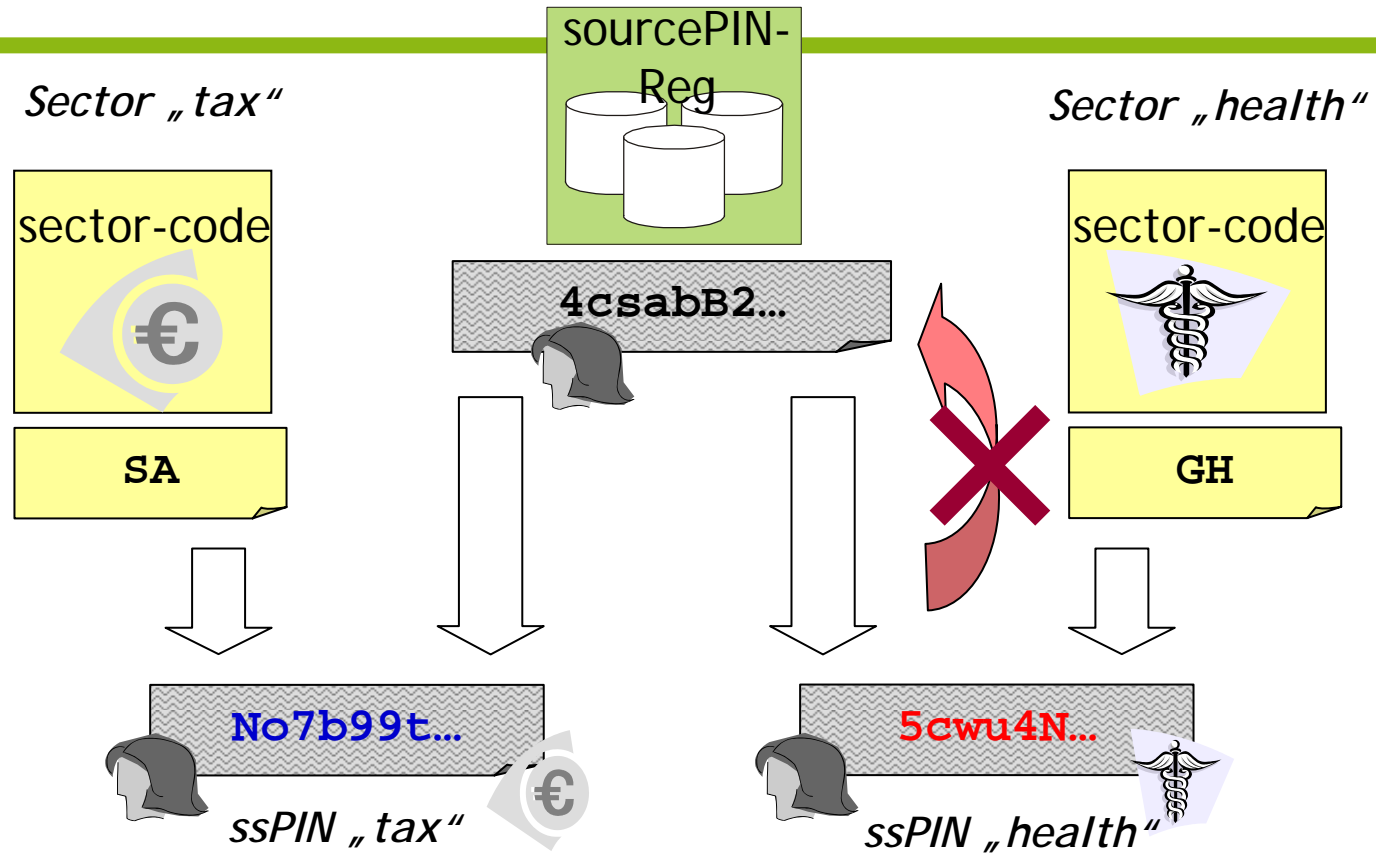


sector-specific identifier

- sourcePINs combined with sector-code
 - Citizen uniquely defined within a sector of State activity
 - Sector-codes combine processes
 - e.g. tax (“SA”) , health (“GH”)
 - Cryptographic hash-functions
 - one-way function
 - no “back-conversion”
 - ssPINs similar to
 - tax number in treasury
 - social security number in health care, etc.
- Cross-search prevented
 - lawful generation of ssPINs possible via sourcePIN-Reg

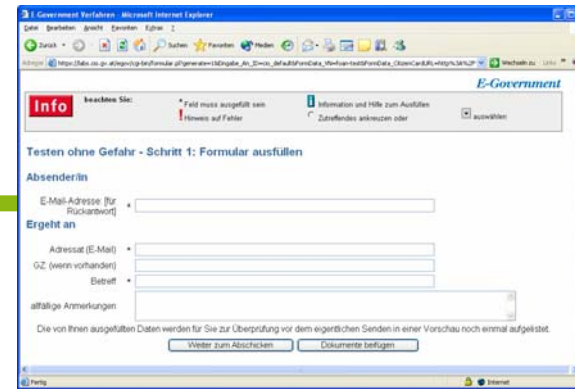


Back- / cross-conversions



Security Layer Access to Citizen Card

Application

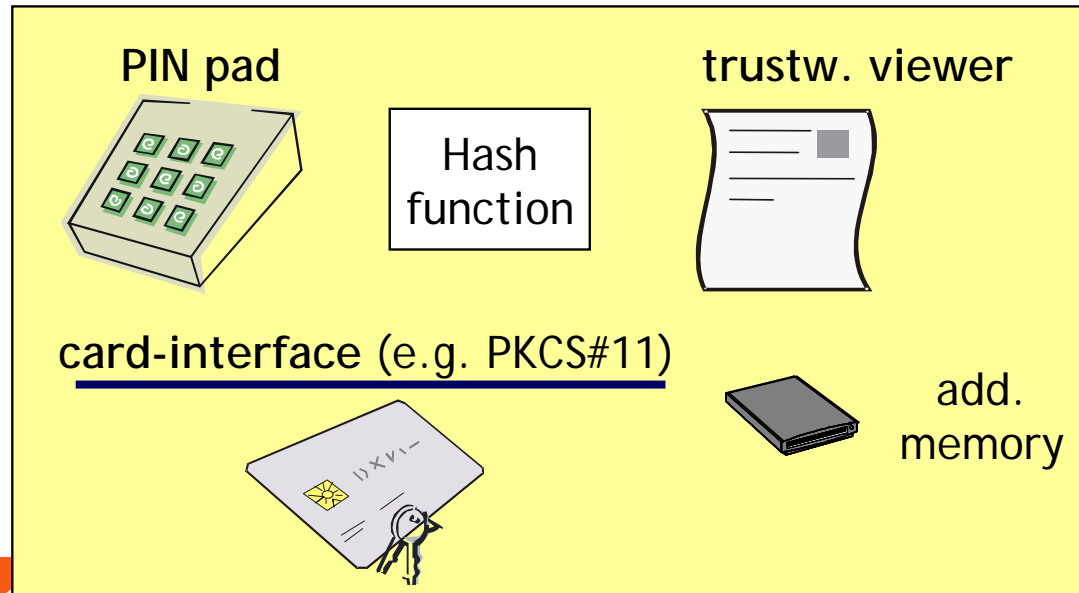


Security-Layer



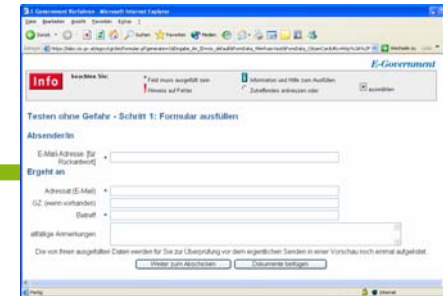
Citizen Card
 Environment
(Software running on PC)

Procured in 2004,
 available for free





Technology neutrality



Security-Layer



Foreign eID

IT

Citizen Card Env.

Conclusions

- All citizens will have (more than) one eID end of 2005
- Cards prepared for eID, citizen can choose whether to activate eID functions
- Citizen cards can be private sector or public sector borne
- Public authority certifies that a signature belongs to an unique ID
- Sector specific identifiers to maintain data protection
- Biometrics have currently no role (except what is agreed for visa / passports)

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PART II: Questionnaire

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General remark on responses to questionnaire

- The Austrian citizen card concept is technology neutral and open to a variety of implementations
- eID is available in various technologies (e.g. smart cards, server-signatures via mobile phones) and issued by various organisations (public sector or private sector).
- The questionnaire in several cases does not fit the concept followed in Austria. We therefore stated *"depends on the actual implementation/issuer"* where the questions cannot be clearly answered

CA organisation

- Responsible CA organisation:
A1, A-TRUST, or other CAs under EU Directive (concepts not limited to a single CA)
- The background of the organisation (private/public):
private
- Description of the existing CA infrastructure (e.g. registration authority, card factory etc):
Registration at banks, notaries, mobile phone shops (*depends on CA / citizen card issuer*)

Status of National legislation on eID

- Are eID specific regulations enacted and in place? **Yes**
- Name and date of the regulation(s):
 - E-Government Act (1 March 2004)
 - avail at http://www.a-sit.at/signatur/rechtsrahmen/e-govg_engl.pdf
 - Administrative Signature Order (16 April 2004)
 - further ordinances related to the E-Government Act
- Main elements of the regulatory system regarding:
 - Definition of the citizen card functions (technology neutral)
 - Administrative signature ('relaxed' alternative to qualified signature)
 - Official signatures (authority's signature)
 - Sector-specific identification number (data-protection compliant ID)
 - eID usage in the private sector (e.g. for e-commerce)
 - Data protection provisions
 - Electronic representation / mandates

Status of National deployment of eID

- Name of the project:
Austrian citizen card concept covers various issuers and technologies (smart cards, mobile phones, etc.)
- Plans, piloting or implementation?
Health insurance card (8 mio. cards, 2005)
Bank cards (~ 5 mio., starting 2005)
Civil servant cards (~ 30.000, 2005)
Mobile phone signatures (operational)
- Is the card obligatory? Yes
- Starting date of issuance:
some rolled out, some to be rolled out; see above

Status of National deployment of eID

- Envisioned total number of cardholders: 8 mio.
- Number of cards/certificates issued by 31-10-2004:
no public information (by 11/2003 ~10.000 qualified certificates, ~22.000 'normal' certificates by notified CAs)
- Number of inhabitants: 8 mio.
- Yearly growth rate (percentage): unknown
- Expected number of cards/eID certs by the end of 2007: 13 mio. (cards, citizens will possess different citizen cards, e.g. health insurance card and bank card; on discretion of citizen whether to activate eID)

Status of National deployment of eID

- Basic functionalities of the eID card:
 - official ID document: **No** (identity card with chip not rolled out, various cards without photo ID or alike provide eID function)
 - European travel document: **No**
 - support of on-line access to e-Services: **Yes**
- Validity period of the card/certificates:
max. 3 years for qualified certificates

Status of National deployment of eID

- Price in Euros of the cards?
 - for the citizen: *depends on the actual implementation/issuer*
 - pay per use for mobile phone signatures
5 - 15 EUR basic rate per year, 0,70 – 1 EUR per signature
 - e.g. smart card system with qualified certificates (private sector CA)
12 EUR for registration, 30 EUR for card, 18 EUR per year for certificate
 - for the card issuer: *depends (not known for private sector)*
 - price for the card reader and software:
 - software available for free – procured by federal government
 - 10 EUR subsidy (by banks and Ministry of Finance) per card reader for 200.000 card readers
 - any additional costs for the user/relying party: *no*
- From whom and how may the citizen obtain the end/user packages?
 - Download of software for free
 - Purchase of reader on market / no reader for mobile phone citizen card

Basic ID function

- What cardholder data is electronically stored in the card?
 - national identifier
 - (used to process fractional identifiers, national identifier may not be stored by applications)*
 - family name, given name
 - date of birth

Basic ID function

- Are these data elements in a dedicated data file? **Yes**
 - Is the file 'openly accessible'? **No**
 - If not, how is the file protected?
 - Requesting application needs to possess an 'E-Government Object Identifier'
 - Does the data file comply with the ICAO LDS? **No**
- Is the personal data (also) held in a certificate?
No (except for the name)

Basic Authentication function

- What cardholder verification mechanism is used:
 - PIN? **Yes**
 - Biometrics? **No**
 - If Yes, what biometrics?
 - If No, is introduction of biometrics envisioned? **No**
- Is there a PKI supported cardholder authentication mechanism? **Yes**
- Is there a mutual device authentication mechanism?
depends on the actual implementation/issuer

Basic Signing function

- Is a PKI supported signing mechanism (certificate and keypair) present for e-transaction services (non-repudiation)?

Yes

eID based services

- What kind of services (include examples) are accessible to cardholders based on acceptance of the cards/eID certificates:
 - Various E-Government Services, concept is open for the private sector (e.g. e-commerce)
- Total number of eID based services accessible by cardholders by 31.10.2004:
 - ~80 – 100 (federal + provincial + local services)
- Goal (in numbers/percentage) of eID based services to be accessible to cardholders by the end of 2007:
 - 90 %

eAuthentication Business models; financial

- What are the Charging/Revenue mechanisms?
- What charges are levied for use of the card?
none (to the contrary – in E-Government citizens are released from certain charges for the application)
- Is there a charge for checking certificates and if so who pays for this? none - not allowed by Austrian law
- Has a cost benefit analysis been compiled for the eID scheme? If yes what are the main conclusions?
Yes, e.g. by private sector issuers (not publicly avail.).
- Is there a study report available? no

eAuthentication Business models; public/private partnership

- Are non government bodies allowed to use the IAS or other card functions in support of their services?
Yes, specific data protection requirements apply
- Is the card a multi-application smart card? *Yes (depends on the actual citizen card implementation/issuer)*
 - If No, are there any plans for this and in what timeframe?
 - If Yes, what percentage of the deployed card base is multi-application smart card enabled? *depends on the actual citizen card implementation/issuer (e.g. Banking functions + eID; health insurance certificate + eID; ...)*
 - If Yes, are additional services (other than core IAS) loaded pre-issue or post issue or both? *depends on the actual citizen card implementation/issuer*

eAuthentication Business models; public/private partnership

- What is the level of usage of supported services (number of transactions per card per year)?
no information available
- What is the approach to and experience with card branding?
depends on the actual citizen card implementation/issuer

eAuthentication Business models; cross border usage

- Are there agreements with other national smart card issuers for mutual recognition of cards? (Status of Memorandum of Understanding (MOU) with other CAs)
No bilateral agreements settled; qualified certificates are anyhow recognised under 1999/93/EC.
Prototype integration of Finish and Italian eID into the Austrian concept.
 - If Yes, what countries are concerned and when was agreement made?
 - If Yes, what is the current level of usage (average number of cross-border transactions per card used cross-border per year for each of the countries and services concerned)?

Other Interoperability issues

- What is the level of Current Compliance with each of the following international standards or group activities (Full/Planned/None):
 - CWA eAuthentication (under development): **None**
 - CWA 14890 Secure Signature creation device: **depends on issuer**
 - CEN 224 –15 European Citizen Card (under development): **None**
 - ISO/IEC JTC1 SC 37 biometric standards: **n/a (no biometrics)**
 - ISO/IEC JTC1 SC 17 IS 24727 (under developmment): **n/a (API-ICC not yet avail)**
 - ICAO recommendations: **None**
 - If none or planned, what is the respective target date for compliance?

Current use and plans in Biometrics (if applicable)

- Technical solution(s): [n/a](#)
 - Signature, Fingerprint, Face Recognition, Hand Geometry
 - Iris, Retina, Voice Recognition
- Type of project(s): [n/a](#)
 - Evaluation, Pilot for Trial, Working application
- Application areas: [n/a](#)
 - Border Control, Immigration
 - Driver License, National ID, Healthcare, Voter registration
 - VPN
 - Physical access
 - Computer logon
 - Local government services (please specify)

Lessons learned so far

- Technology neutral concept turns out as strength of the Austrian approach
 - various private-sector issuers have taken up the concept (banks, mobile phone providers)
 - emerging technologies have been integrated (mobile phones)
 - citizens can choose which eID they prefer
 - 100 % coverage expected in 2005 (prepared for eID, activation of eID on discretion of citizens)



Next plans

- Integration of foreign eIDs
 - proof of concept exists for Finnish and Italian cards
- Development of further server-modules
 - Modules exist for identification, signature verification, and server-signatures (avail. for free)



Porvoo Group cooperation issues

- List of issues to be overcome and recommended Porvoo Group members actions that would support accelerated deployments:

Issue: Interoperability framework that allows for integration of existing solutions.

Proposed Action(s): Survey of the basic eID functions required in the MS.

More information

- Web-pages for the project/eID issues:
<http://www.buergerkarte.at>
<http://www.cio.gv.at>
- email: Arno.Hollosi@cio.gv.at ,
Herbert.Leitold@a-sit.at,
Reinhard.Posch@cio.gv.at

Thank You!