



**Wednesday, May 14**

**Track A**  
**Identification Applications & Policy**

**Session: International Government ID Use Cases**

**Time: 3:30 PM – 5:00 PM**

**Room: W202 B&C**

**Moderator:**

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*VP Global Alliances*

**CoreStreet**

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**Eurosmart**

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*Presidente*

**COSMOCOLOR S.A. DE C.V.**

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**Bell ID**




# Landscape of EU Projects

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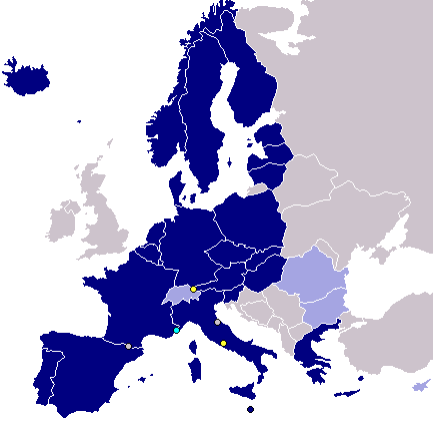


## Content

0. European Union, Brief overview
1. EU Regulations & Recommendations on eID
2. Programs
  - 2.1 EU Citizen Card (ECC)
  - 2.2 Registered Traveller Programm (RTP) in EU
  - 2.3 European electronic Residence Permit (eRP)
  - 2.4 European electronic Emergency Card (eEC)
  - 2.5 European electronic Driving Licence (eDL)
  - 2.6 European electronic Health Insurance Card (eEHIC)
  - 2.7 European electronic Car Registration Card (eCRC)
3. Conclusion



## 0) European Union, Brief overview


- 27 Member States (MS)
- 450 Million Citizens
- 20 Million Residence Permits
- No border control in the Schengen-Area (24 MS)

## 1) EU Regulations & Recommendations on eID

Application	Regulation/ Recommendation	International Standard
e-Tachograph	2135/1998	N.A.
e-Passport	2252/2004	ICAO 9303
e-Residence Permit	1030/2002	BIG-Group <sup>1)</sup>
e-European Health Insurance Card	t.b.d.	CEN TC 215
e-Car-Registration	127/2003	Spec w/o Standard
National-eID	1435/2005	ICAO 9303
e-Emergency Card	t.b.d.	t.b.d.
Registered Traveller Program	t.b.d.	t.b.d.

1) Brussels Interoperability Group, with article-6-committee





## 2.1) Figures of EU Citizen Card (ECC)

- EU's programs: Supported projects for interoperability on e-ID or e-Government has proceeded since 2001/2002, such as
  - TERREGOV (2002 – 2005; FP6),
  - GUIDE (2003 - 2006; FP6) und
  - LSP e-ID/e-Gov (2008 – 2010; ICT)
- Owner in the EU: **DG INFSO** and others
- Status: 8 member states of EU have already partly connected electronic identification cards with a function of the citizen cards and issued the citizen-portal: Finland (since 2003), Belgium (since 2004), Austria (2004), Estonia (2004), Sweden (2005), Italy (2005), Spain (2006) and Portugal (2007). These solutions among themselves are not interoperable, what the technology **and** the application concerns.

These cards are used for citizens via internet.

Some countries have already issued the citizen-portals without the use of citizen cards, such as Britain (GATEWAY) and Netherlands (LIMOSA).

Since 2004 a standardisation of the citizen cards has occurred in CEN (TC 224). A standardisation of applications or processes is not yet planned.



## 2.2). Figures of “Registered Traveller Programs” (RTP)

- EU's programs: Feasibility study (2006-2007), issued by **DG TREN**, 10.06.2006; designation TREN/J2/114-2006.
- Owner in the EU: **DG JFS** and **DG TREN**
- Status: Four major european airports, called Hubs, since several years haben already partly persisted in pilot-applications:
  - FRAPORT/Germany (Program ABG),
  - SCHIPOL/Netherlands (Program SAPHIRE),
  - HEATHROW/Britain (Program miSENSE) and
  - CDG/France (Program P.E.G.A.S.E).

These solutions are related to the invested technologies (Biometrics, database, secure token) and not interoperable.

A standardisation of the applications or processes, e.g. in the USA (program RTIC, period 2005-2007) has not yet been started.

The application is used to accelerate the process of border control for the frequent flyer. The border police (federal police in Germany) can pay attention to the other part of the frequent border peoples.

In quarter 1 of 2008 EU plans to issue another program. It may be implemented parallel to SCHENGEN EXIT/ENTRY program.



## 2.3). Figures of European electronic Residence Permit (eRP)\*

- EU's programs: The rescription of EU-residence cards was issued in 2002 (VO 1030/2002). The reworking stated in the spring of 2006; target: acceptance of biometric features, uniform document for all 27 member states.

Four residence permits are defined: Residence permit, temporarily permit, permanent residence permit (EG) and the (Schengen-) visa.

- Owner in the EU: **DG JFS**, Article-6-committee
- Status: Planned changes to the EU rescription should be adopted at Q1/2008;

The integration of biometric features occurs in two steps:

-1.step: facial image, within 24 months

-2.step: fingerprint, within 36 months

The examples of the application of e-AT are: Residence permit, temporarily permit, permanent residence permit (EG) for not-EU-citizens.

With the publication of the specification eRP is anticipated in the 2nd half of 2008. A powerful refusal of ICAO-standard for travel documents (1.step: ICAO/PKI/BAC, (PACE),modified; 2. step: ICAO/PKI/EAC, modified) will be expected.

\* Application for non-EU-citizens



## 2.4). Figures of European Emergency Card (eEC)


- EU's programs: Supported projects to harmonize in healthcare has proceeded since 2002. Examples with different focuses are:

- eHealth ERA,
- i2Health,
- RIDE,
- Semantic-Health,
- Q-REC.

Since February 2005 an ad-hoc group has been founded under eTEN, with the target to standardize the emergency data on a card, especially if the government has no health cards in the application.

- Owner in the EU: **DG HEALTH, DG INFSO** and others
- Status: With confirming of uniform emergency data will be anticipated in 2008. A possible pilot project is planned for 2009. The goal is the availability of emergency data records for the treating doctors, especially if the patient is not responsive or whose language is not understood.

A standardization of emergency data has occurred since February 2005 in CEN (TC251).



## 2.5). Figures of European electronic Driving Licence (eDL)


- EU's programs : Studies on electronic driving licences went back to the year 1992. The last study CEDLIC occurred in 1999.
 

110 different driving licences in all 27 member states with different data resulted in a new regulation with the target ID1 format in October 2003, associated with a reduced life span limited to 10 years. The exchange of old documents should occur up to 2010.

On a recommendation to a electronic driving license has so far been given up.
- Owner in the EU: **DG TREN**
- Status: Since 2006 new driving licences have been issued just according to EU-uniform-documents-standard. Format: ID1. Data-media: Plastic card. Validity is limited to 10 years. Transitional periods are published for the existing documents.
 

A standardisation of electronic driving licences occurred in 2004 under ISO 18013. The completion of the standardisation will be anticipated in 2008. This represents a significant facilitation of document-verification for the policemen on the street.

So far Britain is the only EU member state (DVLA), which plans to test the electronic driving licences in the first half of 2008.



## 2.6). Figures of European electronic Health Insurance Card(E111, EIHC)

- EU's programs : Supported projects for the data on crossborder exchanges in the healthcare have been set up since 2002. The famous are:
  - Ten4Health and
  - Netc@rd

An action plan for the unification of the european electronic health insurance card was agreed in March 2002.

The EU Regulation 1408/71 was published with COM(2002)17final in 2003. It contains a 2-steps introduction:
 
  - visibility identification card from 2006
  - smart card from 2009
- Owner in the EU: **DG ES**
- Status: Since 01.01.2007 27 member states have published the european electronic health insurance card. Until now 155 million (33% of users) visibility identification cards are applicated.
 

The certificate is necessary, if the patient sees a doctor abroad.

CEN has initiated a two-years ad-hoc group to specify the smart card, called electronic European Health Insurance Card (eEHIC). The introduction is for 2009/2010.



## 2.7). Figures of European electronic Car Registration Card (eCRC)

- Eu's programs: The specification of electronic Car Registration Card was publicly announced in 2001. Giesecke & Devrient company obtained the extra charge.

In 2002 the EU decided to publish a technical recommendation for electronic car registration cards. The auto industry and the motor and the motor vehicle licensing authorities remain free to change from electronic car registration card to EU-standard.

- Owner in the EU: **DG TREN**
- Status: The EU published a technical recommendation with 127/2003(EC) in 2003. The transfer was not yet implemented in any member state or by any car manufacturer.

The electronic car letter could be contribution to reduce the stolen cars and at the same time represent a electronic "life cycle" of cars.



## 3). Conclusion on EU Smart Card Projects

Application	"User Group"	Market-Start CY
e-Passport	EU Citizens (20%)	2004 (2)
eID/eGov	EU Citizens (+Foreigner)	2004 (3)
e-Tachograph	Trucks/EU	2006
e-Residence Permit	Foreigner (1)	2009
European Health Insurance	EU Citizens (30%)	2009
Registered Traveller Program	Frequent Traveller	2010
e-Emergency Card	EU Citizens, Voluntary	2010
e-Car-Registration Card	Automotive Industry	t.b.d.
e-Driving License	Driver (car, truck, bus)	t.b.d.

1) non EU

2) Belgium, 11/2004

3) Belgium, Q1/2004



## 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](http://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

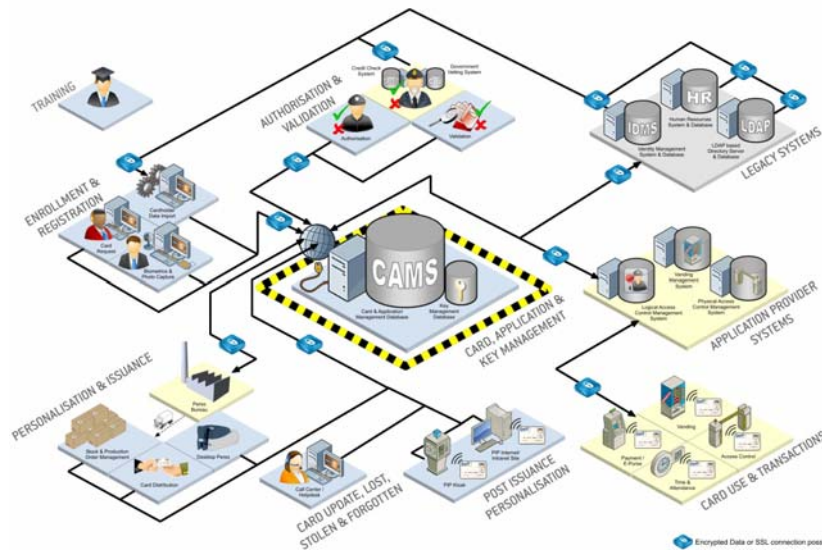


**Multi Application Card**

- 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



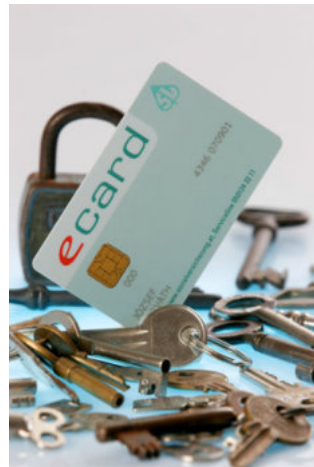


## The e-card project

## 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



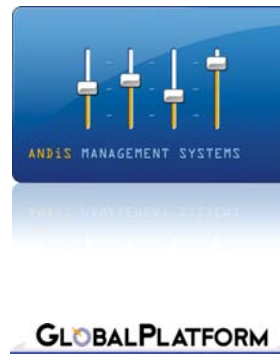
- Country-wide Social Insurance Card
- Total Costs: €116 million
- Issued and managed by Service Bureau 'Central Association of Austrian Social Insurance Institutions'
- SCMS, Application Management, Key Management and Mass Personalization Interface follow GlobalPlatform
- Card rollout start: May 2005 (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)



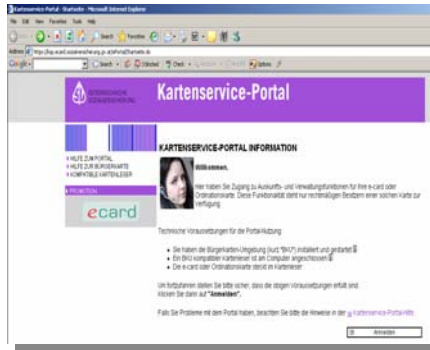
ANDiS provides complete infrastructure for

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

- 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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