COM(2012) 238 final 4.6.2012

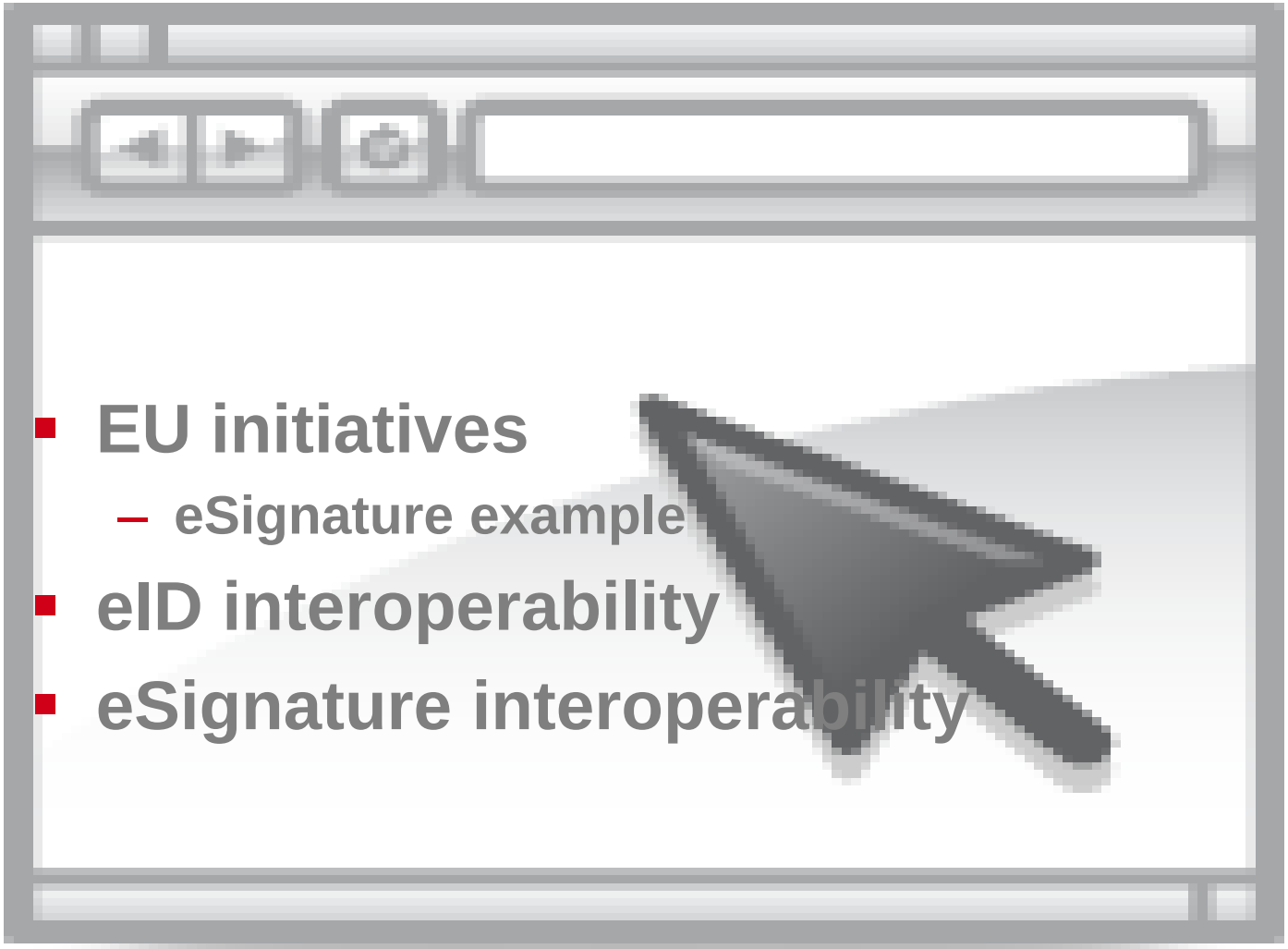
Proposed EU regulation on electronic identification and trust services for electronic transactions

Pan-European interoperability projects

GSMA Mobile Identity Programme Global Launch

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Nice, 18th September 2012
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EU initiatives
eSignature example
eID interoperability
eSignature interoperability

Need of a Single Digital Market

- 13 million EU citizens work in another EU country
- 21 mio. SMEs, significant part have international operations
- 120 mio. shop online, only 20 % buy in another EU state

- Cross-border administration examples
  - 600.000 citizens live in one EU MS and work in another
  - 350.000 per year engage in an marriage with a national of another MS
  - 180.000 students move to another MS (Erasmus / post-graduate degree)

What is the proposal's ambition?

- Strengthen EU Single Market by boosting TRUST and CONVENIENCE in secure and seamless cross-border electronic transactions



Some key EU legal provisions

- Signature Directive
  - Equivalence of handwritten and qualified electronic signature
    - Crypto-related: PKI and signature suites



- Data protection Directive
  - Fundamental rights related to protection of personal data
    - Crypto-related: Identification of data subject; data encryption

- Services Directive
  - Right to eGovernment on services-related administration
    - Crypto-related: Identification and electronic signatures

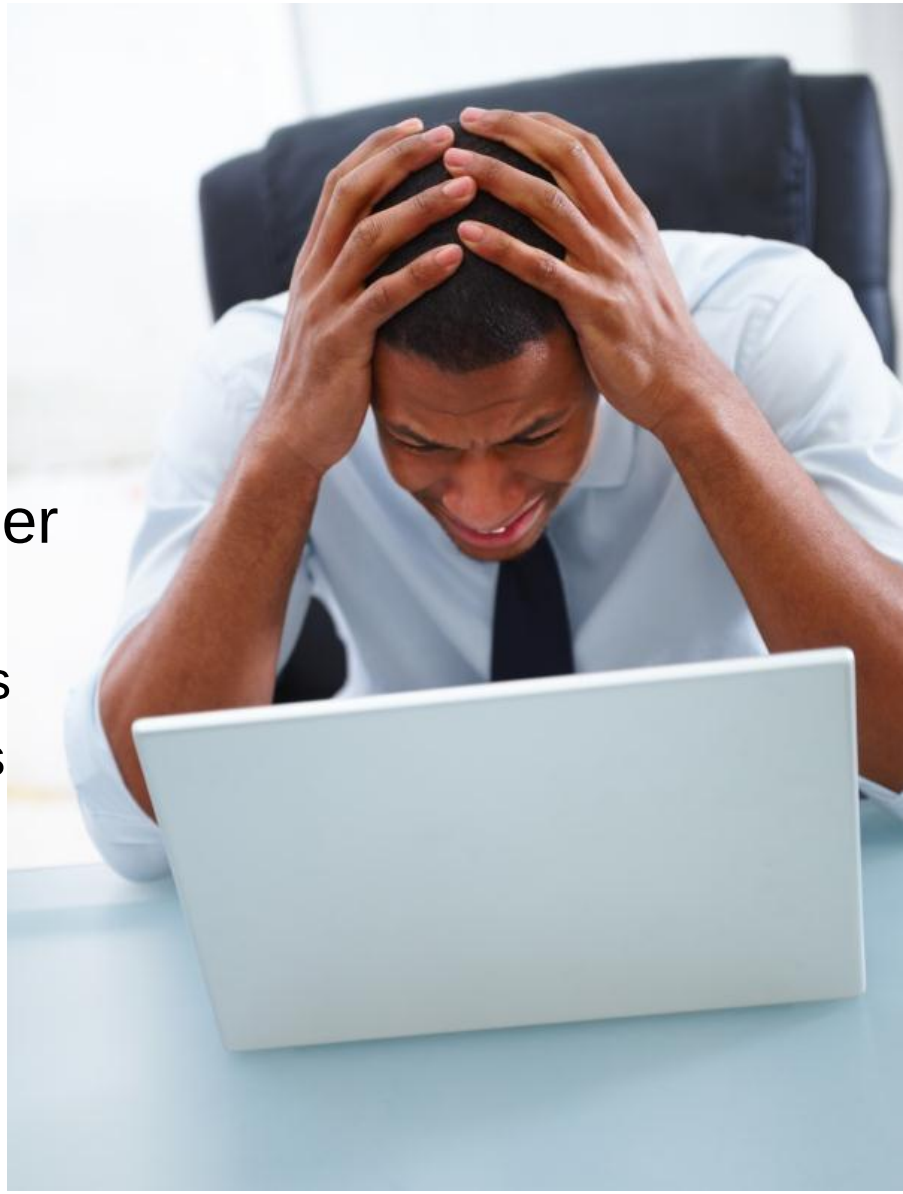
The good news …

- Since the Signature Directive (1999) …
  - … about 100 CAs issuing qualified certificates started their service in the EU
  - … several Member States issued eID that are SSCDs
    - AT, BE, EE, ES , IT, MD, PT, ….
  - … many eGovernment and eBusiness services emerged that rely on eSignatures



The Shortcomings …

- Many implementations on eID and eSignature are tailored around the national environment
- Lack of technical cross-border interoperability
  - e.g. different signature formats
  - e.g. different crypto algorithms
- Differences in national laws
  - e.g. key length
  - e.g. time-stamp requirements



Council Conclusions 28-29 June 2012

- *"**Agreement should be reached as soon as possible on the proposals** on public procurement, **eSignature** and the recognition of professional qualifications."*
- Achieve a well-functioning Digital Single Market by 2015

  "***priority should be given to measures aimed at further developing cross-border online trade**, including by facilitating the transition to e-invoicing, and **promoting the cross-border use of eIdentification and other e-services.***"

Who will benefit from the proposal?

- 13 million EU citizens work in another EU country



- 21 millions of SMEs of which a significant part is w internationally



- Some 150 million EU citizens shop online.
  However, only 20% of them buy goods and services from another EU state



How?

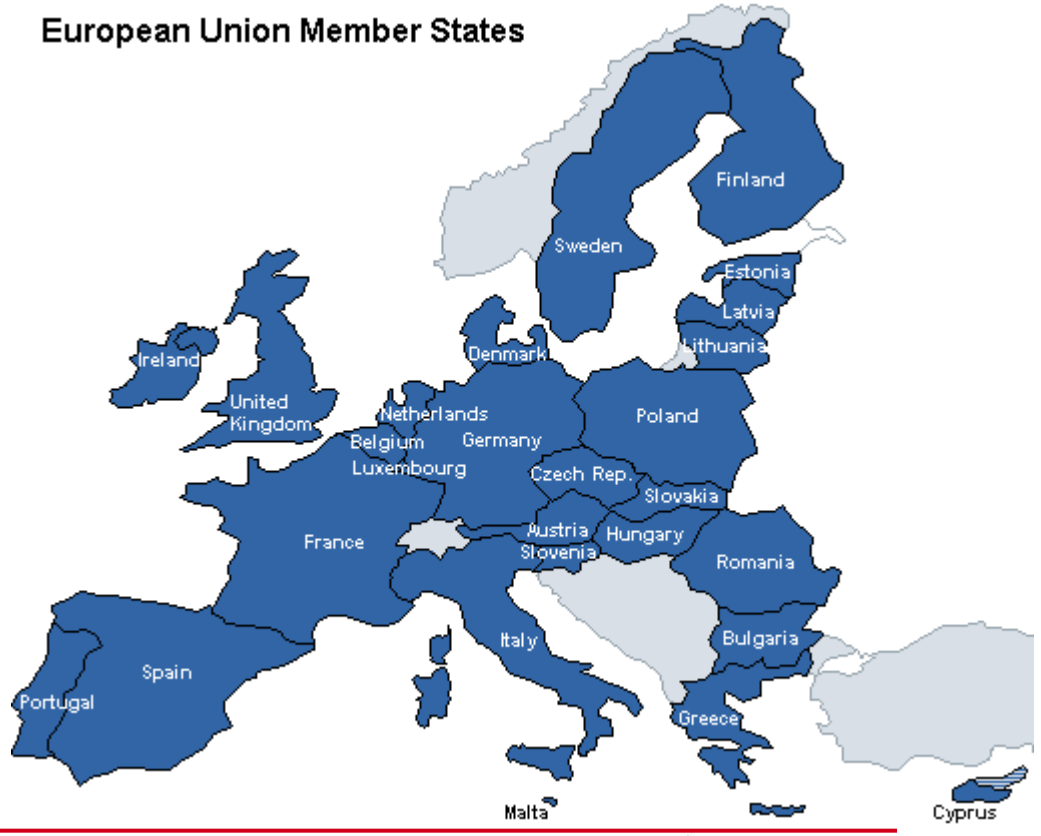
1. By ensuring that people and businesses can use and leverage across borders their national eIDs to access public services in other EU countries where eIDs are available.











How?

2. By removing the barriers to the internal market for e-Signatures and related online trust services across borders
   -> i.e. by ensuring that trust services have the same legal value as in traditional paper based processes.









What is our political commitment?

- **Digital Agenda for Europe** 19.5.10, COM(2010)245
- **European eGov Action Plan 2011-15** 15.12.10, COM(2010)743
- **Single Market Act** 13.4.11, COM(2011)206
- **A roadmap to stability and growth** 12.10.11, COM(2011)669
  Fast track action
- **Commission Work Programme 2012** 15.11.11,COM(2011)777

What is the scope of the proposed Regulation?

1. Mutual recognition of **electronic identification**



2. Electronic **trust services**:

   – **Electronic signatures** interoperability and usability
   – **Electronic seals** interoperability and usability
   – Cross-border dimension of:

      - **Time stamping**,
      - **Electronic delivery service**,
      - **Electronic documents admissibility**,
      - **Website authentication**.

Mutual recognition and acceptance of eID

- **A EU Member State:**

1. May '**notify**' to European Commission the 'national' electronic identification scheme(s) used at home for, at least, access to public services;
2. Must recognise and accept 'notified' eIDs of other Member States for cross-border access to its public services requiring e-identification;
3. Must provide online free eID **authentication** facility;
4. Is **liable** for unambiguous identification of persons and for authentication;
5. May allow the private sector to use 'notified' eID

Electronic trust services

Common Principles:

- Mutual recognition of «**qualified**» electronic trust services
- Strengthens and harmonises **national supervision** of qualified trust service providers and trust services
- **Reinforces data protection + obligation for data minimisation**
- Uses **delegated and implementing acts** as a mechanism to ensure flexibility vis-à-vis technological developments

Electronic trust services

eSignature

- Clarifies the concepts related to eSignature (natural persons)
- Introduces eSeals (legal persons)
- Clarifies validation of qualified eSignatures
- Ensures long term preservation
- Allows for full reference to standards
- Allows «server» and «mobile» signing

What is not covered? eID

- Member States are not obliged to have an e-identification scheme
- Member States are not obliged to notify their e-identification scheme(s)
- «Notified» eID ID cards
- No "EU database" of any kind
- No "EU eID"
- No coverage «soft ID» (ex. Facebook); only «hard eID»

What is not covered? Trust Services

- EU supervision (vs. national / regional level)
- No prior authorisation to start qualified service, no accreditation
- Detailed provisions on trust services other than eSignatures/eSeals
- Persons' roles and/or attributes
- Certification of other products than eSig/eSeal creation devices
- Encryption



Why will it make a difference? (1/2)

- **Creates confidence in electronic trust services:**
  - Effective state supervision
  - Systematic usage of "trusted lists“
- **Easy eSignature:**
  - Harmonisation power of Regulation
  - Enables full eSig specification via secondary legislation + standards
- **Related trust services:**
  - Address clear market needs: eSeals, eDelivery, eDocuments, “indefinite” value of an eSig
  - Harmonise national legislation: time stamping, eDelivery
  - E-Document admissibility: « big bang » for de-materialisation
  - Website authentication is an implicit expectation of the citizens

Why will it make a difference? (2/2)

- **Comprehensive "toolbox" of trust building instruments**
  - One single legislation across EU



- **Foster eID usage ("world premiere"):**
  - Leverage eID cards and mobile ID infrastructure
  - Reliable eID to allow cross border eBusiness and enable eGovernment services
  - Private sector is invited to build on «notified» eID schemes
  - Leverage Large Scale Pilot project STORK

Provisions of the proposed Regulation

- **Ch 1: General Provisions**
- **Ch 2: Electronic identification**
- **Ch 3: Trust services**
  - *Sec 1: General Provisions*
  - *Sec 2: Supervision*
  - *Sec 3: Electronic signature*
  - *Sec 4: Electronic seals*
  - *Sec 5: Electronic time stamp*
  - *Sec 6: Electronic documents*
  - *Sec 7: Qualified electronic delivery service*
  - *Sec 8: Website authentication*
- **Ch 4: Delegated acts**
- **Ch 5: Implementing acts**
- **Ch 6: Final provisions**
- **Annexes I, III, IV: Qualified certificates**
- **Annex II: Qualified eSig creation devices**

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Monitoring and evaluation

- **The Commission will monitor the application of the legislative framework through continuous dialogue with stakeholders and the collection of statistics**
- **Progress indicators to monitor the application of the legislative framework:**
- **1. Existence of eIAS suppliers that have activities in multiple EU member states:**
- **2. Usage of eIAS services by eService providers in other sectors than the "traditional closed niche sectors";**
- **3. Degree to which devices become interoperational (e.g. eCard readers) between sectors, countries;**
- **4. Usage of eIAS by all categories of population (cf. via 'Household survey'-type questionnaires);**
- **5. Follow-up of reasons why consumers remain reluctant to use eIAS (cf. via 'Household survey'-type**
- **questionnaires);**
- **6. Extent to which eIAS are used by end-users for national transactions and international (cross-border)**
- **transactions;**
- **7. Degree of harmonisation across members states when regulating eIAS (incl. related trust services).**
- **8. Official eIDs notified to the Commission**
- **9. Services accessible with notified eIDs in the public sector (eGovernment, eHealth, eJustice, eProcurement)**
- **10. Services accessible with notified eIDs provided by central, regional, local authorities**
- **11. Services accessible with notified eIDs provided by Points of Single Contact**
- **12. Electronic delivery systems accessible with notified eIDs**
- **13. Services accessible with notified eIDs in the private sector (online banking, eCommerce, eGambling, login to**
- **websites, safer internet services e.g. chatrooms for children)**
- **Moreover, the new legislative framework will request Member States to provide the European Commission with**
- **statistics based on their supervision activities.**

For further information and feedback

- **Website:**

  http://ec.europa.eu/information_society/policy/esignature

- **Draft Regulation:**

  http://ec.europa.eu/information_society/policy/esignature/eu_legislation/regulation

Summary / personal point of view

- **one regulation (eID / eSignature)**
- replacing SigRL directive
- no forced introduction of eID (NO central EU eID) BUT cross national ‚acceptance'/notification
- „devil in the detail": delegated laws, regulations, directives & cross notifications …
- **…**






Some facts about Austria

- Area: 83 870.95 km²
- Population: 8 419 000
- 13 federal ministries
- 83 district administrations
- 9 provinces
- 2357 municipalities







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Some facts about Austria

- 99 % of Austrian enterprises have internet access
- > 88 % use eGovernment information
- 79 % of the Austrian population are using internet,
  > 51 % are using eGovernment services
- About 2.8 Million pages of the two Austrian One-Stop eGovernment Portals are visited per month
  - www.help.gv.at – One-Stop eGovernment Portal for citizens
  - www.usp.gv.at – One-Stop eGovernment Portal for businesses

Use of eID

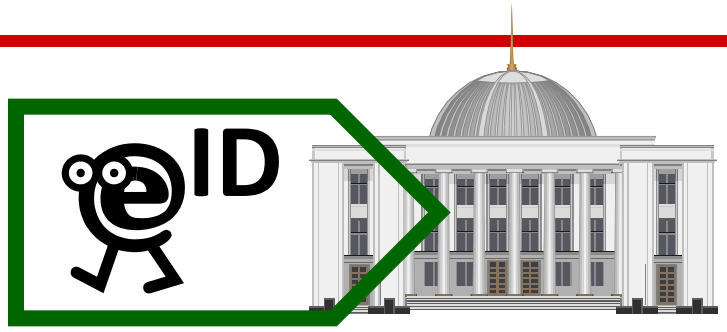
Within administration:

- in order to provide more efficient procedures and to avoid extensive data to be collected



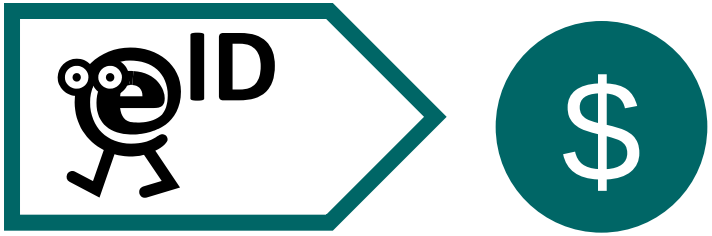
Access to e-gov:

- in order to facilitate e-government and transformation (automated procedures)



Access to e-business:

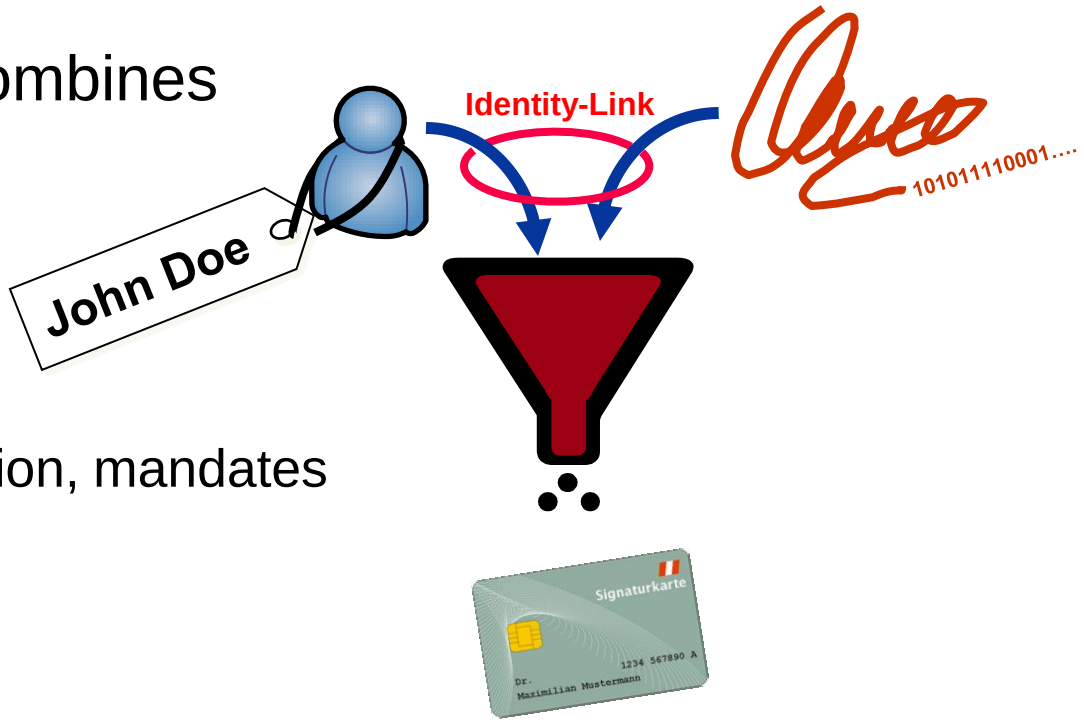
- in order to raise quality trust and security by profiting from public sector



Citizen card

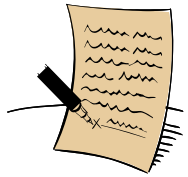
- The Austrian citizen card is a concept, not a specific technology

- The Citizen Card combines
  - electronic signature
    → Authentication
  - electronic identity
    → Identification
  - data on representation, mandates
    → Representation



Citizen card concept means…

- unique identification
  - Name alone is not enough
- declaration of intent
  - User needs to decide actively when and what to sign
  - Two factor authentication (something you have and something you know)



- authentic and unchanged documents
  - method: cryptographic mechanisms (electronic signature, hash functions)



- authorization and representation
  - companies and unprivileged groups are able to join eGovernment as well

Citizen Card - Major Milestones

- November 2000: Austrian Cabinet Council decision
  - … to employ chip-card technology to improve citizen's access to public services; to supplement the planned health insurance card with electronic signatures
- February 2003: 1st Citizen Card
  - Austrian Computer Society membership card
- March 2004: E-Government Act
  - Legal basis of the Identity Management System
- 2005 - 2010
  - Several private-sector and public-sector borne Citizen Card initiatives



Citizen “Cards”



Cards:

- Health insurance cards: 100 % coverage, activation free of charge for citizens
- official’s service card
- Certification service provider signature cards
- student service cards, etc.



Mobile phone signatures:

- Start 2005 / reLaunch 2009
- free of charge for citizens

mobile phone signature

- server-based citizen card solution for
- qualified electronic signatures via mobile phone
- familiar technology and comfortable alternative to the current smartcards
- important step towards usability and dissemination of modern eGovernment services because
  - no software installation on the local PC, just the browser,
  - no special computer skills and
  - no card readers are needed for use.
- No requirement on the mobile phone or SIM
  - Just receiving SMS

mobile phone signature 2

- Core Aspects
  - Operated by a Certification Service Provider (CSP) for qualified certificates
  - Signature-creation data (cryptographic keys) kept at CSP but controlled by the signatory
    - 2-factor authentication (knowledge & possession) as known from smartcards
  - Secure Signature-Creation Device
    - 1999/93/EC Annex III, confirmed by a notified body

eID citizen card function

- Bank cards
- Health insurance card
- Affinity cards
-







Within administration:

- eSignature
- eRegisters
- eFile System

Ac e-business:

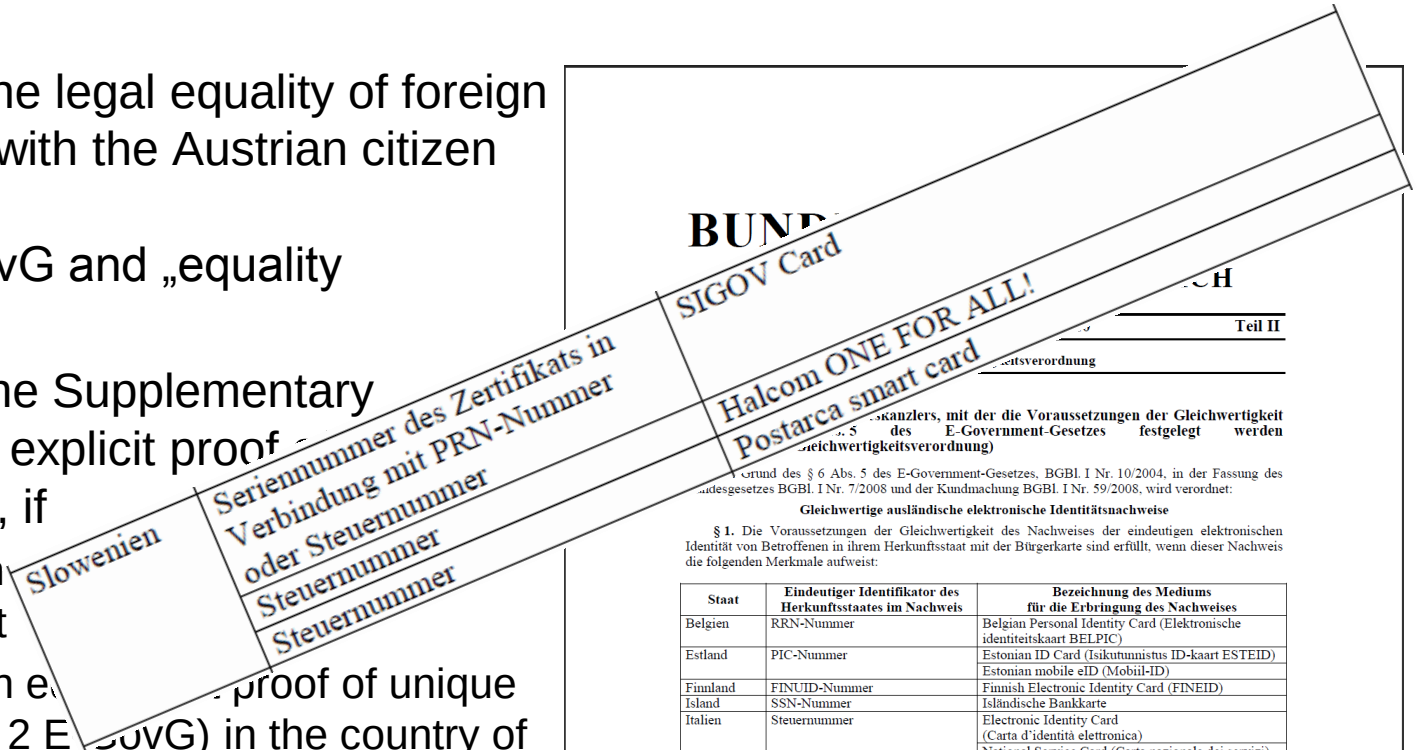
- eBanki
- eBilling
- eProcurement
- CyberDoc
- Archivium
- eDelivery

- rms
- ealth
- elivery
- Document-Safe
- University
- eVoting

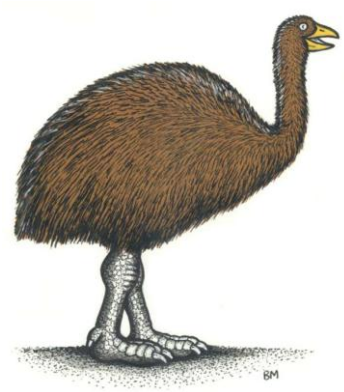
Integration of foreign eIDs

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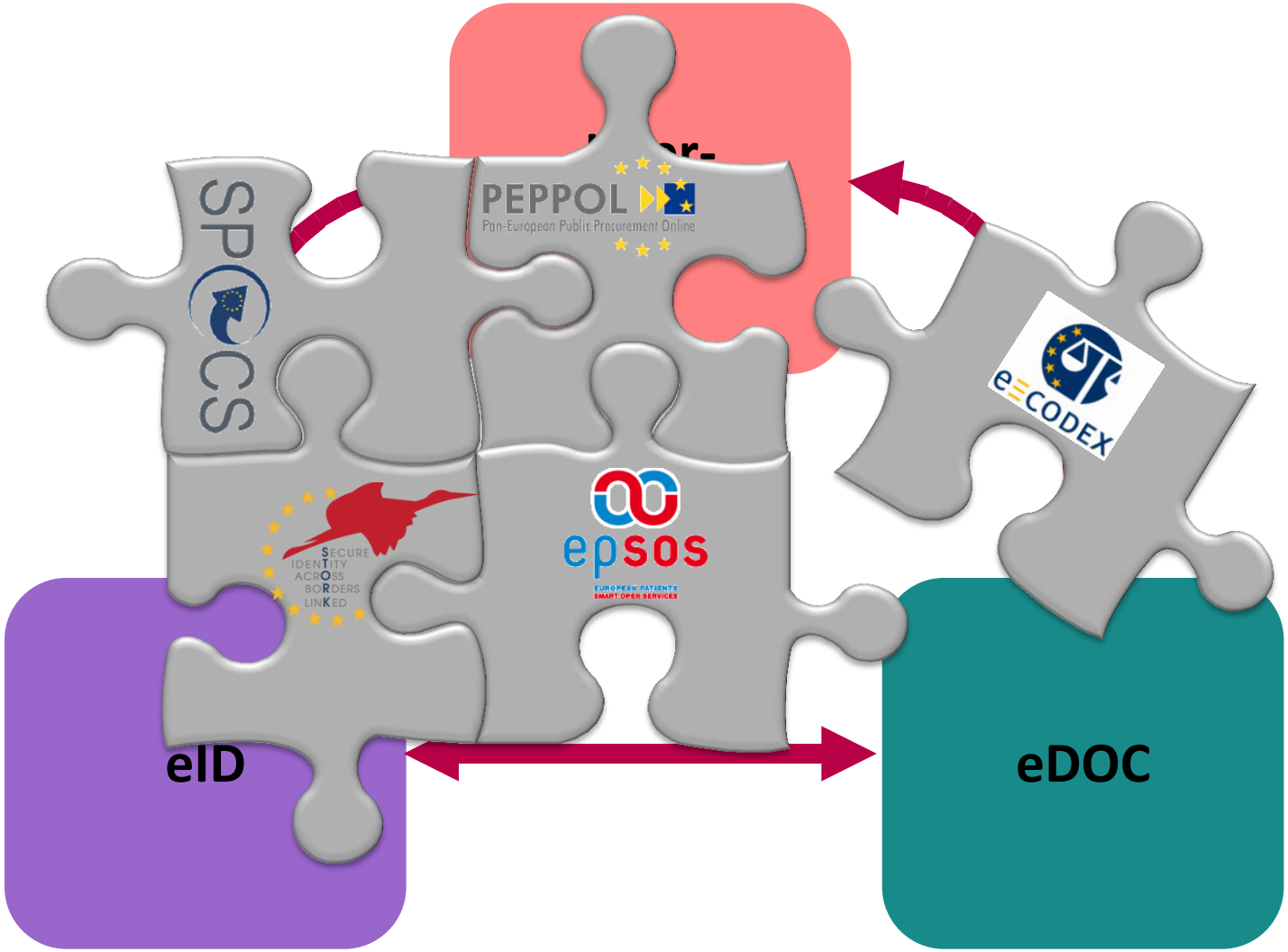
- Framework for the legal equality of foreign signature cards with the Austrian citizen card concept:
  § 6 Abs. 5 E-GovG and „equality regulation“
- Registration in the Supplementary Register without explicit proof of registration data, if
  - an Application signature, that
  - is based on an e proof of unique identity (§ 2 Z 2 E GovG) in the country of origin.
- Currently the signature cards of Belgium, Estonia, Finland, Iceland, Italy, Liechtenstein, Lithuania, Portugal, Sweden, Slovenia and Spain meet these requirements.



3 basic elements …



the basic elements



Member States cooperate in key policy areas

- eID interoperability
  www.eid-stork.eu
- eHealth
  www.epsos.eu
- eJustice
  www.e-codex.eu
- Service Directive
  www.eu-spocs.eu
- eProcurement
  www.peppol.eu











International approach

STORK
(Secure identity across borders linked)

It aims at implementing an EU wide interoperable system for recognition of eID and authentication that will enable businesses, citizens and government employees to use their national electronic identities in any Member State. It will also pilot transborder eGovernment identity services and learn from practice on how to roll out such services.

PEPPOL
(Pan-European Public eProcurement On-Line)

The objective of the project is to set up a pan-European pilot solution that, conjointly with existing national solutions, facilitates EU-wide interoperable public eProcurement. The vision of the PEPPOL project is that any company and in particular SMEs in the EU can communicate electronically with any European governmental institution for the entire procurement process.

SPOCS
(Simple Procedures Online for Cross-border Services)

A pilot project launched by the European Commission which aims to remove the administrative barriers that European businesses face before offering their services abroad. It will allow them to more easily meet all the administrative obligations through the points of single contact.



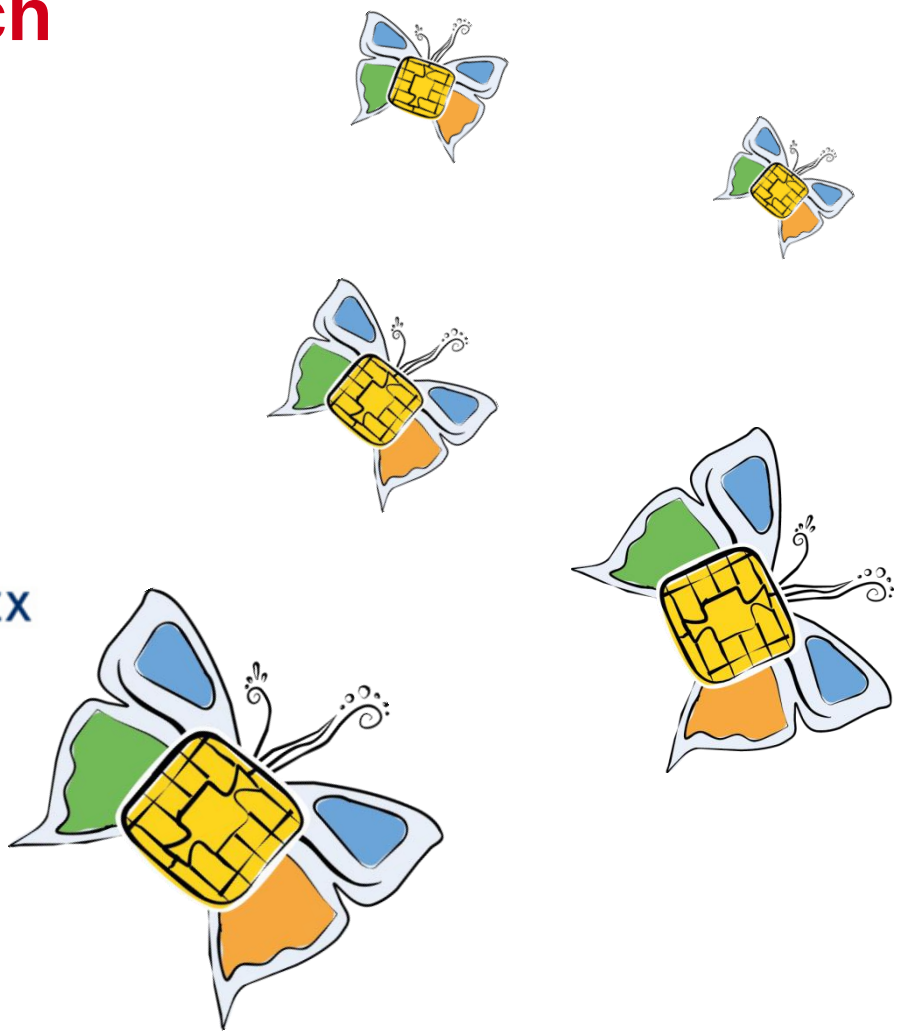
epSOS
(European Patients Smart Open Services)

The overarching goal of epSOS is to develop a practical eHealth framework and Information & Communication Technology (ICT) infrastructure that will enable secure access to patient health information, particularly with respect to a basic patient summary and ePrescription, between European healthcare systems.

International approach

E-CODEX
(e-Justice via Online Data Exchange)

The goal of the e-CODEX project is to improve the cross-border access of citizens and businesses to legal means in Europe as well as to improve the interoperability between legal authorities within the EU.



eSens



EU LARGE SCALE PILOT ON EID INTEROPERABILITY

The Basis

- STORK is a eID interoperability Large Scale Pilot
- Starting point
  - Member States have eID projects
    - planned, deploying, or operational
  - Heterogenous environment
    - Technology: smartcards, username/passwords
    - Operational: e.g. centralized, decentralized
    - Legal: e.g. persistant identifiers, sector-specific IDs

STORK did not change the MS situation, but aimed at interoperability on top of it!

The pilots

- Six pilots live as “pioneering applications”
  - Online authentication
  - Safer Chat
  - Student Mobility
  - eDelivery
  - Change of Address
  - ECAS

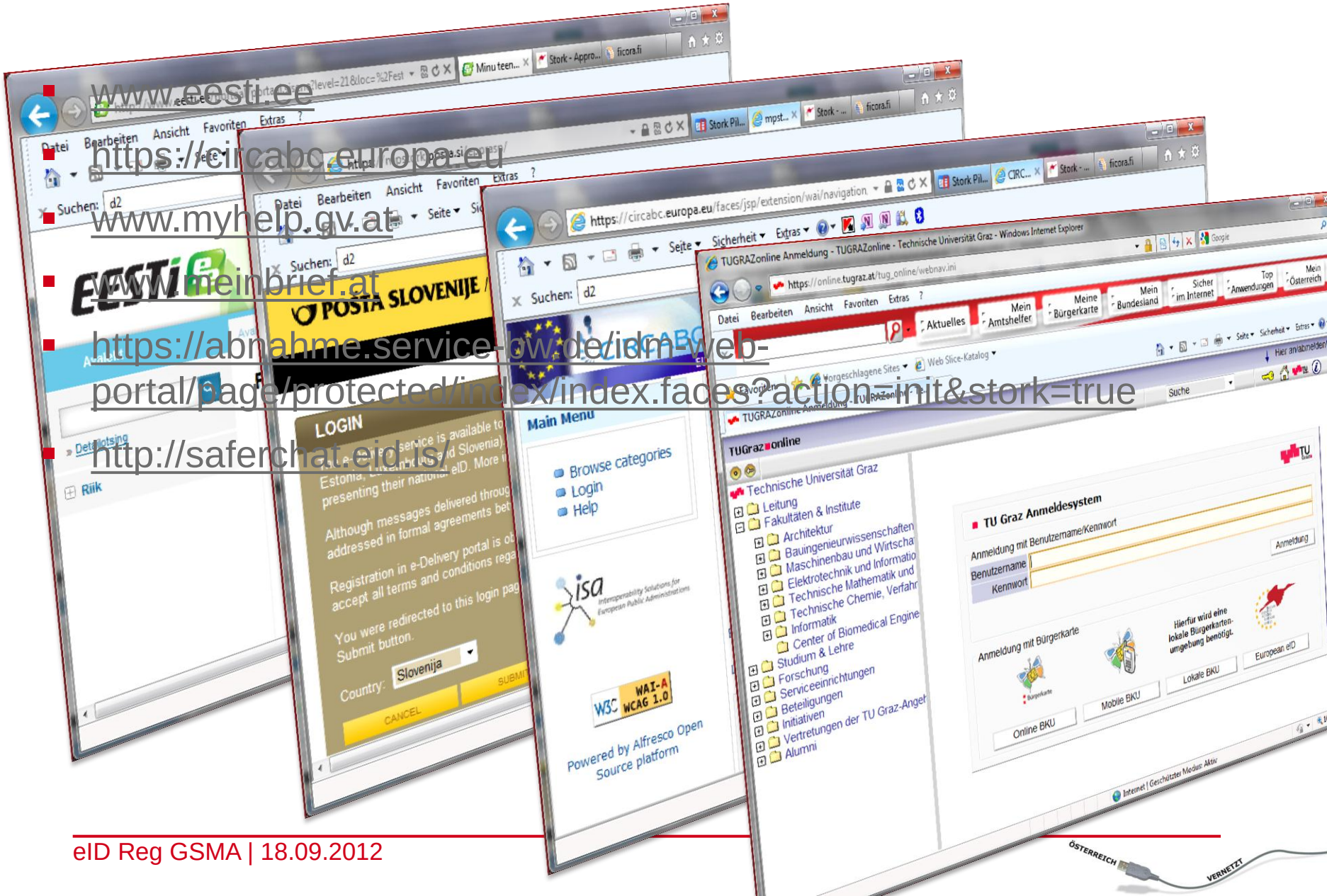
Affiliate



Interoperability across Europe…

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- www.eesti.ee
- https://circabc.europa.eu
- www.myhelp.gv.at
- www.meinbrief.at
- https://abnahme.service-bw.de/idm-web-portal/page/protected/index/index.faces?action=init&stork=true
- http://saferchat.eid.is/

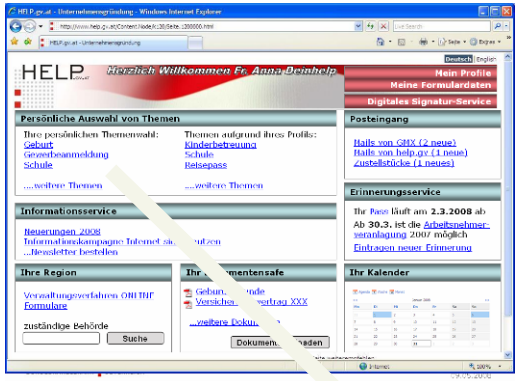


eID - essential challenges

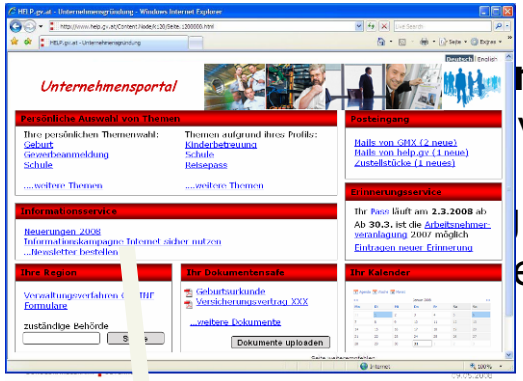
- **Non-natural Persons (e.g. companies)**
  - where time equals money and
  - where identity and privacy (e.g. IP protection ..) really counts
- **Mobility - eID with and through mobile devices**
  - convenience
  - availability
  - simplicity
  - we have to go to the citizen - not vice versa
- **Impacts of Cloud Computing on eID**
  - cloud is opening up an ample set of security questions
  - it is a chance and a challenge
  - while not a technology by itself it changes assumptions

All_In_One ...

Citizens Portal



Business Portal



Health Portal



The customer decide what they want!

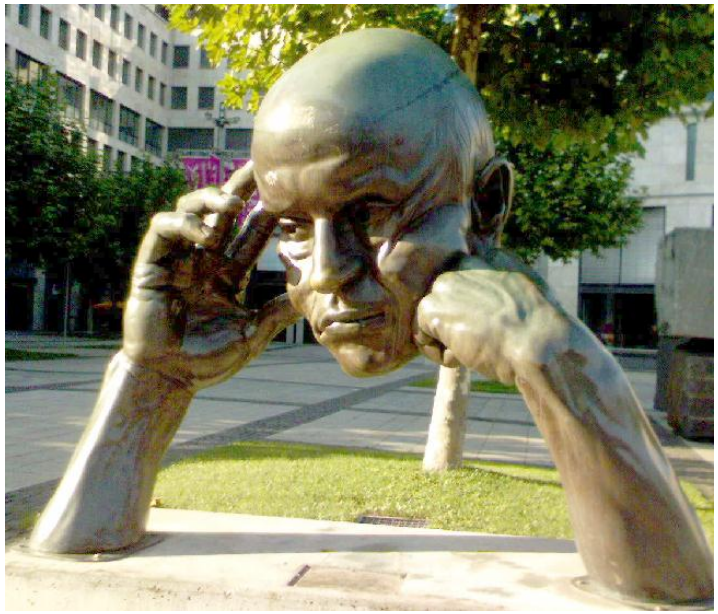


Conclusion

- **Lets walk the way together …**



we clearly have to identify our strategic goals



Thank you!



Questions?



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Federal Chancellerey / ICT-Strategy

http://www.help.gv.at/
http://www.digital.austria.gv.at/
http://reference.e-government.gv.at/

Results and specifications available online (unfortunately mostly only in German ☺, but we're doing our best …)

E GOV | Österreichisches E-Government Gütesiegel