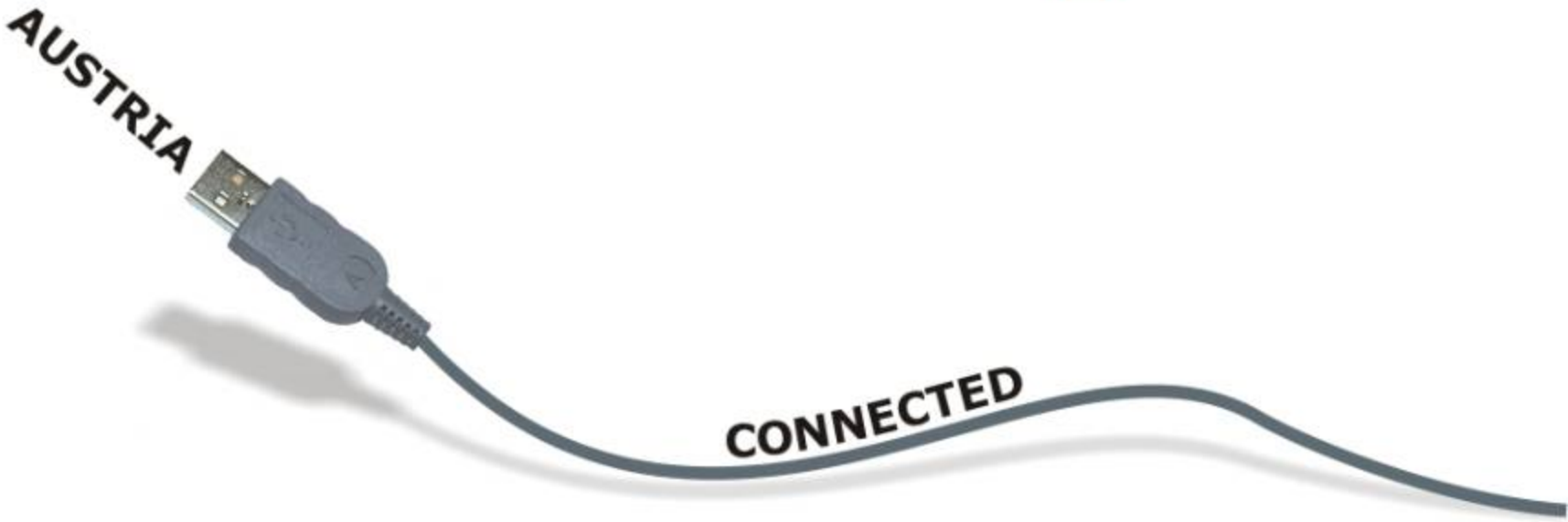
DIGITAL AUSTRIA



The ePrivacy System in the Austrian eGovernment

Marcus Hild
Austrian Data Protection Commission – E-Government Register Authority

NIS'09, Crete, 14th September 2009

Index

DIGITAL AUSTRIA

- eID and sectoral model
- role of Data Protection Commission

DSK



DIGITAL AUSTRIA



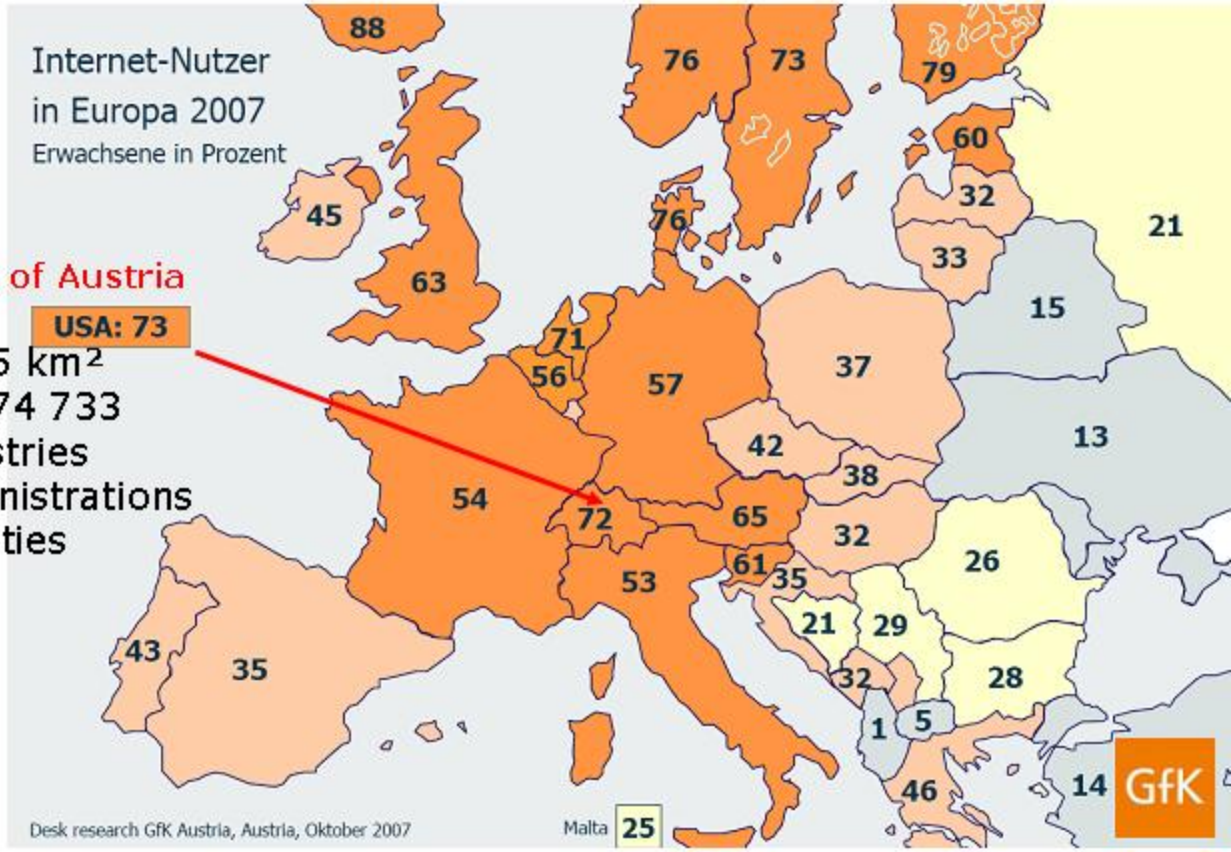






Federal Republic of Austria

Area: 83 870.95 km²
Population: 8 174 733
12 federal ministries
80 district administrations
2359 municipalities
9 provinces













Some facts

DIGITAL AUSTRIA

- >95 % of the Austrian enterprises are using computers
- >90 % have internet access
- ~75 % eGovernment information
- Each fifth enterprise has already complete official procedures electronically

- >60 % of the Austrian population are using internet
- ~50 % of the Austrian households are equipped with computers
- ~80 % have a mobile phone
- ~80 % eGovernment information
- ~45 % complete official procedures electronically

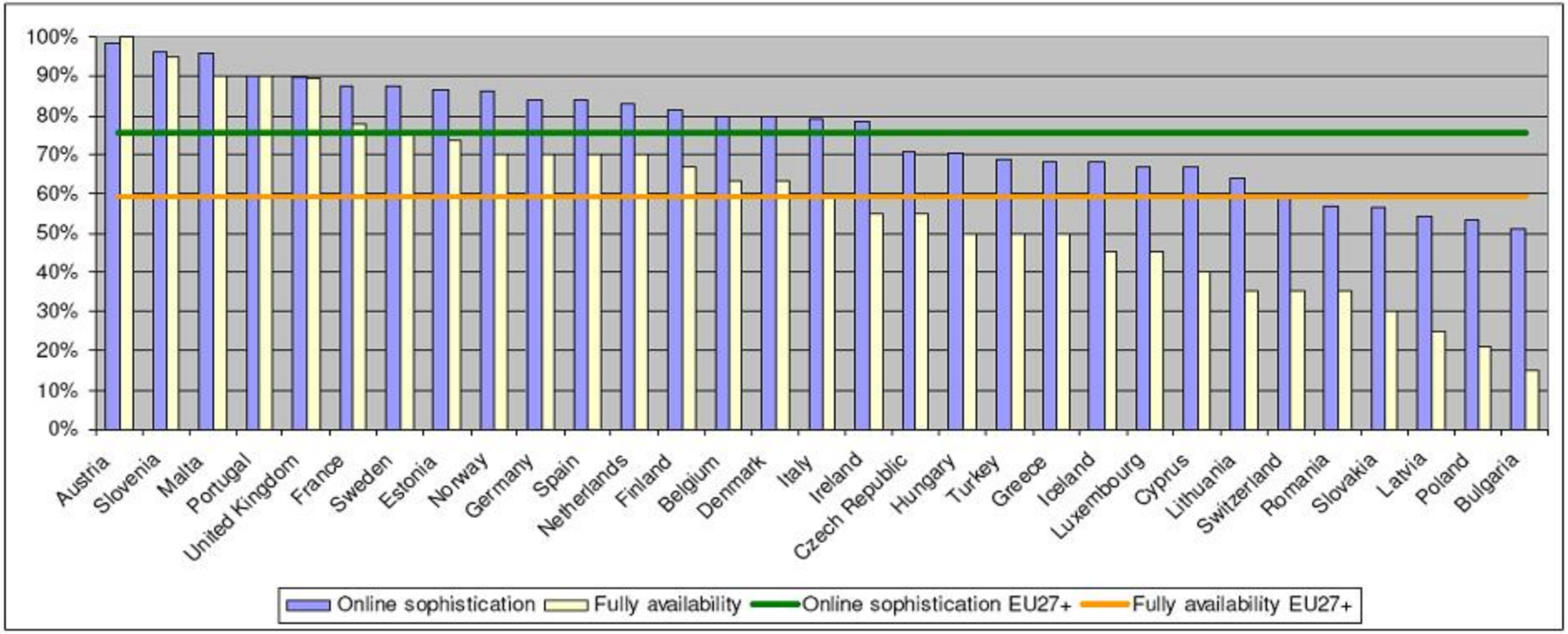
DSK



EU-Benchmarking

DIGITAL AUSTRIA

„Sophistication indicator shows that Austria leads the European way in all 20 services measured."

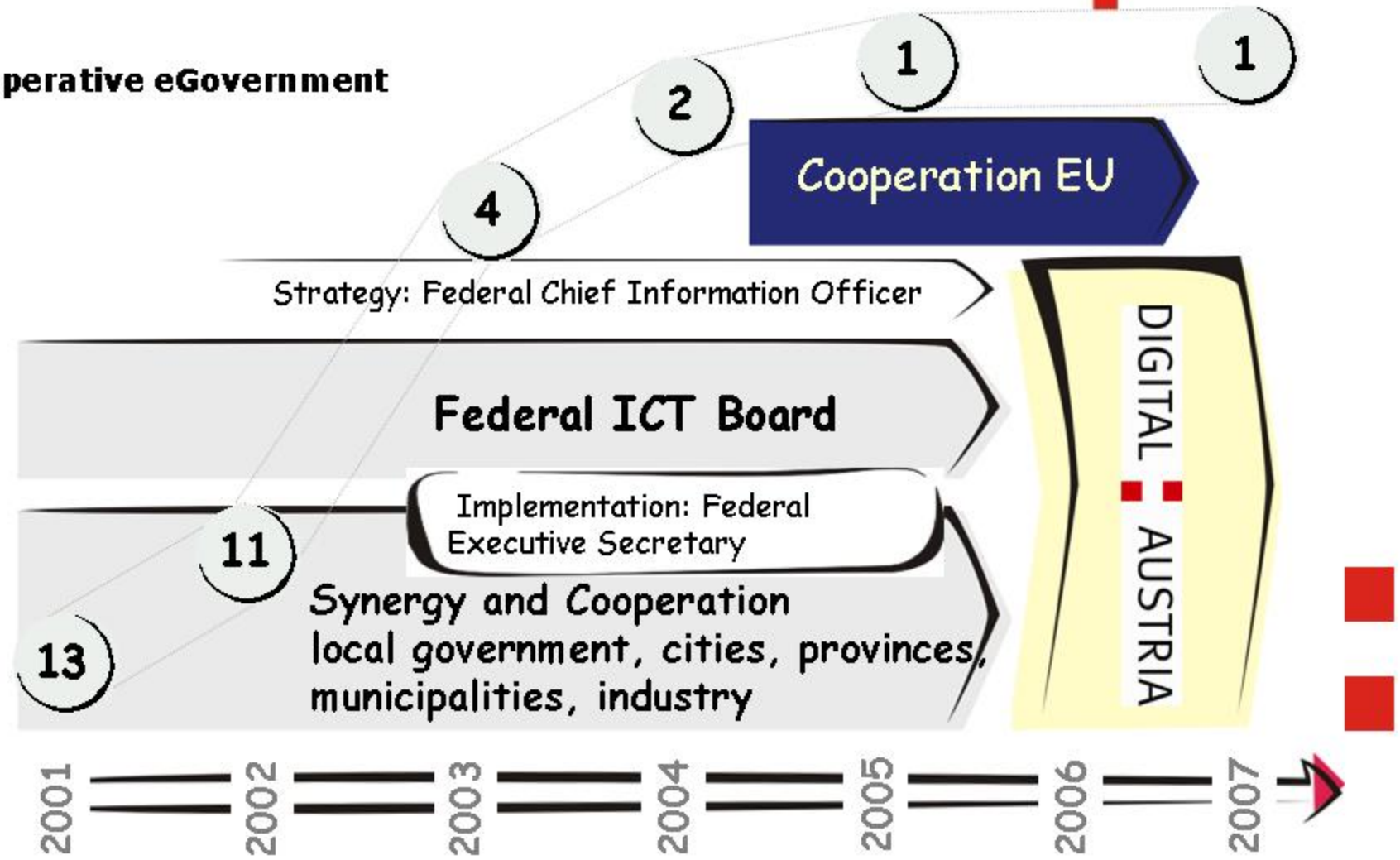


„Austria's eGovernment initiative is a class-leading example of how to optimize a government's eServices offering and make it almost 100% transactional."

observing cooperation among the federal levels is crucial → about 70% of administration is NOT at federal level → the way of working together has a top priority to be successful

DIGITAL AUSTRIA

Cooperative eGovernment



EU - goal

DIGITAL AUSTRIA

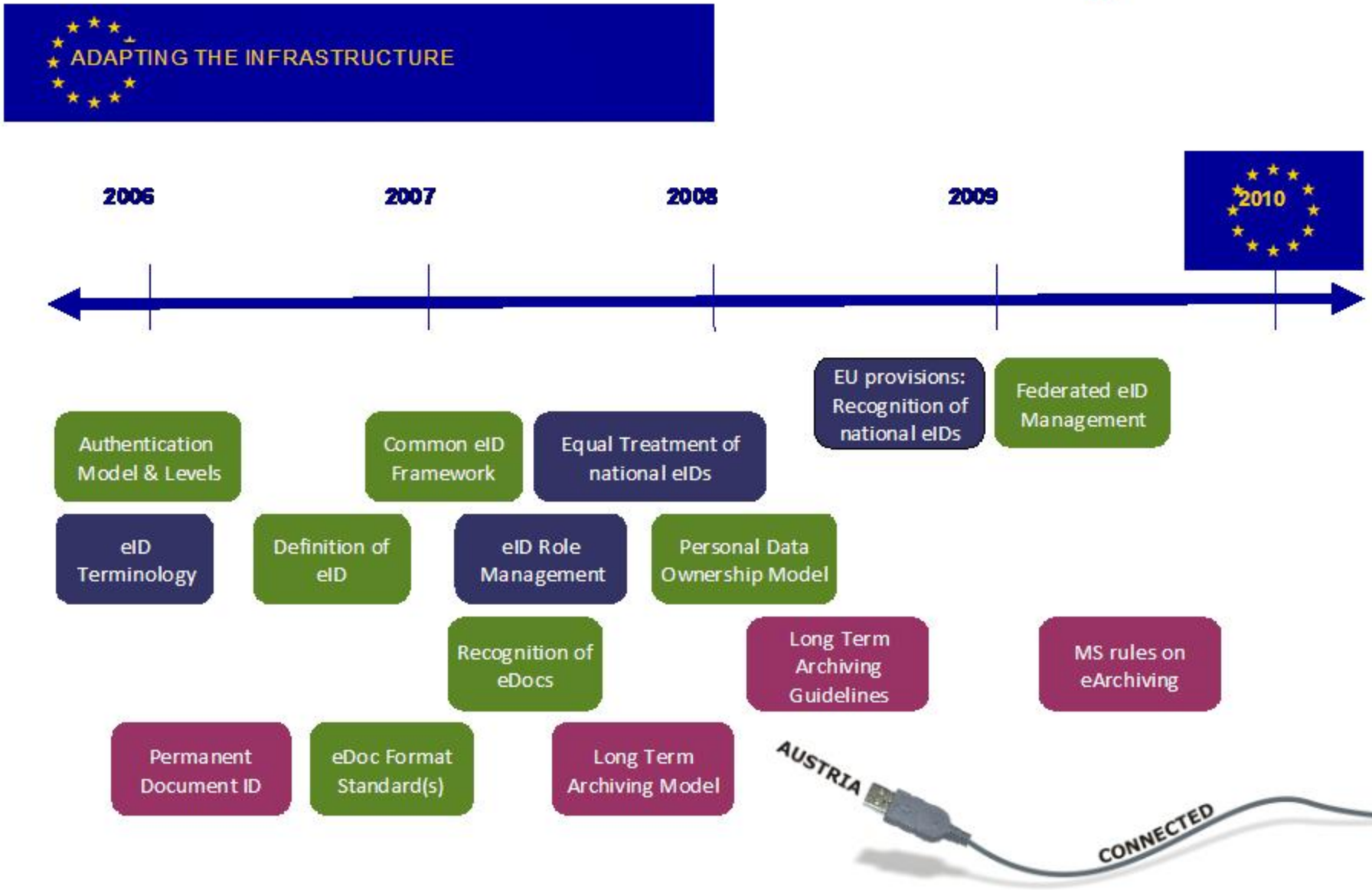


By 2010 all European citizens, businesses and administrations shall benefit from secure means of electronic identification (eID) that maximise user convenience while respecting data protection regulations. Such means shall be made available under the responsibility by Member States but be recognised across the EU.



i2010 signposts

DIGITAL AUSTRIA



EU - Services Directive

Article 8 - Procedures by electronic means

> Member States shall ensure that all procedures and formalities relating to access to a service activity and to the exercise thereof may be easily completed, at a distance and by electronic means, through the relevant point of single contact and with the relevant competent authorities.

...



'ICT in the public sector is like a large vessel – it needs clear decisions quite ahead before real movement can be planned."

DIGITAL AUSTRIA

Federal Government

Digital Austria

Management | CIO | Spokesperson

Local and National Governments as well as Chamber Organisations and Industry

Digital Austria Federal ICT Board

Digital Austria eCooperation Board

Fed. Ministries

Provinces, Municipalities, Regions

EGIZ

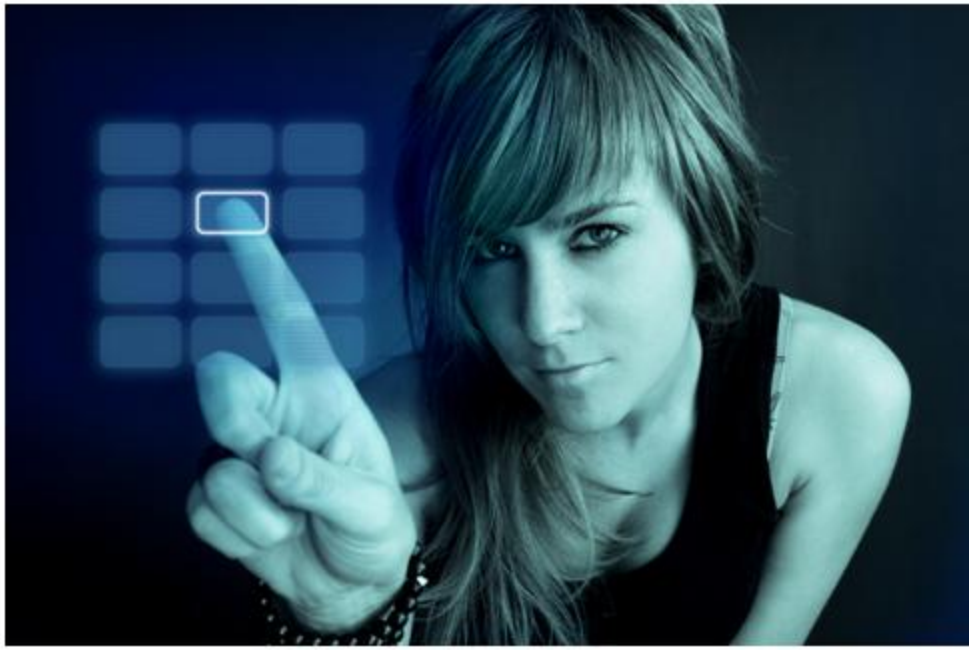
DSK



factors of success

DIGITAL AUSTRIA

- backed by highest political level
- strength through coordination and cooperation
- usage of state of the art technology
- citizen centricity
- trust and security
- privacy and data protection
- transparency and efficiency
- eInclusion / usability
- sustainability
- interoperability
- technology neutrality





DSK

goal: consistent procedure

DIGITAL : AUSTRIA

anytime : anywhere



filling in form (XML) | signing with citizen card | ePayment (EPS) | back office activity(ELAK) | electronic delivery

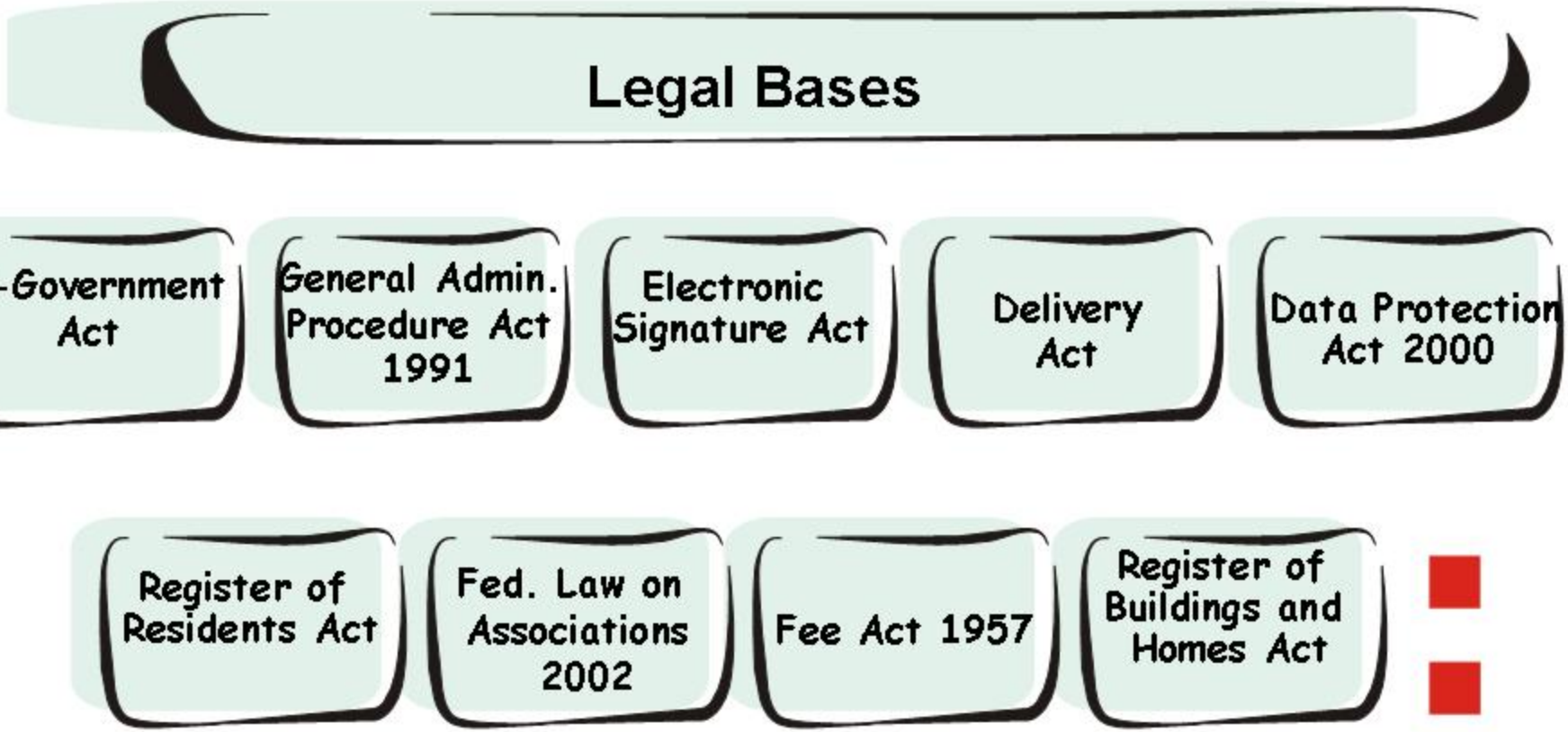
www.help.gv.at **www.buergerkarte.at** **www.elak.gv.at** **www.zustellung.gv.at**

DSK



Legal framework (excerpt)

DIGITAL AUSTRIA





eID AUSTRIA :: LEGAL BACKUP

DIGITAL AUSTRIA

E-Government Act

- citizen card
- identity-link (SAML)
- mandates (SAML)
- source PIN
- sector specific eID

- source PIN REGISTER
- supplement REGISTER
- standard-document REGISTER
- official signature



Use of eID

DIGITAL AUSTRIA

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





DSK

The citizen card concept

- 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 realization

DIGITAL AUSTRIA

AUSTRIAN CITIZEN CARD

- not a card, but a requirement profile
- realization in a Private Public Partnership model
- technology independent interface for identification (identity link) and authenticity (digital signature)
- support of arbitrary signature cards, mobile phones and other technologies



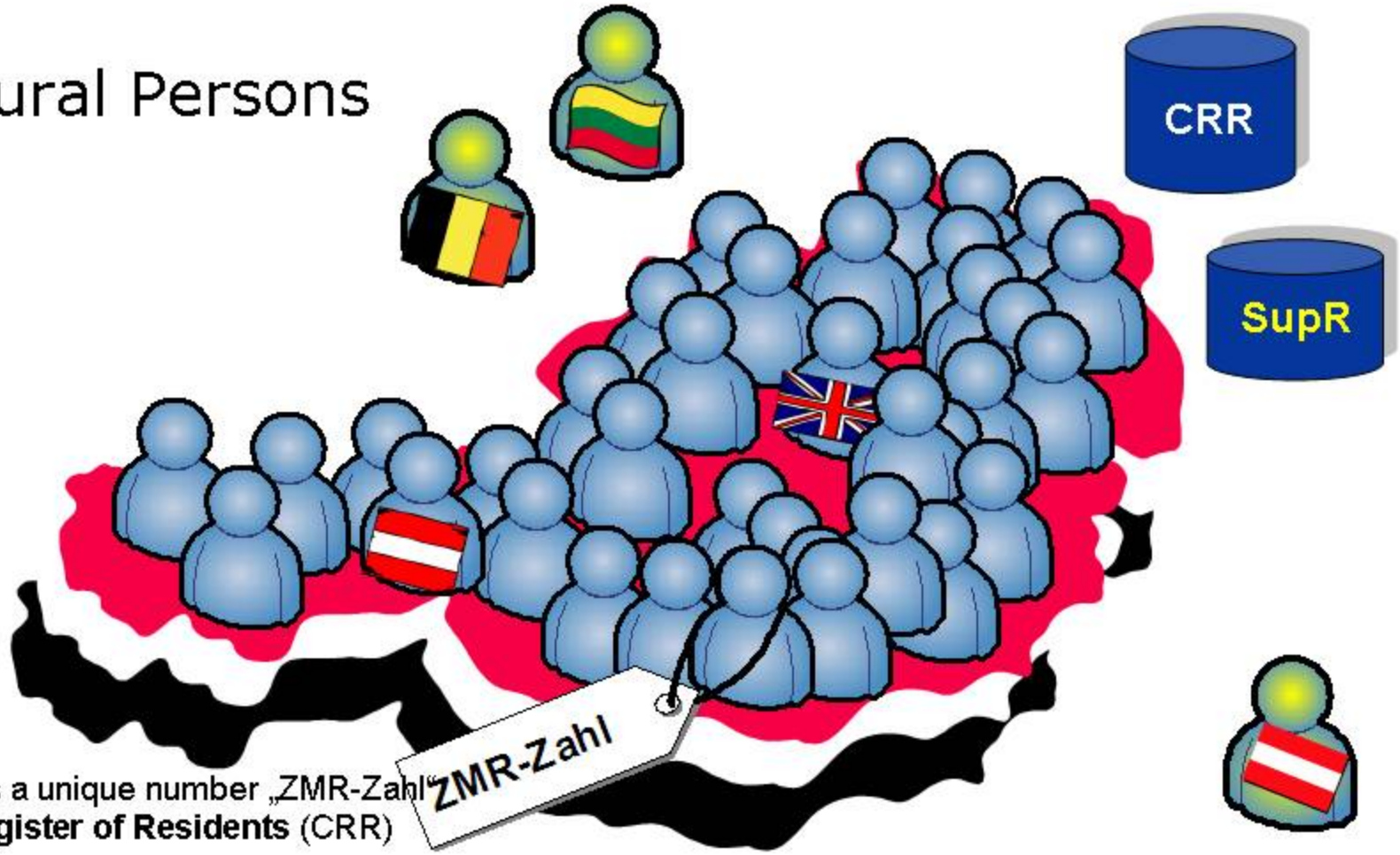


DSK

Austrian Identification System

DIGITAL AUSTRIA

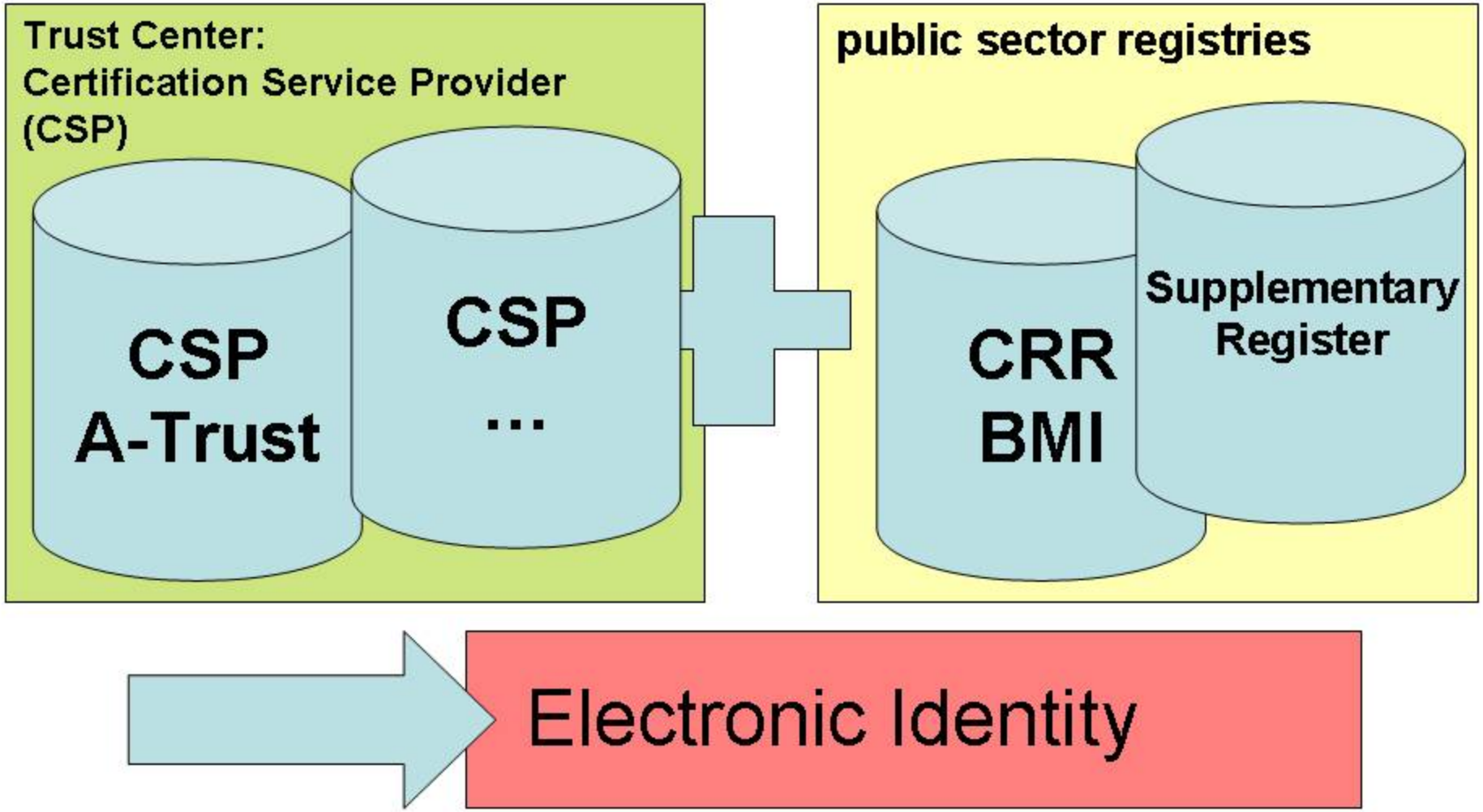
- Natural Persons



Each resident has a unique number „ZMR-Zahl“
in the **Central Register of Residents** (CRR)

Online Identity = CSP + public register

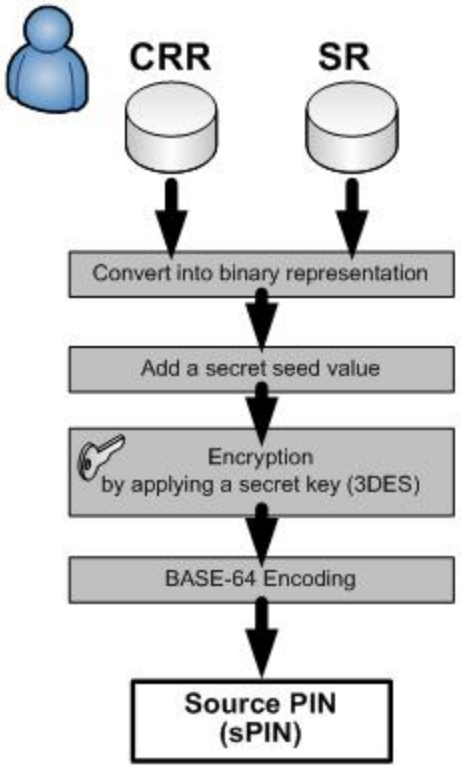
DIGITAL AUSTRIA



Austrian Identification System

DIGITAL AUSTRIA

- Identification is based on unique identification numbers taken from Austria's base registers:
  - e.g. Central Register of Residents (CRR), etc.
- Every person in Austria is registered with such a base register
- Even foreigners living in Austria can be registered with the so called Supplementary Register (SR)

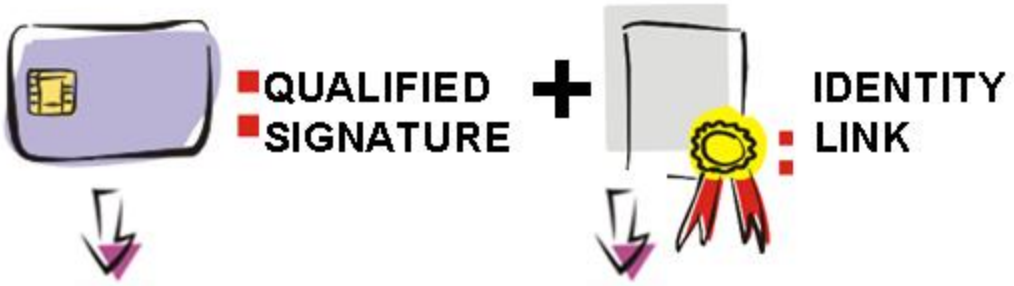


Every person gets assigned a unique personal identification number, the so called **Source-PIN**

eID AUSTRIA :: OVERVIEW

DIGITAL AUSTRIA

LEGAL



PUBLIC PRIVATE

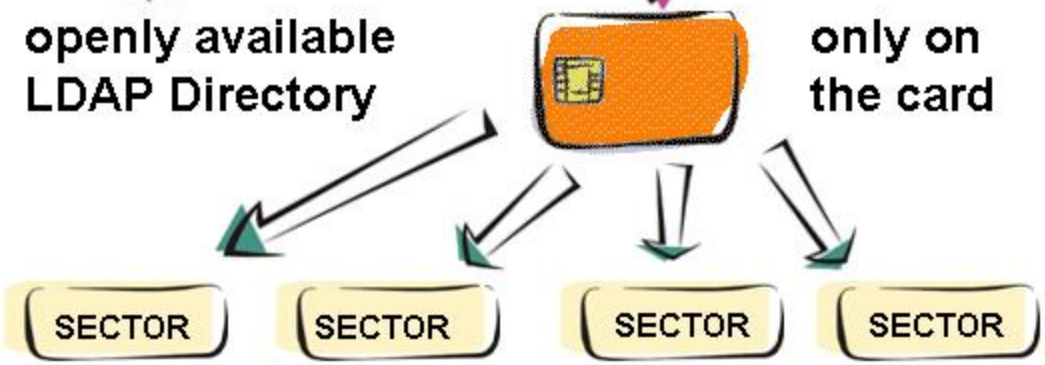
any private sector CA for qualified signatures

Identity = source pin cryptographically bound to certificate

DATAPROTECTION

openly available LDAP Directory

only on the card



one way mapping into sectors

Source pin - derivation

DIGITAL AUSTRIA

0	Base number	000247681888 (Ex: ZMR number, 12-digit decimal number)
1	Binary representation	00 0E C3 53 60 (5 byte, hexadecimal number)
2	Expanded to 128 Bit	00 0E C3 53 60 FF 00 0E C3 53 60 00 0E C3 53 60 (16 byte, seed value, set to 'FF' as an example)
3	Triple-DES encryption, hexadecimal	42 AD 37 74 FA E0 70 7B 31 DC 6D 25 29 21 FA 49 (16 byte)
4	sourcePIN, Base64	Qq03dPrgcHsx3G0lKSH6SQ== (24 characters)



Austrian Identification System

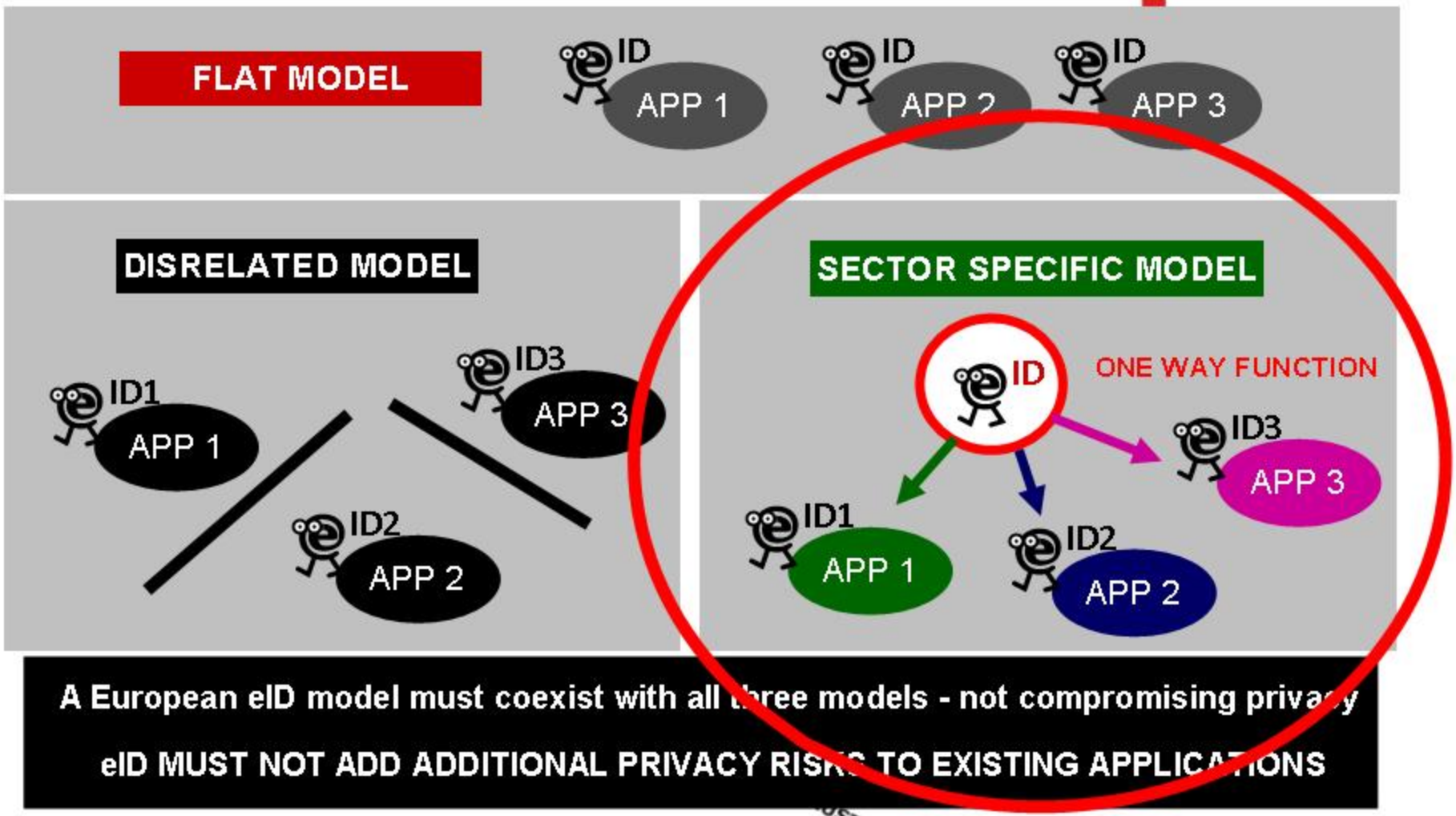
DIGITAL AUSTRIA

- Source PIN
  - … is **unique**
  - … in contrast to other base identifiers, it is under the **sole control** of the citizen
  - … it **must not** be stored by any governmental or private party
- Due to privacy reasons, the **Source PIN** is not used to identify persons in E-Government processes

For Identification in E-Government Processes, we use **Sector Specific-PINs** (ssPIN)

eID and data protection – models in place

DIGITAL AUSTRIA

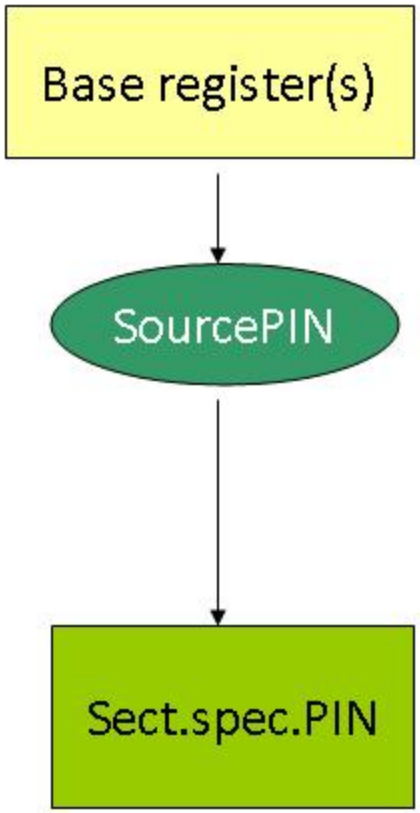


CONNECTED

Sector specific approach in Austria

DIGITAL AUSTRIA

Austrian *e*Government Act:



The base registers provide for unique identification

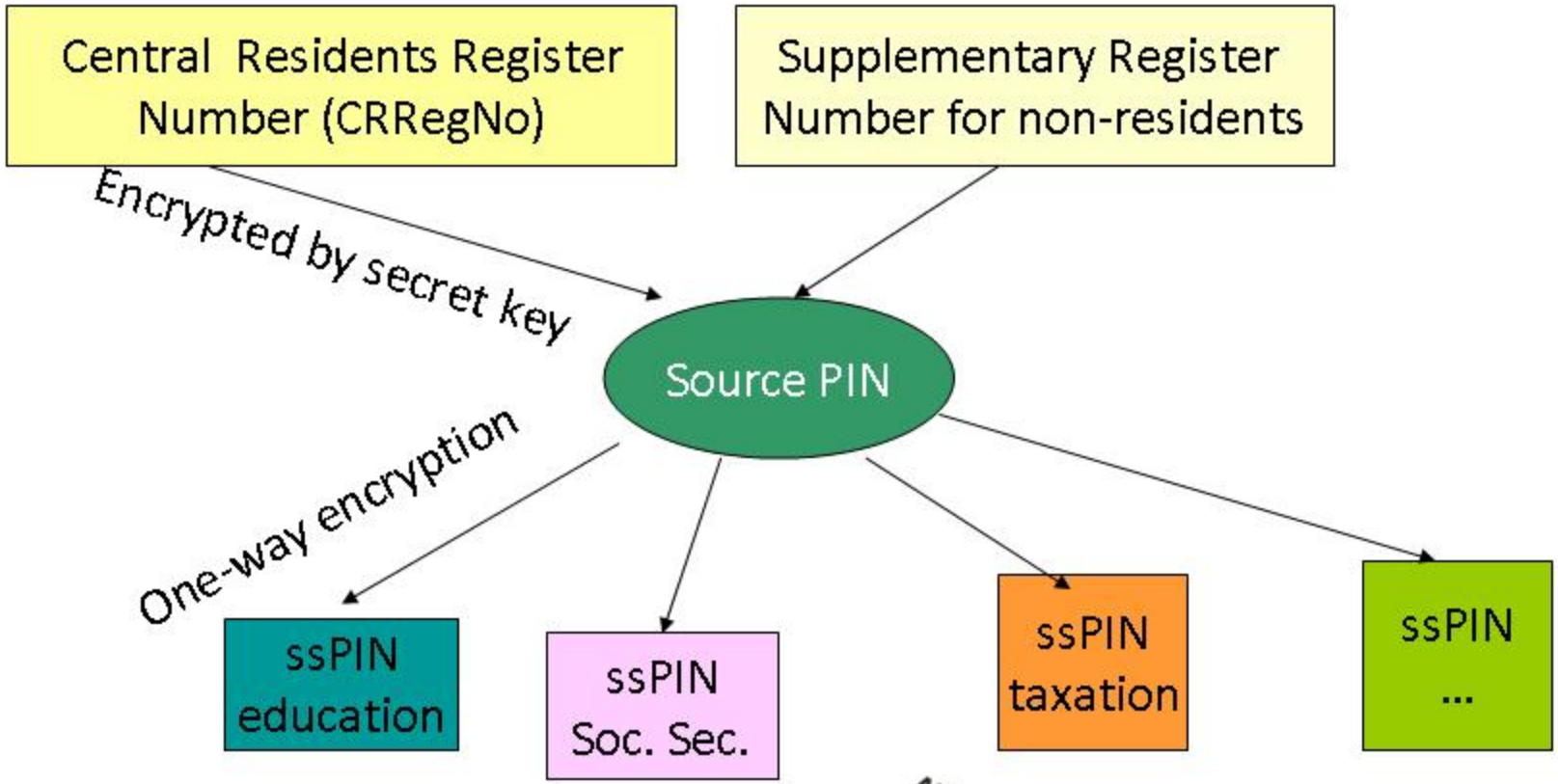
The SourcePIN represents the uniquely identified person; it is a **hidden number, stored only in the Citizen Card**, which is in the possession of the data subject

In government data bases only the appropriate sector specific PIN appears for identifying data subjects



Electronic identity of natural persons

DIGITAL AUSTRIA





Sector-specific personal identifiers

DIGITAL AUSTRIA

- SourcePINs can only be stored on a citizen card. **Additional identifiers are needed** that are allowed to be stored in databases during public authority processes.

- Public **administration is divided into 36 legally defined sectors** of State activity. (health, social insurance...)The eGovernment Act states that different identifiers must be used for each sector.

- For this reason, **a sector-specific personal identifier** (ssPIN) **is derived from the sourcePIN** by an irreversible cryptographic operation.



Austrian identification system

DIGITAL AUSTRIA

- Each governmental sector (i.e. different areas of the public administration) is assigned a specific alphanumeric code, the sector code
- For each of these sectors, the Austrian e-ID concept foresees a separate unique identifier, which is called the **Sector Specific PIN** (ssPIN)
- The Sector Specific PIN is derived from the person's **Source PIN** by applying a cryptographic one-way function (Hash-function)

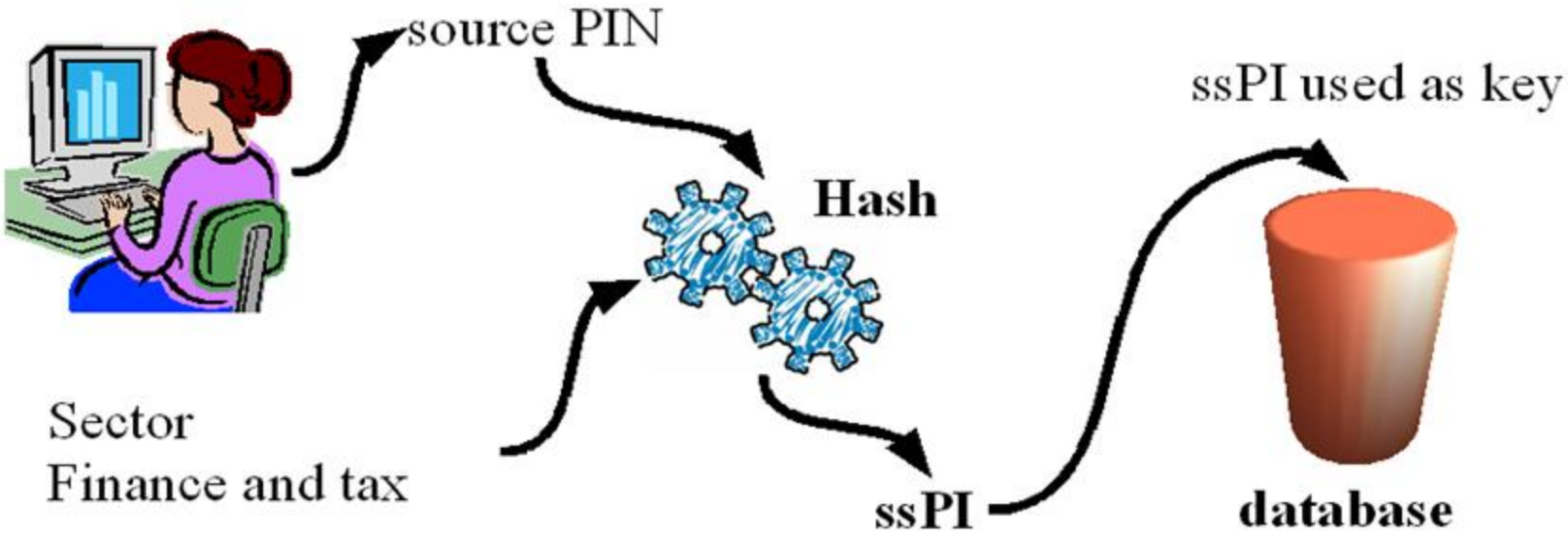


Each **ssPIN** is different and it is neither possible to calculate the underlying **sourcePIN** nor any other sector's **ssPIN** from a given **ssPIN**.

Data Protection / Privacy

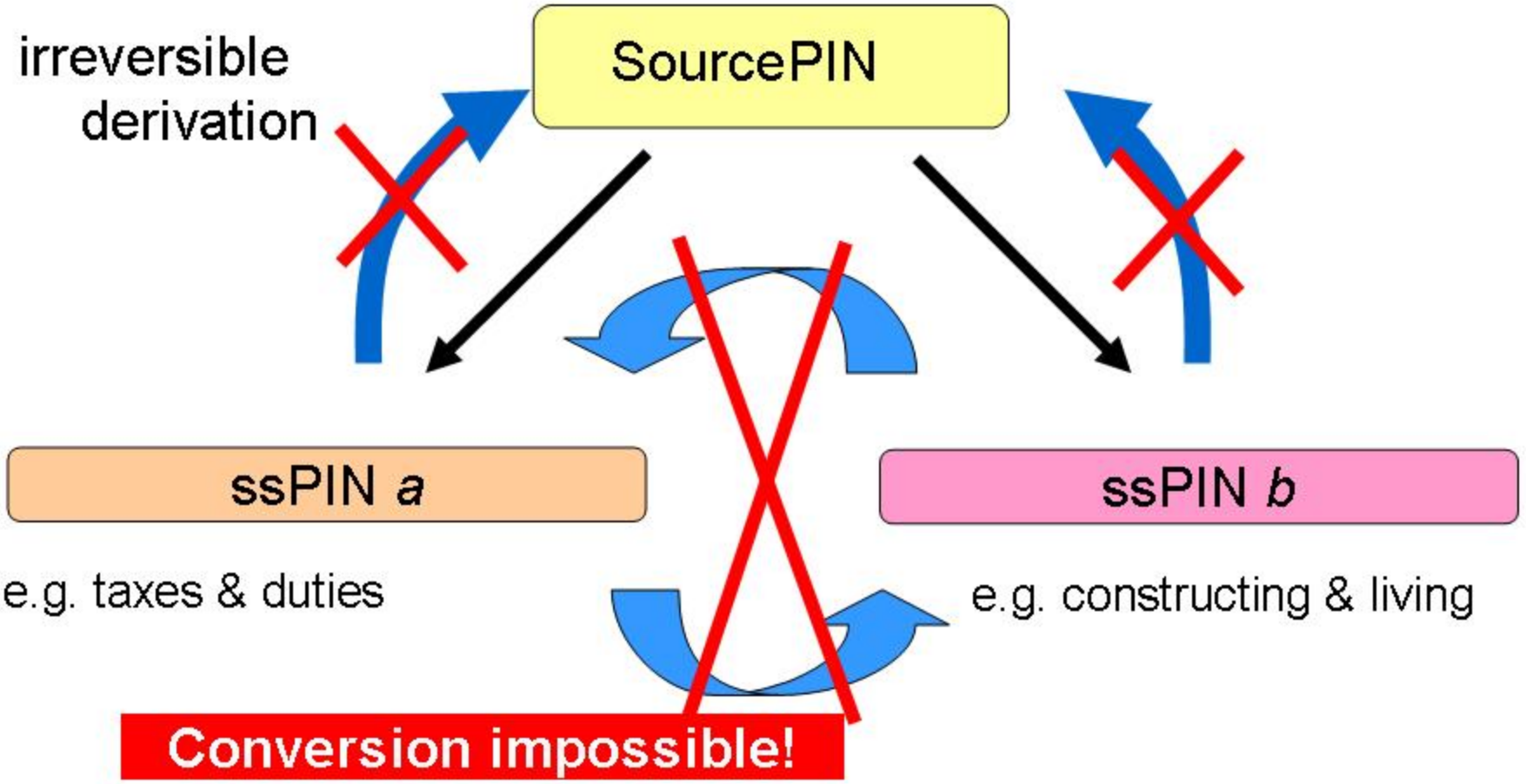
DIGITAL AUSTRIA

- Persons uniquely identified (source PIN)
- ID in applications (ssPIN)



ssPIN: Generation

DIGITAL AUSTRIA

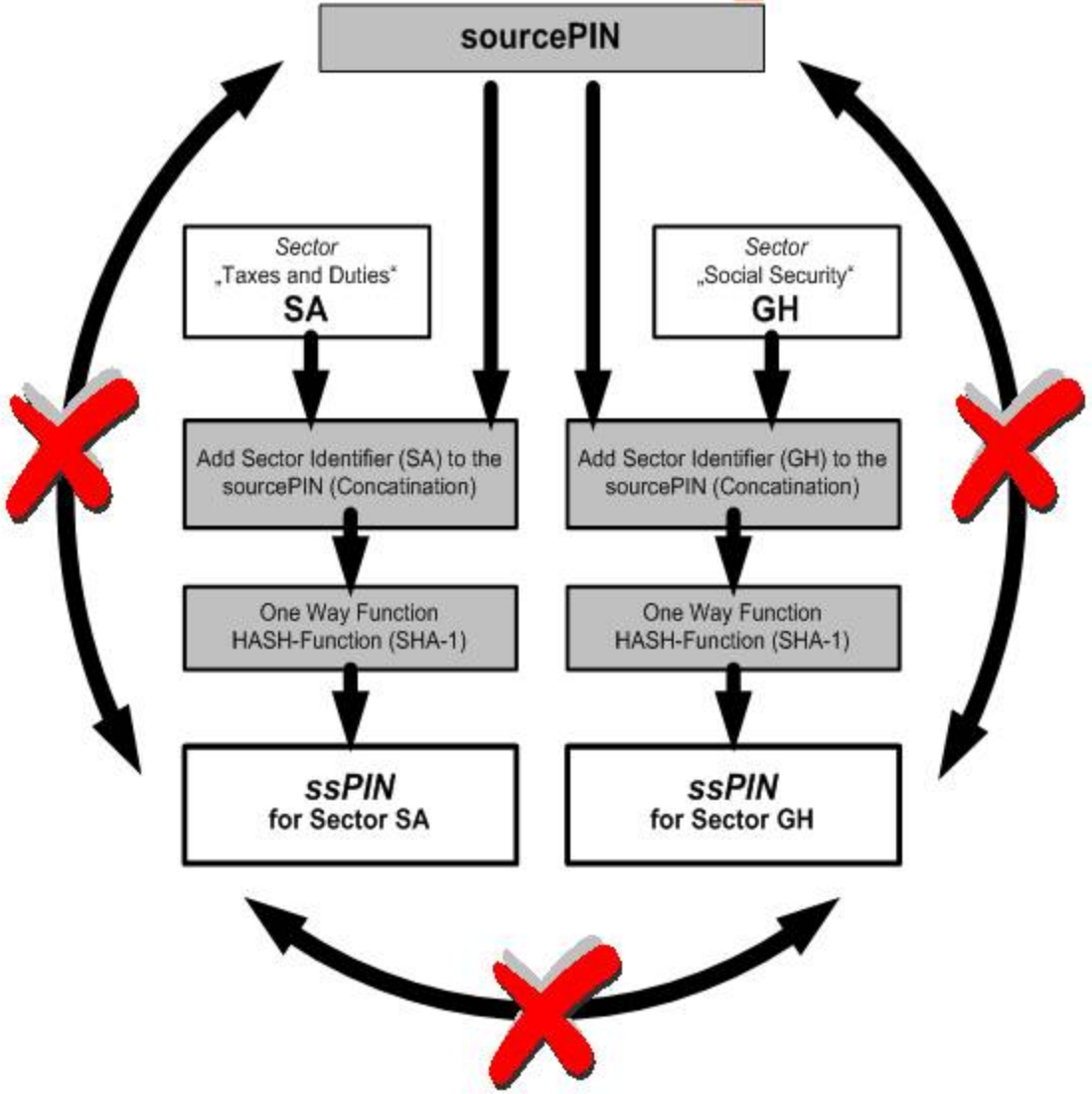


Austrian identification system

DIGITAL AUSTRIA

Break the

„Doom Loop"

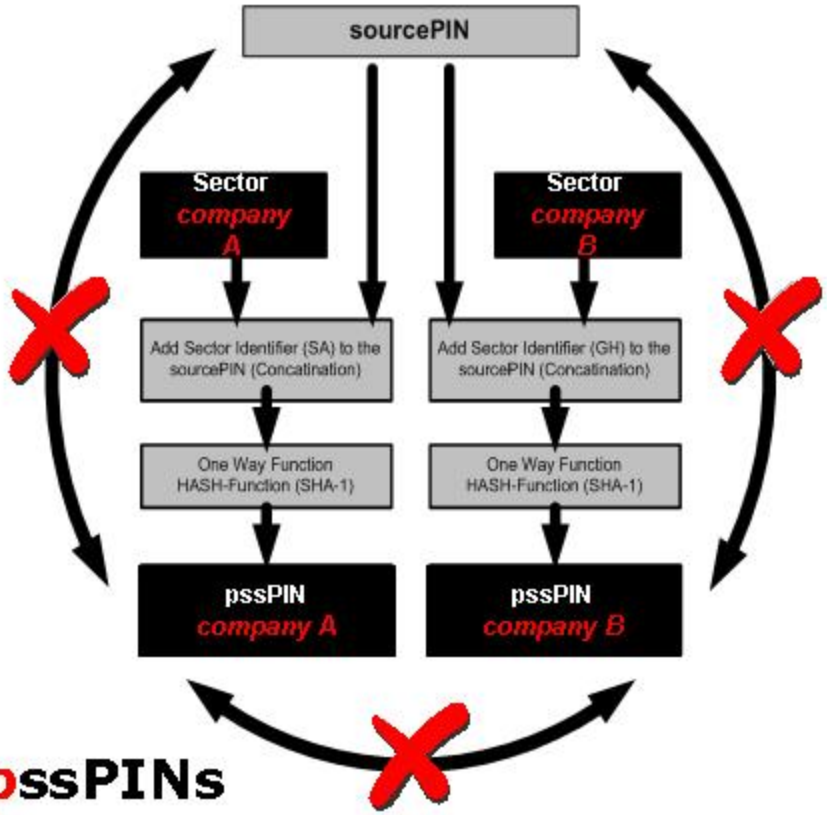


DSK

Austrian identification system

DIGITAL AUSTRIA

- The same approach is used for private sector applications!
  - private sector-specific personal identifier
- electronic communication in the private sector (e-Business)
  - sector code: controllers´ SourcePIN (instead of the identifier used for administration procedures)
- Controller may only store such **pssPINs**



Lassen Sie sich aktivieren!

DIGITALES ÖSTERREICH



Mit der Bürgerkarte zum elektronischen Ausweis

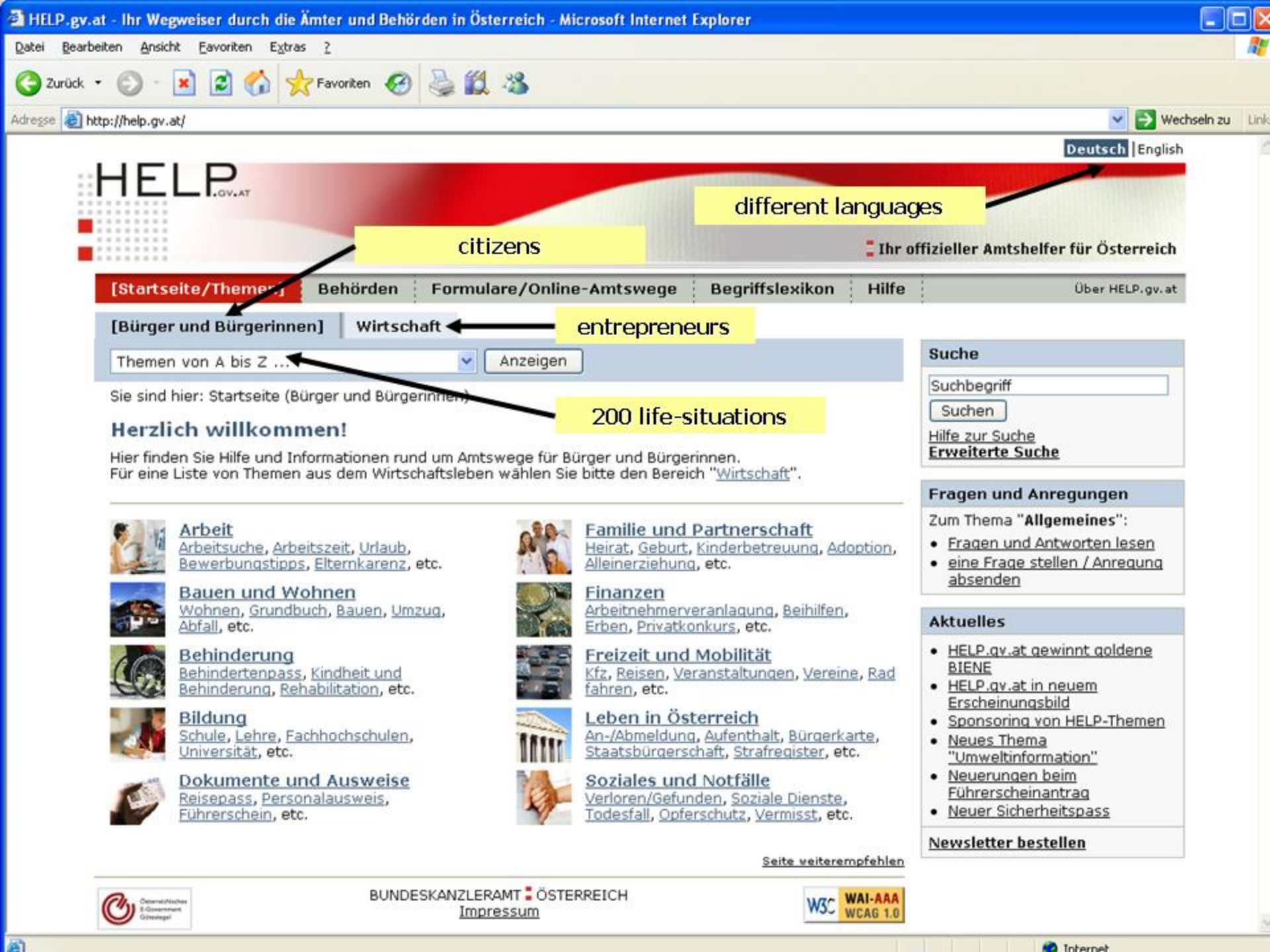
- Arbeitnehmerveranlagung
- Bauanzeige/Wohnbauförderung
- Staatsbürgerschaftsnachweis
- Wunschkennzeichen
- Einkommenssteuererklärung
- Gewerbeschein
- Heiratsurkunde
- Leistungsinformation Sozialversicherung



- Meldebestätigung
- Strafregisterbescheinigung
- Sozialversicherungsdaten
- Krankenversicherung
- Pensionskonto
- Kinderbetreuungsgeld
- Wahlkarte
- Rezeptgebührenkonto

DSK

AUSTRIA CONNECTED


HELP.gv.at - Ihr Wegweiser durch die Ämter und Behörden in Österreich - Microsoft Internet Explorer
Datei Bearbeiten Ansicht Favoriten Extras ?
Zurück
Favoriten
Adresse http://help.gv.at/
Wechseln zu
Deutsch | English
HELP.GV.AT
Ihr offizieller Amtshelfer für Österreich
different languages
citizens
entrepreneurs
200 life-situations
[Startseite/Themen]
Behörden
Formulare/Online-Amtswege
Begriffslexikon
Hilfe
Über HELP.gv.at
[Bürger und Bürgerinnen]
Wirtschaft
Themen von A bis Z ...
Anzeigen
Sie sind hier: Startseite (Bürger und Bürgerinnen)
Herzlich willkommen!
Hier finden Sie Hilfe und Informationen rund um Amtswege für Bürger und Bürgerinnen.
Für eine Liste von Themen aus dem Wirtschaftsleben wählen Sie bitte den Bereich "Wirtschaft".
Arbeit
Arbeitsuche, Arbeitszeit, Urlaub, Bewerbungstipps, Elternkarenz, etc.
Bauen und Wohnen
Wohnen, Grundbuch, Bauen, Umzug, Abfall, etc.
Behinderung
Behindertenpass, Kindheit und Behinderung, Rehabilitation, etc.
Bildung
Schule, Lehre, Fachhochschulen, Universität, etc.
Dokumente und Ausweise
Reisepass, Personalausweis, Führerschein, etc.
Familie und Partnerschaft
Heirat, Geburt, Kinderbetreuung, Adoption, Alleinerziehung, etc.
Finanzen
Arbeitnehmerveranlagung, Beihilfen, Erben, Privatkonkurs, etc.
Freizeit und Mobilität
Kfz, Reisen, Veranstaltungen, Vereine, Rad fahren, etc.
Leben in Österreich
An-/Abmeldung, Aufenthalt, Bürgerkarte, Staatsbürgerschaft, Strafregister, etc.
Soziales und Notfälle
Verloren/Gefunden, Soziale Dienste, Todesfall, Opferschutz, Vermisst, etc.
Seite weiterempfehlen
Suche
Suchbegriff
Suchen
Hilfe zur Suche
Erweiterte Suche
Fragen und Anregungen
Zum Thema "Allgemeines":
Fragen und Antworten lesen
eine Frage stellen / Anregung absenden
Aktuelles
HELP.gv.at gewinnt goldene BIENE
HELP.gv.at in neuem Erscheinungsbild
Sponsoring von HELP-Themen
Neues Thema "Umweltinformation"
Neuerungen beim Führerscheinantrag
Neuer Sicherheitspass
Newsletter bestellen
BUNDESKANZLERAMT ÖSTERREICH
Impressum
WAI-AAA WCAG 1.0
Internet

Strengthening the Rights of Citizens





History

DIGITAL AUSTRIA

- The Austrian DP-Commission exists since 1980
- Was originally only responsible for the public sector
- Since 2000, when the Directive 95/46 was implemented,
  - formal legal decisions concerning alleged data protection infringements in the public sector
  - formal legal decisions for complaints concerning access for information in the public as well as in the private sector
  - Ombudsman procedures for public and private sector

DSK



Organisation

DIGITAL AUSTRIA

- Legal basis: Data Protection Act 2000, containing a
  - **constitutional provision**, which renders the
  - **Data Protection Commission (DPC) independent**
- The DPC is a federal authority
- The DPC has two organs
  - The **Collegium**, consisting of 6 members
    - In charge of formal legal decisions
  - The **Executive member**
    - in charge of ombudsman-functions and
    - Organisation
- The Federal Chancellery is responsible for furnishing personnel, accommodation, technical infrastructure etc.

DSK



The collegium

DIGITAL AUSTRIA

- The Collegium is a **tribunal,** constitutionally independent and **presided by a judge**
- The Collegium consists of 6 members, who are appointed by the president of the Republic
- Due to the fact that Austria is a federal state, two members of the Commission are appointed on grounds of **proposals made by the Länder**
- Due to the fact that the DPC is also supervising the private sector two members are appointed on grounds of proposals made by the **Chamber of employees** resp. the **Chamber of employers**
- One member is proposed by the federal government to the federal president

DSK

AUSTRIA CONNECTED

The executive member

DIGITAL AUSTRIA

- Responsible for the functioning of the commission and for taking care of daily business
- Head of the staff
- Competences under „daily business" is further defined in the rules of procedure of the DPC which is enacted by the DPC itself
    - Ombudsman-functions
    - EU- and international affairs
    - Register of data processing
    - Head of the staff of the DPC
    - **E-Government-Authority**

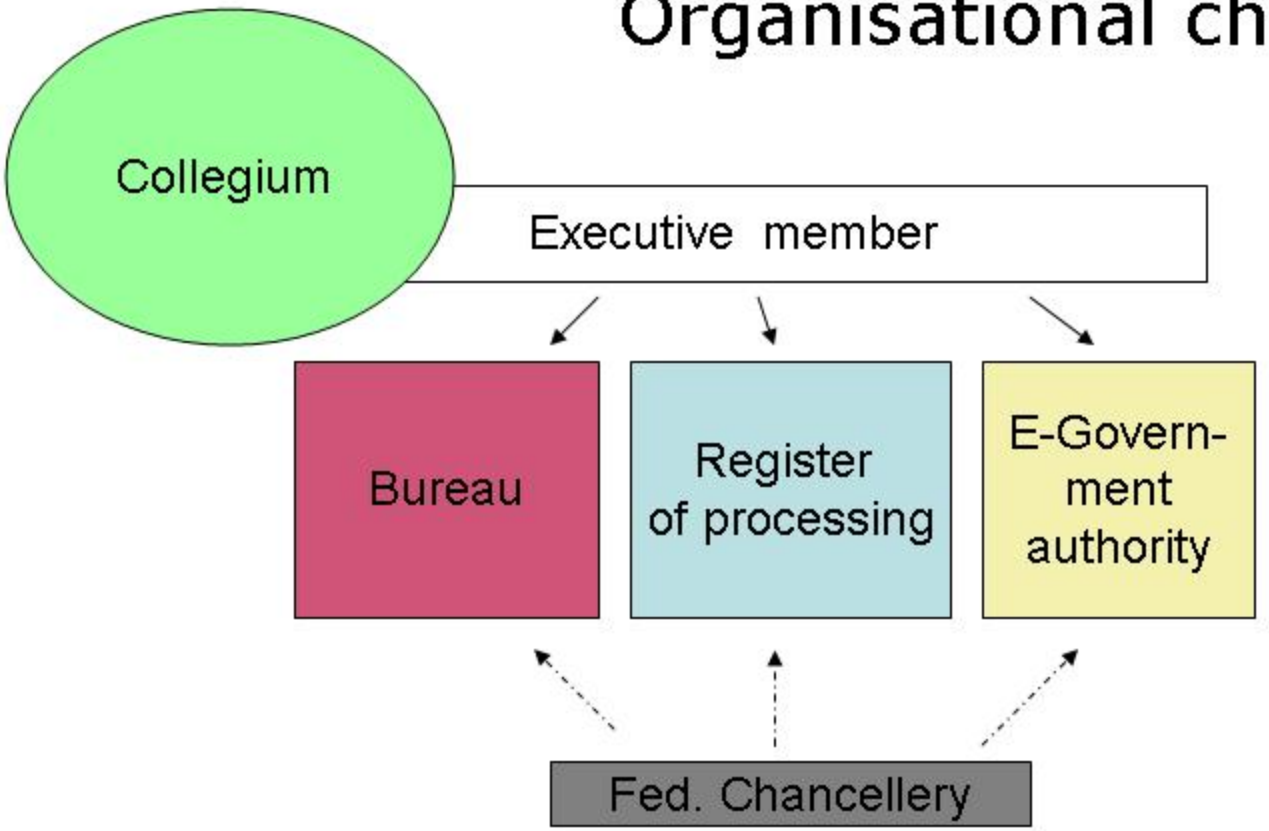
DSK



Organisation

DIGITAL AUSTRIA

Organisational chart



AUSTRIA CONNECTED

DSK

Nature of procedures

DIGITAL AUSTRIA

- Formal individual complaints (§ 31 DSG 2000): about
  - infringement of secrecy
  - Infringement of access
  - Infringement of rectification or deletion

- Ombudsman procedures (§ 30 DSG 2000)
- License for int. data transfer (§ 13 DSG 2000)
- Decisions about registration
- Legal advice to citizens
- Etc.

DSK



E-Government register authority

DIGITAL AUSTRIA

- § 7 E-Gov-Act: Data Protection Commission is the e-government Register Authority

  ➔ these functions are performed with the same independence as all the other functions of the DPA

- DPC = Controller of the special e-gov registers:
  - Supplementary Register for natural persons
  - Supplementary Register for other entities

- DPC = Regulator concerning the use of all e-gov-registers for the purpose of creating e-identities

DSK



Service processors

DIGITAL AUSTRIA

- The e-government "registers" are run by the Ministry of the Interior resp. the Ministry of Finance in different roles, e.g.
  - The CRR by the Ministry of the Interior (MoI)
    - as Controller concerning matters of lawful residence
    - As service provider for the DPA concerning e-gov
  - The Company Register
    - As service provider for the Ministry of Justice concerning commercial law matters
    - As service provider for the DPA concerning e-gov
  - The Supplementary Registers
    - **Only** as service providers for the DPA in e-gov matters



Regulating e-identity „traffic"

DIGITAL AUSTRIA

- During registration in the Data Processing Register the relevant sector for a specific data processing is determined and published in the register

- Equipment of a data processing with fPINs needs a special order by DPC for the MoI as service provider in charge of the CRR and the supplementary register for natural persons



- Contact:

Marcus Hild
Data Protection Commission
Hohenstaufengasse 3
A-1010 Vienna
Tel.: 01/53115/2887
Fax: 01/53109/2887
marcus.hild@dsk.gv.at

eGovernment -

it's a journey not a destination!



DIGITAL AUSTRIA

Many thanks for your attention!



http://www.stammzahlenregister.gv.at
http://www.digitales.oesterreich.gv.at

