

# eID Interoperability for PEGS

## NATIONAL PROFILE POLAND

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## **Executive summary**

The project eID Interoperability for PEGS aims to propose a solution to the legal, technical and organisational issues related to the creation of an interoperable Pan-European identity management infrastructure. The EU Member States, Candidate Countries and EEA Countries are introducing more sophisticated ways to manage identities in the eGovernment area. Different member states are implementing different structures as their identity management solution. The main challenge for the eID Interoperability for PEGS project is to propose a general architecture that, while taking into account the existence of different models, is able to cope with them by obtaining the final goal of interoperability.

The project should conclude with several different proposals how to build interoperability without affecting member states' own existing infrastructures.

This document describes the current situation regarding the use of electronic authentication means in Polish eGovernment applications.



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## 1 Documents

## 1.1 Applicable Documents

| [AD1] | Framework Contract ENTR/05/58-SECURITY |
|-------|--|

## 1.2 Reference Documents

| [RD1] | eGovernment in the Member States of the European Union – 5th Edition – May 2006   |  |  |  |  |  |  |
|-------|---|--|--|--|--|--|--|
|       | http://ec.europa.eu/idabc/servlets/Doc?id=24769   |  |  |  |  |  |  |
| [RD2] | European Electronic Signatures Study  |  |  |  |  |  |  |
|       | http://www.law.kuleuven.ac.be/icri/itl/es_archive.php?where=itl   |  |  |  |  |  |  |
| [RD3] | DIRECTIVE 1999/93/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 13 December 1999 on a Community framework for electronic signatures <a href="http://europa.eu.int/information-society/eeurope/i2010/docs/esignatures/esignatures-es-en.pdf">http://europa.eu.int/information-society/eeurope/i2010/docs/esignatures/esignatures-es-en.pdf</a> |  |  |  |  |  |  |
| [RD4] | Decision 2003/511/EC of 14 July 2003 on the publication of reference numbers of generally recognised standards for electronic signature products in accordance with Directive 1999/93/EC of the European Parliament and of the Council, OJ L 175, 15.7.2003, p.45   |  |  |  |  |  |  |
|       | http://europa.eu.int/eur-<br>lex/pri/en/oj/dat/2003/l_175/l_17520030715en00450046.pdf   |  |  |  |  |  |  |
| [RD5] | DIRECTIVE 2004/18/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 on the coordination of procedures for the award of public works contracts, public supply contracts and public service contracts   |  |  |  |  |  |  |
|       | http://eur-<br>lex.europa.eu/LexUriServ/site/en/oj/2004/I_134/I_13420040430en01140240.pdf   |  |  |  |  |  |  |
| [RD6] | IDABC Work Programme Third Revision   |  |  |  |  |  |  |
|       | http://ec.europa.eu/idabc/servlets/Doc?id=25302   |  |  |  |  |  |  |
| [RD7] | DIRECTIVE 2004/17/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 31 March 2004 coordinating the procurement procedures of entities operating in the water, energy, transport and postal services sectors   |  |  |  |  |  |  |
|       | http://europa.eu.int/eur-<br>lex/pri/en/oj/dat/2004/l_134/l_13420040430en00010113.pdf   |  |  |  |  |  |  |



## 2 Glossary

#### 2.1 Definitions

In the course of this report, a number of key notions are frequently referred to. To avoid any ambiguity, the following definitions apply to these notions and should also be used by the correspondents.

- Entity: anyone or anything that is characterised through the measurement of its attributes in an eIDM system. This includes natural persons, legal persons and associations without legal personality; it includes both nationals and non-nationals of any given country.
- o eIDM system: the organisational and technical infrastructure used for the definition, designation and administration of identity attributes of entities. This Profile will only elaborate on eIDM systems that are considered a key part of the national eIDM strategy. Decentralised solutions (state/region/province/commune...) can be included in the scope of this Profile if they are considered a key part of the national eIDM strategy.
- eIDM token (or 'token'): any hardware or software or combination thereof that contains credentials, i.e. information attesting to the integrity of identity attributes. Examples include smart cards/USB sticks/cell phones containing PKI certificates, ...
- o Authentication<sup>1</sup>: the corroboration of the claimed identity of an entity and a set of its observed attributes. (i.e. the notion is used as a synonym of "entity authentication").
- o *Authorisation*: the process of determining, by evaluation of applicable permissions, whether an authenticated entity is allowed to have access to a particular resource.
- Unique identifiers: an attribute or a set of attributes of an entity which uniquely identifies the entity within a certain context. Examples may include national numbers, certificate numbers, etc.
- Official registers: data collections held and maintained by public authorities, in which the identity attributes of a clearly defined subset of entities is managed, and to which a particular legal of factual trust is attached (i.e. which are generally assumed to be correct). This includes National Registers, tax registers, company registers, etc.

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<sup>&</sup>lt;sup>1</sup> For the purposes of this Profile, the notion of authentication is considered to be synonymous with 'entity authentication', as opposed to 'data authentication'. The notion of 'identification should be avoided to avoid confusion.



- o eGovernment application: any interactive public service using electronic means which is offered entirely or partially by or on the authority of a public administration, for the mutual benefit of the end user (which may include citizens, legal persons and/or other administrations) and the public administration. Any form of electronic service (including stand-alone software, web applications, and proprietary interfaces offered locally (e.g. at a local office counter using an electronic device)) can be considered an eGovernment application, provided that a certain degree of interactivity is included. Interactivity requires that a transaction between the parties must be involved; one-way communication by a public administration (such as the publication of standardised forms on a website) does not suffice.
- eSignature: data in electronic form which are attached to or logically associated with other electronic data and which serve as a method of authentication with regard to this data. Note that this also includes non-PKI solutions.
- o Advanced electronic signature: an electronic signature which meets the following requirements:
  - (a) it is uniquely linked to the signatory;
  - (b) it is capable of identifying the signatory;
  - (c) it is created using means that the signatory can maintain under his sole control; and
  - (d) it is linked to the data to which it relates in such a manner that any subsequent change of the data is detectable:

Again, this definition may cover non-PKI solutions.

- Qualified electronic signature: advanced electronic signatures which are based on a qualified certificate and which are created by a secure-signature-creation device, as defined in the eSignatures Directive<sup>2</sup>.
- Validation: the corroboration of whether an eSignature was valid at the time of signing.

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<sup>&</sup>lt;sup>2</sup> See http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:31999L0093:EN:HTML



#### 2.2 Acronyms

A2A ...... Administration to Administration A2B ...... Administration to Businesses A2C ...... Administration to Citizens CA..... Certification Authority CRL..... Certificate Revocation Lists CSP...... Certificate Service Provider eID ...... Electronic Identity eIDM..... Electronic Identity Management IAM...... Identity and Authentication Management IDM ...... Identity Management OCSP...... Online Certificate Status Protocol OTP...... One-Time Password PKCS ...... Public-Key Cryptography Standards PKI...... Public Key Infrastructure SA...... Supervision Authority SOAP...... Simple Object Access Protocol SCVP ...... Server-based Certificate Validation Protocol SSCD ...... Secure Signature Creation Device USB...... Universal Serial Bus TTP...... Trusted Third Party XAdES ...... XML Advanced Electronic Signature XML ...... eXtensible Markup Language XML-DSIG...... XML Digital Signature



#### 3 Introduction

#### 3.1 General status and most significant eIDM systems

There is no nationwide eIDM system in Poland (state at the end of March, 2007). According to the State Informatisation Plan for years 2007-2010 (Plan Informatyzacji Pa• stwa na lata 2007-2010<sup>3</sup>) one of the main government tasks is an implementation of a multipurpose electronic identity document system supporting biometric authentication (a biometric ID), compliant with EU national ID concepts (eID)<sup>4</sup>. This implementation is the part of the pl.ID (Polish ID card) task to be implemented in 2008-2013.

The State Informatisation Plan is published on the basis of Art. 6, pos. 1 of the Act on activity informatisation of entities performing public tasks (from February, 17th, 2005; Law Diaries - Dz. U. no 64/2005, pos. 565, Dz. U. No 12/2006, pos.65 and Dz. U. No 73/2006, pos. 501)

The national pl.ID system, to be implemented in 2008-2013, will realise the national eIDM strategy. One of the main goals of this project is to integrate the pl.ID system with public reference registers, e.g. with the currently implemented PESEL2 system. The PESEL2 system registers personal and address data of Polish citizens and other persons with a PESEL number assigned.

The PESEL2 system is intended to create Internet services for confirmation, verification and accessibility of the data from population registries, identity cards and Legal Status Offices (*Urz*• *dy Stanu Cywilnego*). Therefore it will be possible to identify Polish citizens effectively and in a secure manner. The authenticity of documents used in commercial and financial operations and in contacts with state authorities will be verified as well. In the case of this system the essential issue will be the complete rebuilding of the existing PESEL<sup>5</sup> register containing PESEL numbers assigned to every authorized natural person<sup>6</sup>.

The resulting PESEL2 system will be integrated with the register of *Tax Identification Numbers* NIP (*Numer Identyfikacji Podatkowej*). This register is obligatory for natural persons (entrepreneurs) and legal persons; it concerns also other subjects who are obliged to pay taxes on the basis of separate law regulations. It includes such cases where the beneficiary is the Treasury or local communities as well. Additionally, the evidence is obligatory for social and health insurance contribution payers.

PESEL numbers and NIP numbers are identifiers commonly used in public administration systems, banking, etc.

Basic documents confirming the identity of natural and legal persons are paper documents at present. Usually those documents contain an identifier printed on their blank forms with a serial number and an issuer name. For example PESEL numbers are placed on the back side of currently used plastic identity cards and drivers licences, and on the front side of pensioner certificates. The PESEL number is also the basis for the access to health services and social support, etc.

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The Regulation of Ministry Council from March 28<sup>th</sup>, 2007 *concerning State Informatisation Plan* (Low Diary – *Dziennik Ustaw* – from April 6<sup>th</sup>, Dz. U. no 61/2007, pos. 415), http://isip.sejm.gov.pl/prawo/index.html

European Citizen Card

PESEL is an acronym from "Powszechny Elektroniczny System Ewidencji Ludno•ci" (Common Electronic System for Citizens Evidence)). The system has been established in 1979 by state authorities on the base of the Act on population registry and identity cards, from April, 10<sup>th</sup>, 1974 (Law Diary - Dz. U. no 87/2001, pos. 960, with later amendments).

More information could be found in the report European eGovernment Services (IDABC) - Preliminary Study on Mutual Recognition of eSignatures for eGovernment applications - National Profile Poland, 2006

Pensioner certificates are issued by Social Insurance Organisation (ZUS - Zak•ad Ubezpiecze• Spo•ecznych)



Any document other than the personal identification document is only an auxiliary one. It confirms the owner rights for some specific services or to perform specific activities, but it has be presented together with the basic personal identification document.

The private sector issues certificates (either software certificates or smart card based), which, when associated with a PESEL number or a NIP number, can be used as identity confirmation media. For example it is the case of public key certificates issued with smart cards by qualified entities providing PKI certification services on the base of the Act on an electronic signature from September, 18<sup>th</sup>, 2001.

The only one serious trial to use eID in the form of smart cards is the local Electronic Card for Health Insurance EKUZ (*Elektroniczna Karta Ubezpieczenia Zdrowotnego*) issued from 1999 by the Silesian Voivodeship Department of National Health Fund (• I• ski Oddzia• Wojewódzkiego Narodowego Funduszu Zdrowia<sup>8</sup>). EKUZ itself confirms the fact the patient is insured and has the right to obtain an access to free of costs health services. According to the plans of National Health Fund all other Departments of National Health Fund should issue the similar electronic cards for authorized citizens from their areas of responsibility. However it requires the revision of the Act on public health services financing from August, 27<sup>th</sup>, 2004 (Law Diary - Dz.U. no 210/2004, pos. 2135).

Until the end of 2006 above 4 millions EKUZ cards has been issued (the only users are patients of Silesian Voivodeship Department of National Health Fund). The expansion of the system to the statewide scale could spread this amount to 30 millions. From the technical point of view EKUZ is a memory card with 1 kB of non-volatile memory and a simple security mechanism based on PIN, but some additional security mechanisms have been implemented to make attacks on the system non-trivial.

### 3.2 Background and traditional identity resources

#### 3.2.1 eGovernment structure

In Poland the minister designated for IT implementation is responsible for the development of eGovernment applications (the case of vertical integration), and the responsibility for sector-specific IT solutions (the case of horizontal integration) is delegated to the minister of an appropriate government administration department. This responsibility splitting is reflected in the eGovernment sector and intersector IT projects developed in the *State Informatisation Plan for years* 2007-2010.

Even if during the last few years some eGovernment applications have been rolled out (e.g. Electronic transfer of insurance documents by payers to the Social Insurance Organisation (ZUS)), eGovernment structure building in Poland is still pending. This is the result of delays in an informatisation of public administration entities. No complex projects from the government's *Polish Republic Informatisation Strategy for 2004-2006 ePolska* have been finalized; many of them are seriously delayed. There are the following examples<sup>9</sup>:

- (a) Gateway of Poland (Wrota Polski): an integrated internet platform for administration primary due date has been predicted for the first half of 2005;
- (b) e-PUAP: an electronic platform for public administration services implementation in 2006 -2008;
- (c) STAP: IT network for public administration due date at the end of 2007;

http://www.nfz-katowice.pl/index.php?&k0=3\_ubezpieczony&k1=6\_karta\_ubezpieczenia\_zdrowotnego

<sup>&</sup>lt;sup>9</sup> The report European eGovernment Services (IDABC) - Preliminary Study on Mutual Recognition of eSignatures for eGovernment applications - National Profile Poland, 2006



- (d) e-Declarations: electronic tax returns for business due date before the half of 2008;
- (e) CEPiK: Central Register of Vehicles and Drivers the project still will be continued in 2007.

Stated above intentions for eGoverment systems development are included in the *State Informatisation Plan for years 2007-2010*, which covers central sector and inter-sector IT projects. One of the most important inter-sector projects is eIDM system which should be implemented in 2008-2013 (it is called pl.ID in the document cited). The authority responsible for it is Home Affairs Ministry (MSWiA). That Ministry will be also responsible for the coordination and supervision of the whole issuance and usage of eID in eGovernment systems.

System projects proposed in the *State Informatisation Plan for years 2007-2010* should ensure the complete coordination of those systems at the regional and local level, and at the central level as well. That kind of interoperability should be obtained through data sharing; it concerns the data stored in public registers and trusted databases managed by state authorities, and therefore being single authentic source of the data concerning natural and legal persons.

Common usage of eIDM systems for authentication and authorisation purposes in different eGovernment systems (based on the data from "authentic sources") will be possible only after a successful implementation of the planned systems.

Due to the lack of a complete implementation of the "Gateway of Poland", ePUAP, and because of gaps in common teleinformatic infrastructure, local public and community administration offices develop local informative portals only. Mainly it is the way to obtain C2A communication, very rarely it becomes the implementation of an A2C communication idea.

At the regional and local levels internet Public Information Bulletins (*Biuletyny Informacji Publicznej*-BIP)<sup>10</sup> are rapidly developed. BIP is intended to transfer to citizens via WWW services any information concerning the State (its structures, procedures, finances, properties, etc.). It is an information enterprise mainly. Public administration subjects treat the role of BIPs differently. Nevertheless it is an important means in contacts with public administration, especially when information made accessible via BIPs does not concern administrative issues only, but represents matters searched by citizens frequently, such as public transport time-tables, education, health services.

#### 3.2.2 National eGovernment cooperation and coordination

The building of an electronic platform for public administration services (*Elektroniczna Platforma Us•ug Administracji Publicznej* - ePUAP) has created great expectations of public administration subjects, including government administration ones. The basic task of this platform is to make accessible electronic services for public administration subjects, especially for small ones, who have no possibilities or needs to develop their own huge and separated systems. The ePUAP project includes also services requiring the usage of an electronic signature, especially electronic delivery boxes. The end of that project is planned for Q2 of 2008.

The Home Affairs Ministry (MSWiA) is competent for the coordination of eGovernment projects and this concerns mainly sector projects developed at the national level. The minister of MSWiA is designated for IT implementation. This means, according to the Act on informatisation of entities activities for public tasks performance (Law Diary - Dz.U. 2002 no 169 pos. 1385, with later amendments), that he is responsible for inter-sector projects coordination as well.

Regional and local eGovernment initiatives are lead and coordinated by voivodeship authorities and local authorities (mostly municipalities) appropriately.

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Rules for BIP functionality are defined in the act on public information accessibility (from September, 6<sup>th</sup>, 2001; Law Diary - Dz.U. 2001, no 112, pos. 1198 with later amendments).



The Home Affairs Ministry (MSWiA) has to implement and coordinate the pl.ID system (eIDM system).

#### 3.2.3 Traditional identity resources

For the identification of citizens in Polish eGovernment type systems the PESEL number is used, and the mandatory ID-1 plastic personal identification card<sup>11</sup> (in the case of taxpayers the NIP number is used as well).

After the 1st World War – in the 20s and 30s of the XXth century – the name "dowód osobisty" (an identity card) was used for the document necessary in the case of citizen movements outside the Polish state territory. It was the passport de facto (even if the title "dowód osobisty" was printed on the cover, it was named "the passport" inside). It was also used as the document for temporary stay confirmations (e.g. in hotels, etc.).

The possibility to obtain an identity card was introduced with the provision of the President of Poland, on March 16th 1928. The document was issued at the request of any interested person (there was no obligation to do it). Only during the German occupation in World War II this provision was used by Germans to oblige Polish citizens to possess those identity cards (and to present it on demand). That obligation has been continued after the war.

The identity card confirms the identity of a person, his Polish citizenship, and his right to cross the borders inside EU countries area. This document, apart from some basic personal data (given names, surname, parents' given names, date and place of birth, characteristic features) and face-photo, includes some fields with another data, e.g. the PESEL number and the document's validity period. Any Polish citizen living in Poland is obliged to possess a identity card<sup>12</sup>:

- 1. when he/she is 18 years old, or older,
- 2. when he/she is 15 years old and is officially employed, or does not live together with persons which have the legal responsibility for him/her.

Polish citizens can apply for a passport. Passports are also legal forms of identification documents and in some circumstances they are the only ones enabling the owner to cross the borders of the state (in some countries visas are required additionally).

From January 1<sup>st</sup>, 2006, the new passport template was introduced; the Polish membership in EU is marked in this case. From August 28<sup>th</sup>, 2006, passports with biometric data are issued for Polish citizens<sup>13</sup>.

Every Polish citizen can possess two identity documents: a identity card ("dowód osobisty", mandatory for the ones over 18 years old) and a passport (optional, issued for citizen's request), necessary otside of Poland and EU areas.

The issuance of identity cards ("dowody osobiste") is regulated by the Act on population registry and identity cards, from April, 10<sup>th</sup>, 1974 – an uniform text (Law Diary - Dz.U. no 87/2001, pos. 960, with later amendments), the regulation of Ministry Council (Rada Ministrów) on identity card template and procedures of issuance, exchange, return and loss, from November, 21th, 2000 (Law Diary - Dz.U. no 112, pos.1182, with later amendments) and the regulation of Ministry Council on fees associated with identity card issuance, from November, 30<sup>th</sup>, 2000 (Law Diary - Dz.U. no 105, pos.1110, with later amendments).

The issuance of passports is regulated by the Act on passport documents, from July, 13<sup>th</sup>, 2006 (Law Diary - Dz.U. No 143, pos. 1027, from July, 13<sup>th</sup>, 2006), the regulation of Home Affairs Minister on passport documents and procedures used in the case of their forgeries, faults or losses, from August, 24<sup>th</sup>, 2006 (Law Diary - Dz. U. no 153, pos. 1090, from August, 28<sup>th</sup>, 2006) and the regulation of Ministry Council on fees associated with passports issuance and their return, from August, 25<sup>th</sup>, 2006 (Law Diary - Dz. U. no 153, pos. 1091, from August, 28<sup>th</sup>, 2006).



Every Polish citizen is provided obligatorily with two distinctive identifiers: the PESEL number (an acronym from *Powszechny Elektroniczny System Ewidencji Ludno•ci* – General Electronic System for Citizens Evidence) and the NIP (*Numer Identyfikacji Podatkowej - Tax Identification Number*).

The PESEL number is assigned by the ministry competent for public administration matters in the way of material-technical act. The legal foundation for the PESEL numbers assignment is the Act on citizens evidence and identity documents, from April 10<sup>th</sup>, 1974 (Art.46). Local public authorities are obliged to maintain citizens evidence in the form of communities evidence registers (Law Diary - Dz. U. z 2001,r. no 87 pos. 960 and later amendments).

#### A PESEL number is assigned to:

- (a) Polish citizens with status of permanent stay or temporary stay for a time period greater than 2 months, and applicants for issuance of an identity document as well;
- (b) foreigners with status of permanent stay or temporary stay for a time period greater than 2 months.
- (c) Polish citizens and foreigners who are covered by social or health insurance in Poland, excluding persons stated in pts. (a) and (b),
- (d) Polish citizens living abroad and applying for Polish passport issuance.

PESEL numbers are stored in PESEL registers. PESEL numbers are not unique (incidents occurred in the past when different persons have been assigned the same PESEL number). Among others this was the reason why MSWiA has started PESEL2 project for a new public registers implementation.

The Tax Identification Number (NIP) is used for entities paying taxes in Poland. It is assigned by tax authorities according to regulations stated in the act on taxpayers evidence and identification form October, 13<sup>th</sup>, 1995 (uniform text: Law Diary - Dz. U. 2004, no 269, pos. 2681).

Obligatory evidence is relevant for individuals and legally registered entities; it concerns also other subjects who are obliged to pay taxes on the basis of separate law regulations. It includes the cases where the beneficiary is the Treasury and the local communities as well. Additionally the evidence is obligatory for social and health insurance contribution payers.

The NIP assignment is performed by way of administrative decision, which the head of appropriate tax authority is responsible for.

Natural persons without the Polish nationality who have been mandated to remain within Polish borders receive so called "cards for temporary or permanent residence". Neutral persons without the Polish nationality (waiting for the registration, e.g. refugees) receive so called "temporary confirmations of foreigner's identity".

The basic legal act concerning foreigners is the Act on foreigners from June 25<sup>th</sup>, 1997 (Law Diary-Dz.U. no 114, pos. 739, with later amendments). The rules and conditions of an entrance at the Polish territory, a stay inside and a transit across it are stated there. It was the basis for the regulation of the Home Affairs Minister on detailed rules, procedures and documents templates for matters concerning foreigners, from December 23<sup>th</sup>, 1997 (Law Diary - Dz.U. no 1/1998, pos. 1). The Act mentioned above defines and regulates the issuance of "temporary or permanent residence cards" and "temporary confirmations of foreigner's identity".

A temporary residence card entitles persons to stay within the territory of Poland for more than 1 year. The data placed on the card are: date of issuance and validity period, serial number, registration number relevant to entry number in the register of application forms for temporary living approvement and appropriate authorities' decisions concerning the matter, PESEL number and other. The first card is issued for 2 years; it is possible to prolong its validity, but for no longer than 10 years.

A permanent residence card entitles the permanent stay within the territory of Poland and is valid no longer than 10 years (after this period it has to be replaced). The data on that card are similar to those placed on previous one; it is issued at least after 5 years legal residence in Poland.

Both types of card entitle to settle within the Polish territory.



Temporary confirmations of foreigner's identity are valid for three months; there is a possibility to prolong their validity for the time necessary to obtain a refugee status. The owners of those documents have no PESEL numbers assigned but the fact of a confirmation issuance is notified in the register of application forms for temporary living approvement and appropriate authorities' decisions concerning the matter.

The PESEL register is the most important public register enabling unambiguous identification of Polish citizens and neutral persons authorized to stay on Polish territory for periods exceeding two months. An *Identity card* (Polish citizens) and a *permanent or temporary residence card* for non-nationals are issued for every person registered there.

Two quite different registers concern passports and ID cards. There are:

- The Central Register of Issued and Invalidated Passports (pol. CEWiUP in operation for 7 years),
- The Central Register of Issued and Invalidated ID cards (pol. OEWiUDO in operation for 7 years)

Additionally, information concerning permanent or temporary residence cards and temporary confirmations of foreigner's identity is stored in the following registers:

- the register of application forms for temporary living approvement and appropriate authorities' decisions concerning the matter,
- the register of application forms for settlement and appropriate authorities' decisions concerning the matter,
- the register of application forms for a refugee status and appropriate authorities' decisions concerning the matter.

The PESEL register records consist of the following data:

- 1. PESEL number
- 2. current surname and given names
- 3. generic name
- previous surname and given names
- 5. parents' given names and mother's generic name,
- 6. date and place of birth,
- 7. sex.
- 8. citizenship (nationality),
- 9. address and date of registration for permanent stay,
- 10. address of registration for temporary stay exceeding two months, with temporary stay period,
- 11. serial number of identification document (identity card, permanent or temporary residence card) and issuing authority name,
- 12. date of death.

The PESEL number is changed for example when the date of birth is corrected, the sex of person is changed or it was stated that previously registered identity was erroneous.

Access to the information in the PESEL Register is obviously restricted and requires a prior approval of the Home Affairs Ministry.



From July 2<sup>nd</sup>, 2004, new regulations concerning an economic activity and its registration rules oblige. According to stated above regulations all entrepreneurs<sup>14</sup> are subject to entry in local economic activity registers (appropriately to the place of main activity – community or municipality managed ones) or in the National Judicial Register (KRS<sup>15</sup>) managed by regional (economic) courts with the means of an information system; every voivodeship or its part has its own specific regional court assigned.

The National Judicial Register (KRS) is the centralized database with three separate registers:

- the register of entrepreneurs,
- the register of associations, other social and professional organizations, funds and public health-care institutions,
- the register of unsolvent debtors.

The National Judicial Register (KRS) has been established on the base of the Act on National Judicial Register from August, 20<sup>th</sup>, 1997 (Law Diary - Dz.U. no 17/2001, pos. 209, with later amendments) and acts from January, 1<sup>st</sup>, 2001.

The main task of KRS is to make fast and reliable information concerning the legal status of a registered entity commonly available (Central Information of KRS), as well as the most important elements of its financial condition and the way it is represented.

The contents of KRS entry depends on the register type, but usually it includes KRS number, REGON<sup>16</sup>, name of entity, legal form (in case of legal persons), legal status, activity type according to the Polish Activity Classification (Polska Klasyfikacja Dzia•alno•ci - PKD)<sup>17</sup>, date of establishment, management and mandatories.

There is an assumption that the data stored in the KRS should be sufficient for the reliable identification of entrepreneurs. Since the registers concern only those entities, which are enforced to obtain such an entry in KRS on the base of legal regulations, in other cases local economic activity registers in relevant locations should be used (municipal or communal ones).

#### 3.3 eIDM framework

#### 3.3.1 Main eGovernment policies with regard to eIDM

The eID card

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Entrepreneurs performing an economic or professional activity on their behalf are: natural persons, legal persons and organizational units defined by specific legal regulations. Additionally co-partners in civil companies are also treated as entrepreneurs within the range of their activity.

National Judicial Register (Krajowy Rejestr S• dowy)

National Official Register for State Economy Entities (Krajowy Urz•dowy Rejestr Podmiotów Gospodarki Narodowej)

The PKD classification has been introduced by the regulation of Ministry Council from January, 20<sup>th</sup>, 2004 (Law Diary - Dz. U. no 33, pos. 289, with later amendments introduced by the regulation of Ministry Council from July, 14<sup>th</sup>, 2004, published in Law Diary - Dz. U. No 165, pos. 1727, and recommended to use in statistics, registration, documentation and accounting, and in official registers and public administration information systems as well.



The citizens of Republic of Poland have no eID cards. According to *State Informatisation Plan for years 2007-2010 (Plan Informatyzacji Pa•stwa na lata 2007-2010*<sup>18</sup>) a general introduction of eID cards is planned for the years 2008-2010 (see chapter B). The Polish eID will be a multi-application electronic card used in public sector IT systems for Polish citizens identity confirmation (in public administration, social services, health service, etc.).

The Polish eID should be fully compliant with the multipart european standard EN 15480 *Identification card systems - European Citizen Card*<sup>19</sup>. Such a decision will ensure an interoperability with other countries ID systems developed on the base of the same standards.

#### Electronic Card for Health Insurance (EKUZ)

An Electronic Card for Health Insurance EKUZ (Elektroniczna Karta Ubezpieczenia Zdrowotnego) has been issued since 1999 by the Silesian Voivodeship Department of National Health Fund (• I• ski Oddzia• Wojewódzkiego Narodowego Funduszu Zdrowia (NFZ))<sup>20</sup>.

The cards and 2.500 readers are the part of the START system for health service registration. The system has been rolled out since 1999 by Sygnity Company <sup>21</sup> (previously: Computerland). START is the closed system for the management of documents and information concerning particular medical services. It is used for the current monitoring of activities associated with contracts between NFZ and health service enterprises and pharmacy.

The system has been established mainly for the purpose of facilitating the creation of reports concerning services realized by health service units and physicians as well. It is also used for data exchange between physicians and NFZ, and for the delivery of detailed information concerning health services. The START system transmits medical and statistical information between entities financing and performing medical services.

The registration process is based on the data stored inside electronic card memories. Those cards are issued for all insured members of the Silesian voivodeship community. The cards play the role of identifiers and data carriers for basic personal data. The cards are ID-1 format memory cards (integrated circuit SLE 4428<sup>22</sup> inside), but other mechanisms increasing data security have been implemented in the system (including SAMs with strong cryptomechanisms). The smart card is without a photo of the bearer.

The following data are printed on the front and back side of the EKUZ::

- PESEL number
- name and surname
- address
- · date and place of birth
- codes of community, voivodeship and payer

The Regulation of Ministry Council from March 28<sup>th</sup>, 2007 concerning State Informatisation Plan (Low Diary – Dziennik Ustaw – from April 6<sup>th</sup>, Dz. U. no 61/2007, pos. 415), http://isip.sejm.gov.pl/prawo/index.html

ECC multipart standard is within the scope of activity of CEN TC224 WG15 and is now in the fase of drafting

http://www.nfz-katowice.pl/index.php?&k0=3\_ubezpieczony&k1=6\_karta\_ubezpieczenia\_zdrowotnego

<sup>&</sup>lt;sup>21</sup> www.sygnity.pl

<sup>&</sup>lt;sup>22</sup> The producer of integrated circuits is Infineon, http://www.infineon.com/



- RUM<sup>23</sup> local office number
- a leading physician number
- a leading unit number
- other data (e.g. card serial number)

The same data are stored in a card memory.

Entities wishing to use the system are authenticated before any access is granted. System terminals are equipped with active Security Application Modules (SAM). Those modules are smart cards with a cryptoprocessor. About 600 terminals with SAM are introduced in the EKUZ system.

On the basis of a disposition of the NFZ Chief (disposition no 40/2004 from November, 25<sup>th</sup>, 2004) concerning the elaboration of the concept and the template of an electronic card for health insurance (e-KUZ), an electronic health service register (e-RUM) and their development<sup>24</sup>, the development strategy for e-RUM has been published. The EKUZ card is intended not only to be used locally, but also as a European Card for Health Insurance. The card will be the means for a confirmation of patient's rights to free health services in Poland and in the EU. An implementation period for the system was stated as 2007-2013 (as a part of *State Informatisation Plan for years 2007-2010*, named *The platform for on-line access to digital medical registers*).

#### Other systems

Four existing public registers are essential for e-government applications development: the National Judicial Register (*Krajowy Rejestr S• dowy* - KRS)<sup>25</sup>, the Common Electronic System for Population Registration ((*Powszechny Elektroniczny System Ewidencji Ludno•ci* - PESEL)<sup>26</sup>, the Taxpayer Identification Number (*Numer Identyfikacji Podatkowej* - NIP)<sup>27</sup>, and the National Official Register for Economy Subjects (*Krajowy Rejestr Urz• dowy Podmiotów Gospodarki Narodowej* - *REGON*)<sup>28</sup>. The PESEL register is now being rebuilt as a part of the PESEL2 project (expected due date is 2008).

National Judicial Register (Krajowy Rejestr S. dowy - KRS)

This is the register containing mainly the basic data of entrepreneurs (natural and legal persons). The REGON number (assigned by Main Statistical Office) is the basis for entity identification (see: *REGON register* below).

KRS is a public register and the data are accessible in on-line communication. Keywords for information searching are:

(a) full name of the subject, according to KRS entry, or the part of the name (in such a case few subject names could be obtained), or

<sup>&</sup>lt;sup>23</sup> Rejestr Us•ug Medycznych (Medical Service Register)

http://www.nfz.gov.pl/new/index.php?katnr=3&dzialnr=12&artnr=1122

The register subjects to the Ministry of Justice, <a href="http://www.ms.gov.pl/krs/krs.shtml">http://www.ms.gov.pl/krs/krs.shtml</a>

The register subjects to the Ministry of Home Affairs, <a href="http://www1.mswia.gov.pl/index.php?dzial=72&id=32">http://www1.mswia.gov.pl/index.php?dzial=72&id=32</a>

The register subjects to the Ministry of Finance http://www.mf.gov.pl/dokument.php?const=3&id=10514&dzial=143

The register subjects to Main Statistical Office (G•ówny Urz• d Statystyczny), http://www.stat.gov.pl/bip/rejestry/regon/regon.htm



(b) full subject's registration number (KRS number), containing ten digits; information concerning only the one subject is obtained.

It should be noted that the description obtained as the result of register queries includes a REGON number. There is no Taxpayer Identification Number (NIP) in the obtained record; nevertheless the NIP number is the basic one for contacts with tax offices. Therefore it is hard to associate the NIP number with the REGON number (and *vice versa*) if necessary. This is the reason (but most of all due to the redundancy of assigned numbers) why it is intended to retire REGON numbers from usage.

An interactive user interface is set up on the website accessible via internet viewer at <a href="http://pdi.cors.gov.pl/KRSSED/">http://pdi.cors.gov.pl/KRSSED/</a>.

Common Electronic System for Population Registration (Powszechny Elektroniczny System Ewidencji Ludno•ci - PESEL)

The PESEL register contains the data of natural persons, including the foreigners who stay in Poland for more than two months. Access to personal data from the PESEL register is restricted through the Act on population registry and identity cards ("Ustawa o ewidencji ludno•ci i dowodach osobistych" from April, 10<sup>th</sup>, 1974; Art. 44h, uniform text – Law Diary Dz.U. No 87/2001, pos. 960). There it is stated that on-line access is possible for legally authorized entities (e.g.: Police, Border Guards, Penitentiary Guards, community/municipality guards). Others can get PESEL register data only on the basis of a written request associated with appropriate fees.

On-line data access requires authentication and authorization of requesting parties.

Taxpayer Identification Number (Numer Identyfikacji Podatkowej - NIP)

This register contains NIP numbers for taxpayer identification in the Republic of Poland. It is assigned by tax offices to natural and legal persons, and other organisational units (without legal personality) obliged to pay taxes on the basis of appropriate regulations.

The basic legal act concerning NIP numbers is the Act on the registration and identification of taxpayers ("Ustawa o zasadach ewidencji i identyfikacji podatników i p•atników" from October, 13<sup>th</sup>, 1995; uniform text – Law Diary Dz.U. No 269/2004, pos. 2681)<sup>29</sup>. This contains the rules for taxpayer registration and a registration of fee-payers for social and health insurance purposes. This act defines rules and procedures for NIP assignment and the way they should be used.

Tax offices collect and store any documentation concerning NIP assignment and updates of personal data. Tax offices are obliged to confirm NIP assignment when such a confirmation is requested by taxpayers or any other entities legally involved.

The contents of NIP register is accessible for:

- (a) courts, public prosecutors, tax services, custom services, legally authorized representatives;
- (b) tax control organisational units;
- (c) main and central government administration units;
- (d) the Social Insurance Organisation (Zak•ad Ubezpiecze• Spo•ecznych ZUS) and the National Fund for Rehabilitation of Impaired Persons (Pa• stwowy Fundusz Rehabilitacji Osób Niepe•nosprawnych;
- (e) The General Inspector of Finance Information
- (f) units managing official registers (at the request specifying the data necessary for taxpayers identification against known NIP number).

The entities mentioned above can obtain NIP numbers in on-line communication.

<sup>&</sup>lt;sup>29</sup> http://isip.sejm.gov.pl/prawo/index.html



National Official Register for Economy Subjects (Krajowy Rejestr Urz• dowy Podmiotów Gospodarki Narodowej - REGON)

The REGON register has been established on the basis of the Act on public statistics (from June, 29<sup>th</sup>, 1995; Law Diary - Dz. U. No 88, pos. 439, with later amendments)<sup>28</sup>. The detailed rules for register maintenance and updating are defined in the regulation on the procedures and methodology of national economy subjects, including forms templates, and on detailed conditions and interoperability of public statistics services and other bodies maintaining official registers and public administration IT systems (issued by Ministry Council on July, 27th, 1999; Law Diary - Dz. U. No 69/1999, pos. 763, with later amendments)<sup>28</sup>.

The REGON register is updated and maintained in the form of a central database and associated local databases.

It is recognized currently that REGON numbers are not useful and should be withdrawn and replaced by NIP numbers.



#### PESEL2 project

The main task of this project is to collect the personal and address data of Polish citizens and other persons with PESEL numbers assigned.

The new integrated PESEL2 population registry system has to enable e.g. the remote update of PESEL register data on the basis of community offices data, the remote access to reference data for authorised entities and the usage of an electronic signature technology for the purposes of identification and authorisation before any access to the system data.

The functionalities of the PESEL2 system will be similar to those of the current PESEL system. Its integration with ePUAP platform should enable to build eIDM-type systems in Poland.

The end of PESEL2 system implementation is planned for 2008.

#### Authentication policies

In Poland there are no official rules for the support of authentication mechanisms. However the currently developed e-PUAP<sup>30</sup> project includes identification, authentication and authorization of citizens.

Four authentication methods are considered in an official document "The security rules for ePUAP –  $WKP^{n^{31}}$  (ver. 1.02, from August,  $23^{th}$ , 2006), ordered by Ministry of Home Affairs and prepared by Infovide company:

- 1. authentication with return channel a mechanism enabling to set the channel for the reception of an information placement confirmation; such a channel does not introduce security mechanisms;
- authentication with static password an information containing an identifier and password (a method widely used in IT systems);
- 3. authentication with one-time password a user sends his/her identifier and two-part password to the system (an appropriate sequence of characters is generated by the token; additionally PIN of the user is used);
- 4. authentication with strong cryptographic support based on an assumption that the person using a private key associated with a certificated public key is probably that one which is clearly mentioned in the public key certificate (in website login or electronic signature procedures); an authentication can be supported by smart cards with appropriate cryptographic functionalities.

Suggested user profiles are presented in the table below.

Abreviation e-PUAP means integrated information platform (central, regional and local portals) supporting the provision of electronic public services for administration, citizens and business (front-office); see also <a href="http://www.e-puap.mswia.gov.pl">http://www.e-puap.mswia.gov.pl</a>.

<sup>31</sup> http://www.infovidematrix.pl



| User type                           | No authentication | Return channel<br>identification | Static password authentication | One-time password authentication | <b>Cryptographic</b><br>authentication |
|-------------------------------------|-------------------|----------------------------------|--------------------------------|----------------------------------|--|
| Users with an access to information | Х                 |                                  |                                |                                  |  |
| Users with one-time access          |                   | Х                                |                                |                                  |  |
| Users with permanent access         |                   |                                  | X                              | X                                | Х                                      |
| Administrators                      |                   |                                  | Х                              | X                                | Х                                      |

Authentication methods and their hierarchy mentioned in the above table should be treated as proposals only; changes can be introduced during the e-PUAP project enrolment.

#### 3.3.2 Legal framework

Currently there is no official document defining the legal framework for the eID card. Existing regulations concern the ID-1 plastic identity card and the passport with biometric data built-in. There are (see also chapter C.3):

- Act on population registry and identity cards, from April 10th, 1974 an uniform text (Law Diary Dz.U. no 87/2001, pos. 960, with later amendments);
- Regulation of Ministry Council on identity card template and procedures of issuance, exchange, return and loss, from November, 21th, 2000 (Law Diary Dz.U. no 112, pos.1182, with later amendments);
- Regulation of Ministry Council on fees associated with identity card issuance, from November, 30th, 2000 (Law Diary Dz.U. no 105, pos.1110, with later amendments);
- Act on passport documents, from July, 13<sup>th</sup>, 2006 (Law Diary Dz.U. No 143, pos. 1027, from July, 13<sup>th</sup>, 2006);
- Regulation of Home Affairs Minister on passport documents and procedures used in the case of their forgeries, faults or losses, from August, 24<sup>th</sup>, 2006 (Law Diary - Dz. U. no 153, pos. 1090, from August, 28<sup>th</sup>, 2006);
- Regulation of Ministry Council on fees associated with passports issuance and their return, from August, 25<sup>th</sup>, 2006 (Law Diary Dz. U. no 153, pos. 1091, from August, 28<sup>th</sup>, 2006).

Public registers and PESEL, NIP and REGON numbers usage are founded on the ground of following law regulations:

- Act on informatisation of entities activities for public tasks performance (Law Diary - Dz.U. 2002 no 169 pos. 1385);



- Act on National Judicial Register from August, 20<sup>th</sup>, 1997 (Law Diary Dz.U. no 17/2001, pos. 209, with later amendments);
- Act on citizens evidence and identity documents, from April, 10<sup>th</sup>, 1974 (Art.46);
- Act on taxpayers evidence and identification from October, 13<sup>th</sup>, 1995 (uniform text: Law Diary - Dz. U. 2004, no 269, pos. 2681);
- Act on public statistics from June, 29<sup>th</sup>, 1995 (Law Diary Dz. U. No 88, pos. 439, with later amendments).

A realisation of the Polish ID card project<sup>32</sup> requires some changes in the Act on population registry and identity cards (Law Diary - Dz.U. no 87/2001, pos. 960, with later amendments). Those changes should mainly define the usage areas for eID and identity management rules.

The wide usage of eID for citizen identification purposes in public administration and commercial systems will enforce some changes in legal acts with access rules for PESEL and NIP registers (REGON number will be rather withdrawn from the usage). Access to PESEL and NIP number registers is too restrictive now (for example they are not accessible for commercial entities) and therefore it is difficult to build effective user identification systems in practice.

#### 3.3.3 Technical aspects

Due to the lack of eID cards and systems for their management it is possible to speak about the planned pl.Id initiative only. It is only known that it will be a multi-application eID card compliant with the European standards requirements (mainly with EN 15480 *Identification card systems - European Citizen Card*). The card will have PKI functionality and will enable not only to authenticate the holder, but to create qualified electronic signatures as well (the second feature will be compliant with rules defined in the Act on Electronic Signature from September, 18th, 2001 (Law Diary - Dz.U. 2001 no 130, pos. 1450). Therefore it can be expected that two different assymetric key pairs will be used, and two different public key certificates respectively.

The public key certificate for qualified signature verification will be issued by qualified certification authorities. Currently there are three qualified Certification Authorities in Poland: Certum (<a href="www.certum.pl">www.certum.pl</a>), Sigillum (<a href="www.sigillum.pl.com.pl">www.sigillum.pl.com.pl</a>) and Szafir (<a href="www.kir.com.pl">www.kir.com.pl</a>). On the other hand, the certificates used for an identification of eID holders will be issued by non-qualified certification authorities (under control of the Ministry of Home Affairs).

More details can be found in the report European eGovernment Services (IDABC) - Preliminary Study on Mutual Recognition of eSignatures for eGovernment applications - National Profile Poland, 2006.

#### 3.4 Interoperability

The Polish eID card should ensure interoperability through compliance with the standard for a European Citizen Card.

#### 3.5 eIDM Applications

The Regulation of Ministry Council from March 28<sup>th</sup>, 2007 concerning State Informatisation Plan (Low Diary – Dziennik Ustaw – from April 6<sup>th</sup>, Dz. U. no 61/2007, pos. 415), http://isip.sejm.gov.pl/prawo/index.html



Currently there are no applications using eID cards in Poland. The only exception is an Electronic Card for Health Insurance (EKUZ) used in START system (see: chapter D.1.2).

#### 3.6 Future trends/expectations

As indicated above, the Polish eID card idea is still in the design phase. There is a tendency to adopt current EU solutions. The framework for the Polish eID card system development is defined in *State Informatisation Plan for years 2007-2010 (Plan Informatyzacji Pa• stwa na lata 2007-2010<sup>33</sup>)* (see: chapter B). The will to integrate an access for e-government authorised and commercial subjects to the data base including appropriate eID information is visible clearly in the document mentioned above, but the final form of this process is unclear. Even if future multifunctionality of eID cards is stated, the scope of this is not strictly defined.

#### 3.7 Assessment

Any trials to assess the Polish approach to the commonly used eID system for citizens identification purposes are still premature. If the compliance with European standards and recommendations will really be fulfilled during the actual roll-out of the system, then we can expect to have not only an effective system, but one that is interoperable with other similar European solutions as well. The next few years should make the issue more clear, whatever the result will be.

The Regulation of Ministry Council from March 28<sup>th</sup>, 2007 *concerning State Informatisation Plan* (Low Diary – *Dziennik Ustaw* – from April 6<sup>th</sup>, Dz. U. no 61/2007, pos. 415), http://isip.sejm.gov.pl/prawo/index.html