



Factsheet:

Access to Base Registries in Greece

Published 10/09/2018

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Greece towards Interoperability

In order to modernise public administrations, achieve interoperability between their information systems and develop efficient public e-services, different objectives and actions have been set in the main Greek interoperability enabler, the **Action Plan 2014-2020**¹.

Within this plan, there are actions addressing interoperability of public administration information systems. These are related to a great extent to base registries. For example, the action “Interoperability of information systems” establishes the creation of a single operating framework between institutions, automatic document search and the use of the **National Portal ERMIS**² for the interaction with public administrations and the provision of electronic services to businesses and citizens.

The mandatory implementation of the **framework for the provision of e-Government Services**³ to all the activities and projects of the public administration is also included within this set of actions as well as the open, transparent and safe movement of public documents. This is followed by the goal of an electronic and simplified public administration process.

Within the National Action Plan, section 3.1.7 refers the **Interconnecting of base registries** for the improvement of the public sector productivity, e-Government services to citizens and the possibility of having joint databases. In this regard, priority is given to the interconnection of the following National Registries⁴:

- National Registry of the Insured, Employed and Pensioners (Social Security Number)
- Police Registry (Identity Card Number)
- Tax Registry (Tax Identification Number) and
- Population Registry.

The specific sub-actions are as follow:

1. Develop functional interfaces of four national registries;
2. Develop functional interfaces of 250 registries;
3. Undertake a study to determine the interconnection model of about 250 registries;
4. Regulate the interconnection of 250 registries;
5. Interconnect the Commercial Registries.

The interconnection of the aforementioned base registries will lead to a series of improvements, such as acceleration of the issuance of ID cards and passports through the data pumping from the National Citizens Registry.

In the case of business registries, the Business Registers Interconnection System (BRIS) infrastructure aims to:

- enable the access to information on EU companies for the public and
- ensure safe and secure interconnection among EU Business registries.

According to Directive 2012/17/EU on the interconnection of business registers and the Implementing Regulation (EU) 2015/884, Member States should establish an information system that interconnects their central, commercial and companies registers.

¹ http://www.minadmin.gov.gr/wp-content/uploads/20141219_action_plan.pdf

² <http://www.ermis.gov.gr>

³ <http://www.e-gif.gov.gr/portal/pls/portal/docs/744025.PDF>

⁴ To interconnect the country's registries, a study will be undertaken determining the interconnection model of about 250 registries, which is a prerequisite for legally regulating this interconnection.

The Greek National Interoperability Framework (**e-Government Framework and Interoperability Standards for Greek Public Administration**⁵, **e-GIF**) which is a prerequisite for Action Plan 2014-2020, was launched in 2008 and it is a set of standards, specifications and guidelines for achieving e-Government Interoperability at organisational, semantic and technical levels supporting the provision of e-Government services at central, regional and local level.

The framework is mandatory for public administration entities that provide or are planning to provide e-services. The Greek NIF is composed of the following documents:

- Certification Framework for Public Administration web sites and portals: specifies the directions and standards to be considered during the development of public web sites for the Greek Public Administration;
- Interoperability and Electronic Services Provisioning Framework: defines the strategy and principles to be followed by the public agencies when developing e-government information systems;
- Digital Authentication Framework: sets the standards, procedures and technologies required for the registration, identification and authentication of the users (citizens and enterprises);
- Documentation Model for Public Administration Processes and Data: describes the notation, rules and specifications for the documentation of processes, documents and electronic data exchange;
- Interoperability Registry: a web-based repository of service and document metadata, services process models (BPMN), standardized XML Schemas, as well as code lists for the most common information elements within governmental service provision in Greece;
- XML schema repository: proposed XML schema definitions for several documents, core components and code lists.

Greece is among the countries that have defined technical specifications to ensure interoperability within their national interoperability frameworks. However, interconnection platforms have not been developed yet.

In the e-Government Strategy 2014-2020 the interconnection of national registries is defined, since all the registries in Greece operate autonomously.

The most relevant and recent program regarding interoperability and base registries in Greece, is the **Electronic Government Now (eGov Now)**. It defines principles and tools for interoperability within the public sector information systems, including large databases and base registries, considered as key modules of electronic government. It also supports other structural elements, such as documents exchange and information, certified document sharing, interoperability interfaces, etc. Its completion will lead to better use of existing information in the base registries, by promoting better collaboration between departments, such as. Ministry of Health, Employment Agency, Ministry of Labour, and Ministry of Environment. The Ministry of Interior and Administrative Reform is responsible for executing the project. All public administration bodies will take account of the principles, specifications and standards set by the project.

⁵ <http://www.e-gif.gov.gr/portal/page/portal/egif/history/object>

Legal Interoperability

- Legal interoperability, in the context of base registries, is about ensuring that public administrations in charge of the registries operate under a harmonised legal framework. Thus the policies and strategies included in this common framework enable base registries to cooperate, resulting in cost and time savings. The Greek e-Government Framework and Interoperability Standards for Greek Public Administration (e-GIF) is regulated in the law⁶.
- The **re-use of public sector information** in Greece, and the corresponding implementation of the **Public Sector Information** (PSI) Directive, is covered from the legal point of view by a set of laws which are based on an information pull model than on a push one. In Greece, there is no obligation for the public authorities to publish information. However, the Transparency law⁷ introduced changes⁸, such as (1) making all administrative acts available in formats that are easy to access, navigate and comprehend, regardless of the level of the citizen's knowledge on the inner processes of the administration, and (2) eliminating corruption by exposing it easier when it takes place and (3) reinforcing citizens' constitutional rights through participation in the Information Society. The law on the Access to public documents⁹, the Regulation for the Re-use of Public Sector information¹⁰, the law on the Re-use of geospatial information¹¹ and the e-Government law, although they do not include any obligations for the public authorities to actively publish information, they contain only obligations on the provision of information upon request.

The Greek PSI-related laws stipulate that documents should be available for re-use in all formats and languages in which the information exists. Also that the public sector information should be available in open formats which follow open standards¹² (this only applies to cases where PSI is available by electronic means). PSI is further supported through the obligatory provisions of certain sets of metadata such as in the case of geospatial data¹³ or in accordance with standards, such as in the case of European metadata. For this, portals and catalogues are used in order to publish **open data** as in the case of the National Geo data Portal¹⁴. In terms of base registries, the availability of data in open formats which follow open standards facilitate their interconnection and interoperability.

Currently, the main institutional framework governing open data policy is Law 15 on the re-use of public information. Law 15 integrates EU Directive 16 on the re-use of public sector information. The main features of this law is summarized as follows:

⁶Law 37/31/2008,(article 27) <https://www.taxheaven.gr/laws/law/index/law/210>

⁷<https://et.diavgeia.gov.gr/legislationdocs/%CE%9D%CE%9F%CE%9C%CE%9F%CE%98%CE%95%CE%A3%CE%99%CE%91/%CE%9D%CE%9F%CE%9C%CE%9F%CE%99/%CE%9D.%203861-2010%20-%20CE%95%CF%80%CE%B9%CE%BA%CE%B1%CE%B9%CF%81%CE%BF%CF%80%CE%BF%CE%B9%CE%B7%CE%BC%CE%AD%CE%BD%CE%B7%20%CE%88%CE%BA%CE%B4%CE%BF%CF%83%CE%B7.pdf>

⁸ <https://diavgeia.gov.gr/en>

⁹ <https://nomoi.info/%CE%A6%CE%95%CE%9A-%CE%91-45-1999-%CF%83%CE%B5%CE%BB-1.html>

¹⁰ http://dipe.kav.sch.gr/wp-content/uploads/2014/12/N_3848_2010.pdf

¹¹ <https://nomoi.info/%CE%A6%CE%95%CE%9A-%CE%91-166-2010-%CF%83%CE%B5%CE%BB-1.html>

¹² <https://nomoi.info/%CE%A6%CE%95%CE%9A-%CE%91-138-2011-%CF%83%CE%B5%CE%BB-1.html>

¹³ <https://nomoi.info/%CE%A6%CE%95%CE%9A-%CE%91-166-2010-%CF%83%CE%B5%CE%BB-1.html>

¹⁴ <http://geodata.gov.gr/>

¹⁵ 4305/2014, <https://www.taxheaven.gr/laws/law/index/law/654>

¹⁶ <http://eur-lex.europa.eu/legal-content/ES/TXT/?uri=celex%3A32013L0037>

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- The “open by default” principle is established as the fundamental principle of open data policy.
 - Uniform process established: each public entity shall issue a decision on the classification of the recorded datasets, according to the process provided by the law, in order to upload datasets to the web platform www.data.gov.gr through a uniform process.
 - The Inspector General of the Greek Public Administration is set as the “impartial review body” that judges the decision of the public sector body according to which a request for data was rejected.
 - Open and readable formats.
 - Strong urge for the use of online and open licences formats with minimum restrictions.
 - Extension of the scope of the previous regulations (inclusion of libraries, museums and archives).
 - Annual contest on the use of open public data by natural and legal persons and Excellence awards for public entities which have implemented effective and innovative procedures on open data and re-use policy.
 - In October 2014 the web platform www.data.gov.gr was been developed. The objective was to serve as the main repository of the data of the Greek public administration, providing access to the respective datasets of public entities. Currently there are 2165 datasets available, out of which: 53 - Geo data, 29 - Vehicle dataset and 3 - Business.

The provisions of law on re-use of public information are listed in directives issued by the Minister of Interior and Administrative Reform (MINAR) in January, June and August 2015. Moreover, a series of meetings with many stakeholders (Ministries, Independent Authorities, Auditing Services, Decentralized Administrations, Regions, Municipalities and Universities) have taken place since September 2015 to further promote the implementation of open data policy.

The **DIAVGEIA**¹⁷ programme constitutes the most recent step in the effort of Greek public administration to facilitate access to PSI. The purpose of this programme is to render the actions of public administration more transparent by establishing conditions and processes that ensure wider publicity of laws and other legislative acts affecting citizens’ everyday life.

Legal provisions are applied for specific base registries. For instance, for the **Cadastre Registry**, under Law 2664/1998 on the Hellenic Cadastre, it is defined that land register data may be stored and updated only electronically in areas where the Cadastre has been operating since 2003, replacing the previous system of property transfers and mortgages. The land register database is stored centrally for the whole country by the Land Registry (*Κτηματολόγιο Α.Ε.*) and is updated by the local land registries based on their transactions. The electronic land registration system allows searches by personal data, Hellenic Cadastre code and/or property address.

One of the most relevant legal constraints with regard to the processing of personal data is the law on the **Protection of Individuals**¹⁸. It establishes the terms and conditions under which the processing of personal data is carried out so as to protect the fundamental rights and freedoms of natural persons and in particular their right to privacy. It also allows any person to obtain their personal information held by government departments or private entities. The law is enforced by the Hellenic Data Protection Authority and it is

¹⁷ <https://diavgeia.gov.gr/en>

¹⁸ http://www.dpa.gr/portal/page?_pageid=33,19052&_dad=portal&_schema=PORTAL

complemented by the law on the Protection of Personal Data in Telecommunications¹⁹, and by the law Assurance of Confidentiality in Communications²⁰.

For the **Only Once Principle there is no legal provision** of Greece. However, the e-Government Strategy²¹ defines that the establishment of the interconnection of basic registries which will result in the reuse of information. The main registers (the Tax Registry, Social Security Registry, Population Registry, Police Identity Registry, Business Registry) will be combined, using a common binding standard and will interoperate with each other. The development of new registries or data bases will follow the common standard procedure and will interoperate with the rest. The information that already exists in public administrations about citizens and businesses will not need to be submitted again. The 'Only-Once' Principle is partially implemented through ERMIS.

¹⁹ <https://nomoi.info/%CE%A6%CE%95%CE%9A-%CE%91-287-1999-%CF%83%CE%B5%CE%BB-1.html>

²⁰ <http://dide.flo.sch.gr/Plinet/Nomothesia-Internet/ADAE-Systasi-N.3115-2003.pdf>

²¹ <http://www.opengov.gr/minreform/wp-content/uploads/downloads/2014/02/stratigiki-ilektron.-diakyv.-teliko-pdf1.pdf>

Organisational Interoperability

This aspect of interoperability covers how public administrations align their responsibilities and expectations to achieve commonly agreed and mutually beneficial goals. In practice, the Greek entities within the public sector interoperability context, are organised as follows:

The **Hellenic Ministry²² of Interior, Decentralization and e-Government** is responsible for the maintenance of the Greek e-GIF.

The **Ministry of Administrative Reform and e-Government (MAREG)²³** facilitates the interconnection among the base registries. It is, also, is responsible for the policies on organization structures of public authorities (their operation and personnel), the e-Government policy and operational program for the public administration reform.

The **Ministry of Interior and Administrative Reform²⁴** (the part of ex Ministry of Administrative Reform and e-Government that discontinued in January 2015) is responsible for the organisation and operation of the public sector. The central service of this Ministry is also the competent body for designing, operating and supporting the following information systems:

- Electoral Rolls: is an on-going registry of eligible voters for European elections, local government elections, parliamentary elections, and referenda,
- The National Civil Status Registry (Ethnico Dimotologio): is a central database projection of the local municipality databases of citizen's civil status. All changes to the civil status of a person are registered at the competent municipality database. Then the central database is updated automatically.
- The National Population Event Registry (Ethnico Lyxiarchio): supports an event-based registration system. Events like birth, marriage, cohabitation agreement, death, and divorce are registered centrally.
- The National Naturalisation Registry: facilitates individual applications for nationality acquired by naturalization.
- The Immigration Registry: facilitates EU policy-based legal immigration requests.

The **IT and Communications Committee²⁵** (under the Ministry of Interior and Administrative Reform) is responsible for the implementation of the institutional framework governing the development of IT and electronic communications for the public administration. It recommends improvements, operational and organisational restructuring for entities and services of the public sector, including ministries, for the most effective promotion of government work in the field of eGovernment. Furthermore, it establishes management teams to monitor and promote the implementation of relevant projects.

In Greece, the law²⁶ on New Architecture of Local Authorities and Decentralized Administration organizes the country into seven regional decentralized administrations, 13 prefectures and 325 municipalities. Each of these levels has a different and broader set of powers than the previous administrative levels. However,

²² <http://www.adam-europe.eu/prj/8394/prd/2/1/D3-3%20State-of-the%20art%20national%20report%20EL.pdf>

²³ <http://ec.europa.eu/isa/documents/semantic-interoperability-and-access-to-base-registries-panel-session-at-semic-2014.pdf>

²⁴ <http://www.ypes.gr/en>

²⁵ <http://www.amcham.gr/information-technology-and-communications-committee/>

²⁶ Law 3852/2010, http://www.ypes.gr/userfiles/f0ff9297-f516-40ff-a70e-eca84e2ec9b9/nomos_kallikrati_9_6_2010.pdf

the administration²⁷ of the base registries takes place at national level through their respective authorities. The table below show their distribution:

Base Registry	Authority	Master Data
Business Registry	Central Government, Ministry of Development, Competitiveness and Shipping, General Secretariat for Commerce	BUSINESS
Cadastre	Ministry of the Environment, Energy and Climate Change.	LAND REGISTRY
Civil Registry	Ministry of Interior and Administrative Reform	PERSONAL DATA (NATURAL AND LEGAL PERSONS)
Vehicle Registry	Ministry of Central Government, Ministry of Infrastructure, Transports and Networks	VEHICLES
Tax Registry	Central Government, Ministry of Finance, General Secretariat for Information Systems	TAXES

Base registries in Greece are decentralized and data is gathered at local offices.

The **Population Registry** (Εθνικό Ληξιαρχείο) **project** is an initiative of national scope and concerns all municipalities of the country, the Citizen Service Centres (ΚΕΠ), the Ministry of Interior and the Ministry of Administrative Reform & e-Government. As a result of a unified national **Citizen's Registry** will be created, which will form the basis for further re-use of basic data by public administration bodies. The main two objectives of this project are:

- The implementation of a central IT system that will fully interoperate with the corresponding system of the National Population Registry.
- The digitization of 26 million civil records which are recorded in all the civil status offices of the country in 1034 points.

The existing Electoral Rolls, National Civil Status Registry and National Population Event Registry are going to be merged into a single base registry. The latter will be called **Civil Status Registry** (Mitrown Politon). The Civil Status Registry is going to be event-based, and person-based. Furthermore, it is going to function as the central population register. Each event that has an effect on the civil status of a person will be recorded at the place where the event occurred:

- The birth of a person is recorded at the place of birth.
- The marriage and the cohabitation agreement are recorded at their venue.
- A divorce is recorded also under the authority of the civil status registrars.
- The death of a person is also recorded.

Nevertheless, the system keeps a person-based view of the events, which means that an entry for every person birth in that jurisdiction is made at one particular place. All subsequent changes to the civil status of that person, changes of name, marriages (and cohabitation agreements), divorces, children and, ultimately, the death of that person, are registered at that same place. The latter is the person's residence municipality jurisdiction. The whole information system will be hosted centrally.

²⁷ <http://www.iocenter.eu/media/14934/greece.pdf>,

Citizens' data will have additional entries in the system linked to personal identification numbers, which are registered by other national authorities (e.g. AMKA, AFM). As a result, the Civil Status Registry could be considered as a Central population register. Therefore, any access to the population register is not restricted to matters of civil status and related issues. The system will be accompanied by an interoperability subsystem which leads population register records to become direct information sources for various citizen-oriented services, such as employment, taxes, social benefits etc. While civil status certificates may be issued, these will no longer be necessary. Whenever information is required that was traditionally provided via a certificate, the authority could usually obtain that information on-line and directly out of the system.

The anticipated contract closure date of the project is on Friday 19 Jan 2018.

Semantic Interoperability

In the area of e-Government, information interoperability has to face a recurrent issue. Due to the still non-electronic nature of many public sector services, there is a lack of common fields, standardization and adherence to common definitions. Moreover, when services are made electronic, usually the existing diversity on data, documents and forms are transferred to an electronic format, resulting into non-interoperable artefacts.

The current e-GIF includes **semantic interoperability assets**, such as **XML schemas, ontologies, and code lists**) and guidelines for their design as a first step towards semantic interoperability. However, as such schema libraries are populated with more and more XML Schemas, the need for the design of a semantically-enriched Governmental Data Management comes into the foreground. In this context and more specifically, information aspects of data exchange are addressed in the **Model for Public Administration Processes and Data**²⁸ (**DMPAPD**) which aims at defining the notation, rules and specifications that guide the processes, and data models (designed in a unified way), based on BPMN. Also, UML activity diagrams in the case of processes and XML Schema in the case of documents and data are provided. It also includes Core Components, Business Information Entities, Data Types, Code and Identifiers Lists, and Documents of Public Administration in XML Schema format.

Code Lists: coded and classified lists definitions for main, commonly used entities in procedures, documents and systems. Indicative refer to countries, entities of the Central Public Administration (Ministries and Agencies), organizations, of Local Authorities (Prefectures, Municipalities and Communities), currencies, data formats (e.g. pdf, doc, txt), services, documents, systems, data types (e.g. integer, string, float, decimal unit, integer unit, etc.), etc.

Building Data Elements (Core Data Components): description of fields for main entities of eGovernment. Used for the systematic construction of standard electronic documents and data. They allow the structuring of other components or data types. Some examples are:

- Identity Person (Name, Last Name, Father, Mother, Date of Birth, Place Birth, Citizenship, Address)
- Address (Country, State, Municipality / Community Street Number, Post Code)
- General Application of an Individual [Date, vector addresses (Institution), Applicant (Identity Person B) Application Content (Text)]

Data Types: the types that can have fields or data descriptions such as alphanumeric fields (string) with free/specific length, Integer, Decimal, Date, etc.

Standards Electronic Document Schemas (XML Schemas): structured descriptions in XML describing the structure and content of electronic documents. They contain references to code lists, data types and structural data elements. They may contain other XML schemas and are divided into two categories: Horizontal XML standards (general purpose) and Sector XML standards (sectorial services).

Metadata: sets of information concerning e-Government entities that allow their discovery and understanding. There are Metadata formats set by the e-Government Framework for Entities, Services (conventional and electronic), Documents (conventional and electronic) and Systems.

Ontologies: sets of associated representations, which include classified entities, their relationships and their metadata.

The resources of the e-Gif regarding e-services, responsibilities, processes, documents, data, xml schemas, core components, code lists, etc. are offered by the called **Interoperability Registry** hosted by the ERMIS portal.

²⁸ <http://www.e-gif.gov.gr/portal/pls/portal/docs/1/211037.PDF>

Technical Interoperability

Technical Interoperability covers the applications and the infrastructures linking systems and services including aspects such as interface specifications, interconnection services, data integration services, data presentation and exchange, secure communication protocols etc. While public administrations have specific characteristics at political, legal, organisational and semantic layers, interoperability at the technical layer does not exhibit specific characteristics. Technical interoperability should be applied, whenever possible, via the use of standards and specifications.

In Greece there is no interconnection platform (middleware) as such. However, exchange of information between base registries takes place through the ERMIS portal. The most relevant example of this is the exchange of data between the Tax Registry and the Civil Registry. The case scenario is the following: the user accesses the Tax Registry via Taxisnet²⁹ (Single-Sing-On) and from there, the requested information goes through ERMIS to the Civil Registry where the user can, in a later stage, retrieve certain certificates such as marital status, birth, etc.³⁰

ERMIS

Even though ERMIS³¹ is not a base registries interconnection platform, it is the main Greek government's administrative portal. It works as a mailbox and storage space for users' documents and apart from the provision of information to users, it also provides e-safe capabilities. It includes the back-office technology for the so-called Citizen Service Centres (KEP) which are physical establishments where citizens get help related to communicating with the public administration. The portal offers:

- a systematic, collaborative toolset to manage service transformation, from paper-based to electronic, already populated with a substantial set of information on services and documents;
- a set of guidelines and standards for managing portal creation and operation, back-office and front-office interoperability, eID management and service documentation – the main pillars of eGovernment;
- a centralised interoperability infrastructure with, highly automated services that federates on-line content from a variety of sources;
- an infrastructure for publishing available or needed web services on-line that can be further promoted;
- digital services that can be delivered at no extra cost. This is extremely important especially for services that encompass several organisations and thus take a lot of time during manual delivery;
- full on-line documentation of the whole spectrum of governmental services providing organisations with information and the legal framework in four languages, with advanced semantic search mechanisms;
- a set of guidelines and standards for offering high-quality ICT for the public sector services, through the e-GIF (for the ICT industry);
- the ERMIS Service Delivery Platform provides more than 100 highly sophisticated interoperable, cross-organisational digital services. The most important services, provided at full-online availability, are the birth, citizenship, and family certificates. The cost is up to 30 EUR per certificate issued³².

²⁹ http://www.gsis.gr/gsis/info/gsis_site/index.html

³⁰ The estimation of this type of certificates demanded every year is 1500000.

³¹ <http://www.ermis.gov.gr/portal/page/portal/ermis/>

³² Generating an annual gain of more than 10 million EUR.

Moreover, the e-GIF contains information on technical standards, specifications and architecture approaches, in order to achieve a common design and development of IT systems for public administration authorities. Some examples of this is the use of:

- Multi-layered architectures,
- Development Based on Autonomous Structural Units (component based development),
- Service-Oriented Architecture (SOA), and
- Web Services technology (SOAP, WSDL, UDDI, BPEL4WS, WS-I, WS-Security).

In addition, GIF sets the following policies with respect to the interconnection, communication and interoperability of eGovernment systems:

- The information systems of bodies of public administration should provide services through networks based on IP protocol, version least v4. However, operators should develop transition plan their networks to IPv6.
- The e-mail system (e-mail) used by public administration bodies must follow the SMTP / MIME standard for message transport (transport message) and POP3 or IMAP for finding / withdrawal ports (mailbox retrieval). For the security of electronic messages mail the S / MIME v3 protocol must be used, unless no other specific safety requirements. For those entities using services email provided by the National Public Administration Network Syzefxis³³ applicable requirements, standards and policies followed by this.
- The development of directory services (directory services) and related interfaces should be based on the LDAP protocol, except when used web services so will the UDDI protocol must be used, while development of the interfaces should follow the WSDL protocol.
- Developing web services should be based on the SOAP protocol, which will be used in conjunction with the protocols WSDL to describe services and UDDI for directory services.
- Official Domain Naming Policy of the Greek Public Administration, as determined by the Public of Internet Certification Framework Sites.
- The Domain Name Server (Domain Name Server - DNS) should be used for Domain Names in Internet / Intranet networks for the analysis of IP Address (IP Address Resolution).
- The transfer of electronic records should be based on the FTP protocol. Moreover, during transport large files should be supported by potential reboot (restart) and recovery (recovery) of the FTP protocol.

³³ <http://www.syzefxis.gov.gr/>

Cross-border Interoperability

The European Single Market drives the needs for more cross border exchange of data. Next to initiatives at European level, Member States also enter in close cross border cooperation. Accordingly, Greece is a member of EUCARIS³⁴ (European CAR and driving licence Information System), and is making use of the EUCARIS technology for information exchange based on the Road Safety Directive³⁵ (2015/413/EU). Greece is also member of ECRIS³⁶ (European Criminal Records Information System) and ELRA³⁷ (European Land Registry Association- ELRN which is European Land Registry Network).

Furthermore, the Hellenic Ministry of Administration reform and e-Governance (MAREG) has been a STORK³⁸ 2.0 partner in charge of establishing interoperability at national and EU level through electronic Identification (eID).

Greece is a member of SPOCS³⁹ ("Simple Procedures Online for Cross-border Services") which is a project aiming to remove the administrative barriers that European businesses face before offering their services abroad and ensure service and system interoperability.

Last but not least the Syzefxis Network, on which all Greek public administration systems operate, is connected to s-TESTA⁴⁰ (Secure Trans European Services for Telematics between Administrations)

³⁵ http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2015.068.01.0009.01.ENG

³⁶ ECRIS (European Criminal Records Information System): http://ec.europa.eu/justice/criminal/european-e-justice/ecris/index_en.htm

³⁷ ELRA (European Land Registry Association), <https://www.elra.eu/members/>

³⁸ STORK 2.0 <https://www.eid-stork2.eu/>

³⁹ SPOCS (Simple Procedures Online for Cross-Border Services), <https://www.eu-spocs.eu/>

⁴⁰ http://ec.europa.eu/isa/ready-to-use-solutions/stesta_en.htm

E-Government Public Services making use of Base Registries data

Better access to data in base registries allows governments to deliver more efficiently public services in a user friendly and effective way. Services to the citizens and businesses are based on life events and data in base registries. They often serve as input or output to these services.

A set of **common life events** that will result in inputs in a series of base registries are as follows:

- **Land Registry**⁴¹: purchase/sale of real-estate,
- **Civil Registry**⁴²: birth/deceased of person,
- **Tax Registry**⁴³: change in income, change in assets,
- **Business Registry**⁴⁴: creation/dissolution of company.

However, the national portal ERMIS⁴⁵ is the one stop shop solution which provides integrated and secure eGovernment services at all levels, from a central point. In addition, through the new authentication system, the user, citizen or enterprise, can submit a request to the portal with an electronic signature. The request is then identified and handled by the appropriate agency. In this way the security, validity and legality of digital transactions are ensured.

The ERMIS portal, May 2009, is also the most modern technological platform for ensuring interoperability between the computer systems of public services, including base registries as well as secure transactions of public information through digital certificates. It provides approximately 27 online services in respect with the base registries and it is organized in various ways to facilitate the navigation to the users.



Figure 1: Ermis' services

There is no charge to register, access nor take over an official document as a user of ERMIS. Based on the decision of the Ministry of Administration, all services provided through the ERMIS portal are free of charge.

Another portal worth mentioning is **Taxisnet**⁴⁶, the Greek online tax and custom services portal, including e-filing of VAT forms with payment through banking services, e-filing of income tax forms, personalized information for income tax assessment and e-delivery of tax certificates. It is a portal that citizens and professionals can use to interact with the tax offices in order to declare sales, value added taxes, income, and collect necessary certificates among other various applications. Taxisnet is daily accessed by a large number of users with different characteristics, educational levels and objectives.

⁴¹ <https://oss.uredjenazemlja.hr/private/login.jsp>

⁴² <https://registar.azop.hr/?page=login>

⁴³ <https://nias.gov.hr/Authentication/Step1>

⁴⁴ <https://e-obrt.minpo.hr/>

⁴⁵ <http://www.ermis.gov.gr/portal/page/portal/ermis/>

⁴⁶ Taxisnet, http://www.gsis.gr/gsis/info/gsis_site/index.html