

Factsheet:

Access to Base Registries in Slovakia

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Slovakia towards Interoperability

Slovakia is progressing towards interoperability, but have no National Interoperability Framework in place. However, some interoperability initiatives and regulations support the country in the implementation of several European Interoperability Framework (EIF) principles. Examples of such initiatives are the **Administrative simplification**, implemented with the exchange of data between administrations through the base registries, and the **Openness** principle, implemented through the open data portal.

Accordingly, Slovakia is advancing in interoperability with the guidance of the National Concept of Informatization (NKIVS, Národná koncepcia informatizácie verejnej správy) 2015 -2020¹, that intends the e-Government to be interoperable nationally and across borders, based on the internationally agreed standards and technical specifications. The ICT development focusing on the use of cloud-based solutions may, along with the harmonization of processes, contribute to increased interoperability at national level. To ensure technology interoperability, the hardware and software in public administration must be consistent with the defined standards that promote interoperability of data, applications, and technologies across the European environment. Open standards and formats are preferably used, and the emphasis is laid on ensuring technological neutrality. This document also represents a new philosophy of viewing informatisation with an emphasis on the process openness, fair competition, and increase of the value of IT in key functions of public administration, whether in a form of the improved services, better decisions thanks to data, better regulation, or more efficient operation. The concept is built around a vision of an innovative and open state that provides the citizens and businesses with user-friendly and easy-to-use services but at the same time operates inside in a complex way so that it can respond swiftly and effectively to the challenges of the dynamic modern era.

The first four strategic priorities among the 17 documents presented in Chapter 9 of the NKIVS have been approved in February 2017 by the Council of the Government of the Slovak Republic for the Digitization of Public Administration and the Single Digital Market:

- Data management²,
- Integration and orchestration³,
- Government cloud⁴
- Multichannel access⁵.

Approved strategic priorities serve as a guide for public administrations to build an eGovernment and to achieve the principles addressed by strategic architecture concerning the informatization of public administration. It is vital to adhere to these priorities in order to build a digital and transparent public administration that will benefit society as a whole. The priority of process optimization and automation of the public administration performance, along with the priority of orchestration of services to the life situations, shall ensure a qualitative change not only in the provision of the public administration services to the public, but also in the operation of public administration itself. Equally important are the priorities referring to the improved access of citizens, businesses or officials to the e-Government environment, the use of the common central blocks, management of data, Open Data, Government Cloud and security.

¹ <https://www.vicepremier.gov.sk/index.php/informatizacia/narodna-koncepcia-informatizacie-verejnej-spravy-nkivs/index.html>

² http://www.informatizacia.sk/index/open_file.php?ext_dok=24196

³ http://www.informatizacia.sk/index/open_file.php?ext_dok=24197

⁴ http://www.informatizacia.sk/index/open_file.php?ext_dok=24194

⁵ http://www.informatizacia.sk/index/open_file.php?ext_dok=24195

The NKIVS builds on the **Strategic Document for Digital Growth and Next Generation Access Infrastructure (2014-2020)**⁶, which has as its aim the increased usage of open data, as well as an increased usage and provision of e-Government services. Slovakia aims to accomplish these objectives by providing more electronic services to boost competitiveness and quality of life, by constantly improving the services they provide, as well as ensuring that public administrations use as much data as possible in customer-driven processes. Following the successful fulfilment of these objectives by 2020, Slovakia should be a country characterised by advanced data sharing practices and optimised processes providing increasingly sophisticated services, where all of them work together towards relieving citizens and businesses of administrative burden. Within these documents, it is evident that Slovakia has done a great deal regarding strong transparency promotion in administrative procedures, as well as the concept of data as a valuable national resource.

In August the Reference Architecture of the Integrated Public Information System has been approved, which specifically focuses on the description of the reference architecture of the integrated information system of public administration (IIS VS). Additionally, the **Integrated Infrastructure Operational Programme** focuses on the development of electronic services for citizens and businesses, but from an open data perspective. By implementing the Programme, an increasing amount of data should be opened, and infrastructure for its exchange should be improved, thus augmenting the availability of government data through open data.

Electronic services for citizens and businesses are continuously developed in Slovakia, and they can be accessed through the **Central Public Administration Portal**⁷ which serves as a single point of access to e-Government services. The portal provides separate access to services for both citizens and entrepreneurs, in turn allowing easy access and clear identification of necessary information about the relevant services to be used. The basis for all activities of Central Government Portal is the entry point, which arranges user's authentication, login, data reception and creates transaction that is passed to the particular service provider to finish the transaction process. The portal also contains an e-Desk module which allows citizens to view all of their communications with the public administration, including electronic versions of documents that can be used for legal purposes. It also allows for electronic fee payments.

⁶ http://www.informatizacia.sk/ext_dok-strategicky_dokument_2014_2020_en/16622c

⁷ <https://www.slovensko.sk/sk/titulna-stranka>

Legal Interoperability

The Slovak **e-Government Legal Framework** leans on four fundamental pillars: (1) the **Free Access to Information Law**⁸, which implements the PSI Directive; (2) the **Public Administration Information Systems Law**⁹, which regulates among others the basic conditions in order to ensure integrity and security of public administration information systems, and the administration and operation of a central portal for public administration; (3) the legal provision on **Standards for Public Administration Information Systems**¹⁰, which regulates technical standards, safety standards, minimum standards for technical support, data standards, etc; and (4) the **e-Government Law**¹¹, which aims to streamline and simplify the existing legal procedures related to base registries, for instance ensuring the data synchronisation, when referencing a single method of providing data from the base registries. This fundamental piece of legislation also regulates public administration information systems, the electronic filing of official documents that including certain conditions of the public power on electronic communication, electronic delivery of documents, identification and authentication of individuals, etc.

Rules have been set for interoperability levels of public open data of the Slovak Republic thanks to the work of the Better Data Workgroup. Three strategic documents concerning legal interoperability have been approved over 2017:

- National strategic priority: using linked data, a national ontological model and URI registration
- Checklist for feasibility studies for PublicIS: duty to use URIs and central ontological model
- National strategic priority (open data): the most important one, 5 stars scale open data levels

Additionally, some examples of legal provisions for specific base registries also could be found:

- For the **Civil Registry**: the Act No. 154/1994¹² includes the definition of the civil registry and the information it keeps, including births, marriages or deaths in the Slovak Republic and Slovak citizens who were born, married or died abroad. The Registry also collects data other matters that are crucial for checking or verifying personal status. In particular, data on adoption, establishing parenthood and divorce. The subjects of these records are events that occurred inside the country and abroad, related to citizens of the Slovak Republic. On 14 May 2015, the Slovak Parliament approved an amendment to Act No. 154/1994 Coll. on registries. In this amendment, the most important novelty was the introduction of so-called electronic registries.
- **Register of natural persons**: As a result of the informatization of the public administration, a register of natural persons was established as a basic information system of public administration, the regulation of which is contained in § 23a et seq. of Act no. 253/1998 Coll. on the Reporting of Residence of the Citizens of the Slovak Republic and Registers of the Population of the Slovak Republic, as amended.

The Register of Natural Persons contains data on:

- citizens with permanent residence on the territory of the Slovak Republic,
- citizens who do not have permanent residence in the territory of the Slovak Republic,
- foreigners registered for residence on the territory of the Slovak Republic and foreigners who have been granted asylum in the territory of the Slovak Republic,

⁸ <http://www.noveaspi.sk/products/lawText/1/85126/1/2>

⁹ <http://www.zakonypreludi.sk/zz/2006-275>

¹⁰ <http://www.zakonypreludi.sk/zz/2014-55>

¹¹ Amendment No. 273/2015 (<http://www.zakonypreludi.sk/zz/2015-273>) to the Act No. 305/2013 of Coll. On the eGovernment (<http://www.zakonypreludi.sk/zz/2013-305>)

¹² <https://portal.minv.sk/wps/wcm/connect/en/site/main/Individuals+-life-situations/registry-office/>

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- foreigners without residence on the territory of the Slovak Republic registered in information systems maintained pursuant to Act no. 404/2011 Coll. on the residence of aliens and on the amendment and supplementation of some laws.
 - In the case of the **Land Registry**, there are three main legal provisions:
 - The Act No. 162/1995 Coll. National Council of the Slovak Republic on cadastre and registration of ownership and other rights (Land Registry Act) describes the Registry itself as an inventory and description of the properties, including property rights, the property management communities, etc.
 - The Act No. 461/2009 Coll. which includes the descriptive information of all the entities related to the Registry regarding the data they should keep. It also includes the definition of several code lists such as the type of land, land use, type of protected property, etc.
 - And the Act No. 22/2010 Coll. which describes the procedural rules for the Cadastre (cadastre offices).

Disclosure of data through the Cadastral Portal¹³ is made by the Law No. 346/2007 Coll. amending and supplementing the Act of the National Council of the Slovak Republic No. 215/1995 Coll. on geodesy and cartography as amended by Act No. 423/2003 Coll. Additionally, it states that the information from the Land Registry Information System should be provided for free to all the entities.

- The **Business Registry** was established in 1992, after the adoption of Act No. 513/1991 on the Commercial Code replacing an earlier Company Registry. From 1 February 2004, the new legal requirements for the Business Registry were introduced and entered into force (amendment to Act No. 530/2003 on the Business Registry resulting in the electronic publication of the registry). However, it is Decree No. 25/2004 Coll., which defines the standard forms for submitting applications for registration of a company and the list of documents that need to accompany the application for registration. Finally the last legislation Decree No. 98/2012 Coll. introduced the XML format for the submission of electronic proposals.
- Relevant legislation on which the **Registry of legal persons, entrepreneurs and public authorities (RPO)**

One of the most relevant legal constraints identified is **Data Protection**, reflected in the Act No. 428/2002 Coll. on Protection of Personal Data¹⁴. It regulates the protection of personal data of natural persons in the course of their processing, the principles of personal data processing, the security of personal data, protection the rights of data subjects, the trans-border personal data flow, the registration and keeping of records of filing systems and the establishment, status and scope of powers of the Office for Personal Data Protection of the Slovak Republic. Also in this context, the Act No. 122/2013 on **Personal Data Protection** implements the principles set in the EU's Data Protection Directive (95/46/EC). Under this Act, individuals can access and correct personal information, held by the public and private bodies.

Slovakia is currently not applying the '**Once-Only**' Principle. However, the Civil Registry through amendment of Act No. 154/1994 introduced the Civil Electronic Registry to the original Act. It starts with mentioning that citizens do not have to resubmit documents that are already included in the electronic Registry, thus reducing administrative burdens.

Creation of the **Open Data Portal**¹⁵ under the **Action Plan Initiative for Open Governance 2012 – 2013** was the main step towards making the public information and data available. The intention is to improve governance and public matters, through increasing transparency, effectivity and responsibility. The portal is a catalogue containing various datasets published by obliged entities in the Slovak republic. Data can be

¹³ <https://www.katasterportal.sk>

¹⁴ <http://www.zakonypreludi.sk/zz/2002-428>

¹⁵ <http://data.gov.sk/>

collected from the web directly from the published links or by searching. Open data portal is capable to store a copy of data or accommodate them space in database, along with standard visualization tools, according to the type of data (and the forms of use).

Goals which the open data portal intends to reach:

- Publish remote accessible data in a machine-readable form, using open standards and public licenses.
- Publish metadata (i.e. the data description, the meaning of individual columns in a table or windows in a formula) remote access in machine-readable form, using open standards and public licenses.

The basic characteristics of the portal:

- Provides independent data, along with access to data in the form of satisfying open and technology-neutral standards with public licenses that allow further use of the data.
- Enables document search - full text, filtering, and search by metadata.
- The data and databases available to the public are informative and can use for analytical purposes, not for legal actions.

The data is provided in a standardised form to enable further processing, either automated or through the development of applications to be used directly by citizens. By the time of the study, the portal offers 971 datasets published by up to 32 different ministries and organisations. The **Registry of Addresses**, for instance, has published 11 datasets¹⁶ with information on geographical representation streets, buildings, etc.

Moreover, within the international Open Data context, Slovakia joined the **Open Government Partnership (OGP)**¹⁷ in 2011 with the objective of increasing efforts in this field. This Initiative aims to promote transparency, effectiveness and accountability of the public administration, as well as to give citizens the opportunity to actively participate in the governance. According to the OGP website, Slovakia is currently implementing its third Action Plan¹⁸ that was approved in 2017.

Slovakia has also began some open data initiatives, the most relevant is the **LOD (Linked Open Data) project**, a portal which give access to all the information obtained from different datasets. The list of datasets has increased over the years and the same LOD platform has been through several versions.

The latest version of free downloadable linked data is LOD Slovakia 0.9.8, which has been released on April 2017. The new version of the LOD brought a number of improvements: a new version of the Ontology-based Central Model of Public Administration Data, with specific examples of selected entities and their interconnections from key registries such as the Register of Legal Entities, Address Register, Central Metainformation System and others, including automated support reference data management.

LOD 0.9.8 can be easily accessed and viewed on Internet and it currently contains:

- Central metainformation system of public administration
- Semantic Infrastructure Catalog (ontology, mapping ...)
- Register spatial information
- Catalog of the Statistical Office of the Slovak Statistical Office
- Register addresses

¹⁶ <https://data.gov.sk/organization/2df13d50-0b6f-48ba-884e-be66dc0a2934>

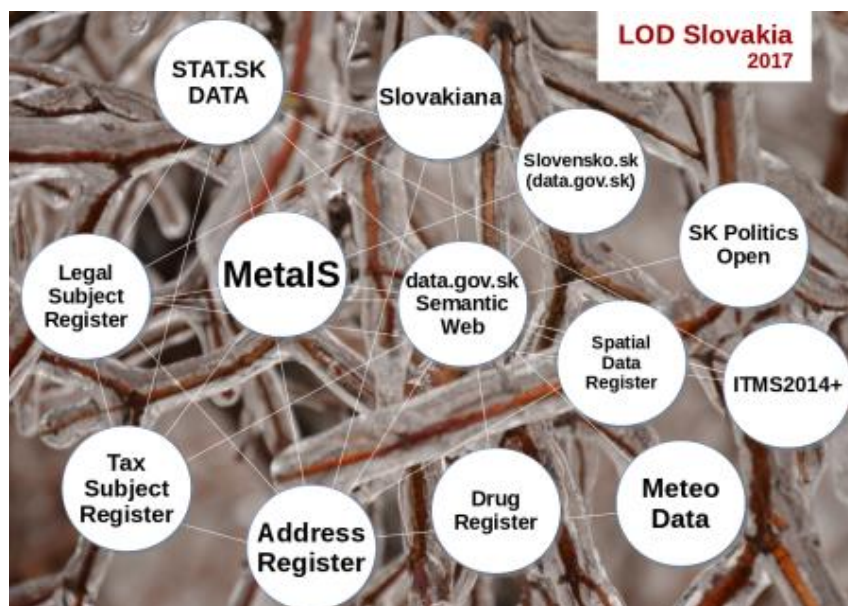
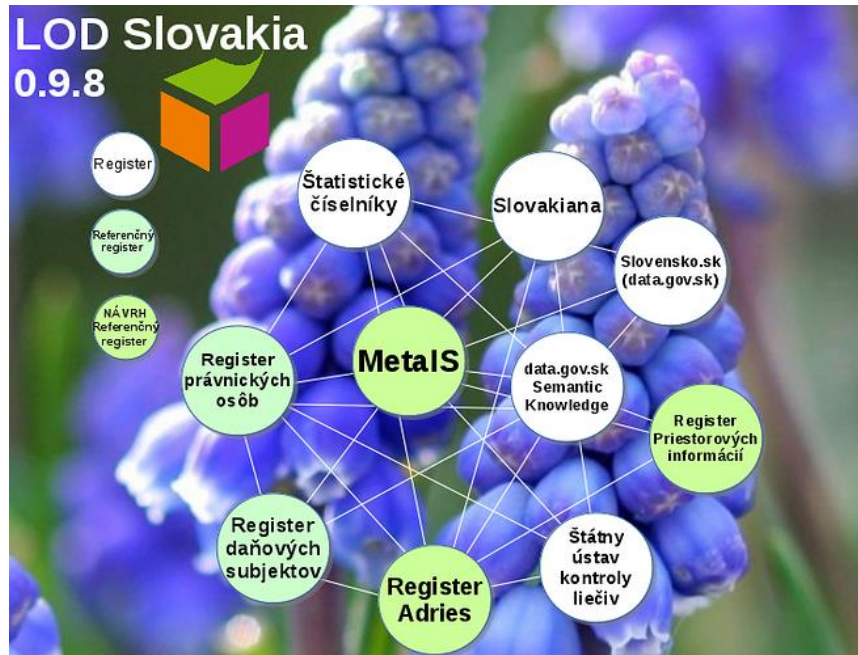
¹⁷ <http://www.opengovpartnership.org/>

¹⁸

https://www.minv.sk/swift_data/source/rozvoj_obcianskej_spolocnosti/otvorene_vladnutie/akcne_plany/2017_2019/Slovakia-OGP-nap-2017-english.pdf

- Register of tax subjects
- Register of legal entities
- State Institute for Drug Control

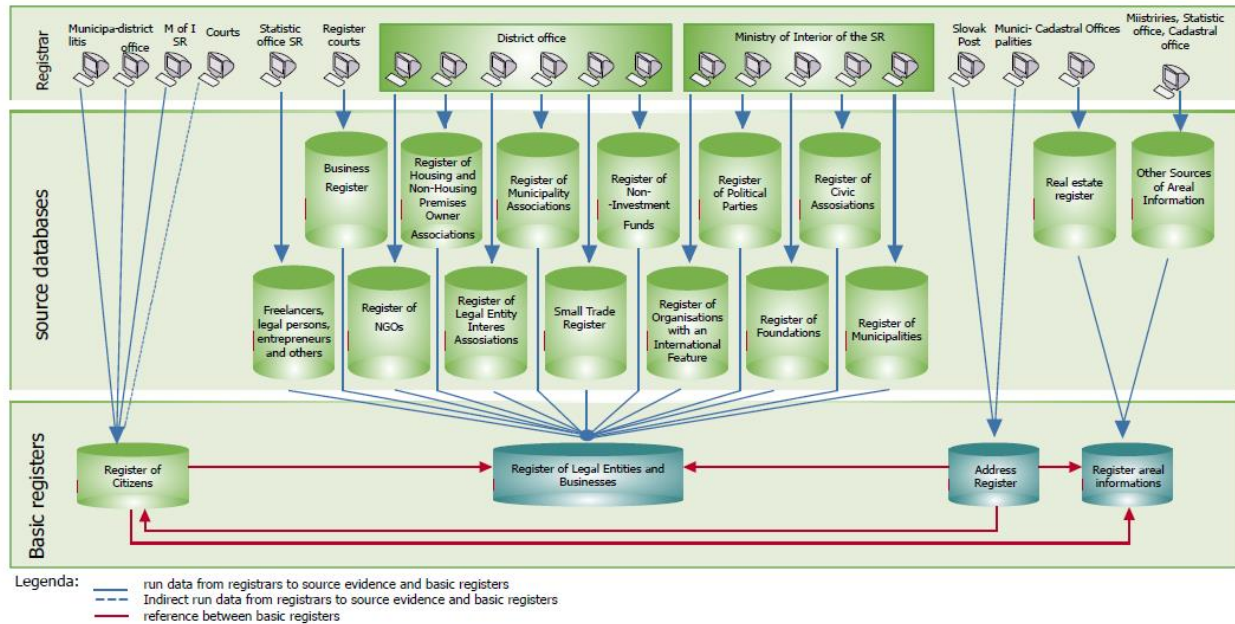
The goal of LOD Slovakia is to provide open, interconnected data at the highest quality level according to the 5 * Open Data classification. LOD Slovakia currently covers the primary data domain of the public administration of the Slovak Republic, focusing on important registers such as Directory of Registers, Registry of Legal Entities, Register of Spatial Information, etc. Its key part is the so- semantic infrastructure, which is a set of national ontologies and their mapping to open external ontologies to ensure semantic interoperability.



Organisational Interoperability

For the purpose of this analysis, the main base registries (also called **Reference Registries**) researched and investigated are the registries holding information on Legal Entities, Entrepreneurs and Public Authorities, Personal Data (Natural Persons), Vehicles, Business and Land.

The following picture displays the structure of base registries, their relations with other data sources and the relevant administrators responsible for them.



It is of special interest that the **Registry of legal persons, entrepreneurs and public authorities (RPO)**¹⁹ is managed by the Statistical Office of Slovak Republic (bottom centre of the previous picture). It was established by the National Concept of Informatisation of the Slovak Public Administration, and it is part of the e-Government. From 1 November 2015, it has become a legal data source because it constitutes a uniform data source of all legal entities (legal persons, entrepreneurs, public authorities) which are currently registered or recorded in more than 70 source registries throughout various types of information systems. All the existing source registries of legal entities will be integrated by November 2017.

The following table gathers the main base registries in Slovakia, and the Public Administration bodies to which they belong and the Master Data Type(s) they handle:

Base Registry	Authority	Master Data
Registry of legal persons, entrepreneurs and public authorities (RPO)	Statistical Office	LEGAL ENTITIES, ENTREPRENEURS AND PUBLIC AUTHORITIES
Civil registry	Ministry of Interior	PERSONAL DATA (NATURAL AND LEGAL PERSONS)
Vehicle Registry	Ministry of Interior	VEHICLES

¹⁹ <https://rpo.statistics.sk/rpo/>

Business Registry	Ministry of Justice	BUSINESS
Land Registry	The Geodesy, Cartography and Cadastre Authority	LAND

The **Meta Information System (METAIS)**²⁰ serves as a catalogue^{21 22} of base registries. It provides information regarding the inclusion of new registries into the catalogue, how to modify the information of the registry and even information on the Reference Data Administration. The following picture shows the registries included in the catalogue.

The following table is not up to date, one new register has been added – the register of natural persons. It should be updated according: <https://metais.finance.gov.sk/refregisters/list?page=1&count=100>

Code ↕	Referential register name ↕	Administrator	to register	Status	Mute
isvs_420	Register of legal entities, entrepreneurs and public authorities	Statistical Office of the Slovak Republic	Statistical Office of the Slovak Republic	Approved and published	MF SR
isvs_6113	Register of taxpayers	Ministry of Finance of the Slovak Republic	Finance Office of the Slovak Republic	Approved and published	MF SR
isvs_278	Information system of employment services	Ministry of Labour, Social Affairs and Family of the Slovak Republic	Labour, Social Affairs and Family	Approved and published	MF SR

Code:	Referential register name	Administrator	Registrar	Status	MUK
isvs_420	Register právnických osôb, podnikateľov a orgánov verejnej moci	Štatistický úrad Slovenskej republiky	Štatistický úrad Slovenskej republiky	Schválený a publikovaný	MF SR
isvs_191	Register fyzických osôb	Ministerstvo vnútra Slovenskej republiky	Ministerstvo vnútra Slovenskej republiky	Schválený a publikovaný	MV SR
isvs_6113	Register daňových subjektov	Ministerstvo financií Slovenskej republiky	Finančné riaditeľstvo Slovenskej republiky	Schválený a publikovaný	MF SR
isvs_278	Informačný systém služieb zamestnanosti (ISSZ)	Ministerstvo práce, sociálnych vecí a rodiny Slovenskej republiky	Ústredie práce, sociálnych vecí a rodiny	Schválený a publikovaný	

²⁰ <https://metais.finance.gov.sk>

²¹ https://metais.finance.gov.sk/howto/REFERENCE.REFERENCE/REF_REG_HOWTO

²² Section 51 of the e-Government Law.

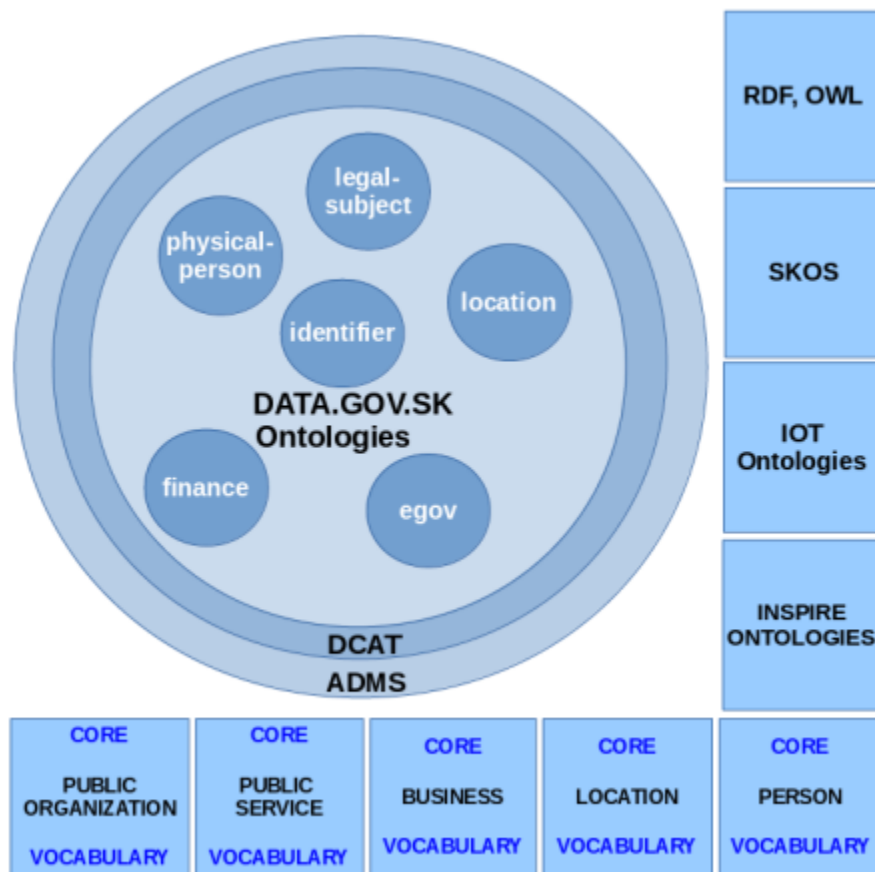
Furthermore, in Slovakia, there is a sort of promotion criteria for data sources to become base registries. It is specifically described in the **Methodological guidance on the procedure for allocating reference data to a list**²³, which ensures a uniform procedure for carrying out the obligations arising from the section 54a of the e-Government Law: “**Identification of data**”.

²³ http://informatizacia.sk/ext_dok-metodicke_usmernenie_na_zaradovanie_ru_do_zoznamu/22954c

Semantic Interoperability

From the Decree on Standards for Public Administration Information Systems, a few examples of standards which foster Information Interoperability can be found. The **standard descriptive language** for the data elements is the Extensible Markup Language (XML) version 1.0 by the World Wide Web Consortium (W3C). For the **transmission of data elements**, there can be used standards such as XSD, OWL, XML, RDF, CSV and JSON. UCS according to UFT-8, XSLT and GML.

The Central ontological model of public data²⁴ contains national ontologies that were derived from base registries such as The Physical Person Register, The Legal Subject Register, The Address Register and others.



However, for the purpose of annotating published data with the ISA2 recommended standards, the Central Ontological Model is mapped to the Core Vocabularies, i.e. for example, national physical-person ontology is mapped to the Core Person Vocabulary

For the purpose of annotating published data, the DCAT-AP is used for describing catalogs, datasets a distributions and CPSV for public services. Therefore, since Central Model is mapped to the CPV and it is also used DCAT-ap, CPVS - it is possible to query Slovak public data without Slovak national ontologies.

²⁴ <https://wiki.finance.gov.sk/pages/viewpage.action?pageId=21168495>

Current process of the Central Ontological Model administration is in competence of the data standardization group PS1 at UPVII. However, more general approach was introduced at the Semantics 2017 Conference: Slovak Public Metadata Governance and Management based on Linked Data:

The technical parameters for data elements and data structures are published on the website of the Deputy Prime Minister's Office for Investments and Informatization of The Slovak Republic in the sections elaborating the development of definitions with regards to its data structures. In MetaIS, the Central Public Data Model is maintained as a set of machine-readable metadata describing uniformly selected entities and their relationships over central data such as: reference data, central registers, MetaIS data, priority datasets, selected data, and services provided. To ensure interoperability at the international level, the Central Model is gradually mapped to Core Public Vocabularies from the European Commission.

The practical implementation of the previously referred law can be found in the **Meta-Information System (METAIS)**. This system offers, among others, a substantial amount of up-to-date information and resources related to Information Interoperability. Here are some examples:

- **Code Lists**

Code: ▾	Counter name ⇅
CL010143	Type of building code
CL010139	Second address
CL010138	currency unit
CL010113	Type statutory body
CL010111	Type of event
CL010110	Type of organizational units
CL010109	Type the person concerned
CL010108	Legal status of the organization
CL010076	languages

- **Reference Identifiers**

Name ⇅	HATE	Type
religion	http://data.gov.sk/def/ontology/physical-person/confessionType	Data element
nationality	http://data.gov.sk/def/ontology/physical-person/citizenship	Data element
The status of natural persons	http://data.gov.sk/def/ontology/physical-person/ExistentialStatus	Data element
status of a natural person	http://data.gov.sk/def/ontology/physical-person/existentialStatus	Data element
year and month of death	http://data.gov.sk/def/ontology/physical-person/yearAndMonthOfDeath	Data element
death year	http://data.gov.sk/def/ontology/physical-person/yearOfDeath	Data element
place of death	http://data.gov.sk/def/ontology/physical-person/placeOfDeath	Data element

- **Definition of base registries and their data** (through the Catalogue of Registries). Each entry includes basic information of the base registry, such as registry name, registry code, date of

inclusion into the catalogue, registry responsible/administration and contact information, etc. Additionally, each entry keeps the identification of Reference Data held by the registry, including ontologies in OWL format as depicted below.

Name:*	business name or corporate name
Order:*	1.
Reference register item belongs to Group:	
Reference register item belongs to subgroup:	
Subject identifications:	1. The identification number of the organization
Source register and source register registrar:	isvs_219 Register of non-profit organizations providing generally beneficial services (Ministry of Interior of the Slovak Republic); isvs_6118 Registration of trade unions and employers' organizations (Ministry of Interior of the Slovak Republic); Register isvs_225 communities of owners of apartments and office space (Ministry of Interior of the Slovak Republic); isvs_226 Register of associations of municipalities (Ministry of Interior of the Slovak Republic); Register isvs_227 association of legal entities (Ministry of Interior of the Slovak Republic); isvs_220 Register of civil society organizations (Ministry of Interior of the Slovak Republic); isvs_217 Register of Foundations (Ministry of Interior of the Slovak Republic); Register isvs_218 non-investment funds (Ministry of Interior of the Slovak Republic); isvs_215 Registration of organizations with an international element (Ministry of Interior of the Slovak Republic); isvs_6117 Business Register (District Court at the county); isvs_224 Register Pages (Ministry of Interior of the Slovak Republic);
Reference identifier of reference data:	http://data.gov.sk/def/ontology/organization/name (owl:DatatypeProperty)
Reference identifier of data element:	The full name of the legal entity (D.1.2)
Note	

Along with standards, the used terminology is an important part of semantic interoperability. Used terminology is defined as the equal understanding of content in the eyes of all users, and it entails assigning a specific meaning to a particular term in a particular area. The Ministry of Finance, therefore, released the first version of the guidelines²⁵ which contain a glossary of terms used in the legislation, as well as other materials in the field of digital society.

Some other resources containing semantic assets can be found at the **Deputy Prime Minister's Office for Investments and Informatization of The Slovak Republic** web portal²⁶, such the explanatory glossary of electronic communications - 2016 (English-Slovak and Slovak-English)²⁷.

Basic Identifiers-based approach

In Slovakia, they use National identifiers for unambiguous and safe identification of natural persons and legal entities communicating with the public administration. The main identifiers pertain to the **Natural person's identifier (NPI)** and the **Legal entities and entrepreneurs' identifier (LEI)**.

The conditions of basic identifiers definition, administration and allocation are set at a nationwide level and include requirements for the identifiers such as:

- Identifiers should be clear and meaning-free;
- Identifiers do not contain any characteristics enabling the derivation of any information on the identified object;
- Identifiers are a symbol chain supporting self-correcting and control functions (numeric chain, alphabetical symbols, etc.);

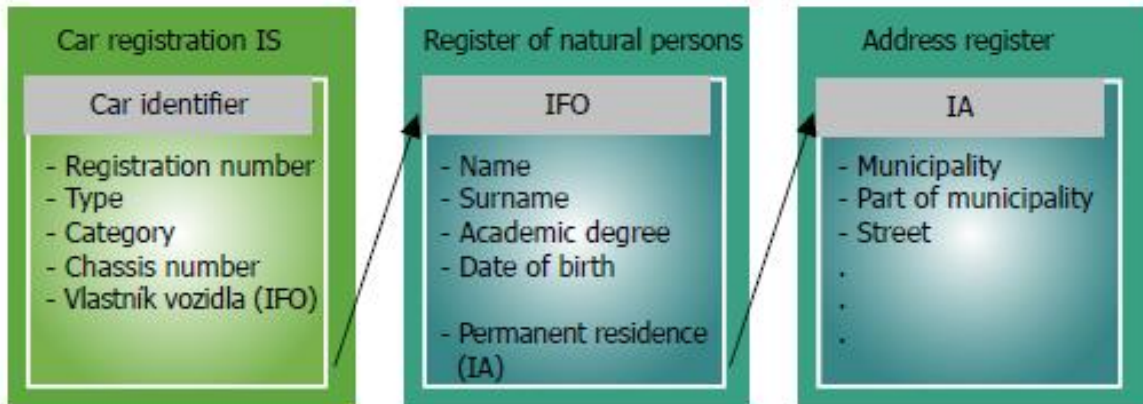
²⁵ http://www.informatizacia.sk/ext_dok-metodicky_pokyn_glosar_pojmov/3482c

²⁶ <http://www.informatizacia.sk/terminologia/3480s>

²⁷ <http://www.vus.sk/iecd/new/Vyklad.asp>

- Identifiers are used at the national level;
- Identifiers are protected from possible fraud;
- In the case of evidence of burden, the generation of Identifiers can be repeated at any time.

The use of these identifiers fosters the integration of base registries which enables the online provision of reference data to other Public Administration Information Systems are obliged to obtain this reference data from the base registries for their processing. Public Administration Information Systems reference data by online provision from base registries via Web Services and are based on the **Identifiers**. The picture below illustrates one specific example of this integration (Car registration – Registry of Natural Persons – Address Registry).

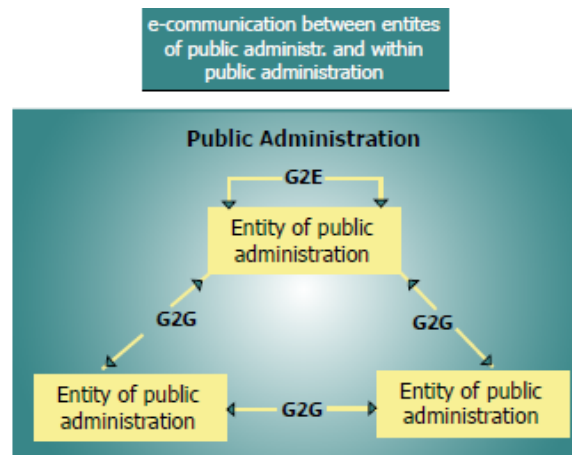


Technical Interoperability

The **G2G module**²⁸ ("Module of process integration and data integration"), acts as the **Data Integration Platform** (data layer) in Slovakia. The Deputy Prime Minister's Office for Investments and Informatisation of The Slovak Republic is the body responsible for the management of this IT component. Its basic functionality is described in section 10 of the **e-Government Law** and can be summarised as the provision of support for the official exchange electronic messages and other electronic communications for public authority systems and other information systems. More specifically, the 2G2 module represents:

- *A technical platform which ensures the integration of all public authorities through an integrative interface;*
- *A transactional nucleus that controls the communications between the connected systems, ensuring transactional processes, reverse transactions and the like;*
- *A component designed and modelled for the execution of aggregate services (those services that are composed of multiple service providers);*
- *A mean for supervision and monitoring of transactions.*

The G2G module allows data exchange between public administration information systems and ensures their communication and coordination through a process-oriented approach (BPM) within the integration of information systems that are built on different technologies and use different standards and protocols.



G-Government, E-Employee

The module is based on the accepted concept of ESB - an integration solution that creates transformations of input and output data for various technical interfaces, thereby ensuring the communication between mutually incompatible technologies. It supports different protocols and standards; the main one is SOAP in exposing Web Services. The communication through the ESB is stateless, and the module itself does not implement any business logic.

To ensure communication between the individual components, the system allows for the creation of certain logic for the selection of individual services including orchestration and choreography of services through

²⁸ Government to Government

functional rules. They are created through generic and specific processes and sub-processes, and their composition can be re-used again. This approach significantly extends the integration platform, contributing to the creation and provision of flexible solutions.

The orchestration of processes is achieved by defining procedures for processing incoming and outgoing messages, including notifications on expiration (e.g. long-term storage files).

Monitoring and surveillance operations enable to track the performance of the entire solution and pinpoint where particular transactions are required. It is also designed to provide information about individual processes regarding their effectiveness and proper functioning. The information can then be used to identify problems or ineffectiveness, in turn ensuring continuous optimisation of the entire environment.

Cross-border Interoperability

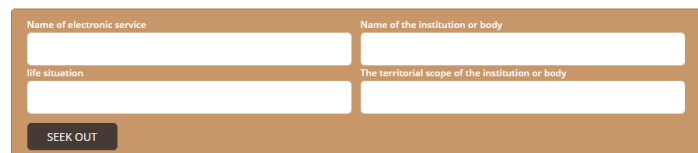
Slovakia is a member of EUCARIS, ECRIS and it is a partly connected member of EULIS. Furthermore, Slovakia's Business Registry is connected to the European Business Registry (EBR), thus enabling access to official information about European companies.

E-Government Public Services making use of Base Registries data

Better access to data in base registries allows governments to deliver public services in a user-friendly and effective way. In Slovakia, the **Central Government Portal**²⁹ can be considered as the clearest implementation of the User Centricity Principle, aiming to be the single access point to public services. As in other countries, this central portal groups the services by day-to-day themes which citizens are familiar with (e.g. Housing, Travelling, Finance, etc.)

The portal itself cannot be considered as a service provider in the case of base registries data. However, it serves as the hub that brings the different services provided by base registries to one single place. This, in turn, allows direct access to the websites of which the service can be used. Examples of base registries with services included in the Central Government Portal are the Land Registry or the Vehicle Registry. Apart from the categorisation of services, this portal also offers a useful functionality, which allows the user to look for a service based on the name of the service, the related life event, the name of the responsible body or the scope of the responsible body.

Find a service



Name of electronic service	Name of the institution or body
life situation	The territorial scope of the institution or body
<input type="button" value="SEEK OUT"/>	

The portal also contains an e-Desk module which allows citizens to view all of their communications with the public administration, including electronic versions of documents that can be used for legal purposes.

On the other hand, the **Electronic Services Portal**³⁰ provided by the Ministry of Interior of the Slovak Republic is also a reference to the provision of services, which make use of base registries data. Due to the classification of life events provided in this portal, it is also possible for easy identification and access to the base registries' services.

Furthermore, in the case of public services, the central **Meta-Information System (METAIS)** of the public administration serves as a catalogue and a registry with containing all the available e-Government services and their relevant metadata.

1 180	1 033	7 863	1 201	27
eGov services of state administration	eGov municipal services	Application services	Public administration information systems	Codelists

²⁹ <https://www.slovensko.sk/sk/titulna-stranka>

³⁰ <https://portal.minv.sk/wps/wcm/connect/sk/site/top/uvod/>

Services offered to the citizens and businesses are based on life events, and data in the base registries often serve as an 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:

- **Registry of legal persons, entrepreneurs and public authorities (RPO)**³¹: provides online identification of companies in the process of formation for all types of legal entities, entrepreneurs and public authorities. It is possible to consume basic electronic services without signing in, and examples of such is a service pertains to the search of records in the informative part of the Registry. However the advanced search feature is only available after login.
- **Land Registry**³²: the cadastral Portal enables authorised access to land registry data, obtaining basic information instantly and without visiting the respective district cadastral registry. The authorised subjects can obtain a summary and detailed information without complicated correspondence.
- **Business Registry**³³: it is possible to submit proposals for registration, update/delete data in the registry and request copies of the documentation.

Identification and authentication in the Slovak e-Government environment are ensured through electronic identity cards (eID cards).

³¹ <https://rpo.statistics.sk/rpo/>

³² <https://www.katasterportal.sk/kapor/informacie.do>

³³ <http://www.orsr.sk/>