



SLOVAKIA

2024 Digital Public Administration Factsheet

Supporting document





Main developments in digital public administrations and interoperability

JULY 2024



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Icons Glossary		
Political Communication	Legislation	Infrastructure
FJ:	<u>Ja</u>	

2030 DIGITAL DECADE

The **Digital Decade policy programme 2030** sets out digital ambitions for the next decade in the form of clear, concrete targets. The main goals can be summarised in 4 points:

- 1) a digitally skilled population and highly skilled digital professionals;
- 2) secure and sustainable digital infrastructures;
- 3) digital transformation of businesses;
- 4) digitalisation of public services.

Skills

20 million employed **ICT specialists**, more graduates + gender balance 80% of adults can **use tech** for everyday tasks

Government

Key Public Services - 100% online Everyone can **access health records online** Everyone can use **eID**



Infrastructure

Gigabit connectivity for everyone, high-speed mobile coverage (at least 5G) everywhere EU produces 20% of world's semiconductors 10 000 cloud edge nodes = fast data access EU quantum computing by 2025

Business

75% of companies using **Cloud, AI or Big Data**Double the number of **unicorn startups**90% of **SMEs taking up tech**

The production of the **Digital Public Administration factsheets and their supportive documents** support the objectives and targets of the Digital Decade programme. By referencing national initiatives on the digital transformation of public administrations and public services, as well as interoperability, they complement existing data and indicators included in the Digital Decade reports and related resources. They also highlight and promote key initiatives put in place or planned by EU countries to reach the Digital Decade's targets.

Interoperability State-of-Play

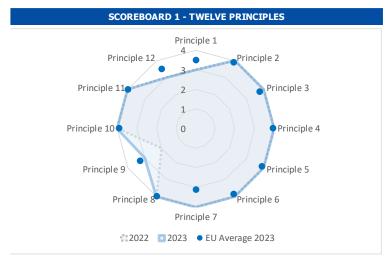
In 2017, the European Commission published the European Interoperability Framework (EIF) to give specific guidance on how to set up interoperable digital public services through a set of 47 recommendations divided in three pillars. The EIF Monitoring Mechanism (MM) was built on these pillars to evaluate the level of implementation of the framework within the Member States. Whereas during the previous, the MM relied upon three scoreboards, starting from the 2022 edition it includes an additional scoreboard on cross-border interoperability, assessing the level of implementation of 35 Recommendations. The mechanism is based on a set of 91 Key Performance Indicators (KPIs) clustered within the four scoreboards (Principles, Layers, Conceptual model and Cross-border interoperability), outlined below.

Starting from the 2022 edition, an additional scoreboard, Scoreboard 4, focusing on cross-border interoperability, has been incorporated. This scoreboard assesses the adherence to 35 Recommendations outlined in the EIF framework. Specifically, it encompasses Interoperability Principles 2, and 4 through 11 from Scoreboard 1, all recommendations pertaining to Interoperability Layers from Scoreboard 2, as well as Conceptual Model recommendations 36 to 43 and 46 to 47 from Scoreboard 3.



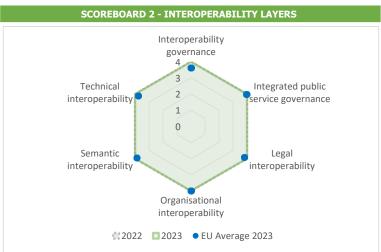
Source: European Interoperability Framework Monitoring Mechanism 2023

Each scoreboard breaks down the results into thematic areas (i.e. principles). The thematic areas are evaluated on a scale from one to four, where one means a lower level of implementation and four means a higher level of implementation. The graphs below show the result of the EIF MM data collection exercise for Slovakia in 2023, comparing it with the EU average as well as the performance of the country in 2022.



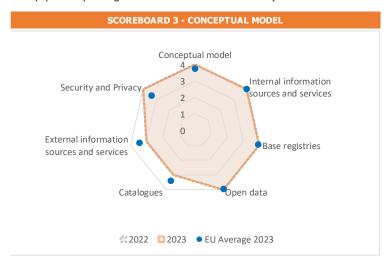
Source: European Interoperability Framework Monitoring Mechanism 2023

The Slovak results in Scoreboard 1 stand for a good implementation of the EIF Principles. Slovakia has obtained the maximum score of 4 in nine Principles, in line with the European average and sometimes also above. Furthermore, the country has managed to improve its score in Principle 9 (Multilingualism) reaching a score of 3. If the country wants to increase its score in the three Principles that have not obtained the maximum score, it should strive to ensure that national interoperability frameworks and strategies are aligned with the EIF (Recommendation 1 – Principle 1), use information systems and technical architectures that cater for multilingualism when establishing a European public service (Recommendation 16 – Principle 9), and evaluate the effectiveness and efficiency of different interoperability solutions and technological options (Recommendation 19 – Principle 12).



Source: European Interoperability Framework Monitoring Mechanism 2023

Slovakia's scores in Scoreboard 2 illustrate an excellent performance in the country for all interoperability layers. Thus, Slovakia continues to obtain the maximum score of 4 in all the layers. A possible area for improvement is linked to Interoperability governance where the country did not reach the maximum score for all KPIs, especially those related to consulting relevant catalogues of standards, specifications, and guidelines at national and EU levels (Recommendation 23), as well as actively participating in standardisation work (Recommendation 24).

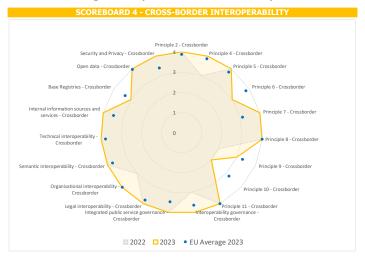


Source: European Interoperability Framework Monitoring Mechanism 2023

The Slovak results in relation to the Conceptual Model in Scoreboard 3 show a very good performance of the country. Slovakia has a high performance in Security and Privacy, performing better than the EU average in this area. To further improve its score on External information sources and services, Slovak public administrations could use more external information sources and services while developing European public services, when useful and feasible to do so (Recommendation 45). Similarly, to increase its score on Catalogues, Slovakia could increase its

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efforts to put in place catalogues of public services, public data, and interoperability solutions and use common models for describing them (Recommendation 44).



Source: European Interoperability Framework Monitoring Mechanism 2023

The results of Slovakia on Cross-Border Interoperability in Scoreboard 4 show a very positive performance of the country. Particularly, the country has the maximum score of 4 in six Principles. Only in Principles 6 (User-centricity) and 9 (Multilingualism) has the country obtained a score of 3. The lowest score for Slovakia is linked to Principle 10, for which the country has obtained a score of 2. In this context, Recommendation 17 on the simplification of processes and use of digital channels to deliver European public services should be observed to increase the score on Principle 10. Base registries also represent an area for improvement, where the country may consider develop interfaces with base registries and authoritative sources of information, publish the semantic and technical means and documentation needed for others to connect and reuse available information (Recommendation 38).

Additional information on Slovakia's results on the EIF Monitoring Mechanism is available online through interactive dashboards.

Curious about the state-of-play on digital public administrations in this country?

Please find here some relevant indicators and resources on this topic:

- Eurostat Information Society Indicators
- Digital Economy and Society Index (DESI)
- eGovernment Benchmark
- · Repository of good practices on the EIF implementation

2. Digital transformation of public administrations



Main digital strategies, action plans and legislations

Berlin Declaration on Digital Society and Value-Based Digital Government

In December 2020, the Slovak government signed the Berlin Declaration on Digital Society and Value-Based Digital Government, thus re-affirming its commitment – together with other European Union (EU) Member States – to foster digital transformation in order to allow citizens and businesses to harness the benefits and opportunities offered by modern digital technologies. The Declaration aims to contribute to a value-based digital transformation by addressing and strengthening digital participation and digital inclusion in European societies.

2030 Strategy for the Digital Transformation of Slovakia and Action Plan 2023 - 2026

The 2030 Strategy for the Digital Transformation of Slovakia framed the government strategy in a way that defined national policies and particular priorities with regard to the ongoing digital transformation of the economy and society.

The strategy followed up on the priorities of the EU Digital Single Market. At the national level, it accelerated ongoing processes in terms of building the digital market and carrying out various measures that arose from the most recent cross-sectoral policies of the EU. The strategy also reflected the strategic materials and recommendations of international organisations (EU, OECD, UN, G7 and G20) that consider digital transformation to be the key to inclusive and sustainable growth. The strategy puts emphasis on new digital technologies such as artificial intelligence, Internet of Things, 5G technology, big data and analytical processing of data, blockchain or high-performance computers, which will eventually become a new engine of economic growth and competitiveness.

Several areas were identified regarding the necessity to multiply the potential of digital transformation:

- Economy;
- Society and education;
- Public services;
- Rural development; and
- Science, research and innovation.

The targets of the process are the citizens, whose everyday life should get simpler, and entrepreneurs, whose businesses should be supported by various incentives and whose bureaucratic burden should be eliminated.

The strategy was followed by the 2019–2022 Action Plan for the Digital Transformation of Slovakia, which defined particular measures in several priority areas:

- Improvement of education and fostering digital skills and employment for the modern era;
- Creation of a basis for a modern digital economy;
- Improvement of the ability of public services to innovate and use data; and
- Development and practical implementation of artificial intelligence.

As for the digital government, the ambition is to launch and implement a 'data-driven State' concept in the public administration. The aim of the concept is for public administration to adopt decisions based on the best available knowledge. It is necessary to make sure that the institutions know how to use real data and make data-based (and possibly automated) decisions. Transforming the functioning of public administration organisations and processes is also key, so that such analyses can be effectively used. The action plan also proposed the continuous deployment of fully automated public administration services, meaning that the system handles filings automatically based on selected criteria.

On December 2022, the government of the Slovak Republic approved the Action Plan for Digital Transformation of Slovakia 2023–2026 aimed to increase the digitalisation of the Slovak economy and targeting especially small and medium enterprises and innovative businesses. It focuses also on developing and deploying top digital technologies and on building a resilient society. It defines

a framework to promote productivity and the knowledge economy, focusing on higher valueadded segments, a more competitive economy and sustainable development. It also promotes a society that thrives in the digital age, but also learns to be resilient to the negative impacts of digital technologies.



National eGovernment Concept

The National Concept of Informatisation of Public Administration of the Slovak Republic, also known as the National eGovernment Concept, was been approved by the Slovak government in December 2021. The National eGovernment Concept will follow these strategic documents: the 2030 Vision and Strategy for Development of Slovakia, the 2030 Digital Transformation Strategy of Slovakia, and the National Cybersecurity Strategy 2021-2025.

National eGovernment Concept contains strategic targets:

- Shared services, government cloud and central common blocks;
- Management of data;
- User orientation, multi-canal access, life events;
- Digital office and starting point for digital transformation;
- Public procurement;
- Human resources in IT in public service; and
- Cybersecurity and information security.

Every strategic target will be regularly evaluated based on indicators.

The National eGovernment Concept concerns all elements of public administration. It formulates a set of strategic goals, priorities and measures which aim to create a central architecture at the national level and to define policy, regulatory and other tools in order to build a controlled and effective level of informatisation in public administration.



Proposal for the ESIF Programming Period 2021–2027

Negotiations for the new programming period began in early 2020. The Ministry of Investments, Regional Development and Informatization of the Slovak Republic proposed a follow-up strategy based on the current investments. The strategy had a higher focus on reducing bureaucracy for businesses and citizens, and the objective of speeding up the digital take-up with digital-by-default services. Moreover, it can be used to support data-driven governance, with more public sector data available, building the digital government structure as a platform based on open APIs. It will also increase the quality of public services thanks to continued feedback from the users. The partnership agreement proposal released in December of 2020 included policy objectives aligned with the government digitalisation through the development of the digital and data economy, the modernisation of public services, and the creation of smart regions and cities.



Programme Slovakia and Partner Agreement for 2021–2027

On 18 July 2022 a Partner Agreement for 2021-2027 for the Programme Slovakia was approved. Its aim is to: (i) support science and research; (ii) build smart cities and regions; (iii) develop digital solutions for citizens, businesses, research organisations and public administrations; (iv) develop small and medium-sized enterprises; (v) develop skills for smart specialisation, industrial transformation and entrepreneurship; and (vi) increase digital connectivity.

In November 2022, the European Commission approved Programme Slovakia 2021–2027, within Policy Objective one (PO1). The PO A more competitive and smarter Europe, includes Specific Objective RSO 1.2 Reaping the benefits of digitisation for citizens, companies, research organisations and public authorities, RSO 1.4 Developing skills for smart specialisation, industrial transition and entrepreneurship and RSO 1.5 Enhancing digital connectivity. The listed specific objectives include the topic of digitalisation.



Act No. 305/2013 on eGovernment

The Parliament adopted Act No. 305/2013 on eGovernment in 2013. This act provides a legal framework for operation of public administration bodies in electronic manner, e.g. the number of key elements, such as pursuance by proxy, base registries, eDesk modules document conversion, electronic payment of fees, authentication of persons in public administration information systems, eDelivery, eForms, electronic personal mailbox and the administration and operation of a central portal for public administration and Integrated Service Points (ISPs) for assisted public administration eServices. Furthermore, it also laid down the foundation for a common data layer by defining a common central module for intergovernmental communication. This module implemented the rules and processes for data exchange among IT systems from



different segments (see 4.2.4 Interconnection of Base Registries) and applied the concepts of Master Data Management. This act is updated regularly according to current needs and domestic or international requirements.

After more than 10 years of experience with regulation laid down by Act No. 305/2013, The Ministry of Investments, Regional Development and Informatization of the Slovak Republic has decided that it is necessary to adopt a new act on eGovernment. The main reasons for this decision were the overall developments in the IT sector and the fact that Act No. 305/2013 was designed with idea of digitalisation of traditional paper procedures from the official agenda (public services and official proceedings) provided to the public, which has become outdated. The new act on eGovernment naturally abandons that idea and aims to create a comprehensive digital alternative for the official agenda based on current needs and the current capabilities offered by information technologies.

The new legislative intent was submitted to the Slovak government in March 2023 for approval. Due to the change in the political set-up of the Slovak Republic, the legislative intent is expected to be re-negotiated and approved by the Slovak government in 2024.

Act against Bureaucracy No. 177/2018

Act No. 177/2018 on measures to reduce the administrative burden by using public administration information systems (Act against Bureaucracy) came into force on 1 September 2018. According to the provisions of Par. 1 of the act, in the performance of their official tasks, public authorities are obliged and authorised to obtain and use data stored in public administration information systems to produce extracts, and to provide such data and extracts when necessary. Moreover, an amendment to the Act against Bureaucracy No. 177/2018 eliminated the need for citizens to provide eleven types of paper documents in their dealings with the authorities.

The amendment to the Act against Bureaucracy (14 April 2019) relieved citizens and companies of their duty to submit further statements and confirmations by using the public administration information system. This resulted in less administrative burden and in simplified processes related to the confirmation of arrears within social insurance, health insurance calculations, confirmation of school visits and extracts from the register of NGOs.

In July 2021, the government of the Slovak Republic adopted an amendment to Act No. 177/2018. Following the amendment, the list of documents that citizens and businesses had to obtain and deliver to public authorities within their proceedings was further reduced by 21. Citizens will no longer be required to submit what accounted for more than 4 million papers per year, which will result in savings of approximately EUR 40 million per year. At the same time, The Ministry of Investments, Regional Development and Informatization of the Slovak Republic is in the process of implementing a unique systematic Data Program, which is aimed to support the implementation of data activities across the entire public administration in order to dynamise and digitally help the public administration.

Digitalisation of internal processes

GovNet

GovNet is a supra-departmental information network for the efficient and secure exchange of information. It was established on the basis of the resolution of the government of the Slovak Republic no. 310/1993 Coll. GovNet creates a universal interconnection network for individual isolated virtual private networks of public administration entities and ensures safe and reliable access from one network to all others under the control of other participating public administration entities.

GovNet enables connected public administrations to use a set of useful data communication infrastructure services, such as sharing information resources between public administration entities, a secure shared access to the Internet through a reverse web proxy, connectivity to the TESTA Network, internal IP telephony independent of the public telecommunications network, and a coordinated address range on VPN links of nodes and projects, among others.

Implementing Rules for Act No. 95/2019 Coll. on Information Technologies in Public Administration

The following decrees are meant to implement Act No. 95/2019 Coll. on Information Technologies in Public Administration:

Decree No. 78/2020 Coll. on Standards for Information Technologies of Public Administration;



- Decree No. 401/2023 Coll. of the Ministry of Investments, Regional Development and Informatisation of the Slovak Republic dated October 9, 2023 on project management and change requirements in the operation of public administration information technologies;
- Decree No. 179/2020 Coll. Laying down the Method of Categorisation and the Content of Security Measures for Public Administration Information Technologies: and
- Decree No. 54/2021 Coll. on Electronisation of the Public Administration Agenda.

Digitalisation supporting the EU Green Deal

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Digital Initiatives supporting the EU Green Deal

The initiatives supporting digitalisation and the EU Green Deal in Slovakia include the Recovery and Resilience Plan of Slovakia, which has been approved by the European Commission. This plan is entirely financed by the Recovery and Resilience Facility (RRF). It grants and includes investments and reforms that address REPowerEU objectives. The plan allocates significant resources to climate objectives and the digital transition, indicating a commitment to leveraging digitalisation to support sustainable and green initiatives. Additionally, Slovakia's 2030 Digital Transformation Strategy outlines the policy priorities of the country in the context of ongoing digital transformation of the economy and society under the influence of innovative technologies and global megatrends of the digital era. This Strategy also sets a long-term priority of 'transforming traditional industry into an intelligent, innovative, digital industry.' Digital transformation and the shift towards an industry focused on innovation and technology have immense potential to become a real driver of economic growth in Slovakia. It is necessary for the Slovak economy to shift from traditional industrial production to the digital level. The traditional sectoral division of the economy is gradually disappearing, while its interdisciplinary and intersectoral character is growing. The goal in this area is to harness the technological potential and increase private and public investments in progressive technologies such as AI, IoT, 5G, HPC, big data, blockchain, green energy, and more.



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3. Interoperability and data

Interoperability Framework



National eGovernment Concept

The National eGovernment Concept, which was approved by the Slovak government in December 2021, contains the strategy to achieve interoperability of public administration services in Slovakia (e.g. data interoperability of information systems, semantic data interoperability, interoperability of publicly available open data from base registries published in the central portal of open data, interoperability of base registries, technological interoperability, and interoperability of government cloud).

Data access, management and reuse



eGovement Data Act

The eGovement Data Act aims to create a general regulation for data management in the public sector bodies, which is an area that is not sufficiently and suitably covered by the existing legal regulation set out in previously acts. The eGovement Data Act serves as an important part in the transformation of Slovakia into a truly digital State, i.e. a State that exploits the full potential of data in accordance with the interoperability principle, accessibility and data quality requirements. It will also help Slovakia become a State that makes its decisions on the basis of expert data from analyses, predictions and evaluations using current, available, accurate and complete data. The first legislative works on the eGovement Data Act began already in 2018. Since then, the act has undergone a thorough elaboration, going from being a simple and very general regulation to a sophisticated and comprehensive one, which reflects contemporary needs in the field of public sector data management. The act sets out the rules for data sharing within the public sector and from the public sector to the public, implements MyData concept for natural person and legal entities, bolsters the existing open data regulation and enhances and improves public sector data accessibility for analytical purposes. It is expected that the eGovement Data Act will be finished in 2024 and adopted in 2025.



Act on Free Access to Public Information No. 211/2000

The Act on Free Access to Information, which came into force on 1 January 2001, defined the term 'public information' and established a general principle of free and unlimited access. Under this act, any person or organisation can request information held by State agencies, municipalities and private organisations that make public decisions. The body has to respond no later than 10 days after receipt of the request and must keep a registry of requests. Costs are limited to reproduction and can be waived. There are a number of exemptions (e.g. for information classified as a State or professional secret, personal information, trade secrets, etc.), which can be withheld. Appeals are made to higher agencies and can be reviewed by a court.



Reuse of Public Sector Information

Slovakia notified the full transposition of Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information (PSI Directive). This legislation was implemented by the Act No. 211/2000 on Free Access to Public Information. As of 17 July 2021, the Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information (PSI Directive) were replaced by Directive (EU) 2019/1024 of the European Parliament and of the Council of 20 June 2019 on open data and the re-use of public sector information. This Directive was transposed by Act no. 251/2022 Coll. amending Act No. 211/2000 Coll. on free access to information.

Open data



Action Plan for the Open Governance Initiative

The Action Plan for the Open Governance Initiative in the Slovak Republic for the years 2022-2024 was approved by Resolution of the Government of the Slovak Republic No. 457/2022. The Slovak Republic's fifth action plan includes promising commitments on strengthening the protection of whistleblowers and expanding the number of companies disclosing beneficial ownership information. Existing data control mechanisms will need to be well-resourced to cope with the expectation of rapid beneficial ownership data disclosure. The action plan was adopted by the newly created Multi-Stakeholder Forum (MSF) dedicated to the OGP process. One of its commitments consists in measuring the impact of open data in pre-defined areas. The Data Office is currently preparing the methodology to measure this impact.

Base registries

The following table lists the Slovak base registries:

National		
Business and Tax	The Business Register of the Slovak Republic on Internet is a public list containing statutory data concerning entrepreneurs, companies and other legal entities, where this is required under separate legislation. The list is administered by the Ministry of Justice of the Slovak Republic. Data are entered into the register by the district authorities through the trade business information system, the administrator of which is the Ministry of the Interior of the Slovak Republic.	
Transportation / vehicles	The Unified information system in road transport keeps records on individuals and professionally competent entities, as well as on authorised entities. These records represent a unified and central source of information about registered individuals and entities, their professional qualifications, authorisations, and qualifications. The records are divided into public and non-public according to §3 and §6 to §11 of the Act on the Unified Information System in Road Transport No. 387/2015. The records include: technical station register, technician register, inspection register from technical stations, driving schools and training centres register, register of professionally competent persons, register of administrative offenses of vehicle operators. For their functionality as well as for ensuring the completeness of information, the system also stores and maintains the following data similar in nature to the registry: taxi service registry, ADR registry, national electronic registry of road transport operators, central card registry, unified information system for issuing driver qualification cards, record of vehicle approvals maintained by the Ministry of Transport, record of driving school instructors, record of traffic violations in road transport.	
Land	The Slovak Land Register Portal is hosted by the Geodesy, Cartography and Cadastre Authority of the Slovak Republic, and a central government authority for land registers. The portal is operated and maintained by the Bratislava Geographic and Cartographic Institute. The portal provides legal and factual information about real estate ownership. It is updated once a week using data supplied by the respective land register offices. The portal provides selected data from the geographic information file (i.e. cadastral maps) and the descriptive information file (i.e. information about parcels, structures, flats, non-residential premises and ownership documents); the register of municipalities; the register of cadastral districts; statistical reports aggregate values by type of land; information about the status of proceedings before the land register; and notifications of pending registration applications.	
Population	The Register of Inhabitants of the Slovak Republic is a database maintained by the Ministry of the Interior of the Slovak Republic containing information	

	about residents living in Slovakia. It includes personal data such as names, dates of birth, addresses, and citizenship status of individuals residing in the country. The register is used for various administrative purposes, including census data collection, election registration, social security, and public services provision. It helps the government to keep track of the population, monitor demographic trends, and ensure efficient delivery of public services to residents.
Other	The Non-governmental and non-profit organisations Register is a database that contains information about non-governmental and non-profit organisations operating in Slovakia. This register is maintained by the Slovak authorities and provides details about the legal status, activities, and other relevant information about these organisations. This allows for transparency and accountability of these organisations to the government and the public. Non-profit organisations play a crucial role in addressing social issues, advocating for causes, and providing services to communities.
Sub-national	
Base Registries	The Register of interest associations of legal entities serves as a centralised database or record-keeping system for these associations, providing transparency and accessibility to information about their existence and operations. Interest associations of legal entities are organisations or associations formed by legal entities to collectively pursue common interests, advocate for specific causes, or address shared concerns. These associations often work together to represent the interests of their members, engage in lobbying activities, and collaborate on initiatives that benefit the collective group. The specific focus and activities of these associations can vary widely depending on the interests and goals of the member organisations.



National Concept of Informatisation of Public Administration of the Slovak Republic

One of the aims of the National Concept of Informatisation of Public Administration of the Slovak Republic, which was approved by the Slovak Government in December 2021, is to achieve the interconnection of public administration information systems and reference registries. The efficient systems interconnection will allow to merge related services while minimising user interactions or the need for manual data entry by implementing reference data policies and common modules for process and data integration.



Common Modules

Public authorities are obliged to use common modules among public administration information systems while performing their roles and exercising their powers electronically. Common modules ensure that there is no need to mutually integrate all information systems with one another, because each public authority integrates with these common modules where the communication and exchange of data take place.

The Module for Data and Process Integration is one of the common modules and it serves as a unified mechanism to provide data to public authorities. It contains a central system of reference for data management, which provides base registries in Slovakia (the so-called 'reference registries'), as well as other standards for public administration information systems aimed to achieve technical and semantic compatibility of the respective information systems and their data. The Ministry of Investments, Regional Development and Informatization of the Slovak Republic manages the Module for Data and Process Integration.



Reference Registries Framework in the eGovernment Act

The basic legislative framework related to the base and reference registries and their mutual interconnection is defined in Act No. 305/2013 Coll. on eGovernment. Its sixth part contains basic rules for equating data, referencing and correcting data between the registries, as well as rules on obligations of registries administrators. Specific rules regarding the respective registries, including the extent of their data and the opportunities for other entities to access them for specific purposes, are defined in the regulations which created them. The eGovernment Act

also created rules for the establishment of a common central process and data integration module, which:

- Grants unified access to data within the information systems in order to allow public authorities to exercise their duties electronically; and
- Integrates and synchronises data during referencing and offers a single way of providing data from the information systems of public authorities, mainly from reference registries, and provides integration services to reference and base registries based on SOAP and REST API technology and XML data format.

The interconnection of registries and the exchange of data between public authorities was supported by the Ministry of Investments, Regional Development and Information of the Slovak Republic through the establishment of the Data Office at the beginning of 2019. The Data Office is responsible for implementing the policy and the principles in public sector data management. It also works towards a central data model by mapping out the relations between data and registries. The Data Office also oversees data quality, the publication of reference data, open data, the access to MyData and consolidates an analytical background available for policy making. In Slovakia there are currently the following reference registers: (i) Register of addresses; (ii) Register of legal persons, entrepreneurs and public administration organs; (iii) Register of natural persons; (iv) Information system of employment, (v) Register of tax entities; (vi) Central registration of records of guaranteed conversion and (vii) Central register of the Transport Office. The common Module for Data and Process Integration is used for integration to base registers.

Data platforms and portals

The following table lists the Slovak data platforms and portals infrastructures:

Oversi.gov.sk	The central portal "oversi.sk" offers a way for public institutions to access any necessary statements and confirmations issued by other public institutions in order to apply the principles foreseen by the Antibureaucracy Act. It is accessible after registration into the portal.
Data.gov.sk	The open data portal of Slovakia, data.gov.sk, was created as part of the Initiative for Open Government. The aim of the portal is to improve public services governance and administration by increasing transparency, efficiency and accountability. In practice, data.gov.sk offers a catalogue of datasets shared by various entities of the Slovak Republic. The administrator of the data.gov.sk portal is The National Agency for Network and Electronic Services.
Single Digital Gateway	Since December 2020, the government portal has served as Single Digital Gateway according to Regulation No. 2018/1724. The information part, which can be found in the 'Life events' section, is available in Slovak and English. The information content is continuously updated according to legislative changes and reports of individual Ministries (coordinators).
Mirri.gov.sk	The official portal of The Ministry of Investments, Regional Development and Informatisation of the Slovak Republic is mirri.gov.sk. The website offers an overview of the projects and work done by the Ministry in the area of implementing information technologies into public administration. It also offers a summary of all relevant legislation and strategic documents guiding the informatisation process.
Slov-Lex	The legislative and information portal Slov-Lex provides information to professionals and to the general public on law-related issues. It provides effective tools to law makers for the creation of legislation and the relevant lifecycle management. The main parts of Slov-Lex are two closely linked systems: eCollection and eLegislation. The portal provides access to Slovak law and its amendments, as well as to EU law and its implementing regulations. Users can search for legal information, comment, propose bills, and follow the law-making process online. The portal also offers a Slovak Law Thesaurus and a dictionary of legal terms. It is a valuable resource for accessing legal information and keeping up to date with legislative developments in Slovakia.
Central Register of Contracts	The Central Register of Contracts is a web portal operated by the Office of the Government of the Slovak Republic in which contracts concluded by the Slovak State are published. In Slovakia, it is mandatory to disclose any

	contract in which at least one party is a Ministry, other government body, public institution, public-benefit corporation established by a government body, or a contributory organisation. Contracts are published in the CRS by so-called obliged entities: State authorities; legal entities and individuals required by law to make decisions about the rights and obligations of individuals or legal entities in the area of public administration (e.g. private schools); legal entities established by law (i.e. public institutions, such as the Social Insurance Agency and other legal entities established by law (e.g. the National Property Fund); legal entities established by State authorities; legal entities established by obliged entities.
Business register of the Slovak Republic	The Business register of the Slovak Republic is a public register that contains information about all legal entities and entrepreneurs operating in Slovakia. It includes details such as company name, address, business activities, shareholders, and other relevant information. The register is maintained by the Register of Companies at the respective district court in Slovakia. Access to the business register is available to the public, allowing individuals to obtain information about companies registered in Slovakia. This information is crucial for business transparency, legal compliance, and conducting due diligence when engaging in business activities in Slovakia.
Central Meta- information System of Public Administration (MetaIS)	The Central Metadata System of Public Administration (MetaIS) is a central information system used in Slovakia to manage and share metadata related to public administration. It serves as a platform for storing and exchanging metadata across various government bodies, ensuring consistency and interoperability in data management. MetaIS plays a crucial role in enhancing the efficiency and transparency of public services by providing a standardised way of organising and accessing information. It helps in improving data quality, facilitating data sharing, and supporting decision-making processes within the public sector.

Cross-border infrastructures

The following table lists the European cross-border infrastructures of which Slovakia is part of:

European Business Registry	The European Business Registry (EBR) is a platform that provides access to business registers in EU countries. Slovakia is part of the European Business Registry through its Ministry of Justice, and its commercial register holds information about businesses operating in Slovakia. The commercial register in Slovakia is accessible through the European e-Justice Portal, which offers an overview of the Slovak commercial register and allows users to search for information about companies registered in Slovakia.
EUCARIS	The Slovak Republic is a member of the European Car and Driving Licence Information System (EUCARIS) through its Ministry of Interior.
TESTA	The Trans European Services for Telematics between Administrations (TESTA) network is used for a number of cross-border use cases. In Slovakia, the TESTA Network is operated by the National Agency for Network and Electronic Services (NASES).
Once-Only Technical System (OOTS)	When interacting with the public administration in Slovakia, only data that are new and not yet available to the public administration will be required from the applicant. This principle is applied at the level of the entire European Union and will be ensured through a data integration platform. At the same time, electronic sharing of decisions issued by the public administration will be allowed. The administrator of this system is the Ministry of Investments, Regional Development and Informatisation of the Slovak Republic.

EU Digital Wallet	The proposal for a European Digital Wallet solution, which will include an electronic identity card, is currently being finalised at the European Union level. In Slovakia, the project is in its initial preparatory phase, and the launch of a digital wallet is planned for 2026. The EU Digital Identity Wallet will provide a secure and convenient way for European citizens and businesses to share identity data needed for accessing digital services such as checking in at the airport, renting a car, opening a bank account, or when logging in to their accounts on large online platforms. The coordinator of the EU Digital Wallet solution in Slovakia is the National Security Office.
European Blockchain Services Infrastructure (EBSI)	Slovakia has been a member of the European Blockchain Partnership since 2018 and part of the European Blockchain Services Infrastructure since 2020. Under the umbrella of the Recovery and Resilience Plan, Slovakia will invest into extending EBSI nodes within its borders. Slovakia will deploy a network of distributed blockchain nodes and fully participate in EBSI pilot projects. Slovakia aims to use EBSI infrastructure also in national eGovernment projects.

4. Digital transformation of public services



Digital public services for citizens

Central Government Portal

The Central Government Portal, under the administration of The Ministry of Investments, Regional Development and Informatisation of the Slovak Republic and operated by the National Agency for Network and Electronic Services (NASES), provides central and unified access to information resources and services of the public administration. The basis for all future activities of the Central Government Portal is the entry point, which enables user authentication, login, data reception and transactions with a particular service provider. Among the tasks of the portal, the most important are directing the interested party to a particular eGovernment service, navigating through the services relevant to a specific life event, and providing useful tips and tricks. The portal currently offers eGovernment services in the areas of running a business, citizenship, justice, registering vehicles, social security and more.

The Portal provides:

- A common registry, a single sign-on authentication function, an authorisation feature, a signing feature and a user support feature; and
- Management of the information flow, electronic filing, electronic fee payments, delivery of electronic official documents (judgements, orders, decisions, etc) from public authorities;
- An electronic mailbox, which is intended primarily for two-way communication between citizens and businesses and the State and local government.

For citizens, the Central Government Portal is:

- The single entry point to public administration affairs; and
- The place where users can find first-hand current and complete information and services. For public authorities, the Central Government Portal is:
 - The interface to communicate with citizens;
 - The interface to provide different types of public authorities' information systems; and
 - A common national communication infrastructure and entry point.

Payment Module

Following the eGovernment Act No. 305/2013, a payment module was established in order to facilitate payments of administrative fees or other payments to public authorities. The module consists of a communication part and an administrative part: the former gives updates on payments, while the latter provides records of the payments and all necessary details for the creation of payment orders.

The Ministry of Investments, Regional Development and Informatization of the Slovak Republic manages the communication part, while the administrative part is managed by the Ministry of Finance of the Slovak Republic. There are two modules in operation – the electronic payments module and the information system to make administrative and court fees payment and to obtain payment records.

eInvoicing



eInvoicing Legislation

In Slovakia, the competent authority for eInvoicing is the Ministry of Finance. The eInvoicing platform was launched in May 2022. Starting on 1 April 2023, electronic invoicing to the public administration is mandatory for all. The Ministry of Finance and the Office for Public Procurement are the responsible bodies for the transposition and implementation of Directive 2014/55/EC. The Directive was transposed into the Slovak legislation by means of Act No. 215/2019, which entered into force on 1 August 2019.



eInvoicing Information System

In 2019, the eInvoicing Information System project feasibility study was approved. The Ministry of Finance of the Slovak Republic oversees matters pertaining to eInvoicing, including the management of the related information system and the central economic system. The corresponding information system, which was launched in May 2022, offers an interface for issuing, sending and receiving electronic invoices which should be processed automatically, if possible, in compliance with the relevant national and EU legislation on trade relations between economic subjects within public procurement processes.

The system also defines invoicing standards for trade relations with public authorities. It helps to speed up issuing, receiving and processing invoices, as well as ensure costs savings.

eHealth and social security



ePrescription

ePrescription is an equivalent for paper prescription whereas the traditional stamp and signature is substituted by the electronic passport of the health professional. On their side, patients do not have the paper prescription at hand, and rather submit their identity card in the pharmacy or medical retail. After their identification, the system displays all prescribed and non-dispensed medicines and treatments to the pharmacist or retailer.



Electronic Sick Leave

The Social Insurance Agency has launched a change in the process of digitalisation and introduced the electronic sick leave (so called ePN). The electronic sick leave is a service that replaces the paper form confirming a temporary sick leave. Citizens with a social insurance ask for a temporary sick leave much more easily and without unnecessary bureaucracy. Issuance of ePN has been mandatory for authorised doctors starting on 1 June 2023. By using this service, the doctor and the relevant institutions exchange all necessary data electronically. This means hand-written certificates should no longer be a common occurrence. Citizens with a social insurance can monitor the status of their electronic sick leave online if they have activated access to their account at the Social Insurance Agency. Employers get an easier overview of their employees' sick leaves due to the electronic service that enables the automatic transfer of data on electronic sick leaves from the Social Insurance Agency portal directly to them.



Patient's Electronic Health Record

A patient's Electronic Health Record is a health documentation of a patient in electronic format. For reasons of security and record protection, patients access their health book via their eID or electronic proof of residence via the National Health Portal. The Electronic Health Book contains records created by health professionals, data from the account of the insured person, and own records, too. Every access and access attempt or data provision attempt is recorded in the health book.

Other key initiatives



Application 'Slovakia in Mobile' (Slovensko v Mobile)

On 20 June 2022, the first phase of the Slovakia in Mobile (SvM) project was presented. It will enable access to the government electronic services such as slovensko.sk portal or the electronic mailboxes via a smartphone using a mobile key. This means that users will be able to login into government services without an ID card reader.

Slovakia in mobile is gradually being implemented in several phases. The first step is the Mobile ID, thanks to which, after initial activation, you can log in to the Central Government Porta slovensko.sk without a reader and an ID card with a chip simply by using the application.

Digital public services for businesses

😂 Central Government Portal

The Central Government Portal offers a range of electronic services for businesses in Slovakia, including registration, tax filing, and obtaining permits and licenses. These services are designed to simplify administrative tasks and save businesses time and money.

- For businesses, the Central Government Portal provides:

 A mandatory communication platform; the electronic mailbox is automatically activated after the establishment of a new business entity. An exception is made for self-employed
 - use it when communicating with the State or local government;
 An interaction platform for all business activities with the State that can be carried out electronically via the electronic mailbox. For most activities, there are separate electronic services, but even in the case of a missing service, it is possible to use a general application and thus avoid visiting the State or local government office or submitting a paper application.

individuals who have an electronic mailbox set up, but are not obliged to activate it and

Formation of a Business

All digital public services required for business registration are already digitised and available on the Central Government Portal. Registration of businesses in the Commercial Register in Slovakia is currently only possible in electronic form without the option of submitting a paper application to the Registry court. The registration of businesses has expanded beyond Registry courts to notaries, significantly speeding up and simplifying the establishment of new business entities. New digital public services are being introduced (starting in 2023), which overall simplifies business registration, introduces user-friendly design, and allows integration between registers. An example can be the service Simplified Establishment of a Limited Liability Company, whereby it is possible to use an electronic tool for drafting the Memorandum of Association and in one step register a limited liability company along with the registration of free trades. After the establishment of the business (registration in the Register of Legal Entities), an electronic mailbox is automatically created for the executive manager, and the entity is automatically registered with the tax administrator, who assigns them a Tax Identification Number without the need to submit an application.

Business Operation

Business Support - Businesses can utilise digital services aimed at supporting business in general for various industries and business activities, as well as services focused on emergency assistance (e.g., during the Covid19 pandemic).

Tax Obligations - Businesses have complete services in the area of tax obligations available on the portal of the Financial Administration of the Slovak Republic, where the same identifier accepted for the services of the Central Government Portal is used. The portal of the Financial Administration of the Slovak Republic centralises all services related to the tax obligations of businesses in one place.

Social and Health Contributions - In the case of employing staff, businesses have fully digitalised public services available through the e-Services Portal of the Social Insurance Agency and portals of individual health insurance agencies. Communication with these entities is mandatory in electronic form for employers. The Social Insurance Agency provides not only standard electronic services on its portal but also various B2G integration services to link the information systems of companies automatically for submitting bulk reports for employees, processing electronic sick notes, and more.

Submission of various applications, reports, request for documents, and permits - The Central Government Portal provides links to hundreds of services for businesses in their daily activities, including services for pharmacies, clinics, transportation (public transport, carriers, and taxi services), as well as specific activities like auctions, business premises, technical inspections, services related to the real estate cadastre, and customs procedures.

Termination of a Business

The Central Government Portal provides links to services related to bankruptcy, restructuring, filing a petition for bankruptcy declaration, small bankruptcy, reporting contractual and other overviews in bankruptcies, restructurings, and debt relief, debtor's asset list, debtor's liabilities list, and more. The Business Register of the Slovak Republic also provides fully digitalised



deletion services. As these are matters of the Business Register of the Slovak Republic, these services are now only available in electronic form.

Public procurement



Act on Public Procurement

The Act No. 95/2013 on Public Procurement, which entered into force on 1 July 2013, amended Act No. 25/2006 on Public Procurement. This legislation implemented Directive 2007/66/EC of the European Parliament. The amendment provided further details on the regulation of review procedures, harmonised the standstill periods applied in the procurement process with the periods laid down in the Directive, and regulated the entire supervision process directly in the Public Procurement Act. The new Act No. 343/2015 Coll. on Public Procurement, which regulates public procurement in Slovakia, was adopted in 2015. The new Act on Public Procurement provides the legal framework for electronic public procurement in Slovakia. This act outlines the rules and procedures for conducting public procurement electronically, including the use of electronic means for publishing procurement notices, submitting bids, and managing procurement processes.

Electronic public procurement under this Act aims to streamline and modernise the procurement process, making it more efficient, transparent, and accessible. It allows for the use of electronic platforms and systems for the publication of procurement notices, the submission of bids, and the evaluation of tender documents. Additionally, it facilitates the electronic exchange of information and documents between contracting authorities and economic operators.

This new Act aligns with the principles of the European Union directives on public procurement, which emphasise the use of electronic communication and processes to enhance competition, transparency, and efficiency in public procurement procedures.



Information System for Electronic Public Procurement

The Public Procurement Office manages the eProcurement system (IS EVO) used to award contracts above and below a specific threshold, as well as low value contracts. The IS EVO covers the different phases of procurement, which are: eNotification, eDiscovery, eAccess, eSubmission and eAuction (lowest price and MEAT criteria). The basic functions of IS EVO are:

- eID authentication;
- Wizard for contract award notices;
- Explanation of tender documents;
- Remedy request, objection;
- Submission and cryptography of tenders;
- Structural proposal of criteria fulfilment;
- Explanation of offers; and
- Electronic auction.

The IS EVO is not mandatory pursuant to the Law on public procurement. There are 12 information systems providing electronic communication in public procurement in Slovakia. The IS EVO is used in 50% of all published contracts. The Ministry of the Interior manages the Electronic Contracting System (EKS), which is used for a fully automated placement of orders for contracts below the threshold.



IT Procurement in the Public Administration

In May 2019, the Council for Digitalisation and the Digital Single Market of the Government of the Slovak Republic adopted the Concept for IT Procurement in the Public Administration. This concept is the result of the multi-stakeholder working group on ICT public procurement. The Concept aims to assist public procurers in achieving the set goals and meeting societal demands, drawing on best practices for the procurement of information technologies and establishing clear and verifiable rules for IT procurement in public administration. The Concept addresses new institutions in public procurement, such as the description of the 'design contest' method for procuring IT solutions (unique software works), which is one of the options for achieving transparent competition while considering the complexity and specifics of assessing IT solutions by experts. In line with the opinion of the European Commission, the basic principles are defined for developing a methodology for using design contests with subsequent direct negotiation, as one of the possible procedures for public procurement of unique software. Among other things, it also describes other new institutions such as preparatory market consultations.



Digital inclusion and digital skills



National Digital Skills Strategy of the Slovak Republic and Action Plan for 2023-2026

The National Digital Skills Strategy and Action Plan for 2023-2026 was approved by the government in December 2022 and it contains six priority areas:

- Institutional background ('Governance' model);
- ICT specialists;
- Digital skills for young people and teachers;
- Digital skills for active labour market participants;
- Proportion of girls and women in ICT; and
- Digital divide and digital exclusion.

The main objectives are: (i) to strengthen the institutional background in order to create an effective coordination mechanism for digital skills within the public administration, public, academia or the business sector; (ii) to further develop digital skills of students and teachers at all levels of the educational process; (iii) to support the improvement of digital skills of active labour market participants and to support their upskilling or reskilling; (iv) to create favourable conditions for girls and women in the IT sector in order to increase their number, and (v) to help overcome the problem of digital divide and exclusion in Slovakia.

There will be regular evaluations and reporting of achievements every year to the Slovak Government.



National Strategy and Action Plan to Improve the Position of Slovakia in the Digital Economy and Society Index

In May 2021, the government of the Slovak Republic approved the National Strategy and Action Plan to improve the position of Slovakia in the Digital Economy and Society Index (DESI), whose aim is to bring the country up to speed with the European digital economy level. It sets targets for each of the indicators measured in the DESI (connectivity, human capital, use of internet by citizens, integration of digital technology by businesses and digital public services). In order to achieve these strategic targets/priorities, specific tasks and measures were identified for each dimension.



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5. Trust and Cybersecurity

eID and trust services



eID card

On 1 December 2013, the Ministry of the Interior of the Slovak Republic started issuing eID cards to citizens as a means of identification and authentication for individuals within the eGovernment and possibly other public and private services. The new eID card, having the shape of a credit card, replaces the existing national identity card and includes the optional electronic signature functionality.

By using a microchip, the card provides an online authentication functionality, applicable to eGovernment transactions. Data from eID cards can only be read with the consent of the citizen, using a security code and inserting the eID card in the card reader. The safety of the data stored in the contact chip is protected by security mechanisms and by a personal security code (PSC). The PSC is a combination of several numbers that are chosen by the holder when applying for the eID, when collecting the card or anytime during its validity. The PSC is used to confirm the identity of eID holders in electronic communications. Starting on 2023, eID cards bear an NFC chip.



eIDAS Module

Following EU Regulation No. 910/2014 on eIDAS, in September 2018 Slovakia launched an option for foreign natural persons to log into its online public services with a foreign means of electronic identification (e.g. ID or residence card) issued in EU Member States via Slovakia's central government portal slovensko.sk.

The possibility to log on all specialised portals of public administration bodies in Slovakia through eIDAS Node has existed since February 2019. The login page is in Slovak and English language. It offers single sign-on (WebSSO) authentication with multiple options, including the use of a foreign eIDAS, notified means for electronic identification, a Slovak eID, the use of residence cards, and other alternative authenticators for foreign statutory bodies and MobileID. The number of available foreign eIDAS notified means for electronic identification from different countries that can be used on the portal slovensko.sk is steadily growing according to the notification process in accordance with Regulation (EU) No. 910/2014. In 2019, only 89 logins had been recorded by foreigners. In 2020 this number rose to 1 435 logins, in 2021 to 7 043 logins and in 2023 37 810 logins of Slovak nationals or holders of residence cards. Concerning the Central Government Portal (slovensko.sk), users can also enter the electronic mailbox. At the end of 2019, Slovakia notified the creation of its eID scheme. Users can log in via eIDAS Node Slovak eID can be currently used in these countries: Austria, Belgium, Croatia, Cyprus, the Czech Republic, Denmark, Estonia, Finland, Greece, Germany, Netherlands, Italy, Ireland, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Poland, Portugal, Slovenia, Spain, and Sweden. A rise in the number of Slovaks using eID abroad has also been reported. Indeed, in 2019 the service did not register any logins, but in 2020 it registered 14 902 logins, in 2021 42 625 logins, in 2022 there have been 40 966 logins and in 2023 there have been 37 810 logins of Slovak nationals or holders of residence cards.



Trust Services Regulations

Act No. 272/2016 on Trust Services for Electronic Transactions in the Internal Market, besides amending certain laws (Trust Services Act), also regulates the conditions for the provision of trust services, the obligations of trust service providers, the competence of the National Security Authority in the area of trust services and sanctions for breaches of obligations under a special regulation and this Act.



Trust Services Infrastructure

Since 2018, the National Agency for Network and Electronic Services has been a trust service provider of the trust service for preservation of qualified electronic signatures and seals. The Agency has been providing the following qualifies trusted services through the Slovak National Certification Authority since 2019: the creation, verification, and validation of electronic signatures, electronic seals or electronic time stamps and certificates related to those services;

the creation, verification, and validation of certificates for website authentication; the preservation of electronic signatures, seals or certificates related to those services.

Cybersecurity



Information Technologies in the Public Sector Act No. 95/2019

The Information Technologies in the Public Sector Act No. 95/2019 (ITPS) was published in March 2019. The act repealed and amended the former law from 2006 as a reaction to the general advancement in the digitisation of the Slovak public sector. The Cybersecurity Act serves as national NIS-based legislation and it provides a general national cybersecurity framework for essential services, but it does not cover the public sector specifically. Therefore, this element was added to the new ITPS act. This act sets out cybersecurity measures specific for the public sector and it covers all public bodies, even those who do not meet the definition of 'essential services operator'. The ITPS act also strengthens the competences in proactive Computer security incident response team (CSIRT) services of the Slovak government CSIRT, which include scanning, testing from the internet or governmental network, cybersecurity audits, and hardening or penetration testing of the public bodies' IT.



National Cybersecurity Strategy 2021–2025

The National Cybersecurity Strategy 2021-2025 was approved by the government in January 2021. It was prepared by the National Security Authority of the Slovak Republic and it takes into account the principles listed in the Security Strategy and EU, NATO, OECD and UN strategies. Building on the cybersecurity strategy for the period 2015-2020, the strategic goals aim to serve the interests of the State and protect the services provided to citizens and businesses. Six principles are defined for the cybersecurity system:

- The primacy of fundamental human rights and freedom in the cyberspace;
- Legal-based cybersecurity in the management system and mechanisms of the security system;
- A comprehensive and universal approach to cybersecurity;
- Risk management as a key element of the national cybersecurity management system;
- Support, cooperation and prevention; and
- Continuous capacity building in the field of the cybersecurity.

The National Cybersecurity Strategy 2021–2025 pursues seven high-level (strategic) goals:

- A reliable State prepared for threats;
- Effective detection of cybercrime;
- A resilient private sector;
- Cyber security as an essential part of public administration;
- Strong partnerships;
- Educated professionals and an educated public; and
- Research and development in the field of cyber security.

The Action Plan for the implementation of the National Cybersecurity Strategy for 2021-2025 was approved by the Government in July 2021. The Action Plan highlights more than 150 tasks for various entities, including all relevant stakeholders, and is followed by several strategic goals based on the National Cybersecurity Strategy. Fulfilment of the tasks is monitored by a special committee established by the National Security Authority.



Cybersecurity Act

In March 2018, the Act on Cybersecurity was published in the Collection of Laws as No. 69/2018. This legislation was the first legal norm governing cybersecurity within the Slovak Republic. It came into force on 1 April 2018. The act establishes minimum cybersecurity requirements, including incidents and notification procedures. It regulates: the jurisdiction of public administration bodies in the area of cybersecurity; the national strategy on cybersecurity; the cybersecurity Single Information System; the status and the obligations of essential services operators and digital service providers; the organisation and the competencies of CSIRT units; education and awareness building; and inspection mechanisms and sanctions.

The new act transposed the EU Directive on network and information security (NIS Directive) into the Slovak legal system.

An amendment to the Cybersecurity Act was approved in May 2021. The amendment aims to deal with certain open issues identified in practice since the relatively recent adoption of the Cybersecurity Act, most notably the precise extent of operators of essential services within the



public services landscape of the Slovak Republic and particular dynamics of direct blocking of harmful content when a security incident takes place, among others.

The bill further aims to amend various other pieces of legislation with regards to cybersecurity and public administration IT systems in general, such as the Act on IT in Public Administration. Suggested changes to these other laws are mostly of technical nature, rescinding certain obsolete provisions, unifying the terminology used throughout related legislation to safeguard their smooth application, as well as conformity with applicable EU legislation.

The Cybersecurity Act might be subject to further amendments down the line in order to safeguard compliance with the upcoming NIS2 Directive following the adoption thereof.

Act No. 18/2018 on Personal Data Protection

Act No. 18/2018 implements the General Data Protection Regulation 2016/679 (GDPR) and transposes the Directive on the Protection of Natural Persons with regard to the Processing of Personal Data by Competent Authorities for the Purposes of the Prevention, Investigation, Detection or Prosecution of Criminal Offences or the Execution of Criminal Penalties, and on the Free Movement of such Data (2016/680).

This Act regulates:

- The processing operations which are not within the scope of GDPR;
- The processing of personal data vested in our national legislation by the GDPR;
- The processing of personal data in the law enforcement sector;
- The duties, responsibilities and liabilities in the personal data processing; and
- The scope of the powers and the organisation of the Office for Personal Data Protection of the Slovak Republic.

Cybersecurity Competence and Certification Centre

The Cybersecurity Competence and Certification Centre was established on 1 January 2020 and acts as the national sectoral and technological research centre in the field of cyber security. It provides services related to the organisation and technical provision of educational activities; it offers consulting activities in the field of protection of classified information, cyber security and trust services, and it organises educational events, courses, training and seminars.



6. Innovative technologies

Artificial Intelligence (AI)



2030 Digital Transformation Strategy of Slovakia

The 2030 Digital Transformation Strategy of Slovakia identifies several key technologies and technological areas that need to be supported by the government:

- Artificial Intelligence and blockchain, which are key to use the most revolutionary current technologies and find enough use for them (in view of exporting services);
- Data and privacy protection, necessary to create a functioning base for a vibrant data economy where consumer rights are safeguarded;
- High-performance computing: getting access to high-performance computing and storage capacity that also efficiently uses resources is the cornerstone of success in the digital era. The age of quantum technologies is approaching - quantum computers, quantum cryptography and quantum sensors as part of the IoT will become the decisive technologies in the new IT age;
- Next-generation fixed and mobile networks will allow Slovakia to get access to high-speed broadband connection, extension of NGA technologies in order to transfer data quickly and seamlessly. Subsequently, it will be necessary to build 5G networks to support autonomous and connected mobility and smart transport systems with expected massive utilisation in the future; and
- Internet of Things (IoT), in particular in the context of education. In fact, various primary and secondary school and university curricula in Slovakia have already been extended with matters concerning IoT, thanks to which Slovak students have excellent results in IoT and robotics.

In order to carry out effective measures in the mentioned priority areas, it is necessary to strengthen the institutional background that constitutes the basis of the innovation ecosystem. The 2019-2022 Action Plan for Digital Transformation of Slovakia defined the ambition to create and strengthen the institutional background in order to bring the benefits of novel technologies across all economic and societal sectors. This could be achieved by supporting the set-up of the different areas in order to facilitate its uptake.

In December 2022, Slovakia launched the 2023-2026 Action Plan for Digital Transformation of Slovakia, as a follow-up to the previous Action Plan. The plan is built upon the following pillars:

- Building a digital ecosystem;
- Support the digital transformation of enterprises and digitalisation of the broader economy;
- Support the digital infrastructure, high-performance computing and quantum technologies;
- Support the AI potential and AI application; and
- Support the digital society (women in digital economy, impact of digitalisation on mental health, green digital transformation, support of financial innovation and technology deployment).



Permanent Commission for Ethics and for the Regulation of Artificial Intelligence

As one of the measures of the 2030 Strategy for the Digital Transformation of Slovakia, the Permanent Commission for Ethics and for the Regulation of Artificial Intelligence (AI) was set up in November 2020. The Permanent Commission for Ethics and for the Regulation of AI is an independent advisory body made of experts from various fields, who act in their own capacity. Its main goals are to assess ethical and regulatory framework issues arising from the development, deployment and use of AI technologies, as well as preparing opinions on legislation in the field of the ethical aspects of AI. The Commission may also comment on draft laws at national level or legislative acts at international level. It holds regular meetings over the year and it provides the Ministry of Investments, Regional Development and Informatisation of the Slovak Republic with its expertise in the area of AI and its regulation.



Distributed Ledger Technologies



Distributed Ledger Technologies (DLT) in Slovakia are undergoing ongoing exploration and implementation. The National Bank of Slovakia is actively involved in the supervision and regulation of DLT, as they allow a common ledger to be shared across networks of computers, with blockchain being a specific type of DLT. The technology is being considered for various sectors and is making strides toward becoming a solution for a growing number of applications.

Big data

Involvement in the European Digital Innovation Hubs

The Slovak Recovery and Resilience Plan supports the overall takeover of cloud, big data and AI technologies by small and medium enterprises. This goal will be attained by building a network of European Digital Innovation Hubs (EDIH) and Digital Innovation Hubs (DIH) across Slovakia. The network will be spread regionally in order to ensure equal and easy access to services, and they will have a double function: first, they will map the stage of digital maturity of companies in the given region; and second, they will prepare and provide individual digital or technical solutions tailored to their clients. They will use solutions mostly based on new technologies, including cloud, big data and AI, plus other technologies and digital instruments mentioned in the Digital Europe programme.

All entities will provide tailor-made services to their clients - mostly SMEs, but they may also include public authorities and large companies. In Slovakia, one of the major barriers to adopt new technologies by businesses is a low capitalisation of SMEs specifically; therefore, the services offered by EDIHs/DIHs will be provided for free. The Hubs will be involved in the wider European network, which is being built with the financial support of the Digital Europe Programme. As of early 2024, there are 5 EIDH Hubs in Slovakia, namely: (i) Cassovium, (ii) Hopero, (iii) Slovak Centre for Digital Innovations, (iv) HealthHub and (v) Expandi 4.0.

Cloud & edge computing

Government Cloud

On 21 May 2014, the government of the Slovak Republic approved a new strategic approach whose main goal was to define the technical, organisational and legal levels of implementation and operation of supra-ministerial data centres as providers of government cloud services. The eGovernment cloud provides national authorities and institutions with cloud services (such as IaaS, PaaS, SaaS), which meet high standards of quality and safety, through a one-stop shop in the form of a service catalogue.

The institutionalisation of the government cloud was completed in 2017. Cloud computing is currently regulated by Act No. 95/2019 Coll. on information technologies in public administration (§24a). A government cloud is cloud computing operated in the form of a hybrid cloud, which is made up of government cloud services.

Proposal for the Centralisation and Development of Data Centres in the State Administration

In 2014, the Government of the Slovak Republic approved a Data Centre Strategy, whose main goal is to centralise the number of data centres of the State into just two facilities, under the scope of the Ministry of Finance and the Ministry of the Interior. Some of the cloud services included in the scope are, for example, IaaS, PaaS, and SaaS, and they benefited from high levels of guality and safety in the form of catalogue services.

The National Concept of Informatisation of Public Administration of the Slovak Republic, approved by the Slovak Government in December 2021, includes a vision for data centres: they should have a comprehensive concept for building cloud computing services and data centres, including categorisation of data centres based on needs and active planning and area management.





Digital and Data Transformation

The National Concept of Informatisation of Public Administration of the Slovak Republic contains a chapter, titled Digital and data transformation, which deals with services based on the cloud. The eGovernment cloud provides national authorities and institutions with cloud services (such as IaaS, PaaS, SaaS), which meet high standards of quality and safety, through a one-stop shop in the form of a service catalogue. The cloud solution will ensure effective sharing of ICT resources, improve access to data and facilitate the use of big data, as well as unify the environment and methodologies for information systems development and operation.

Internet-of-Things (IoT)

No particular initiatives in this field have been reported to date.

Quantum Computing



Involvement in Quantum Research and High-Performance Computing

Slovakia contributes to quantum research and the high-performance computing (HPC) infrastructure. The goals are under the umbrella of the RRP. Slovakia is a member of EuroHPC, which has already started to launch dedicated calls for the development and deployment of supercomputers that will be integrated into high-performance computing infrastructure. Slovakia is preparing investment into the top European supercomputer with very high energy efficiency. Moreover, as part of the RRP investments, Slovakia will create a quantum communication network of three links with twelve nodes between research and development centres across the country. The first six nodes will be put into operation before the end of 2023. Building on that, the infrastructure will be made available for industrial and public-sector users. Slovakia is also involved in the cross-border European project Quapital and, in October 2020, it established the first functional link between two capitals in the world: Bratislava and Vienna. The next phase of creating a quantum communication ecosystem will consist of extending the links to bordering countries and beyond. The quantum communication infrastructure consists of the following elements:

- Link Vienna Bratislava Slovak Academy of Sciences (SAV) Slovak University of Technology Bratislava (STU) - Trnava - Trenčín - Žilina - Liptovský Mikuláš - Prešov -Košice (prospectively expected to continue to the Czech Republic, Poland and Ukraine);
- Link Bratislava Nitra Zvolen Banská Bystrica; and
- Link Bratislava Komárno (prospectively continued to Hungary).

The Slovak RRP will co-finance the building of the QCI terrestrial network and the development of single quantum photon detectors. Besides that, international connections are planned with neighbour countries and satellite components in the future.



Quantum Technologies

In Slovakia, the informal Slovak National Research Platform for Quantum Technologies was established in 2018 and was transformed into the National Centre for Quantum Technologies at the end of 2021 under the auspices of The Ministry of Investments, Regional Development and Informatization and the Ministry of Education, Science, Research and Sport, with participation of the Physics Institute of the Slovak Academy of Sciences and National Security Agency. It represents the Slovak research community working in the area of quantum technologies. Its main goal is to support research in accordance with the Quantum Flagship initiative of the European Commission. It aims to create conditions to increase competitiveness and Slovakia's excellence in research and innovation in the field of quantum technologies, which will play a key role in future industrial and safety applications.



High-performance Computing

In November 2020, the National Super-Computing Centre in Slovakia was established. This Centre is based on a consortium made up of the Centre of Operations of the Slovak Academy of Sciences (CSČ SAV), The Ministry of Investments, Regional Development and Informatization of the Slovak Republic and the I4DI Association (Innovations for Digital Infrastructure). It aims to develop High-Performance Computing activities in Slovakia. Its vision is to build a new supercomputer that could enable extensive and efficient use of HPC technologies and the use of high-performance data analytics tools, artificial intelligence and machine learning. It will also try



to improve competencies among Slovaks in these areas by providing free consultations and educational activities for small and medium-sized enterprises, industrial companies, public administration entities and academic institutions.

Triple Helix Platforms

In the near future, Slovakia intends to create State, academic and business consortia in the triple helix model (Triple Helix Platforms), to support the development in fields such as artificial intelligence or blockchain. Triple Helix platforms should also serve as basic contact points for projects directly managed with EU funds. For the success of the Slovak Republic in digital transformation, it will be necessary to build and develop an innovative ecosystem based on active collaboration of the private, academic, and public sectors with the involvement of communities (quadruple helix). The key measure is the establishment of a state-of-the-art high-performance computing system, which is ensured by the investment in the Recovery and Resilience Plan of Slovakia - Component 17: Digital Slovakia. The goal is to build a computing system with high energy efficiency, which will form the basis for the development of the HPC environment in Slovakia and will have pan-European significance due to Slovakia's involvement in the joint European initiative EuroHPC. To coordinate and implement activities in the field of HPC in Slovakia, a special interest association of legal entities, the National Supercomputing Centre (NSCC), was established under the previous Action Plan for the Digital Transformation of Slovakia for the years 2019-2022. The NSCC also oversees the activities of the Competence Centre for high-performance computing. The NSCC is the basis for the development of most of the areas mentioned above, including the operation of computing infrastructure. In addition to operating the computing system and making it accessible to users, the NSCC's task is to develop the user environment and provide program frameworks and libraries according to user requirements. The HPC infrastructure will be available to the academic, public, and private sectors, with State aid rules setting a limit of a maximum of 20% of computing time for the private sector.

The EU has included the development of quantum communication infrastructure (OCI) among the flagship initiatives necessary to maintain the ability to provide secure communication. In December 2019, the Ministry of Investment, Regional Development, and Informatisation of the Slovak Republic became a signatory to the Bucharest framework agreement on cooperation in the development of quantum communication infrastructure, with the aim of developing a secure quantum communication infrastructure across the EU. The development of quantum technologies is an essential part of secure communication infrastructure to create physically quaranteed authenticity of information transmission in the terrestrial segment (optical cables) as well as in the space segment (optical transmission to satellites). The ambition of developing quantum technologies in Slovakia, in line with the European Quantum Technologies Flagship initiative, is guided by the National Centre for Quantum Technologies. The development of quantum communication infrastructure in Slovakia involves seven academic institutions in Slovakia (Institute of Physics of the Slovak Academy of Sciences, Institute of Electrical Engineering of the Slovak Academy of Sciences, Mathematical Institute of the Slovak Academy of Sciences, Institute of Experimental Physics of the Slovak Academy of Sciences, Department of Mathematics, Physics and Informatics of Comenius University, Department of Science of Pavol Jozef Šafárik University, Department of Electrical Engineering and Information Technology of Slovak University of Technology) in collaboration with other significant institutions such as the Department of Electrical Engineering and Information Technology of the University of Žilina, and the Department of Electrical Engineering and Informatics of Technical University of Košice, and others. For this reason, it is necessary to establish quantum communication links among them as part of the initial investment. For technical and geographical reasons, this involves three lines with twelve nodes. In the next step, after successful testing of the infrastructure, public authorities and private entities will also be involved, and the infrastructure will be suitable for uses other than research and development. Slovakia is involved in the cross-border European project Quapital, and in October 2020, the first functional quantum terrestrial connection was established between two major cities in the world - Bratislava and Vienna. The proposed development of quantum communication infrastructure in Slovakia with preparation for interconnection with neighbouring States is a targeted development of this initiative, which now requires a significant financial injection while creating positive synergies in the field of education for professionals, as well as opportunities for the development of a manufacturing base for the supply of specialised components of Slovak production with export potential, contributing to the technological sovereignty of the EU. The corporate sector is also planned to be involved in the development of a quantum communication infrastructure, and State authorities will also be users of a secure quantum communication infrastructure.



Gigabit and wireless high-speed networks



National Broadband Plan Feasibility Study

The feasibility study for the National Broadband Plan was launched in May 2022. The aim of the feasibility study is to elaborate in more detail the rules, parameters and requirements for the preparation and implementation of broadband interventions. In January 2023, the 1^{st} version of the feasibility study was presented to the relevant stakeholders. We expect to collect relevant comments from the expert community and deliver the final version of the feasibility study in April 2023. The next step will be the preparation of other necessary documents required for the implementation of the planned interventions.



National Broadband Plan

On 17 March 2021, the Slovak government approved the National Broadband Plan and determined the content of this follow-up feasibility study. It decided, inter alia, that for Slovakia, it was "the most appropriate instrument for financing the expansion of UFB infrastructure coverage, the selected demand call model in two alternatives (for the purposes of this document the term 'call for projects') is complementary to financing the generation of demand (and thus the return on investment) through vouchers".

The strategy capitalises on the experience of other EU countries on how to intervene in the telecoms market through demand calls (invitations to submit projects) and direct public resources exclusively to the passive part of the Gigabit UFB infrastructure which will be sufficient for decades into the future ("future-proof"). This feasibility study elaborates in detail throughout its complexity. The strategy draws on two key decisions.

The first of these two key decisions of the strategy is translated into the intervention model set out in chapter 6.3. It translates the various instruments of the proposed model into a logical sequence, so that the multi-stage process of calls for projects and voucher schemes maximises the effect of each euro awarded. Given their naturally limited volume, a determining imperative in the proposed intervention model is achieving the maximisation of resource efficiency through the greatest possible inhibition of private funds (including those already spent) as well as all available synergies in the construction of other lineside infrastructures. This is in favour of achieving the greatest possible increase in coverage as well as benefits for users - from competition to the ensuing Gigabit infrastructure.

In summary, throughout the intervention period, the so-called 'zero' call for projects (6.3.2) will be available to all municipalities in Slovakia with identified white addresses for their 'prepreparedness' for future construction - the so-called 'Protective'. This will allow to significantly save resources in the actual construction of the Gigabit optical UFB infrastructure. Furthermore, the intervention mechanism will be divided into several phases with a larger number of intervention areas as needed, as long as not all white addresses in Slovakia are covered. Each phase will consist of two rounds. The first round of calls for projects is addressed to undertakings providing electronic communications services under the general authorisation in the intervention area (0) – together with the announcement of a demand stimulus voucher scheme (6.3.5). The second round of calls for projects in the same intervention area will follow for the same eligible applicants and may be implemented in two alternatives. In the first - the most appropriate option - with an increase in the thresholds compared to the first round. In the second alternative, with an additional composition of eligible expenditure and reduced transmission speed requirements for users (6.3.4). Both cases should preferably occur only after the first round has taken place throughout Slovakia. The second round in the second alternative, while not directly helping to meet the EU Digital Compass targets, will at least improve the situation of the worstcovered population and reduce the costs of future construction. Each of the rounds should be supplemented by a voucher scheme (6.3.5) in which all households (or other entities) at the initial white addresses covered under the 1st and 2nd rounds of calls for projects (0 and 6.3.4) receive vouchers to cover part of the costs of telecommunications services in order to stimulate demand. The passive Gigabit UFB infrastructure is supported by public funds (exactly defined in cap. 5.2), therefore should require the lowest possible use of public resources and reach maximum use. The second key decision of the new strategy - directing public resources to the passive part of the Gigabit UFB infrastructure – is elaborated in chapter 5.2 into detailed specifications so that it can also be 'future-proof' and ensure a constant increase in transmission speeds for decades. This practically means that there must be a passive fibre infrastructure with a fully optical backhaul solution (5.2.1) and fully optical access networks up to the FTTP buildings (5.2.2 and 5.2.3). With technological developments, only the technologies deployed on such infrastructure will be





replaced over the years and decades, but not by the fibre transmission infrastructure itself. Unlike other transmission media ('radio networks' or copper lines), the latter is far from reaching its physical transmission limits. The passive fibre infrastructure thus built will also benefit the current 4G and 5G networks (and the ones that will follow), as these cannot be considered very fast broadband (100 Mbps – VHCN as defined by BEREC).

Given the incomparably higher ecological footprint of wireless data traffic, Slovakia's primary interest should be to maximise interventions in optical transmission technologies. Mobile networks are an additional connection for and eco-thinking society, ensuring in particular mobility. A Gigabit UFB connection will be a green solution for Big Data Transfers for each household and socioeconomic actors. Any Member State that aims to minimise CO_2 emissions and the greatest energy efficiency will promote such solutions.

Moreover, the intervention model is designed to be universally applicable to all options for the possible implementation of the National Broadband Plan in the coming years. It is therefore not appropriate to try to achieve a potential change in the results of a future intervention (if the State decides to meet the EU Digital Compass targets to a lesser extent) by omitting one of the instruments of the intervention model. The most efficient - in terms of public resources spent is to achieve the other results of the intervention solely by changing the parameters of the intervention model (initial to the pilot proposed in chapter 10.4). For example, in case of lack of public resources for interventions, by reducing the proposed unit thresholds under Chapter 10.4. By doing so, the intervention model will generate a smaller number of households covered by the Gigabit UFB infrastructure and a larger number of households, which will only improve coverage (at VHCN) by approaching regional fibre networks (backhaul). However, it is crucial to continuously work with the model proposed in the format described in this feasibility study. Not only start by testing the market reactions to the proposed thresholds in the pilot intervention. But also over the years, adjust the level of financial limits, vouchers for households and 'protective' so as to optimise the efficiency of the public resources spent in relation to the results achieved and the timelines for achieving the EU 2030 Digital Compass targets.

GovTech

GovTech Initiatives

Slovakia is involved in several GovTech initiatives, including the Action Plan for Smart Cities and Regions for 2023-2026, which promotes open source solutions as part of its digital transformation strategy for smart cities and regions. Additionally, the GovTech Global Forum aims to promote GovTech policy thinking and practical implementation, engaging a broad ecosystem of GovTech stakeholders from governments to the private sector, academia, and civil society.

Public Administration 7. Digital Governance

For more details on Slovakia's responsible bodies for digital policy and interoperability, its main actors, as well as relevant digital initiatives, please visit the NIFO collection on Joinup.

National

Ministry of Investments, Regional Development and Informatisation of the Slovak Republic

The Ministry of Investments, Regional Development and Informatisation of the Slovak Republic (hereinafter the Ministry) is a central public authority body which succeeded the former Deputy Prime Minister's Office for Investments, Regional Development and Informatisation of the Slovak Republic on 1 July 2020. Among the main tasks of the Ministry is the creation and the implementation of a uniform State policy towards EU funds, e.g. in the field of informatisation of society, eGovernment and investments. The Ministry performs tasks that stem from the membership of the Slovak Republic in international organisations, being an intermediary body that manages the Recovery and Resilience Plan of Slovakia (RRP), Component 17: Digital Slovakia (State in mobile, Cyber security, Fast internet for everyone, Digital economy) and the Strategy for the Digital Transformation of Slovakia 2030 on the national level. The Ministry also provides for the performance of obligations resulting from binding international treaties and conventions and fall under the scope of competences of the Ministry.

Within The Ministry of Investments, Regional Development and Informatisation, four sections perform tasks related to the informatisation of the public administration and the broader digitalisation of society: the Section of the digital agenda, the Section of information technologies of public administration, the Cybersecurity Section and the Section of implementation of informatisation projects. The different divisions are organised as follows:

- A) The Section of the digital agenda is responsible for:
 - Preparing and analysing eGovernment concepts and strategies;
 - Developing, updating, reporting and coordination of national and transnational strategies that implement EU goals according to the Digital Decade policy programme 2030;
 - Digital single market policy-making, including new innovative and disruptive technologies;
 - Developing and implementing national strategies for the digital single market and digital transformation;
 - The European and international agenda, including cooperation with organisations such as the United Nations, the Organisation for Economic Cooperation and Development and others in the field of digital policies, etc.; and
 - The Broadband Competence Office.
 - Preparing national legislation in the field of digital agenda and informatisation of public administration
- B) The Section of information technologies of public administration is responsible for:
 - Overseeing the national eGovernment architecture;
 - Issuing standards for public administration information systems;
 - Drafting legislative measures; and
 - Managing the IT projects and their effectiveness.
- C) The Cyber security section is responsible for:
 - · Ensuring the continuous improvement of the overall level of cyber and information security in public administration;
 - Developing and implementing a unified cyber and information security management strategy in public administration;
 - Creating and implementing a uniform methodological basis for cyber and information procedures and security measures in public administration;
 - Monitoring compliance with cyber and information procedures and security measures security in public administration, etc.; and



- Monitoring compliance with cyber and information procedures and security measures security in public administration, etc.
- D) The Section of implementation of informatisation projects is responsible for:
 - Managing and implementing of the Component 17: Digital Slovakia (State in mobile, Cyber security, Fast internet for everyone, Digital economy) of the Recovery and Resilience Plan of Slovakia (RRP);
 - Programming and implementation of the Programme Slovakia 2021 2027, especially in the area of informatisation and digitalization;
 - Cooperating with the relevant sections of the Ministry in the preparation of projects financed by the European Structural and Investment Funds.

Government Council for Digitalisation of the Public Administration and the Digital Single Market of the Slovak Republic

The Council for Digitalisation of the Public Administration and the Digital Single Market of the Slovak Republic, founded in December 2015, is the advisory and coordinating body, with right of initiative, of the Slovak government. It focuses on the issues related to informatization and digitisation of public administration and the DSM. The Council is composed of high-level representatives from Ministries and IT associations.

Working Group for Digital Transformation of Slovakia

The Working Group for Digital Transformation of Slovakia was established after the approval of the Action Plan for Digital Transformation of Slovakia for 2019–2022. Its main task is to provide assistance to The Ministry of Investments, Regional Development and Informatization of the Slovak Republic with the implementation of the Action Plan for Digital Transformation of Slovakia for 2023–2026. It consists of representatives from different Ministries, main actors and promoters of individual measures, as well as public experts. One of its tasks is also to assess new technological trends that may have impact on the scope of the Action Plan. It should also contribute to the timely evaluation of the relevant measures in terms of their real contribution. Where necessary, it will contribute to the development of Slovakia's positions for the purpose of negotiations in committees and working groups of the EU institutions, recommend innovations in particular areas and assist with the implementation of changes. It reports to the Government Council for Digitalisation of the Public Administration and the Digital Single Market of the Slovak Republic.

National Agency for Network and Electronic Services

The National Agency for Network and Electronic Services (NASES) is a contributory organisation of The Ministry of Investments, Regional Development and Informatization of the Slovak Republic. It fulfils professional tasks in the field of informatization of society and management and operation of electronic communications networks. Its main task and subject of activity is the administration, operation and development of the government data network GOVNET and the operation and development of the services of the Central Government Portal, as basic tools of public administration informatization in Slovakia.

The agency supports the development of eGovernment services in Slovakia and is a provider of central common information systems. This activity improves the effectiveness of public administration and simplifies the interaction between citizens and authorities, besides supporting the information knowledge base of society, the public sphere, the business community and the general public.

The key tasks of NASES are:

- Organising, operating and developing the GOVNET network;
- Operating the TESTA network in the Slovak Republic;
- Operating and developing the Central Governmental Portal (www.slovensko.sk); Operating and developing central customer services for the Slovak Republic; and
- Qualified trusted service provider

National Security Authority

The National Security Authority (NSA) is the central government body for the protection of classified information, cryptographic services, trust services and cybersecurity. The recent change brought on by the EU Regulation on Electronic Identification and Trust Services (eIDAS) and the Act on Trust Services, generated a change in the NSA's scope of responsibilities with respect to the use of the electronic signature and other related services, the so-called trust services.

According to eIDAS, Member States shall designate a supervisory body established in their territory. This body carries out supervisory tasks in a particular Member State. The NSA is the supervisory authority in the Slovak Republic. A 'trust services oversight scheme' is published to ensure that common basic supervisory requirements are met and to ensure a comparable security level of qualified trust services throughout the Union.

Slovakia IT

The State-owned company Slovakia IT was established in September 2020. It aims to provide comprehensive IT services (e.g. simplification of processes of public services, development of stable information systems, and improving the accessibility of services for citizens); develop innovation and cloud solutions for State-owned enterprises and institutions; and develop mobile applications.

Computer Security Incident Response Team Slovakia

The Computer Security Incident Response Team Slovakia (CSIRT.SK) was based on Act No. 69/2018 Coll. on Cybersecurity, as amended, to ensure adequate protection of the national information and communication infrastructure and critical information infrastructure. It is an independent unit of The Ministry of Investments, Regional Development and Informatization of the Slovak Republic, which provides services associated with security incidents handling and impact elimination, followed by the recovery of affected information and communication technologies for all public services. It also provides preventive and educational services.

National Cybersecurity Centre

The was established on 1 September 2019. It carries out national and strategic activities in the field of cybersecurity management, threat analysis, as well as coordination of national security incident handling and response. The SK-CERT also aids in the following areas: governance; development, management and support of training; educational activities; awareness raising; and research.

Data Office

The Ministry of Investments, Regional Development and Informatization of the Slovak Republic has created the Data Office. The office, which operates on a national and subnational level, oversees the integration of processes and data from all base registries by managing an information system for the central management of reference data. Public authorities can integrate this information system and access available public sector data in compliance with the Once-Only principle. It also manages data interoperability through a central data model and it has a coordinating role in the field of open data.

Office for Personal Data Protection

The Office for Personal Data Protection of the Slovak Republic is an independent State authority which is in charge of data protection supervision. It also contributes to the protection of fundamental rights and freedoms of citizens with regard to the processing of their personal data.

Broadband Competence Office

The Broadband Competence Office was established in January 2020 in cooperation between the Regulation Office of the Slovak Republic and The Ministry of Investments, Regional Development and Informatization. It is part of a Europe-wide Broadband Competence Offices network between Member States (or regions). Its main task is to meet the objectives of the National Broadband Plan. Other tasks include: strategic planning for broadband deployment, monitoring of the implementation of development plans in the field of communication infrastructure, management of public consultations with telecommunications operators, mapping the communication infrastructure, management of state interventions in the field of communication infrastructure, provision of technical and economic information, expertise of administrative capacities of public authorities in planning, implementation and monitoring of broadband projects.

National Platform for the AI development in Slovakia (AIslovakIA)

AIslovakIA is a neutral, independent and non-profit platform with an ambition to develop excellence and to bring together experts and those interested in AI in Slovakia. The national platform of artificial intelligence (AIslovakIA) is part of the Center for Artificial Intelligence. The vision of the platform is to create a space for active cooperation of the academic community with



representatives of employers, government representatives, representatives of international institutions or individuals in order to fully develop the potential of artificial intelligence in Slovakia and beyond.

Subnational (Federal, Regional and Local)

Association of Towns and Municipalities of Slovakia

The Association of Towns and Municipalities of Slovakia (ZMOS) designed and developed the ISOMI, an internet information system for towns and municipalities. The project was designed to host and integrate municipal websites to support municipalities in providing citizens with information and eServices. Furthermore, the association operates the DCOM (Municipal Data Centre) solution, which offers eServices to citizens at town and municipality level.

DEUS Association

The DEUS Association is the datacentre for the informatisation of the local self-governments of Slovakia. Its priority is to promote electronic communication between all the different levels of government and citizens. The association is in charge of managing the electronic systems of self-governing cities and villages. It cooperates with suppliers who administer these systems to cities and villages.

The association was founded as an association of legal persons with the signing of the memorandum in July 2011. The founding members were the Ministry of Finance of the Slovak Republic and the Association of Towns and Municipalities. The DEUS Association manages the DCOM.

8. Cross border Digital Public Administration Services for Citizens and Businesses

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Further to the information on national digital public services provided in the previous chapters, this final chapter presents an overview of the basic cross-border public services provided to citizens and businesses in other European countries. Your Europe is taken as reference, as it is the EU one-stop shop which aims to simplify the life of both citizens and businesses by avoiding unnecessary inconvenience and red tape in regard to 'life and travel', as well as 'doing business' abroad. In order to do so, Your Europe offers information on basic rights under EU law, but also on how these rights are implemented in each individual country (where information has been provided by the national authorities). Free email or telephone contact with EU assistance services, to get more personalised or detailed help and advice is also available.

Please note that, in most cases, the EU rights described in Your Europe apply to all EU member countries plus Iceland, Liechtenstein and Norway, and sometimes to Switzerland. Information on Your Europe is provided by the relevant departments of the European Commission and complemented by content provided by the authorities of every country it covers. As the website consists of two sections - one for citizens and one for businesses, both managed by DG Internal Market, Industry, Entrepreneurship and SMEs (DG GROW) - below the main groups of services for each section are listed.

Life and Travel

For citizens, the following groups of services can be found on the website:

- Travel (e.g. Documents needed for travelling in Europe);
- Work and retirement (e.g. Unemployment and Benefits);
- Vehicles (e.g. Registration);
- Residence formalities (e.g. Elections abroad);
- Education and youth (e.g. Researchers);
- Health (e.g. Medical Treatment abroad);
- Family (e.g. Couples);
- Consumers (e.g. Shopping).

Doing Business

Regarding businesses, the groups of services on the website concern:

- Running a business (e.g. Developing a business);
- Taxation (e.g. Business tax);
- Selling in the EU (e.g. Public contracts);
- Human Resources (e.g. Employment contracts);
- Product requirements (e.g. Standards);
- Financing and Funding (e.g. Accounting);
- Dealing with Customers (e.g. Data protection).

Last update: July 2024

The Digital Public Administration Factsheets

The factsheets present an overview of the state and progress of Digital Public Administration and Interoperability within European countries.

The factsheets are published on the Joinup platform, which is a joint initiative by the Directorate General for Digital Services (DG DIGIT) and the Directorate General for Communications Networks, Content & Technology (DG CONNECT). This factsheet received valuable contribution from the Ministry of Investment, Regional Development, and Informatization of the Slovak Republic and the National Security Authority of the Slovak Republic.



The Digital Public Administration Factsheets are prepared for the European Commission by Wavestone.

An action supported by Interoperable Europe

The ISA² Programme has evolved into Interoperable Europe - the initiative of the European Commission for a reinforced interoperability policy.

The work of the European Commission and its partners in public administrations across Europe to enhance interoperability continues at full speed despite the end of the ISA² programme. Indeed, enhanced interoperability will be necessary to unlock the potential of data use and reuse for improved public services, to enable cross-border collaboration, and to support the sector-specific policy goals set by the Commission for the future.

Interoperable Europe will lead the process of achieving these goals and creating a reinforced interoperability policy that will work for everyone. The initiative is supported by the *Digital Europe Programme*.

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Interoperable Europe



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