



## **SLOVENIA**

## 2024 Digital Public Administration Factsheet

Supporting document





Main developments in digital public administrations and interoperability

**JULY 2024** 



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Political Communication	Legislation	Infrastructure	
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#### 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

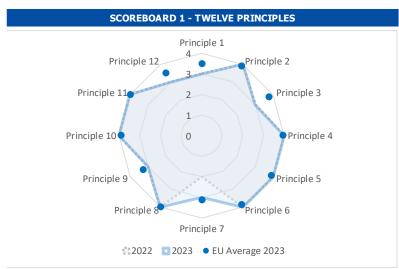
In 2017, the European Commission published the European Interoperability Framework (EIF) to give specific guidance on how to set up interoperable digital public services through a set of 47 recommendations divided in three pillars. The EIF Monitoring Mechanism (MM) was built on these pillars to evaluate the level of implementation of the framework within the Member States. The mechanism is based on a set of 91 Key Performance Indicators (KPIs) clustered within the three 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 Slovenia 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

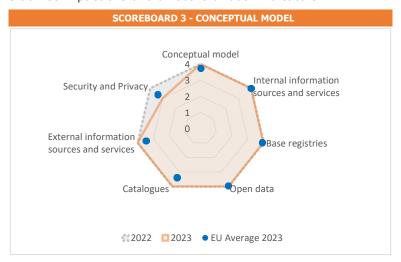
The Slovene results in Scoreboard 1 stand for an overall good implementation of the EIF Principles. The country maintained the maximum score of four for the same seven principles as in 2022 and improved its performance for Principle 7 (Inclusion and Accessibility). Potential areas of

improvement relate to the implementation of Principles 12 (Assessment of Effectiveness and Efficiency) and 3 (Transparency) for which the score of three could be further improved to reach the European average. Particularly, the provision of internal visibility and external interfaces for European public service to make administrative procedures available and accessible online (Principle 3 – Recommendation 05) could be improved to reach the maximum score of four. In addition, Slovenia could increase its score on Principle 9 (Multilingualism) to reach the maximum score of four by enhancing its use of information systems and technical architectures that cater for multilingualism when establishing a European public service (Principle 9 – Recommendation 16) and more specifically, the total number of language resources proposed to users.



Source: European Interoperability Framework Monitoring Mechanism 2023

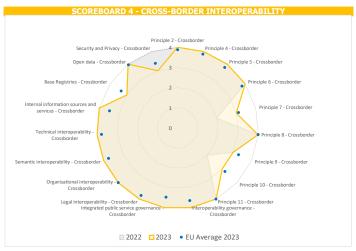
Slovenia's scores in Scoreboard 2 illustrate an excellent performance in the country for all interoperability layers. However, there is still room for improvement regarding the interoperability governance as well as the integrated public service governance indicators. Indeed, Slovenia could continue to consult relevant catalogues of standards, specifications, and guidelines at national and EU level, in accordance with the NIF and relevant DIFs, when procuring and developing ICT solutions (Recommendation 23 – Interoperability governance) to get the maximum score for the recommendation. In addition, Slovenia could further ensure interoperability and coordination over time when operating and delivering integrated public services by putting in place the necessary governance structure (Recommendation 25 - Integrated public service governance) to get the maximum score for this recommendation as well. Nevertheless, the scores of both recommendations do not impact the overall score of both indicators.



Source: European Interoperability Framework Monitoring Mechanism 2023

The Slovene results in relation to the Conceptual Model in Scoreboard 3 show a very good performance of the country. Slovenia has a high performance in catalogues and external information sources and services, performing better than the EU average in these areas. To perfect its score in security and privacy, Slovene public administrations could increase its use of

trust services according to the Regulation on eID and Trust Services, as mechanisms that ensure secure and protected data exchange in public services (Recommendation 47).



Source: European Interoperability Framework Monitoring Mechanism 2023

The results for Slovenia on Cross-Border Interoperability in Scoreboard 4 show a very positive performance of the country. Particularly, Slovenia has the maximum score of four for all interoperability layers, and six principles. Furthermore, the country improved its performance of 2022 in Principles 7 (Inclusion and Accessibility) and 10 (Administrative Simplification), from two to a three. However, the country lost one point in the score of security and privacy, dropping from the score from four to three. To go back to maximum levels, Slovenia should consider implementing Recommendation 47, as mentioned for Scoreboard 3. Other areas of improvement include ensuring that all European public services are accessible to all citizens (Recommendation 14 – Principle 7), and developing interfaces with base registries and authoritative sources of sources of information and publishing the semantic and technical means and documentation needed for others to connect and reuse available information (Recommendation 38).

Additional information on Slovenia'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 Slovenian government signed the Berlin Declaration on Digital Society and Value-based Digital Government, thus re-affirming its commitment – together with other 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.

## Digital Slovenia 2030 Strategy

In April 2023, the Slovenian government adopted the Digital Slovenia 2030 Strategy as the umbrella strategy in the field of digital transformation to determine the key strategic directions for the future development of the country. It integrates individual sectoral strategies into a single strategic development framework. Digital Slovenia 2030 takes into account the ambitions and principles of the EU and at the same time focuses on Slovenia's key challenges in digital transformation, and thus identifies six priority content areas for digital transformation: (i) Gigabit infrastructure; (ii) Digital competences and inclusion; (iii) Digital transformation of the economy; (iv) Path to a Smart Society 5.0; (v) Digital public services; and (vi) Cybersecurity. The Digital Slovenia 2030 Strategy is human- and environment-centred. It highlights the principles of the European Declaration on Digital Principles and Rights and it also includes additional specific principles, such as: (i) general awareness of the importance of digital transformation; (ii) the internet as a strategic tool for digital transformation; (iii) the protection of a free open internet; (iv) the pursuit of cross-sectoral synergies; (v) the use of the Slovenian language and the preservation of cultural identity, and (vi) the promotion of research and development of digital technologies and their use. The vision of the Digital Slovenia 2030 Strategy is to improve the quality of life of the Slovenian population in a sustainable and trustworthy way through the digital transformation of society in all its segments, the State, local communities, and the economy. The Digital Slovenia 2030 Strategy sets out targets with indicators for each of the priority content areas.

## Digital Public Services Strategy 2030

In December 2022, the Slovenian government adopted the Digital Public Services Strategy as one of the key elements of Slovenia's digital transformation by 2030. The strategy clearly sets out the direction for the development of digital public services, putting people and businesses at the heart of digital transformation. The strategy defines a framework that will enable the development of simple services and promote their widespread use. This requires a single digital identity, efficient use of modern information technology and infrastructure, and a digitally empowered public sector. The strategy aims to provide citizen and business-centric digital public services that enable citizens and businesses to interact with public administration in an integrated, coordinated, secure and efficient way. Three strategic priorities have been identified, which represent digital targets at the highest level and are also aligned with the strategic approach of the European Union: (i) by 2030, all key public services will be provided online and be accessible to all users; (ii) at least 80% of key public services that are digitally accessible will also be performed digitally; and (iii) at least 80% of users of public services will use their digital identity. In August 2023, the government of the Republic of Slovenia adopted the Action Plan of the Digital Public Services Strategy 2030, with 109 measurements of 26 competent authorities, which will contribute the most to the digitization of public services in Slovenia by 2030 and have the greatest impact on the digital transformation of the public sector and society, along with the broader ecosystem of related stakeholders. The development of this document involved the participation of all ministries and other stakeholders. As the action plan will be regularly updated every two years, it provides the country with a lever for coordination and influence on the development and provision of digital public services.



#### National Strategic Plan for the Digital Decade

In November 2023, the government adopted the National Strategic Plan for the Digital Decade. The National Strategic Plan for the Digital Decade sets out the way forward and indicates how the Republic of Slovenia will contribute to the common European objectives of the Digital Agenda 2030 in the areas of digital competences, digital infrastructure, digital transformation of the economy and digital public services.

In accordance with the European legislation of the European Parliament and the Council on establishing the Digital Decade policy programme by 2030, all member States are obliged to propose national strategic plans for the digital decade, in which they set out their plans to achieve the general and digital objectives of the European decade and describe the policies, measures, and activities for their achievement.

In June 2023, an inter-ministerial working group, which was established in Slovenia to prepare the National Programme for the Digital Slovenia 2030 Strategy, prepared a proposal for the National Strategic Plan for the Digital Decade.

The plan includes various measures for which financial resources have already been secured from national or European sources, and action plans that indicate the way in which a certain policy goal of the Digital Decade Programme might be achieved.



#### Digital Strategies by Local Authorities

Every period of time is marked by certain technologies, and the era we live in is characterized by digitalization, which also affects cities. The following are some digital strategies adopted by subnational entities:

- Ljubljana's Digital Development Strategy: it will help to direct the process of digitalization in a way that primarily benefits residents of the city;
- Velenje's Strategy for the Digital Development of a Smart City and Community: it aims
  to guide the Municipality's digital advancement towards creating an inclusive smart city
  focused on citizen needs and enhancing public service efficiency.
- Kočevje's Strategy for Establishing a Smart Municipality: the municipality has prepared a strategy to acquire the status of a smart municipality and community.
- Maribor's Smart City Strategy for 2030: it is a living strategic document that represents
  the basis for the transformation of the city of Maribor into a smart city. As a living
  document, the implementation of the strategy itself will change but follow the guidelines
  and recommendations for achieving the goals set in this strategy.



#### Action Plan for Better Regulation

Intensive work is underway to implement the measures set out in the Action Plan for Better Regulation with the aim to develop a systemic approach for better regulation. The key result of the implemented measures in the action plan will be the setting-up of the MOPED system (a modular IT system for eDocuments). Some of the measures, taken from the action plan and aimed to improve the quality of regulation, are:

- Standardisation and e-support for the preparation of normative documents through the MOPED system;
- Setting of objectives, indicators and deadlines for regulatory reviews;
- Strengthening of the stakeholder consultation process;
- Strengthening of inter-ministerial coordination on draft regulations;
- Strengthening of the connection between IT systems, used by the government and the National Assembly;
- Systematic implementation of impact assessments and ex-post evaluations; and
- Conducting systematic and continuous trainings of civil servants in the field of better regulation.

The implementation of the measures in the action plan can be monitored online by the general public via the Single Document, where measures are classified in 'realized', 'not realized', and 'partially realized' according to their status.



#### General Administrative Procedure Act

The General Administrative Procedure Act (Official Gazette of the Republic of Slovenia, No. 24/2006-ZUP-UPB2, 105/06-ZUS-1, 126/07, 65/08, 8/10, 82/13, 175/20 – ZIUOPDVE - Act on Epidemic Intervention Measures and 3/22 – ZDeb), adopted in 1999 and amended several times, provides the general legal basis for all administrative proceedings: Administration-to-Citizen (A2C) and Administration-to-Business (A2B) interactions together with a major portion of



Administration-to-Administration (A2A) relations. The act and its Decree on Administrative Operations (Official Gazette of the Republic of Slovenia, No. 9/18, 14/20, 167/20, 172/21, 68/22, 89/22 and 135/22) regulates a two-way electronic communication between public administration and citizens.



#### De-bureaucratization Act

The De-bureaucratization Act was adopted on 27 December 2021 with the aim to reduce administrative burdens. The act repeals over 200 laws and regulations that are no longer applicable. It also determined the termination of the application of 18 federal (Yugoslav) laws that were in force in the Republic of Slovenia at the time of independence.

Since 22 July 2022, citizens have the opportunity to communicate to the competent authority (administrative unit, embassy) via the e-mail address and mobile phone number, which are kept in the Central Population Register. The requirement to certify electronically-signed decisions has been abolished. A register of legal acts of local communities will be established, which will contain information on published regulations and other acts of local communities. The register will be published in the Official Gazette's website and will be available free of charge.

In 2022 and 2023, activities to reduce administrative barriers continued with the aim of achieving milestone 172 of the RRP. Based on all activities, 25 laws were adopted aiming at regulatory simplification, removing the administrative barriers or reducing the administrative burden for the business sector and citizens, and improving the efficiency of the State and local administration.

#### Digitalisation of Internal Processes

#### State Administration Act

The State Administration Act (Official Gazette of the Republic of Slovenia No. 113/05 – official consolidated text, 89/07 – odl. US, 126/07 – ZUP-E, 48/09, 8/10 – ZUP-G, 8/12 – ZVRS-F, 21/12, 47/13, 12/14, 90/14, 51/16, 36/21, 82/21, 189/21, 153/22 and 18/23), adopted in 2005 and amended several times (last one in February 2023), authorises the Ministry of Digital Transformation to manage information and communication systems of the State administration, and to develop common information solutions and their technological, procedural and organisational compliance with the central information and communication system. The Ministry of Digital Transformation provides central information and communication system services, electronic support for administrative and other procedures and the development of joint information solutions for the electronic operations of State bodies, public agencies, local community bodies and public authorities.

#### KRPAN – Document Management Building Block

With the KRPAN Information System, Slovenia is introducing a single, technologically updated, flexible, easily scalable and advanced information solution for the public sector to support the management of documentary material installed on the central information infrastructure of the Ministry of Public Administration. It enables government employees to work with documentary material faster, more flexibly and more efficiently. The KRPAN Information System provides secure capture and management of original and copy documentary material in digital form. It supports the recording and management of general and administrative matters and document lists, and it supports work with government materials, with eInvoices and other financial accounting documents and travel orders. The modular design of this solution is upgradefriendly, i.e. it is suited to increase the number of users and the volume of data, to modify and complement functionalities, to change the internal organisation of users and to connect with other information systems. It offers other information systems and individuals' central functions, such as: capturing of physical material, central numbering, signing of documents, validation, and shipping of documents. For the purpose of safe and legal long-term storage, central storage of electronic material has been established within the project, which is also available to other State administration bodies' information solutions. With the new unified information solution, userfriendly interface and mobile access, employees of the State administration get a unified, faster, cheaper and safer tool for working with documentary material.

#### **Remote Sessions**

Since 2020, given the situation related to COVID-19, the National Assembly of the Republic of Slovenia amended its Rules of Procedure to introduce the possibility of holding remote sessions of the National Assembly and of its working bodies, which enables deputies and other guests from



a remote location to participate equally in the session, which otherwise takes place in the National Assembly. The users connect to the system via a secure SSL connection, but a VPN connection can also be used. Before the session starts, they connect to a specific website and authenticate themselves using a two-factor login method with login name, a PIN and a password in the form of an SMS message. The solution enables business-friendly registration, participation in the debate, observance of the parliamentary hours and casting of votes with immediate final results that take into account the specific type of voting (simple majority, absolute majority, etc.).



#### MFERAC Personal Portal

The MFERAC Personal Portal is a website intended for employees in the State administration (ministries, government departments, administrative units, judicial bodies, public economic institutions, local communities and other State bodies) to receive ePayroll and other information related to the employment relationship, using the application for personnel management and calculation of labour costs of public finance institutions of the Republic of Slovenia. The MFERAC was developed by the Ministry of Finance as support for the implementation of the national budget by means of a single accounting system.



#### eSessions

The aim of the IT solution eSessions is to provide comprehensive support for decision making in the government. It is an extensive system which includes all State authorities and indirectly - also the stakeholders. The eSessions service is organised into the following three segments by content:

- Internal: consideration of documents by government working bodies and decision making in the government;
- State authorities: in addition to the documents already considered, this segment includes documents currently waiting for government consideration. These documents are published in the government's information system in order to allow other ministries and government offices to submit any comments or proposals; and
- Public: publication of non-confidential government decisions and documents. This content is published on the government's website and is intended for the interested public, in particular non-governmental and other civil society organisations.

A special segment of the system is used as IT support for confidential government decisions, which is in a separate information and communication structure and meets strict security requirements for the treatment of classified information.

The eSessions service facilitates the management of a great number of documents and remote voting; it also enables electronic sessions and provides a strong support for the provision of information to various target user groups and the general public.



#### Aplikacije Program Dela

In 2022, the Ministry of Public Administration developed the Aplikacije Program Dela (Work Program), which is designed to systematically plan and monitor the work progress of individual activities related to the implementation of the strategic objectives of individual ministries and other bodies. The application has a number of functionalities that make it easier to view content, enter and edit individual content, monitor implementation, enable multi-directional communication between users and also has a section dedicated to reporting. The aim is to get an overview of the work carried out by the government, ministries and bodies in a single application. In order to provide support for the systematic planning, reporting and monitoring of the work progress on individual milestones, targets and projects under the Recovery and Resilience Plan, a sub-module of the RRP has been developed within the application. As of September 2022, ministries and other bodies regularly report on progress within the RRF in the application.

#### Digitalisation Supporting the EU Green Deal



## Recovery and Resilience Plan

The Slovenian Recovery and Resilience Plan (RRP) sets out an indicative timetable, estimated total costs, milestones and targets. There are 205 milestones and targets linked to the implementation of 34 reforms and 48 investments. The Slovenian RRP foresees 48.88% of funding for the climate targets and 20.01% for the digital targets. Slovenia will direct EU funding for recovery and resilience to the green transition, digital transformation, support to the economy, research and development, education, healthcare, social security, and housing. The Slovenian RRP foresees five pillars:

- Green transition;
- Digital transformation;
- Smart, sustainable and inclusive growth;
- Healthcare and social security; and
- REPowerEU.

The digital transformation of the economy and the public sector is essential for the long-term development and competitiveness of the country and the European Union as a whole. With a view to increasing the efficiency and resilience of businesses and public administration, digital infrastructure will be strengthened and modernised and the development of advanced technology solutions will be supported through reforms and RRP investments.



#### 100 Climate-Neutral and Smart Cities 2030

Three Slovenian cities, Ljubljana, Kranj and Velenje participate in European Commission's 100 Climate-Neutral and Smart Cities 2030 Mission. Cities play a pivotal role in achieving climate neutrality by 2050, which is the goal of the European Green Deal. European cities can substantially contribute to the Green Deal target of reducing emissions by 55% by 2030 and, in more practical terms, to offer cleaner air, safer transport and less congestion and noise to their citizens.

The Cities Mission involves local authorities, citizens, businesses, investors as well as regional and national authorities to deliver 100 climate-neutral and smart cities by 2030 and ensure that these cities act as experimentation and innovation hubs to enable all European cities to follow suit by 2050. As foreseen in its implementation plan, the Cities Mission takes a cross-sectoral and demand-led approach, creating synergies between existing initiatives and basing its activities on the actual needs of cities.



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## 3. Interoperability and data

#### Interoperability Framework



#### National Interoperability Framework

The Slovenian National Interoperability Framework (NIO) is a conceptual metadata framework for the coordinated development of public sector eServices. On the NIO Portal, system specifications and documentation are available together with standards, recommendations, interoperability products, data access services, organisational rules, interoperability infrastructure and building blocks. The NIO's Editorial Board, a group of IT experts from various fields, are involved in the publication and monitoring of interoperability product working process on the NIO Portal. The editorial team committed to the implementation of an individual field and agreed on a set of contents for an efficient and effective joint implementation of interoperable public services. The remit of the NIO Editorial Board includes the national interoperability framework, education, awareness raising activities, the promotion of the NIO with wide international collaboration and the cooperation in the field of interoperability and integrated digital solutions. An important and permanent task of the Board is to raise awareness on the importance of interoperability and the establishment of DIF, NIF and EIF.



#### National Interoperability Framework Portal

The National Interoperability Framework Portal (NIO) enables the Slovenian public administration to publish information on the progress achieved by its digital solutions at national level and beyond. The NIO Portal is part of the Slovenian National Interoperability Framework, consisting of different guidelines, standards, information and building blocks. It helps to improve the coordination of business processes and enables better compatibility and connectivity on the national and international levels. Many useful assets are published and explained on the NIO portal. Institutions can use them when designing their business processes and related information systems. Examples of this include building blocks for electronic data enquiries, trade, the Tray Module, the Asynchronous Module, and the Security Platform. If an institution wants to electronically gather data from data sources, it can use these building blocks and their functionalities. The owner of the information is always the institution which created it, regardless of whether the institution is part of the private sector or is a non-governmental organisation. The use of NIO assets and solutions reduces development and operating costs, and achieves improved coherence of information solutions, as well as compliance with the European Interoperability Framework and coordination with solutions at the international level (e.g., the Joinup Platform).



#### Semantic Interoperability Implementation Strategy

According to the Semantic Interoperability Implementation Strategy, different issues have been addressed such as the Once-Only principle, a more efficient and standardised planning of information solutions data models, and a greater degree of interoperability between information systems in the public administration. The Platform for Semantic Interoperability has been implemented based on this document. It includes three base modules: Terminology, Repository of Data Models and Repository of Code Lists:

- The Terminology module uniformly and clearly defines the key terminology used in the public sector;
- The Repository of Data Models is a repository of common code lists, upper ontologies, core vocabularies and base registries data models in RDF format. Their use as a base for extension is recommended for the development of sector-specific data models in the public sector; and
- The Repository of Code Lists module include common code lists of public administration.



#### Infrastructure for Spatial Information Act

The Infrastructure for Spatial Information Act defines the interoperability of spatial datasets and services in its Articles 8, 10, 11 and 12. It defines interoperability as the ability to combine spatial datasets for services to interact, without any manual intervention, in such a way that the result is coherent, and the added value of the spatial data sets and services is enhanced. The interoperability of spatial data sets and spatial data services shall be provided by the data and

service providers. The interoperability shall ensure links between different spatial data that refer to the same location, and between the same spatial data that refer to the same spatial object when represented at different scales. Information for the implementation and provision of the interoperability of spatial data sets and services, including data, codes and technical arrangements, shall be available free of charge to public law entities and third parties through the Spatial Data Geoportal.

#### Data Access, Management and Reuse

#### Access to Public Information Act

The legal basis for the proactive publication of information and data on the web by public sector bodies was provided for by the Access to Public Information Act (Official Gazette of the Republic of Slovenia No. 51/06, 117/06 - ZDavP-2, 23/14, 50/14, 19/15, 102/15, 7/18 and 141/22). The act regulates the open and transparent functioning of the public sector and the reuse of public sector information. In principle it provides that all generally accessible public information is reusable (in line with the reuse right from the PSI Directive). The law places the emphasis on the online publication of entire databases/public sector open data (i.e. data in open, machine-readable formats for further reuse by citizens, non-governmental organisations, media, etc.). Regarding public sector databases, special attention is paid to database management by public administration bodies and to the connectivity between databases to provide simple and straightforward data access. For this purpose, the metadata are defined by the Decree on the Delivery and Reuse of Public Information and published the Manual on Opening Up PSI. Apart from the legal framework, several activities have been announced in this field (hackathons, guidelines, renewal of the Open Data Portal, etc.). In addition, it is important to emphasise that in principle all documents (electronic or not) produced by public bodies are publicly available based on a request after a legal review by the institution. The Information Commissioner acts as a supervisory body whose decisions are fully binding upon public sector institutions.

In 2022, the amendments to the Access to Public Information Act (Official Gazette of the Republic of Slovenia No. 141/22) were adopted for the remaining implementation of the EU Open Data Directive, namely to enable easy reuse of high value datasets via API and bulk download. Consequently, also the government decree was amended (Official Gazette of the Republic of Slovenia, No. 146/22), listing the datasets that are of particularly high value for the society and/or economy. The National Assembly adopted the law on ratification of the Council of Europe Convention on Access to Official Documents.

#### **Open Data**



## International Open Data Charter

In 2022, Slovenia joined the international Open Data Charter and thus adopted the principles of the wider open data community. The goal was to enhance the cooperation with all stakeholders from the public sector to researchers and start-ups, so that citizens and businesses can benefit from it. Furthermore, in 2023, the Slovenian National Assembly ratified the Council of Europe Convention on access to public documents. The ratification of the Convention, which is the only international treaty regarding the access to public information, coincided with the 20th anniversary of the adoption of the first Access to Public Information Law in Slovenia.



#### **Data Governance**

The Report of the OECD on the Digital Administration of Slovenia for 2021 defined the need to first promote data-based approaches, and then raise awareness and promote skills among public servants. Therefore, at the end of 2022, Slovenia, in cooperation with the OECD, launched the project 'Development of the Data Stewards Network', with the aim to define the role of data stewards in public administration. At the end of 2023, a network of data stewards was formally established, which includes 33 public sector body organizations.

Representatives of key public sector bodies and various stakeholders defined the mandate for the role of data steward: purpose, responsibilities, objectives, skills and organizational conditions for operation were included in the project of the data stewards' network. As part of the project, the curriculum and training materials are also prepared for those who will later become trainers of data administrators following a Training-of-Trainers (ToT) approach.

### **Base Registries**

The following table lists the Slovenian base registries:

National				
Business and Tax	The Business Register of Slovenia Act regulates many aspects related to the management and maintenance of the Slovenian Business Register. It defines the units of the register, its identification, the obligatory use of the content of the register, how to obtain data for the management of the register and the storage of documents. Other relevant pieces of legislation are the Decree on keeping and maintaining the Slovenian Business Register, the Fees for the Reuse of Public Information, the Slovenian Business Register and the Instruction on the Type and Extent of Data for a Particular Legal Form Unit of the Business Register of Slovenia Unit. The Slovenian Business Register (PSR) is a central database containing information about all business entities involved in profit or non-profit activities having their principal place of business located on the territory of the Republic of Slovenia, as well as information on their subsidiaries and other divisions of business entities performing business activities in the territory of the Republic of Slovenia.			
Transportation / Vehicles	The Rules on the Registration of Motor Vehicles and Trailers set out the registration conditions to be met, the procedures for the registration of motor vehicles and trailers, the issuance and revalidation of transport permits, the deregistration of vehicles, the change of vehicle owner or user data, the issuance of permits for test drives, record-keeping obligations and the storage of documents and evidence. The Ministry of Infrastructure regularly publishes the Register of Registered Vehicles and a cross-section of the situation, by year, on the OPSI open data portal. The inventory includes all technical data, excluding personal data of owners and users.			
Land	The Land Register Act regulates the concepts to be used, and in particular the information system to support the digitalisation of the Land Register and the relevant manager, the property data and legal facts to be included in the register, and the basis for accountability.  The Slovenian Land Register contains the legal facts relating to properties, such as owners, mortgages, and easements. Public electronic access is available upon registration and free of charge.			
Population	The Central Population Register is the central database for: (i) all citizens of the Republic of Slovenia, irrespective of whether they reside in the territory of Slovenia or abroad; (ii) all foreigners who have a residence status in the Republic of Slovenia; and (iii) all foreigners who do not have a permanent or temporary residence permit, but who have certain rights or obligations in the field of pension and disability insurance, taxes, humanitarian reasons or other areas, if so provided by law. The main data sources for the central population register are the Civil Registry, the Permanent Population Register and the Register of Foreigners. The Central Population Register is a distribution database in which population data are centrally collected, processed, stored and used in order to monitor the situation and trends in the population for the needs of State authorities and other users.  • Data on permanent and temporary residences in the Republic of Slovenia, permanent and temporary addresses abroad and addresses for service of individuals are kept, processed, stored and used in the Register of Permanent Residence. It is connected to the Register of Spatial Units, the Real Estate Register, the Building Cadastre, the Slovenian Business Register and other records, such as the Birth Register, the Central Population Register, the Register of Issued Identity Cards, Passports, etc.  • The Register of Deaths, Births and Marriages is a computerised database in which the following events are recorded: birth, marriage or partnership			

- and death, as well as other facts provided for by law. The Civil Register shows the personal status of citizens of the Republic of Slovenia and a record of births, marriages or partnerships and deaths of foreign nationals who have occurred in the territory of the Republic of Slovenia. An integral part of the Civil Register is the collection of documents which form the basis for the entry in the Civil Register.
- The Surveying and Mapping Authority of Slovenia is in charge of managing the Address Register, which is part of the Register of Spatial Units. The following information shall be kept in the register of addresses: address number, title, centroid address and spatial units in the area in which the centroid of the address is located. The address number is an identification mark assigned by the Surveying and Mapping Authority.
- The Real Estate Cadastre Act was published in the Official Gazette of the Republic of Slovenia, No. 54/21, on 9 April 2021 and was applied on 4 April 2022. The act defines the Real Estate Cadastre as an official record of data on the position, shapes, physical and other characteristics of the parcels, buildings and parts thereof, which will show the actual condition of the real estate. Current maintenance of the three real estate records (Land Cadastre, Building Cadastre and Real Estate Register), kept by the same body, has shown the need to establish a modern information system for recording real estate data in one record the Real Estate Cadastre.
- The Central Registry of Patient Data (CRPD) is the core of the Slovenian eHealth system. It is designed for exchanging and sharing electronic health records nationally. The CRPD contains over 250 million records, covering over 95% of the population. All Slovenian healthcare providers are obliged to submit medical records to the CRPD promptly and are entitled to use them for the purpose of providing healthcare. Patients have full access to their CRPD data via the zVEM Portal and mobile application. The content of the CRPD comprises various types of healthcare documentation and structured patient summary records. In addition to the data provided within the healthcare process, patients' statements, such as advanced healthcare instructions and privacy consents, are stored in the CRPD. A technological upgrade was implemented in 2023 to facilitate further expansion and development of new digital health services.

Other

- In December 2017, the Agency of the Republic of Slovenia for Public Legal Records and Related Services (AJPES) established the Beneficial Owners Register in cooperation with the Office for Money Laundering Prevention of the Republic of Slovenia. The register was established based on the Prevention of Money Laundering and Terrorism Financing Act. The Beneficial Owners Register is the main repository of beneficial ownership information, since the identification of a natural person that is owning or controlling a business entity is one of the conditions for the successful prevention of money laundering and terrorism financing. Legal entities were obliged to enter the data on their beneficial owners. The purpose was to implement anti-money laundering and terrorism financing measures. Since then, public data about beneficial owners have been publicly accessible, with authorised entities having access to all data in the register.
- In December 2017, AJPES established the Register of Accommodation Facilities and eTourism System. The register was implemented on the legal basis of the Hospitality Industry Act and the eTourism System under the Residence Registration Act. The following three goals were achieved by the register and the eTourism System: (i) establishment of unique evidence for all accommodation facilities (i.e. the Register of Accommodation Facilities); (ii) unified reporting of guest book data from all accommodation facilities; and (iii) reduction of the administrative burden and costs for both reporters and recipients. The Register of Accommodation Facilities is publicly accessible free of charge on the AJPES web portal. To simplify the reporting of information and to increase the quality of the collected data, the owners of accommodation facilities report guest arrival information only once through the AJPES eTourism System.

The National Register of eInvoice Recipients provides information about recipients of eInvoices and their method for receiving documents in a structured data format. The register is open and allows for connections to other systems to ensure organisations have a greater degree of automation when sending eInvoices. The National Register of eInvoice Recipients is managed by the Chamber of Commerce and Industry of Slovenia. The main purpose of the register is to support automation on the issuer's side. It enables the simplification of eCommerce, reduces the possibility of errors and enables full automation of eInvoicing operations. All budget users are included into the National Register of eInvoice Recipients. The Central Records of Applications (42EVA) is an information support system for storing records that contain important metadata about installed applications. It enables the collection of important data about application and their modules in one single place and in a structured way to prepare appropriate reviews and lists that can be useful in the decision-making process at different levels. Each user (with the appropriate rights) can either view the data directly or create an .xls file to view the data. Sub-national Rase Registries

#### **Data Platforms and Portals**

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

IO-MODULE	The IO-MODULE is the common platform for standardised data distribution. It is used by institutions for distributing data to the related clients. Additionally, the system enables to track the electronic data distributed and to see which user received which data, when and for what specific purpose.
Asynchronous Module	The Asynchronous Module enables electronic enquiries to data sources that are not accessible via synchronous access. By using this system, it is possible to communicate with data sources via specific 'waiting rooms', where all questions for a data source are collected and, after being processed and answered by the data source, transmitted back to the calling system with related answers.
GOV.SI	The GOV.SI Portal is the central website for easy access to comprehensive information on the organisation and functioning of the State administration. Currently, gov.si is hosting the web pages of 187 government bodies. This central platform made it possible to quickly establish an efficient and central point of public information, instructions, data etc.
GeoHub – SI Portal	GeoHub-SI is a GIS infrastructure that supports on a platform the review and publication of space-related content.  GeoHub-SI is intended for publishing and reviewing the contents of centralized State bodies outside the HKOM network for the general public. The environment operates on the infrastructure of the State computer cloud (DRO), which is provided by the relevant ministry.
The National Open Data Portal	The National Open Data Portal (OPSI) is a national single website for publishing open data for the entire public sector and has a dual function. Firstly, it acts as the central catalogue of records and databases in the country: it is a central inventory of metadata from all records and databases managed by State authorities, municipalities, and other public sector bodies. Secondly, it represents a single website for publishing data in open and machine-readable formats. The portal provides everyone with the right to a free and easy reuse of freely accessible data published in

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	open (licence-free) format for any purpose (i.e. for profit or not for profit). On the portal, all public sector bodies publish data by category.
PROSTOR Portal	The PROSTOR Portal is an information and service portal intended for end users. It includes information in the field of basic geodetic system, real estate registration, mass real-estate valuation, State boundaries, spatial units and house numbers, public infrastructure, as well as the topographic and cartographic system maintained by the SMA. It serves as the user's entry point to various services for downloading or processing the data (browsers, applications, publicly available online services, public view of real estate). All the data are free of charge.
Slovenia Digital Library	The Digital Library of Slovenia (DLib.si) is a web portal developed in 2007 by the National and University Library (NUK) in cooperation with several cultural, educational and research institutions, including numerous libraries throughout Slovenia. The portal provides free access to digitised knowledge and cultural material – journals, books, manuscripts, maps, photographs, posters, music, and reference material.
STOP the Bureaucracy portal	Since 2012, citizens and other stakeholders can submit proposals via the 'Stop the Bureaucracy' Portal. The Ministry of Public Administration (MPA), in coordination with relevant ministries, assess the feasibility of proposals and ensure feedback is provided to each submitter. The approved measures (with deadlines and the main responsible ministry for their implementation), which address the admissible proposals, are included in the annual reports published by the webpage. The implementation of these measures is monitored by the MPA and by the Strategic Council operated under the Inter-ministerial Working Group for a better regulation and business environment and increased competitiveness. The MPA reports the achieved results to the government annually.

#### **Cross-border Infrastructures**

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

European Business Registry	The Agency of the Republic of Slovenia for Public Legal Records and Related Services (AJPES) provides users access to data and products on the business entities in EBR Member States subject to the conditions and limitations stated in the General Terms and Conditions for Use of the AJPES Web Portal and in the specific national conditions of EBR Member States.
EUCARIS	Slovenia is a member of the European Car and Driving Licence Information System (EUCARIS). The Ministry of Infrastructure is responsible for the EUCARIS system.
TESTA	The Trans European Services for Telematics between Administrations (TESTA) network is used for a number of cross-border use cases. The Slovenian national public administrations network handled by Ministry for Digital Transformation provides connection to the TESTA network through the central service point of the network. The main administration bodies that are interconnected within TESTA network are: Ministry of Infrastructure, Ministry of the Interior, Ministry of Finance, Ministry of Defence, Ministry of Justice, Ministry of Labor, Family, Social Affairs and Equal Opportunities, The Office of the State Prosecutor General of the Republic of Slovenia, Statistical Office of the Republic of Slovenia, National Laboratory of Health, Environment and Food.
Once-Only Technical System	Slovenia completed the national part of the Once-Only Technical System (OOTS) in December 2023 as required by the EU SDG Regulation. OOTS will streamline cross-border online procedures by allowing citizens and businesses to supply the same data to

	public authorities only once. Slovenia's OOTS system was ranked among the four most advanced member States. It plays the role of the intermediary platform in which the national solution for data exchange – Tray - plays the core element of the OOTS. Tray was upgraded to fulfil the requirements of the EU SDG Regulation with the aim to support the Slovenian procedure portals on one side and evidence providers on the other. Slovenia will gradually
EU Digital Wallet	integrate different portals and evidence providers.  In the first phase, the Wallet solution is expected to be implemented following the 'Local external WSCD' model. Slovenia plans to use the national eID card as an external secure module to reach the high level of assurance. Furthermore, Slovenia intends to support another eID means to grant the assurance level through the embedded secure storage of the mobile phone. It may be combined with some additional remote processing to increase the overall security of the LoA Substantial authentication. Slovenia intends to implement this solution under the scope of LSP Potential
European Blockchain Services Infrastructure	The European Blockchain Services Infrastructure (EBSI), which is a test infrastructure for blockchains, will be put in place, thus contributing to more reliable cross-border, national and local services. Furthermore, Slovenia is one of the partners of DEP (Digital Europe Programme) projects, EBSI – VECTOR and TRACE4EU, and is one of the founding members of EUROPEUM EDIC for blockchain, which will be the first European institution on Blockchain.
LDT EDIC CitiVerse	On 1 February 2024, the European Commission approved and on February 7 published in the Official Journal of the European Union the establishment of LDT-CitiVERSE-EDIC, the European Consortium for Digital Infrastructure on Local Digital Twins for CitiVERSE. In today's digital environment, local digital twins, enriched with advanced artificial intelligence technologies, have become a crucial tool for innovative and efficient municipal management. These digital twins are virtual reflections of local communities, providing a comprehensive digital view of their environment, infrastructure, services, and processes. Designed with integrated data, Internet of Things (IoT) technologies, advanced analytics, and artificial intelligence technologies, they enable municipalities to better understand, plan, and manage their resources.  Slovenia is among the founding members of this EDIC.

## 4. Digital transformation of public services



#### Digital Public Services for Citizens

#### Central Solution for eDelivery

In November 2020, the new central service SI-CeV was launched to cover the e-delivery of official documents to citizens and between public institutions. A central e-delivery solution, SI-CeV, acts as a crossroad to route items between sender and recipient. The solution enables public sector institutions to deliver official decisions electronically from their document systems and to receive delivery from other institutions, according to the General Administrative Procedure Act. Currently, more than 3 400 public institutions are connected to SI-CeV. Citizens can use their secure electronic mailbox, which they can open on the eGovernment portal, or through the information system VEP.SI. The Law on De-bureaucratisation, adopted at the end of 2021, introduced two new methods, namely "notification with confirmation" and "notification without confirmation", with delivery in the citizen's regular electronic mailbox. The implementation of this simplified delivery was fully implemented in mid-2023. Since the begging of 2024, the system has also been supporting the delivery based on the Civil Procedure Act.

#### Electronic Procedures Building Block

The Electronic Procedure Building Block System (JEP) is an information solution for the full and simultaneous electronic implementation of public procedures. The JEP acts as a procedure and form editor and also includes a wizard to help users fill out electronic forms with pre-filled data, obtained from public documents. It also includes the eSignature and ePayment functionalities. The JEP sends a filled-in user's application form to the competent public authority and allows authorities that do not have their own document management system to handle the application within the JEP system. The JEP also transparently provides building blocks for data exchange and trust services to its clients (see Chapters 6.3 and 6.4).

#### eUprava Citizens Portal

eUprava is a Slovenian State portal for citizens and an electronic entry point for various services provided by the government and other institutions in the public sector. eUprava enables users to access their personal data stored by different State institutions, to submit procedures, and to receive decisions from State institutions, all in one place. eUprava offers users electronic services covering various aspect of an individual's life, from birth, education, and employment to retirement. The most used services are: (i) obtaining subsidized public transport tickets for students; (ii) acquiring scholarships; (iii) changing temporary or permanent residences; (iv) submitting applications for maternity/parentally leave; (v) submitting applications for social assistance, subsidies, and reduced payments (e.g. child allowance, financial support for unemployed, reduced kindergarten fees, etc.); and (vi) submitting applications for subsidies for electric vehicles. eUprava is designed to be user-friendly, with clear content and good user experience. It works on mobile devices and is also accessible for people with disabilities and special needs.

#### e-Appointment-Booking

e-Appointment-Booking (eSamonaročanje) is a modern digital solution that provides citizens with a quick, secure, and user-friendly platform for booking appointments for various administrative services offered by the State administrations, allowing them to select available appointment slots that best suit their needs. Simultaneously, it empowers organizations to efficiently schedule and manage customers' appointments. In the first phase, the solution is being introduced in the administrative units of the governments and other State administrations will follow in the next phases.



#### **Municipalities Portals**

Slovenian municipalities developed various tools and portals to enhance the dialogue with citizens, including the implementation of participatory budgets and proposals to improve cities and the quality of the public services provided, as well as to implement their smart city or digitalisation plans and strategies.

Examples of subnational portals include:

- Izboljšajmo Maribor (Let's Improve Maribor), urban municipality of Maribor citizens' proposal for improvements, notices on public infrastructure damage;
- Izboljšajmo Ptuj (Let's Improve Ptuj), urban municipality of Ptuj citizens' proposal for improvements, notices on public infrastructure damage;
- Čuj, sodeluj (Maribor, Participate), urban municipality of Maribor citizens' proposals for projects and voting on projects of the participatory budget;
- Predlagam odločam (Propose Decide) urban municipality of Koper citizens' proposals for projects and voting on projects of the participatory budget;
- Servis 48, urban municipality of Celje citizens' proposal for improvements, notices on public infrastructure damage;
- Servis pobude meščanov (Citizen's Proposals Service), urban municipality of Ljubljana citizens' proposal for improvements, notices on public infrastructure damage;
- KrPovej (Kranj, Tell Us), urban municipality of Kranj citizens' proposal for improvements, notices on public infrastructure damage; and
- Odprti podatki Mestne občine Ljubljana (Open data of the Urban Municipality of Ljubljana),
   urban municipality of Ljubljana open data portal.

On individual municipalities' websites citizens can access all application forms online, which can be submitted with a digital signature via e-mail. Various public utility companies, owned by municipalities, also developed portals for users where they can access their data on costs and usage, e.g. of drinking water, waste, heating, etc.

#### **eInvoicing**



#### eInvoicing Legislation

In Slovenia, the competent authority with purview on eInvoicing is the Public Payments Administration of the Republic of Slovenia, attached to the Ministry of Finance.

Since 1 January 2015, public sector institutions have begun receiving electronic invoices for all goods and services. This function was based on the Provision of Payment Services to Budget Users Act (ZOPSPU-1). The Public Payments Administration serves as a single entry and exit point for the exchange of eInvoices between administrations, and between public administration and external entities as well.

#### **eHealth and Social Security**



#### zVEM Portal and Mobile Application

The zVEM Portal and Mobile Application are a one-stop-shop portal for patients (user of healthcare services). Patients can authenticate using a digital certificate or other supported authentication methods and access the data that are stored on them in the eHealth databases. The zVEM Portal provides patients with full access to their healthcare documentation, referrals, appointments, prescriptions and records of dispensed medication. In 2023, the integration of data from the Health Insurance Institute of Slovenia started (e.g. sick leave certificates). By 2025 almost all healthcare-related data from the Moj ZZZS portal will be integrated into zVEM (so it will provide more functionalities and really offer all health-related information in national databases). Using the eAppointment service, patients themselves can book the appointments for a number of medical services. There are almost 500 000 registered users on the patient portal, 450 000 of them are also users of the mobile application.



#### **ZVEMplus Portal for Healthcare Professionals**

zVEMplus is a web portal for healthcare professionals that was developed in 2021 within the national eHealth services. It was launched as a response to the COVID-19 pandemic and comprised applications for recording of COVID-19 test results, managing COVID-19 vaccination appointments and issuing COVID-19 certificates. In 2023, a tool was launched to issue a personal medication card for patients and in the same year, the National Registry for Rare Non



Communicable Diseases was launched. Further functionalities are envisaged in next years that will make this portal a powerful tool for healthcare professionals and will be financed through the Recovery and Resilience Fund. Application modules are available to public and private healthcare providers.



#### ZZZS Portal

Another health-related service is the patients' access to health insurance records held by the Health Insurance Institute of Slovenia. A registered user authenticated by a digital certificate can access their own records in eHealth databases.

Information on medical costs (reimbursement or direct settlement) is also available to patients on an online ZZZS Portal. The Health Insurance Institute provides effective collection and distribution of public funds for healthcare. The rights arising from compulsory health insurance are the right to healthcare services and the right to several other financial benefits. The institute comprises ten regional units and 45 branch offices located all over Slovenia.

A host of portal functionalities is envisaged within the zVEM Portal in 2025, therefore a separate portal just for insurance data will be no longer available.



#### Amendment to the Healthcare Databases Act

By amending the Healthcare Databases Act in 2015, a new legal basis was provided for the eHealth system, enabling interoperability and the exchange of health data on a national level. Ever since, considerable progress has been made in terms of development, availability and use of eHealth. In 2020, the act was amended to respond to the challenges of the COVID-19 pandemic and the related data-processing requirements. The amendment provided for the comprehensive digitalisation of communicable disease surveillance. Moreover, it facilitated the processing of health records for all persons receiving medical treatment in Slovenia, irrespective of their nationality, by enabling the cross-border exchange of healthcare records within the Central Registry of Patient Data (CRPD). Further amendments in 2021 extended the instances of lawful data processing (e.g. legal base for Health Insurance Institute to access Central Registry of Patient Data). A new act on the digitalisation of healthcare is in preparation.



#### Digital Health Strategy

The Strategy for the Digitalisation of the Slovenian Health System 2022–2027 is the new digital health strategy that has been developed within the project 'eHealth for a Heathier Society' under the framework of the Structural Reform Programme (SRSP) and published in January 2023. The strategy is supported by an investment plan and outlines the priorities and objectives for the period 2022–2027. The main focus areas are: (i) a unified Electronic Health Record; (ii) telemedicine; and (iii) ensuring the availability of health data for both primary and secondary use.

#### **Other Key Initiatives**



#### **SME Test**

Ministries publish draft regulations and other acts that are published in the Official Gazette of the Republic of Slovenia on the single national designated eDemocracy Portal. Open and inclusive policy making builds upon the idea of designing policies based on a broader evidence base. For this reason, the Division for the Administrative Burden Reduction, Better Regulation and Quality in Public Administration has prepared an innovative web-based tool called the SME Test, based on the Standard Cost Model. This tool enables the public (citizens, business entities, economic and other interest groups) to substantiate their comments and suggestions on a public policy proposal and, in addition, to quantify the regulatory impact assessment of their alternative policy proposals on the economy. The use of the SME Test is mandatory since January 2017. The public can thus access the tool through the eDemocracy Portal, that enables citizens to actively cooperate and take part in the decision-making process. The most important aspect is the opportunity to influence the drafting of regulations by expressing opinions and sending proposals and comments on regulation drafts to those who are preparing them and to the final decision makers.



#### Legal Information System

The Legal Information System (PISRS) is a single national legislative portal offering to the public information on adopted laws, regulations and other legal acts free of charge, including EU and national case law, consolidated texts, and other information with significant impact on the



application of national law. In addition to efficient and quick search through all the legal sources, users can easily monitor the process of planning and adopting laws and regulations.

The portal integrates more than 15 registers and databases which are administered by different public authorities, several of them being available online solely via this portal. Since its launch in 2014, the portal has been gaining popularity in various end-user segments and is expected to keep gaining users attention as analytical figures increase by about 10% annually. To keep digital innovation on track as well as to maintain the user-friendliness and responsiveness of the portal, in 2021 the Government Office for Legislation launched a project for redesigning the portal in terms of technical architecture, integrations of different data sources and user interface. The new portal is going to be relaunched in the firs quarter of 2024, which will entail many new advanced functionalities and services, including the possibility for the public to give its opinion on the legislation in force.



#### eHeritage Information System

The eHeritage online application (ISeD) enables the maintenance and use of the Register of Immovable Cultural Heritage (eRNPD module) and the Register of Intangible Cultural Heritage (eRNSD module), the establishment and maintenance of the system of Heritage Protection Areas (eVOD module) and the effective monitoring and supervision of the archaeological fieldwork research (eArchaeology module). The ISeD application supports all phases of the abovementioned heritage protection processes and all involved stakeholders: the Ministry of Culture, the competent organisations for the protection of cultural heritage, the State and private archaeological research providers, the regional museums, and citizens. The publicly accessible parts of the ISeD application allow citizens to engage in the cultural heritage protection system. On the My eHeritage Portal, citizens can submit initiatives for an entry in the Register of Cultural Heritage, applications for cultural heritage consents for the investigation and removal of archaeological remains and participate in e-public consultations on the definition of protection regimes for cultural heritage. All relevant and up-to-date spatial and attribute data from ISeD are published on the GIS Public Portal as open data.



## eArchiving - Protection of Documents, Archives and Archival Institutions Act

The Protection of Documents, Archives and Archival Institutions Act and the accompanying Regulation on Documents and Archives Protection were both passed in 2006 to regulate the management of electronic content. Both were later amended, namely the Protection of Documents, Archives and Archival Institutions Act in 2014, and the accompanying Regulation on Documents and Archives Protection was adopted in a new form in 2017 and entered into force in January 2018. The act states that all electronic records, including digitalised documents, have full legal status provided they comply with certain technical conditions. The accompanying regulation governs the activities and internal rules for individuals to keep documents and/or archives, the storage of such materials in physical and digital forms, the general conditions, the registration and certification of digital storage equipment and services, the selection and transfer of archives to public archival institutions, the processing and keeping of registries of archives, the protection of film and private archives, the use of archives in archival institutions and the work of the Archives Commission. This law eliminated the obligation of confirmation of internal rules for companies and State authorities at the State Archives of the Republic of Slovenia and simplified the procedures for certification. It granted companies and other private organisations the power to decide, autonomously and without any State interference, the best method to store digital documents, leaving them the choice of which solutions and technologies to adopt.

### eTax System

The Slovenian eTax system is a complete business solution that combines various portals and applications (eDavki portal, eCustoms portal, portal for Occasional Transport, SOAP portal, mobile application, etc.) with back-office integration. Since 2004, the system has enabled individuals and companies to log in with various electronic identifications. The system offers several eServices. The most important are: submission of tax forms, declarations and tax returns, electronic delivery of documents, access to data on the tax liability of taxpayers, electronic signing of documents, transfer of authorisations, etc. In 2018, the eDavki Portal was updated to a user-friendly version with easy access to information and eServices. In 2019, a simplified way of signing documents without using a signature component and a qualified digital certificate was introduced with the eTax system. This enabled the eDavki Portal to be used on all operating systems and browsers as well as on mobile devices. The portal is currently in the initial phase of a technological



redesign for more efficient processes and a better user experience, whereas the mobile eTax application is currently in the final stages of a comprehensive technological redesign for a better user experience. The security of the mobile application and the web portal has also been enhanced with the introduction of a two-factor authentication.



#### Public Payments Administration

The Public Payments Administration (PPA) operates and manages the dedicated infrastructure for payments and other related services. Payments are made via online banking, debit or credit cards and the mobile payments application, which enables the payment of eServices. The PPA online store is an online payment-related service, which provides an easy way to set up online sales by budget users. All eServices can be accessed using smartphones and tablets, which further contributes to the increased utility and visibility of PPA ePayments and online payment of eServices for budget users. The purchase procedure is available in Slovenian, English, Italian and Hungarian. During the pandemic, the use of ePayments increased greatly. A change in the habits of users is underway, as they are opting for e-applications and online payment of e-applications in greater numbers.



#### Public Payments Administration Portal

The Public Payments Administration operates and manages the dedicated infrastructure for payments and other related services. The Slovenian Payment System is a complete business solution combining a web portal with back-office integration. The system was developed in 2002 and allows government institutions to honour their payment obligations to individuals and companies as well as process tax payments online using a qualified certificate issued by any registered certification authority in the country. The entire process consists of using all SEPA compliant payment instruments (UJPnet), exchanging eInvoices (eRačun) and other structured electronic documents (eDokument) and validating data, sending all related responses and feedback (corresponding status), digitally signing and timestamping the exchanged data. In November 2022, the Public Payments Administration technologically and visually renovated the UJPnet web application and ensured better transparency and, above all, easier accessibility for UJPnet users to the content they use most often. Since the implementation of the instant payments service in 2020, Public Payments Administration has been successfully receiving inflows of instant payments to sub-accounts of budget users continuously 24 hours a day, every day of the year. From October 2021 onwards, the Public Payments Administration is also successfully receiving cross-border immediate payments. Since 2019, the Public Payments Administration has been enabling a mobile application called mUJPnet that budget users can download for free from the iTunes Store (Apple iOS) and the Play Store (Google Android). The mUJPnet mobile application provides customs users with easy and fast access to payment and other services via tablets and smartphones. This enables budget users to make payment transactions from different locations faster and more easily at different times and at any time (24/7) and to keep track of their status. The Public Payments Administration has been developing the web applications of the UJP eRačun Portal since 2015. The UJP eRačun Portal is intended for smaller issuers for preparing (manual entry of eInvoices) and sending eInvoices to budget users. The access to the UJP eRačun Portal is possible with a qualified digital certificate from one of the Slovenian issuers or through the SI-PASS system.

#### <u>Digital Public Services for Businesses</u>



#### **SPOT Portal for Businesses**

The One-Stop Shop Business Portal SPOT (formerly named eVEM) is the government portal for companies, sole traders, entrepreneurs and future entrepreneurs, whose main purpose is to enable users to carry out public administration operations easily and quickly. Through the SPOT portal, businesses can use electronic services to establish a company and carry out other obligatory or frequent procedures, either at start-up or later stages (submission of forms for social insurance registration, declaration of information changes on family members, notification of needs for workers, declaration of tax information, etc.). Users can carry out procedures independently online, using a valid digital certificate except for certain procedures for which they need to visit one of the SPOT points or a public notary. The main advantages of the SPOT Portal are that it enables a free-of-charge sole trader registration usually within one day (in the past it took seven days) and the registration of a company with limited liabilities within three days (in the past it took more than 60 days). It also enables several important eServices.





The majority of services carried out via the SPOT portal or the SPOT points are free of charge. New services are constantly developed for SPOT. In terms of development of new services, relevant stakeholders are being involved and the principles of interoperability are followed. The development is carried out with the cooperation of different governmental bodies. It includes the connection of different IT systems into the eService of SPOT, aiming at reusing already available data from different registries or systems and following the Once-Only principle, where possible. In 2020, an important new functionality - the electronic sick leave - was introduced on the portal, which significantly reduced the administrative burden. The estimated cost savings for all participating stakeholders are EUR 11.5 million yearly. In 2020–2021, new electronic services for municipalities were published on the portal, both on the Portal for Citizens eUprava and on the Business Portal SPOT. In addition, the portal was visually redesigned in January 2021 to harmonise the user experience and, at the same time, improve its stability. In 2021-2023 over 20 new procedures for businesses were introduced.

#### **Public Procurement**

#### **Public Procurement Act**

On 1 April 2016, a Public Procurement Act entered into force, which transposed Directive 2014/24/EU and Directive 2014/25/EU. On 1 November 2018, an amendment to the Public Procurement Act came in force. Its main objective was to further emphasise the importance of social aspects in public procurement procedures and public contract execution. The second amendment to the Public Procurement Act is in use since 1 January 2022. Its main objective was making the procedure simpler and more transparent with the aim to raise competition in procurement procedures. The third amendment to the Public Procurement Act entered into force on 2 April 2024. Its main objective was regulation of exclusion grounds and recovery mechanism according to the Constitutional Court's decision and introduction of ex-ante notices on negotiated procedures without prior publication.

The Public Procurement Act lays down mandatory actions required of contracting authorities and tenderers in awarding public supply contracts, public service contracts and public works contracts. Among other provisions, the act sets out rules on mandatory publication of procurement notices in the Public Procurement Portal, on mandatory electronic submission and electronic communication in procurement procedures, on electronic verification of tenderers via the information system eDossier, on the dynamic purchasing system and electronic auctions, thus also laying the groundwork for a public, State-developed eProcurement system called e-JN Information System.

Furthermore, the 2017 amendment to the Legal Protection in Public Procurement Procedures Act introduced an electronic information system for legal protection procedures in public procurement, i.e. the eRevision Portal. The eRevision Portal was established in September 2019 and enables the exchange of information and documents between contracting authorities, selected tenderers, the National Review Commission and other participants in the appeal proceedings. It communicates with the Public Procurement Portal to allow a smooth flow of information and documentation. This significantly reduced the duration of the procedure and the administrative burdens and costs for the parties involved. The use of this portal is mandatory since 1 January 2021.



#### eProcurement Portal

The eProcurement system in the Republic of Slovenia is based on two portals:

- The Public Procurement Portal, in which all procurement notices, all public contracts and their modifications, procurement documentation and a list of public contracts awarded in the previous year with a value equal to or greater than EUR 10 000 net of VAT are published. The public procurement portal also enables a view into the state of the review procedures and tracks all payments executed and pairs them with an individual public procurement contract, so the interested public has the information on the financial execution of each individual public procurement contract; and
- A public State-developed eProcurement system called e-JN Information System, which is
  accessible free of charge. Since the technological renovation at the end of 2018, the
  system combines functionalities that were originally developed as part of different standalone modules/applications (eSubmissions, eAuctions, eDossier, eCatalogue and eInternal
  procedures). The five modules/applications are integrated into a comprehensive system
  on a single platform that will enable conducting public procurement procedures and

techniques and instruments for electronic and aggregated procurement in a fully electronic way, from the proposal to start a procurement procedure to the conclusion of the procedure and ordering of individual items through a catalogue.



The eProcurement System e-JN was built with different levels of interoperability in mind. It also uses web services, provided by Slovenian agencies, especially the AJPES (Agency of the Republic of Slovenia for Public Legal Records and Related Services) which is responsible for the Slovenian Business Register, the Official Public Gazette for eTendering and other institutions that provide data on economic operators. It is also connected with the office and financial system software that is widely used in public administration. Last year the Dynamic Procurement System was also introduced and the SMS notification of new public procurements published.

#### eSLOG Standard 2.0

Directive 2014/55/EU on electronic invoicing in public procurement stipulates that public procurement contractors must accept an invoice for public procurement if it was issued in an electronic format in compliance with European standard 16931 (EN 16391). The transposition of the eInvoicing Directive (2014/55/EU) into Slovenian law is contained in the Act Amending the Provision of Payment Services to Budget Users Act. Slovenia developed the new version of the eSLOG standard (version 2.0), which is compliant with the EN 16931 standard. The eSLOG standard version 2.0 is based on UN/EDIFACT INVOIC syntax, which is commonly used in Slovenia among economic operators. The Public Payments Administration of the Republic of Slovenia (PPA) is the single entry and exit point for the exchange of eInvoices with budget users. From 1 October 2020 onwards, they can receive them in eSLOG standard version 2.0, UBL 2.1 and CEFACT CII. From 1 October 2020, budget users can also receive and send eOrder forms, eOrder response and eDespatch advice (eDocuments) in eSLOG standard version 2.0. The PPA upgraded the entry point so that it now includes entry points for eDelivery in accordance with the eDelivery AS4 and OpenPEPPOL AS2 profiles, thus enabling budget users to receive eInvoices submitted in the European standard. The PPA has been connected to PEPPOL since 2018. Information can be found at the Slovenian National eBusiness Centre. Contracting entities other than budget users can use the eInvoicing exchange hub in accordance with eInvoicing Directive 2014/55/EU and the European standard. The exchange hub is operated by ZZI and provides users with the same set of functionalities for eInvoicing as the PPA single entry and exit point for budget users. The ZZI exchange hub is also a certified PEPPOL access point.

#### eJR IT Support for Public Tendering

The eJR online application provides IT support in the processing of public tenders. It supports the procedures of submitting and processing of applicants' documents. It assists professionals with processing and evaluating applications, and preparing administrative acts, as for instance a call for amending an application, decision or agreement. The eJR IT support for implementing public tenders provides for an efficient and rationalised operation of public administration. It provides an IT service for citizens, corporate entities and employees of public administration. It offers IT support for the whole procedure, from the preparation and publication of a tender to the evaluation of applications and allocation of funds.

#### Digital Inclusion and Digital Skills

#### **Administration Academy**

The Administration Academy, operating within the Ministry of Public Administration, organises trainings and proficiency exams for civil servants. To organise, coordinate, administer and analyse training courses, programmes and proficiency exams, the eUA Portal is used. The portal also serves as a tool for civil servants to register and track their training activities through an e-learning environment. The portal consists of a public web page, an administrative environment and a learning environment. The module for proficiency exams is in progress. In 2023, under the RRF, the Administration Academy started the programme 'Strengthening the digital knowledge and skills of civil servants' to improve the digital skills and awareness of civil servants.



#### **Promoting Digital Inclusion Act**

The Promoting Digital Inclusion Act (Official Gazette of the Republic of Slovenia No. 35/22) aims to:

- Raise awareness on the benefits of using digital tools for the life of an individual and society as a whole;
- Raise interest in technical knowledge, especially in the field of digital technologies (computer programming, robotics, artificial intelligence, etc.), and promote a responsible and safe use of digital technologies and their development;
- Have the population acquire and raise their level of basic digital skills so that by 2028 at least 80% of the population in the Republic of Slovenia aged between 16 and 74 have basic digital skills;
- Raise the competences to higher proficiency levels, increase interest in secondary, tertiary
  and higher education programmes featuring special digital skills and reduce the gender
  gap in this area; and
- Promote entrepreneurship in relation to digital skills.

#### Accessibility of Websites and Mobile Applications Act

The Accessibility of Websites and Mobile Applications Act regulates the measures to ensure the accessibility of public sector websites and mobile applications, providing accessibility for all users, in particular for those with disabilities (sensory or mobility impairment and mental disorders). The act is only available in Slovene. Additional information is available via the NIO Portal.



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## 5. Trust and Cybersecurity

#### eID and Trust Services

#### Electronic Identification and Trust Services Act

The national Law on Electronic Identification and Trust Services was adopted in July 2021. It aligns national legislation with Regulation (EU) 910/2014 on electronic identification and trust services for electronic transactions in the internal market (eIDAS Regulation). It introduces an electronic identity that can be issued through different electronic identification means.

The Decree on the Definition of Electronic Identification Means and the Use of a Central Authentication and Electronic Signature Service, adopted in March 2022, defines the electronic identification means and the use of the Central Authentication and Electronic Signature Service. The decree defines the electronic identification means associated with an electronic identity granted by the Republic of Slovenia as:

- Electronic identification means of the assurance level high on the identity card;
- Electronic identification means of the assurance level low on the identity card;
- Virtual electronic identification means of the assurance level substantial; and
- Virtual electronic identification means of the assurance level low (this has not yet been implemented).

The activities regulated by the eIDAS Regulation in the area of trust services, such as the certification of qualified trust service providers, are regularly performed. Currently, all activities in the area of trust services are operational and aligned with the requirements of the eIDAS Regulation.

#### Renewal of the Identity Card Act

In view of the renewal of the Identity Card Act, pursuant to Regulation (EU) 2019/1157 of the European Parliament and of the Council of 20 June 2019 on strengthening the security of identity cards of Union citizens and of residence documents issued to Union citizens and their family members exercising their right of free movement, it was decided that Slovenia would introduce new identity cards according to the above regulation. The identity card also serves as an eID card. The new Identity Card Act has already been adopted, whereas new legislation on eIdentities and trust services was adopted at the end of 2021.

#### SI-PASS - Authentication and eSignature Service

In the last few years, several projects for authentication and trust services as central building blocks were launched. The Authentication and eSignature Service SI-PASS has been fully operational since 2017, offering a central service for authentication and eSignature. The eSignature part of SI-PASS is implemented as a server-based system to allow the creation of an electronic signature with the private keys of the digital certificate holder securely stored in the central system. This system offers different levels of trust, including qualified digital signatures compliant with the eIDAS Regulation. SI-PASS has been integrated into major public administration systems. At present, there are almost 100 systems integrated. SI-PASS is also integrated with the Slovenian eIDAS node to enable cross-border authentication according to the eIDAS regulation. Currently, there are around 50 portals or systems integrated with SI-PASS in a way that makes cross-border authentication available. Several of them were integrated through participation in two CEF projects on enabling cross-border authentication.

#### Qualified Digital Certificates

In line with the transition period until 2026 (based on national law) most eGovernment services are accessible using qualified digital certificates for eSignature that are issued by public or private qualified trust service providers, in line with the eIDAS Regulation.

#### Mobile-based Identification and eSignature smsPASS

An smsPASS service has been launched to enable the use of mobile phones for authentication and eSignature through SI-PASS services. At present, this functionality is enabled in more than 55 different portals, also for citizens using the main State eGovernment Portal.

Mobile-based identification means, based on the revision of eIDAS will be further investigated within the large-scale pilot POTENTIAL. Slovenia is one of the 19 Member States taking part in this project. Slovenia will test the use of the European digital identification wallet to grant citizens and businesses access to the main e-government portals.

#### New Slovenian Electronic Identity Card

The Slovenian government started issuing a new Slovenian identity card compliant with the law on 28 March 2022. The Slovenian identity card (SI eID) is a personal document that can be used to prove the citizen's identity either physically or electronically. The citizens aged 12 years and over receive a SI eID card with the following elements: (i) electronic identification means of the assurance level high; (ii) electronic identification means of the assurance level low; and (iii) a qualified certificate for electronic signature. Starting from the beginning of April 2023, SI eID serves also as a supplement for a national health insurance card, e.g., when visiting the doctor or pharmacy. In April 2023 Slovenia successfully notified SI eID in line with eIDAS.

#### Cybersecurity

## Cybersecurity Strategy

The current Cybersecurity Strategy was the first step in establishing the framework for ensuring national cybersecurity on a higher level. The Republic of Slovenia will provide an open, safe and secure cyberspace, which will serve as the basis for smooth functioning of the infrastructure relevant for State authorities and the economy, as well as the lives of all citizens. Rapid development of ICTs in a modern society is beneficial on one hand but, on the other hand, it determines the emergence of new and more technologically sophisticated cyberthreats. There is a growing trend in using ICT for political, economic, and military pre-eminence. Cyber-attacks have become a major security threat to the contemporary world. Consequently, cybersecurity has become an important and integral part of national security.

With the adoption of the Information Security Act, the real basis for strengthening the national cybersecurity system was set. The Information Security Administration was established within the Ministry of Public Administration with a clear mission of increasing resilience to cyber threats. With the Information Security Act the role of a national CSIRT was taken over by a well-established SI-CERT and a new State Administration CSIRT (Government CERT) was established too.

In March 2021, the Slovenian government adopted the National Cyber Incident Response Plan (NCIRP), prepared by the Information Security Administration, which unified cyber incident management procedures and provides guidelines for a coordinated response for all involved stakeholders. The NCIRP makes operational the procedures set out in the Information Security Act.

In July 2021, the Government Information Security Office was established. The new office, which operates as an independent government office, is the successor of the Information Security Administration of the Republic of Slovenia. The Act on Amendments and Additions to the Act on Information Security (ZInfV-B) entered into force on 29 April 2023 and thus transposed the NIS 2 Directive into national law.

#### Information Security Act

Following Directive (EU) 2016/1148 (NIS Directive), the Information Security Act regulates information security and the measures for achieving a high level of security of network and information systems in the Republic of Slovenia, which are crucial for the smooth functioning of the State in any security situation, and which provide essential services for the preservation of key societal and economic activities. It stipulates the minimum security requirements and the incidents notification requirements for the subjects obliged to comply with the act. Furthermore, it regulates the competences, duties, organisation and operation of the National Competent Authority for Information Security and the Single Point of Contact (which are both part of the Information Security Administration), the National Cybersecurity Incident Response Centre (National CSIRT) and the State Administration Cybersecurity Incident Response Centre (State Administration CSIRT). In June 2021, the Act Amending the Information Security Act was adopted, which foresees a new competent cybersecurity authority. The Information Security Administration of the Republic of Slovenia as a body within the Ministry of Public Administration, which was the competent national authority in the field of information security under the Information Security



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Act, was transformed into the Government Information Security Office as an independent government office. With this legislative change the new office also assumed the role of the National Cybersecurity Certification Authority and incorporated the Government CERT which previously operated within the Ministry of Public Administration. The Act on Amendments and Additions to the Act on Information Security (ZInfV-B) entered into force on 29 April 2023 and thus transposed the NIS 2 Directive into national law.

#### Personal Data Protection Act

In 2022, the Personal Data Protection Act (Official Gazette of the Republic of Slovenia No. 163/22) entered into force, which empowered the Information Commissioner of the Republic of Slovenia (ICRS) to fully implement EU data protection requirements, including imposing sanctions as provided by GDPR.

In 2020, the Act on the Protection of Personal Data in the Area of Treatment of Criminal Offences (Official Gazette of the Republic of Slovenia No. 170/20) entered into force, which implemented the Directive (EU) 2016/680 of the European Parliament and of the Council of 27 April 2016 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, and repealing Council Framework Decision 2008/977/JHA.

With the named legislative acts being adopted, the core of EU data protection regulatory framework has been implemented. ICRS has the mandate to exercise tasks and competences as the national supervisory authority.

## 6. Innovative technologies

#### Artificial Intelligence (AI)



#### National Strategy for Artificial Intelligence

Slovenia adopted the National Programme for AI (NpAI) in May 2021. The programme is designed around the concept of 'innovation diffusion lifecycle', meaning that its main vision is to convey more than 40 years of research, knowledge and experiences in AI into real, trustworthy and ethical AI solutions used in business, public sector and government. In order to achieve this, NpAI sets ten strategic goals that include: (i) support to research and innovation projects; (ii) establishment of proper data and computational infrastructure; and (iii) support for reference implementation projects in six priority areas (health, industry 4.0, public administration, language technologies, sustainable food production and environment, and spatial planning). The National programme for AI represents the main strategic policy instrument to support activities - from research and innovation to AI uptake - in the period 2021-2025. NpAI foresees a special governance structure led by the Ministry of Digital Transformation that will provide guidance and support decision making with respect to the implementation in a multi-sectorial and interministerial setup of all the measures set out in the NpAI. External representatives of stakeholders and experts have also been included in order to steer implementation and changes in the future years based on technology, market and policy-based developments. The NpAI provides the policy framework and concrete support to the main phases of the innovation cycle from research and deployment to uptake activities but, with respect to the latter, measures are limited only to reference implementation projects where there is proper knowledge and capacity available and large impact envisaged. NpAI defines six priority areas, which are listed above. Larger scale uptakes will be left to sectorial strategies and actions.



## International Research Centre on Artificial Intelligence under the Auspices of UNESCO

The International Research Centre on Artificial Intelligence (IRCAI) operates under the auspices of UNESCO, embodying a global effort to harness the transformative power of artificial intelligence (AI) towards achieving the United Nations Sustainable Development Goals (SDGs). Positioned at the nexus of research, policy, and practice, IRCAI aims to foster international collaboration, drive innovative AI solutions, and ensure ethical, transparent, and inclusive development in AI technologies. As a beacon of AI excellence, it serves as a platform for sharing knowledge, best practices, and cutting-edge research across borders. By bridging the gap between diverse stakeholders, including governments, academia, industry, and civil society, IRCAI plays a pivotal role in shaping a future where AI technologies benefit humanity as a whole, addressing critical challenges from education and healthcare to climate change and beyond. The centre has released a number of influential reports on AI, as well as a novel scientific Journal of AI for Sustainable Development (JAISD). It has built strong relationships and influenced international discussions both bilaterally with key international partners (EU, SSA) and in larger settings including the OECD, EC and UN. It has also established a number of initiatives in Slovenia as well as internationally, such as Fellowship for Climate Tech Advanced Compute for Start-ups with Amazon AWS, Stronger Together: Artificial Intelligence for the Common Good with British Council, Network of Centres of Excellence in AI and Sustainable Development with 40 research centres across the global north and south, and an Industrial club comprised of 200 companies. IRCAI is developing its inhouse Sustainable Development Goals Observatory powering a data-driven approach to showcase sustainability in different countries and suggesting appropriate actions.



#### Open-source Language Tools for Slovene in a Digital Environment

With the project titled Development of Slovene in a Digital Environment (DSDE), which is financed by the Slovenian Ministry of Culture, Slovenia has recognized the importance of developing modern language technologies for the Slovene language. In the field of digitisation of the Slovene language, some of the most pressing gaps in the area of openly accessible resources, technologies and services for modern Slovene have been addressed. The learning sets and machine annotation procedures for modern Slovene have been overhauled, the core language resources have been upgraded and the methodology for their future development has been





updated. Progress has been made in particular in the development of the speech database and speech technologies, in particular speech recognition for Slovene, and in the development of semantic resources and technologies (creation of a central digital dictionary database, a knowledge base and resources for various semantic tasks). The machine translation methodology has been upgraded, and concrete language resources and technologies have been developed which form a central part of the digitisation of the language: a translator (Ang-Slo, Slo-English), a speech recogniser (automatic transcription of audio files), a terminology portal for the compilation of Slovene terminology, and various tools:

- Named Entity Recogniser (recognising names of persons, organisations, geographical and real names),
- Link extraction (recognition of names in text and links between them);
- For coreference discovery (recognition of names in text and coreference between them);
- Question answering (finding the answer to a question in a text);
- Disambiguation (identifying the meaning of words in context);
- For machine annotation of Slovene texts; and
- A tool for manual annotation of corrected texts.

#### Semantic Text Analyser

The Semantic Text Analyser is an example of the use of emerging technologies in Slovenia. It is a working prototype developed in cooperation with the University of Ljubljana and co-financed by the European Union. Using AI technologies like NLP, machine, and deep learning, this new tool will support the comparison of texts by content and analysis of their meaning through concepts and terms. It is used to prepare and update vocabularies, to find and narrow down relevant texts with similar content in one or several collections (eg. finding relevant laws by content) and to improve fast content preview of government texts, among others. In the next phase, the semantic analyser is going to be used to support the implementation of digital services, such as the optimisation of work for service portals.

#### The data map

The data map Podatkovni zemljevid aims to provide an overview of Slovenia's public administration's data landscape. The prototype was developed in cooperation with the Open Data Portal of Slovenia (OPSI Portal) and it is an addition to the catalogue of public information. It provides an enriched understanding of databases and the data they contain. It also helps to understand how data are linked, their meaning, and the frequency with which they are updated. It is designed to facilitate the exploration, discovery, and access to data sources that can be used to create public services and other tools and applications for public administrations, citizens, and businesses.

The data's end-users are citizens of the Republic of Slovenia, companies, and organizations who can freely use the published data or check the conditions for accessing and using other protected public information. Slovakia aims to strengthen the interoperability between public administrations and encourage the use of data for commercial, non-economic, or research purposes. The following steps are the development of an application, the gradual integration of public information descriptions and the integration into the governmental cloud in connection with the OPSI Portal and Data Spaces.

#### AI4SI platform

AI4SI is a non-profit think tank and multistakeholder platform of representatives from supply & demand side, NGOs, research and development and government that aims to promote, coordinate, and organize efficient knowledge transfer from AI research to implementation in companies and organizations.

#### TRAY

TRAY is an example of the effective use of innovative technologies supporting data exchange across many diverse systems and life events within the public administration and beyond. Tray is a common central data exchange platform (known as "Pladenj" in Slovenian), stands as a versatile and reliable system designed to facilitate seamless data and document exchange. Employing advanced AI machine learning techniques, it enhances stability and mitigates disruptions, thereby optimizing the flow of information. In December 2023, the platform was upgraded to support cross-border exchanges in alignment with the EU Single Digital Gateway Regulation, serving as our national part of the Once-only Technical system. While unseen by endusers, this back-end system plays a pivotal role in smoothing safe data exchange processes and



safeguarding our digital infrastructure. Using machine learning is smoothing the data flow, helping the data sources and data clients to easier overcome eventual peaks and disturbances, making our digital infrastructure more robust, resilient, and sustainable. As a powerful common data exchange platform it supports the process optimization and automatization, improving efficiency and enabling significant savings for all the stakeholders involved.

#### Training tool for interviews with children in judicial procedures

The Ministry of Digital Transformation is funding the development of a minimum viable product - a training tool for experts conducting forensic interviews with children at the Hiša za otroke (House for Children). This tool enables remote training sessions, allowing trainers to simulate a child's speech, expressions, gestures, and body language using a realistic child avatar mimicking trainers' actions in real time. It supports video and audio communication between trainers, trainees, and observers. The aim is to enhance the skills of professionals such as police officers, social workers, and psychologists in handling sensitive conversations with children who have experienced violence and trauma. The project is conducted in collaboration with the Ministry of Justice and the University of Ljubljana's Faculty of Computer and Information Science.

#### SKRINJA

Skrinja is an example of effective use of innovative advanced technologies supporting service delivery with decision-making. It includes business intelligence (BI) system with data warehouse. Skrinja is used by different public authorities and is developed and managed by the Ministry for Digital Transformation. Users can interactively view and process data in real time with powerful visualisations, also using mobile devices. In this way, data processing, analytics and visualisations are significantly speeded up, simplified and automated, especially for routine activities, so that employees can be engaged in finding new knowledge in the data and interpreting it accordingly. It is designed as a horizontal service for various levels of users in the public administration. It includes and shows in real-time:

- Public sector salaries (over 180.000 civil servants, 2000 budget users with over 750 types of payments),
- Public procurement data (over 11% of GDP), and
- Data from the document system Krpan showing the state of play of the administrative procedures of the country's administrative units.

Furthermore, 12 new data sources from different public authorities are in preparation, as the interest in analytical decision support among public authorities is high. An online Public Procurement in Skrinja is planned to be publicly available shortly. Further steps will be made in developing predictive analytics and algorithmic processing using AI.

The Skrinja system has been awarded several times (in 2020 - the »e-Service of Public Administration« award of the Slovenian Society of Informatics and in 2022 and it made it to the finals of »Moving Forward for the Best Improvement in public administration« of the University of Ljubljana's Faculty of Administration).

#### Distributed Ledger Technologies

#### Blockchain Action Plan

Slovenia follows the Blockchain Action Plan to lay the groundwork for an accelerated use of blockchain technologies. The main activities foreseen in the action plan are:

- Identifying the relevant legislation for the implementation of blockchain/DLT solutions (tax legislation, AML – Anti Money Laundering, GDPR – General Data Protection Regulation, Financial Regulation of the Securities and Requirements for Security Tokens);
- Identifying the relevant (vertical/horizontal) technological areas to determine the testing environment (a 'sandbox');
- Strengthening the implementation of blockchain/DLT solutions (together with other Industry 4.0 technologies: IoT, AI, AR, VR, mixed reality, machine learning) in the demo/pilot projects developed for nine smart specialisation strategy areas (including: smart cities and communities, smart home, sustainable tourism, sustainable materials, smart factories factories of the future, smart mobility, circular economy, health and medicine, and sustainable food supply);
- Creating the regulatory framework for the introduction of blockchain/DLT solutions and ensuring the legal basis to start or develop a business based on blockchain/DLT in Slovenia



- (such as activities concerning recent adoption of MiCA, DLT Pilot regime and the like); and
- Defining the relevant educational/training content and programmes, and the steps to introduce knowledge into companies, supporting environments and the education system (considering the strong concentration of knowledge on blockchain/DLT in Slovenia).

Use cases are implemented by the blockchain ecosystem in Slovenia, which is represented by the Blockchain Think Tank, the Blockchain Alliance Europe and other communities. The main purpose of the Blockchain Think Tank Slovenia, under the Slovenian Ministry of the Economy, Tourism and Sports, is to act as a bridge between the public and the private sector and serve as a platform for gathering all possible knowledge on blockchain technology in one place. With the European Blockchain Services Infrastructure for Blockchain Services EBSI (EABS) hub, an appropriate test infrastructure for blockchains will be put in place, contributing to more reliable cross-border, national and local services. Furthermore, Slovenia is one of the partners of DEP (Digital Europe Program) projects, EBSI – VECTOR and TRACE4EU, and is one of the founding members of EUROPEUM EDIC for blockchain, which will be first European institution on Blockchain.

#### SI-Chain – National Blockchain Test Infrastructure

Slovenia launched the National Blockchain Test Infrastructure SI-Chain to enable the testing of existing and new blockchain applications for both the public and private sectors. The blockchain solution, which is still in the test phase, allows for transactions and offers the possibility to create smart contracts.

#### Big Data

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

#### Cloud & Edge Computing

#### Slovenian Governmental Cloud

The Slovenian Governmental Cloud (DRO), which is based on open standard policy, ensured the connectivity of services, set up a single-service platform based on a common architecture for improving the accessibility of public services to citizens, ensured the availability of services from anywhere and at any time, and established effective information security. This infrastructure provides services that use sensitive, personal and other information that the State does not wish to store outside its environment. The national and common European objectives have been implemented in order to create a more affordable, efficient and user-friendly information environment that standardised and unified the development and maintenance of information and communication systems. Currently, activities are underway within the Resilience and Recovery Plan for the establishment of a new generation of cloud information infrastructure, which will be more energy efficient and will enable the implementation of an increased number of eServices with and within the State.

#### Multi Provider Cloud Edge Continuum

Slovenia is a member of the IPCEI – CIS – next generation cloud on the European level. The IPCEI CIS will establish a true Multi Provider Cloud Edge Continuum. This will enable an advanced data processing ecosystem that provides new capabilities in terms of scalability, interoperability, and trustworthiness. This will contrast current approaches of cloud and edge computing that focus on single provider solutions with limited interoperability and portability of data processing services.

The continuum will enable seamless data processing and service management for cloud and edge applications and it will provide a common and open reference architecture for future interoperable cloud and edge systems. Thereby, the IPCEI CIS lays the groundwork for a seamless usage of cloud and edge services across European providers. It will focus on the development of all necessary technical core capabilities as well as exemplary feature rich applications that demonstrate the successful implementation of the Multi Provider Cloud Edge Continuum.

#### Internet-of-Things (IoT)



## Internet of Things Development

In the Digital Slovenia 2030 Strategy, the Internet of Things is identified as a technological priority. The concept of IoT is to connect devices with built-in sensors to the internet and allow the devices to communicate with one another and exchange data, based on which they can make decisions and function. In terms of content, the priorities of the strategy are smart cities and communities. The aim of using IoT technologies in towns and communities is to develop a connected intelligence system which will support economic activities, increase the population's satisfaction with public services, contribute to public security, sustainable management of the environment, more efficient urban governance and tackling other challenges that towns and communities face. In addition, the National Programme for AI envisaged the establishment of a IoT platform for AI in its strategic goal 5 - Establishing proper technical infrastructure for AI.



#### Internet of Things (IoT) Connectivity Platform pilot project

In 2023 an IoT Connectivity Platform pilot project was implemented, which is intended for users from the state administration. Technically it focuses on a key challenge, i.e. how to connect various IoT end devices like sensors, actuators, meters, dedicated devices, buildings etc. with a single common platform, considering that these end devices may communicate wirelessly or via wired connections, generally using different transmission and data protocols and formats. The purpose of the IoT Connectivity Platform is to provide some sort of common denominator for all these various end devices by enforcing NGSI-LD specifications through the use of the FIWARE Context Broker central building block. The first user of the platform is the Tangible Assets Directorate at the Ministry of Public Administration, which manages approximately 350 buildings and continiously carries out energy renovation project on these buildings. The IoT Connectivity Platform is currently used to gather data from sensors and meters installed in these buildings in order to meet rather detailed energy bookkeeping requirements. In the future, however, the same platform will also be used for advanced energy management in buildings. Other potential users of the platform are also other ministries, government departments, state offices, state agencies as well as administrative units.

The IoT connectivity platform used for advanced energy management in buildings will significantly improve their energy efficiency and can therefore be considered fully in line with the EU's climate and green goals of reducing emissions by at least 55% by 2030 and reaching the target, that the EU will be climate neutral by 2050, as agreed by the Council and the European Parliament. In addition, it will help conserve non-renewable energy sources such as oil and gas, thereby reducing associated costs. More information can be found at the Portal NIO.

#### Quantum Computing



## European Digital Innovation Hubs in Slovenia

European Digital Innovation Hubs (EDIHs) are one-stop shops supporting companies and public sector organisations to respond to digital challenges and become more competitive. EDIHs combine the benefits of a regional presence with the opportunities available to a pan-European network. This regional presence leaves them well-placed to provide the services local companies need, through the local language and innovation ecosystem. The European Coverage of the network facilitates the exchange of best practices across hubs in different countries as well as the provision of specialized services across regions when the required skills are not locally available. Currently, there are ten EDIHs in Slovenia, which can be found in the EDIH Catalogue.

#### Gigabit and Wireless High-speed Networks



## National Broadband Plan

On 26 August 2022, the government of the Republic of Slovenia adopted the Plan for the Development of Gigabit Infrastructure until 2030. It is a strategic plan for the establishment of and partly also for promoting the use of - infrastructure that will enable gigabit connectivity for all households and the main promoters of social economic development, as well as continuous coverage with the 5G network of all populated areas and main ground traffic routes. The plan is





fully aligned with the fundamental digital goals of the European Union in the field of connectivity. The plan includes goals and necessary measures in the field of gigabit infrastructure development, to make Slovenia one of the most digitally advanced countries by 2030 and to ensure gigabit connectivity for all rural and urban households and 5G network coverage for all populated areas. The main objectives are:

- Gigabit objectives for 2025, including 5G coverage for urban areas and the main terrestrial transport routes, Gigabit connectivity for schools, transport hubs, public services providers, and digitally intensive enterprises, at least 100 Mbps upgradable to 1 Gbps coverage for all citizens; and
- 2030 Digital Decade objectives, including gigabit connectivity for all households in rural and urban areas and 100 % 5G coverage for populated areas.

In March 2023, the Slovenian government adopted a supplement to the plan, aiming to define the indicators in more detail.

#### **Electronic Communications Act**

The field of electronic communications in the Republic of Slovenia is regulated by the new Electronic Communications Act (Official Gazette of the Republic of Slovenia No. 130/22; ZEKom-2/ECA-2), which was adopted in October 2022 and is valid from 10 November 2022 onwards. The new law addresses the shortcomings of ZeKOM-1 and transposes the Directive on the European Electronic Communications Code into the legislation of the Republic of Slovenia. The main objectives of the act are: (i) to promote investment in high-speed broadband networks; (ii) to promote competitiveness; (iii) to develop the internal market; and (iv) to protect the interests of end-users.

#### Portal Prostor

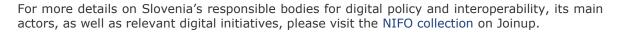
An infrastructure viewer has been developed by the Surveying and Mapping Authority. The mapping system of high-speed broadband connectivity presents the graphical form of data on ducts, cables, nodes, base stations, etc. The system gathers data on electronic communication operators' facilities, mainly location and type of networks used. Citizens can check the availability of the broadband provided by operators on Geoportal AKOS as well.

#### GovTech

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

## 7. Digital Public A Governance

## **Public Administration**



#### **National**

#### Ministry of Digital Transformation

The Ministry of Digital Transformation was established in January 2023. It monitors and analyses the state of digital transformation and the information society at national level. It is responsible for the areas of the information society, electronic communications, digital inclusion, digital competences, the data economy, management of information and communication systems, and fostering the digitalisation of public administration services.

In cooperation with the competent Ministries and government offices, the Ministry prepares, coordinates, and implements national measures and projects in the field of the information society and digital transformation of the economy, public administration, healthcare, justice, agriculture, education and other areas.

The Ministry of Digital Transformation took over the policies and strategies regarding eGovernment focusing on innovative and human-centric solutions and digital public services, together with the development and management of information systems previously carried out by the Information Technology Directorate within the Ministry of Public Administration.

#### Government Information Security Office

The Government Information Security Office (GISO), which succeeded the Information Security Administration of the Republic of Slovenia, was established and became operational in July 2021. GISO is the national competent authority in the field of information and cybersecurity. Its core mission is to increase resilience to cyberthreats that can affect individuals, businesses, the government, and society at large. GISO connects stakeholders in the national information security system and coordinates the operational capabilities of the system at strategic level. Under the Information Security Act (ISA), GISO pays special attention to a group of essential service providers (in the fields of energy, digital infrastructure, drinking water supply and distribution, healthcare, transport, banking, financial market infrastructure, food supply and environmental protection), a group of digital service providers and a group of State administration authorities. GISO is also the single point of contact to ensure cross-border cooperation with the relevant authorities of other EU Member States and with the European CSIRT Network, as well as other international cooperation tasks.

Through its own inspection service, it oversees the implementation of the ISA. Besides that, GISO is the National Cybersecurity Certification Authority and is also appointed by the Slovenian government as the National Coordination Centre for Cybersecurity. It also incorporated the government CERT, which previously operated within the Ministry of Public Administration. GISO is strategically placed within the Slovenian national security system and is tasked with notifying the government and the National Security Council (NSC) in case of a critical incident or cyberattack.

#### Secretariat-General of the Government of the Republic of Slovenia

The Secretariat-General of the Government of the Republic of Slovenia is primarily responsible for conducting the sessions of the government, its working bodies, expert councils and other governmental bodies, and for monitoring the implementation of decisions adopted by the government and the obligations undertaken by or imposed on it.

One of the key tasks of the Secretariat-General is to ensure the smooth operation of information systems whose primary function is to support the decision-making processes. Electronic services and systems developed for this purpose facilitate the harmonisation of documents at different levels and the provision of information on government decisions to various target user groups and to the public.



#### ICT Association at the Chamber of Commerce and Industry

The Ministry of Digital Transformation works with the ICT Association of Slovenia (ZIT) at the Chamber of Commerce and Industry. The association strives to connect public administration and ICT companies as well as to cooperate in marketing and implementing ICT solutions abroad. There are several cooperation initiatives, from 5G networks, eIdentity legislation, smart city solutions to the Artificial Intelligence National Strategy and the Open Data National Hub. The ZIT runs several sections, competence centres, initiatives and projects that support the ICT sector and the digitalisation of the economy in Slovenia. The key sections are:

- ZITEX the export section, organising activities to support the internationalisation of the industry;
- AIDAS the section for data science and artificial intelligence to work on key topics on these very important areas for the country and the common EU digital market;
- SOEK improving the business environment for telecom solutions providers and cooperating on the regulation on digital connectivity;
- SeGov cooperating with the government, connecting providers and exporting solutions;
- S3P promoting online-business and eCommerce, cooperating with the government offices in the field of financial regulation;
- SeKV networking in the field of cybersecurity;
- ScienceTech networking high technology companies for further cooperation with CERN, ESA, EUMETSAT, etc.;
- eHealth the section working closely with Ministry of Health in developing Slovene eHealth system – including strategy, key goals and projects – as well as with all key stakeholders on the topic;
- Initiatives of ICT Association of Slovenia;
- Centre for eBusiness (EPOS), providing B2B support to SMEs with standards, tools and skills;
- AI4Slovenia (AI4SI) an initiative to promote and support the transfer of knowledge of AI to industry, from research to use;
- ICT Innovation Network part of Smart Specialisation of Slovenia, supporting all vertical industries with digitalisation initiatives and projects;
- Gaia-X Hub Slovenia the central contact point for Slovenian companies, stakeholders, initiatives, associations, and public sector bodies contributing to the Gaia-X project and a reference point for data spaces; and
- OPSIHub an initiative within the Ministry for Public Administration to promote public open data.

#### Slovenian Digital Coalition - Digitalna.si

The Slovenian Digital Coalition includes stakeholders from trade and industry, science, education, public administration, public sector, local government and civil society. The Slovenian Digital Coalition is focused on attaining a cross-sector multiplier impact, accelerating the development of the digital society and leveraging opportunities for the development of ICT and the internet. In November 2020, the Slovenian Digital Coalition organised a forum showcasing three years of work and assessing the current state of play in the field of digital transformation. A wide variety of stakeholders took part in this forum and the topics discussed covered key areas in this field. There are three focus areas for the Digital Coalition:(i) digital economy; (ii) digital skills and education system, and (iii) regulatory and business ecosystem. Each area is supported by a coalition strategic working group. Furthermore, the Slovenian Digital Coalition established a project team on the topics of smart cities and society and blockchain. The coalition is also actively participating in different events, and it represents the point of view of businesses. It also highlights those areas which would require additional activities in order to keep on growing.

#### **Information Commissioner**

The Information Commissioner performs the duties of the national Data Protection Authority: it oversees the application of the rules on personal data protection (including the GDPR), the Personal Data Protection Act and the Act on the Protection of Personal Data in the Area of Treatment of Criminal Offences. It performs inspections and issues penalties with regards to violations of the above-mentioned laws. The Information Commissioner also acts as a body of appeal for resolving complaints from the data subjects regarding their rights, namely the right of access by the data subject, the right to rectification, the right to erasure, etc.

On the other hand, the Information Commissioner oversees the application of the Access to Public Information Act with regards to individual complaints when liable public sector bodies deny access



to public documents or reject a request for reuse of public sector information. The role that the Information Commissioner has played is vital in ensuring a high degree of institutional transparency. The number of individual complaints is steadily growing every year, which shows that the awareness on the right to access to public information has risen also among Slovenian citizens. The Information Commissioner receives only a low number of complaints every year regarding the right to reuse public information when compared to the number of complaints raised over the refusal of access to public documents. This can be interpreted as evidence that the government's efforts to promote and enable the reuse of public sector information are working.

#### Subnational (Federal, Regional and Local)

#### Municipalities

In accordance with the constitutional provisions, Slovenian municipalities and urban municipalities are autonomous in the field of introducing eSolutions. Local eGovernment initiatives are solely under the responsibility of local authorities, mostly municipalities, which implement them using their own mechanisms and time schedules.

Voluntary coordination is taking place in the framework of local government associations. For instance, the Association of Urban Municipalities of Slovenia established the Committee for Digitalisation and Smart Cities, which unites experts of the eleven urban municipalities. Cities exchange information on best practices, solutions and challenges and prepare position papers on State policies and public tenders. As the resources for implementing digital solutions at local level are limited, cities explore possibilities for cooperation in projects and initiatives that could be co-financed with European or national funds.

The Association of Municipalities and Towns of Slovenia (SOS) is another example of coordination of local self-government bodies. Besides working with bodies dealing with digital transition, the SOS coordinates access rights and offers support to the local authorities on the eTourism system. The SOS established a strategic partnership with the University of Ljubljana, which resulted in the creation of the 4P Digital Innovation Hub (4PDIH). The aim of the 4PDIH is to foster awareness and provide services to grow digital skills, share digital experience and case studies locally, regionally and internationally, and support the government to adapt regulation and open its data to foster entrepreneurship.

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

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).



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

### An action supported by Interoperable Europe

The ISA<sup>2</sup> 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 ISA<sup>2</sup> 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*.

#### Follow us



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