REPUBLIC OF SLOVENIA
MINISTRY OF DIGITAL TRANSFORMATION

ON THE WAY TO A USER-CENTRED DIGITAL TRANSFORMATION OF SLOVENIA

"Digital transformation is a tool for efficient and transparent functioning of the state."
Dr Emilija Stojmenova Duh, Minister

DIGITAL SLOVENIA: VISION OF A HOLISTIC AND INCLUSIVE DIGITAL ROLE MODEL

Slovenia has committed itself to a digital and green perspective in the next decade, which will help pave the way for our country to become one of the leading digitally oriented countries. The Ministry of Digital Transformation oversees the development and inclusion of digital competences, infrastructure accessibility and promotes the use of digital public services and security in the ICT environment. The task of the Ministry is to guide the comprehensive digital transformation of the four key pillars in our country, i.e. the economy, education, local communities and public administration. The plan for Slovenia's digital transformation focuses on user-friendly digital solutions and safe experience with digitalisation in order to be truly digitally inclusive for all Slovenian citizens.

While committed to the accelerated digital transformation of Slovenia, we will further aim to upgrade the digital solutions of public administration for citizens and business entities and
simultaneously enhance the digital skills of the broader public with a special emphasis on incorporating young people and the elderly into the spirit of intergenerational cooperation.

Knowledge transfer, application of new technologies, data-driven decision making and governance, construction of gigabit infrastructure, awareness raising and concern for online security are but a few specific fields being addressed through systemic, strategic and action measures.

As a ministry, we are involved proactively in the broader international and European space because we believe in the power of the knowledge and information exchange and the enhancement of the existing cooperation between countries and with international organisations. Slovenia has exceptional examples of best practice regarding digitalisation with a special emphasis on artificial intelligence and open data of the public sector, which is also evident from the Digital Economy and Society Index (DESI) with Slovenia being above the EU average. Among the 27 EU member states, Slovenia ranks 11th overall.

OBJECTIVES OF THE MINISTRY OF DIGITAL TRANSFORMATION FOR THE NEXT DIGITAL DECADE BY 2030:

1. Enable gigabit connectivity in all Slovenian households and uninterrupted 5G coverage.
2. Reduce the digital divide with the help of digital competences and tools.
3. Improve the digital offer and application of digital public services and establish a uniform user digital identity.
4. Promote the development of smart cities and local communities.
5. Enhance society's trust in a safe digital environment, respectful communication and clear understanding of digitalisation.

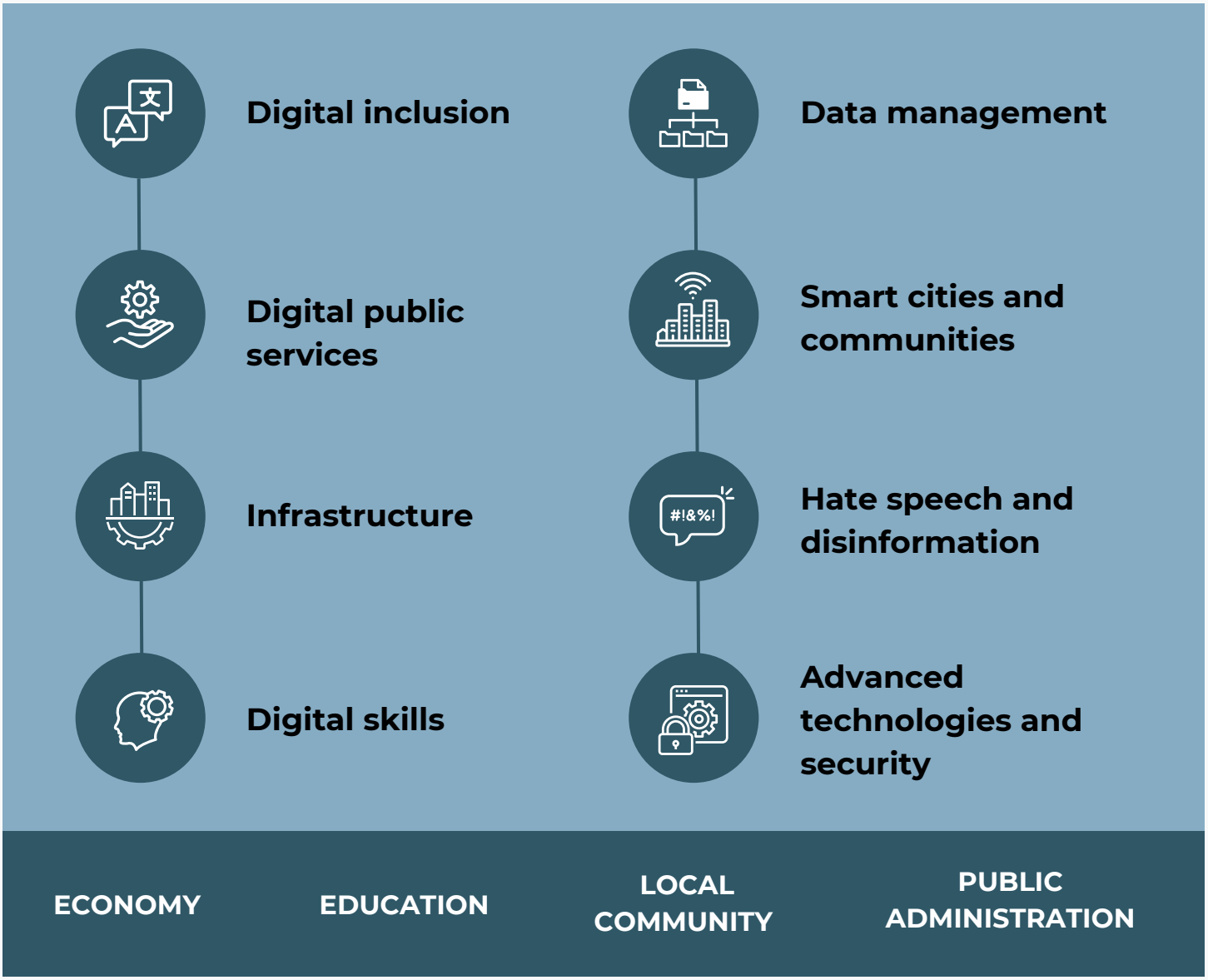
This document consists of key fields, strategic guidelines and examples of best practice that illustrate the existing results and the common goals for which we strive.

Equipped with data, knowledge, a team and ambitious targets, we can contribute together to Slovenia's progress with regard to the digital maturity of the country and the quality of its digital services and thus use the key message to encourage various stakeholders to become engaged in cooperation.

"As a digital role model, Slovenia strives for an efficient comprehensive digital transformation with lifelong learning, intergenerational cooperation and Slovenian digital talents."

STRATEGIC ORIENTATIONS AND PRIORITY FIELDS

A comprehensive approach to efficient digital transformation is divided into complementary fields ranging from the infrastructure to the development of digital services, enhancement of digital literacy and skills, application and introduction of new advanced technologies, use of data and care for ICT security. All the fields are supported strategically with documents and systemic changes.



DIGITAL SLOVENIA 2030

The Digital Slovenia 2030 Strategy (DISI2030) represents an **umbrella document of the digital transformation of the Republic of Slovenia until 2030** and determines the key strategic development guidelines for the future. Individual sectoral strategies are combined in the document into a uniform strategic development framework.

The Strategy anticipates the guidelines and objectives with indicators for the elimination of the largest development gaps for a faster development of the digital transformation in Slovenia. The key challenges are defined in six priority fields: gigabit infrastructure, digital transformation of the economy, digital public services, road to a smart society 5.0, cyber security, digital competences and inclusion and related content, such as supportive environments and green transition. DISI2030 observes the objectives of Europe's Digital Decade **(Digital Compass)** and the principles of the **European Declaration on Digital Rights and Principles for the Digital Decade**, while identifying Slovenia's significant challenges in the field of digital transformation.

The Strategy also highlights other principles, such as general awareness of the importance of the digital transformation, the Internet as a strategic tool of digital transformation, protection of the free and open Internet, the pursuit of intersectoral synergistic development effects, the use of the Slovenian language and the preservation of cultural identity, the promotion of research and development of digital technologies and their application, strategic autonomy and the single digital market, democratic digital society and the attainment of development goals in Slovenia through digital transformation.

The Digital Slovenia 2030 Strategy focuses on individuals and the environment in which they live. The overall objective of the Strategy is to promote Slovenia's digital transformation in all segments, i.e. society, country, local community and the economy.

"The vision of Digital Slovenia 2030 is to improve the quality of life of Slovenian citizens in a sustainable, green and trustworthy manner with digital transformation of all the segments of society."

Priority fields of the Digital Slovenia 2030 Strategy include:

1. **Gigabit infrastructure**
2. **Digital competences and inclusion**
3. **Digital transformation of the economy**
4. **Road to a smart society 5.0**
5. **Digital public services**
6. **Cyber security**

I. INFRASTRUCTURE

"We wish to ensure full coverage of all populated areas with the 5G network by 2030."

The first and essential condition for digital transformation is the establishment of a suitable digital infrastructure that enables the gigabit connectivity of households, drivers of socio-economic development, and uninterrupted coverage with the 5G network. In the field of connectivity, Slovenia ranked 10th in 2022 according to the DESI index.

GIGABIT INFRASTRUCTURE DEVELOPMENT PLAN BY 2030

In August 2022, the Government of the Republic of Slovenia adopted the Gigabit infrastructure development plan until 2030, which represents the strategic plan for the establishment – and partly the promotion of the application – of the infrastructure that will enable the gigabit connectivity of all households and main drivers of the social and economic development and uninterrupted coverage with the 5G network of all populated areas and main transport paths.

The plan includes the objectives and measures necessary for Slovenia to be placed among the digitally most advanced countries by 2030 and to ensure gigabit connectivity of all the households in rural and urban areas, and the coverage with the 5G network of all populated areas.

The main objectives include:

- The gigabit objectives for 2025 include coverage with the 5G network of urban areas and main transport paths, gigabit connectivity of schools, transport hubs, public service providers and digitally intensive companies, and the coverage of at least 100 Mb/s with the option of an upgrade to 1 Gb/s for all citizens.

- The objectives of the digital decade until 2030, including the gigabit connectivity of all the households in rural and urban areas, and a 100% coverage with the 5G network of all populated areas.

Current situation	Objective by 2030
88% of households have access to the Internet with a speed of at least 100 Mb/s, which can be upgraded to the gigabit speed.	Ensure coverage of all households with the gigabit network.
Field of ensuring connectivity of drivers of socio-economic development: • 40% for primary and secondary schools, • 99% for cultural institutions and stadiums, • 20% for transport hubs, • 30% for railway stations and • 100% for seaports and airports, buildings of local authorities, universities, research centres and health service providers, hospitals and digitally intensive companies.	Ensure coverage of all companies and other drivers of socio-economic development with the gigabit network.
Coverage: 75% in urban areas, 24% on motorways and national roads, 20% on railway infrastructure.	Ensure coverage of all populated areas with the 5G network.

II. DIGITAL INCLUSION AND ENHANCEMENT OF DIGITAL COMPETENCES

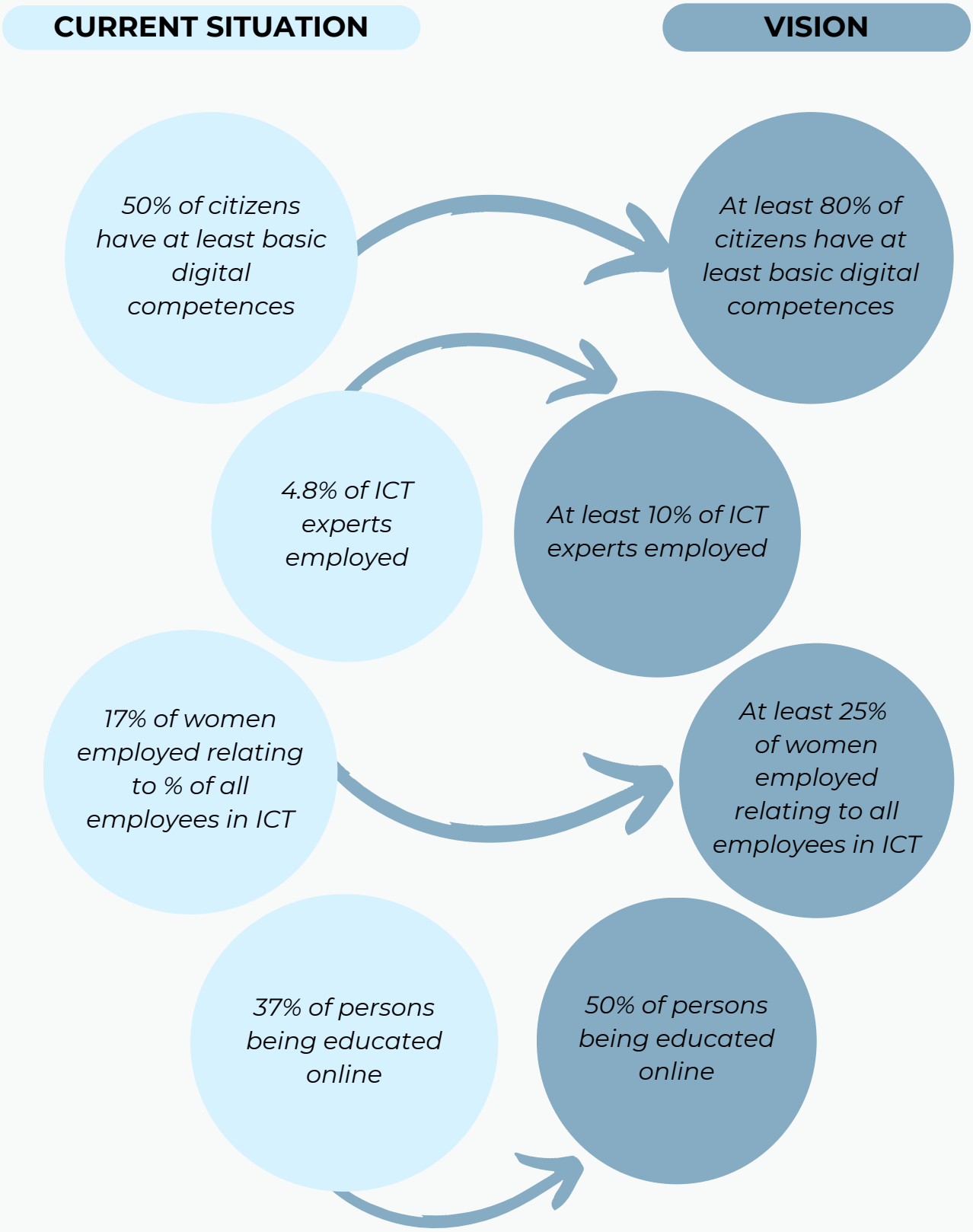
”By enhancing digital competences, we strive for digitally included citizens whose skills to use digital tools and services help them solve everyday tasks at home and at work.”

At a time of accelerated digitalisation of society and the economy, the **reduction of the digital divide**, which is the result of unequal access to the Internet, technologies, tools and knowledge, is one of our most important priorities. We are aware of the lack of digital knowledge and skills in various population groups, the lack of ICT experts in the economy and the public sector and the relatively low use of digital public services that have been developed rapidly in recent years.

Together with the competent ministries, we began harmonised implementation of measures relating to digital competences in the field of formal education, lifelong learning and additional employee training programmes.

The amended Promotion of Digital Inclusion Act (ZSDV) will enable better drafting and implementation of measures relating to digital inclusion and, in particular, it will ensure non-discriminatory treatment of various target groups.

Digital inclusion relies on four pillars – accessibility and availability of information and communication infrastructure and digital services, active citizenship in the information society, a sense of trust and security, and digital competences – whereby the Act mainly focuses on the acquisition and strengthening of digital competences and knowledge of the advantages of digital technologies and services.


CURRENT SITUATION
VISION
50% of citizens have at least basic digital competences
At least 80% of citizens have at least basic digital competences
4.8% of ICT experts employed
At least 10% of ICT experts employed
17% of women employed relating to % of all employees in ICT
At least 25% of women employed relating to all employees in ICT
37% of persons being educated online
50% of persons being educated online

MEASURES TO INCREASE DIGITAL COMPETENCES

Objectives of training:

- acquisition and strengthening of basic digital competences for target groups,
- promoting interest in the use of digital technologies and safe use of the Internet,
- promoting and raising awareness about the importance of the digital technologies, advantages and challenges brought by digitalisation in modern society.

The following projects were implemented in Slovenia in 2022 to increase digital competences:

Mobile heroes (increase of digital competences among the elderly living in rural areas of the Republic of Slovenia),

Internet safety workshops for primary school pupils during holidays,

YUNO – videos and online quizzes (free access to expert content for the broader public, especially for primary school pupils),

the Hate Speech competition (bring the issue of hate speech closer to young people and raise awareness about its negative consequences),

the Hate Speech campaign (present the issue of hate speech with the help of famous people and raise awareness about its negative consequences).

Several public calls relating to the increase of digital competences are also underway:

- **to increase the digital competences of young people** (4 substantive sets: digital literacy of young people from socially disadvantaged families, generating enthusiasm among girls for ICT content, artificial intelligence content and holiday days and weeks for young people),
- **to help users of digital services** (establishment of special points for help when using digital public services),
- **to develop "train-the-trainer" models relating to the acquisition of digital competences** (training of employees or representatives of NGOs and public institutions to obtain digital competences in order to disseminate their knowledge),
- **to increase the digital competences of citizens** (implementation of free educational programmes for adults to obtain basic and advanced digital competences),
- **public call for digital competences of NGOs** (promotion of digital inclusion in NGOs; on the one hand, it involves empowerment of employees in NGOs and educational activities for citizens implemented by NGOs on the other),
- **a public call to promote the involvement of women in ICT and their re-qualification is to be prepared**; the programme and training will be primarily aimed at women.

We are also planning a mechanism to ensure access to computer equipment, which would enable a rental of computer equipment to end users, i.e. citizens who need it (e.g. the socially disadvantaged, children with special needs, the disabled and pensioners).

III. DIGITAL TRANSFORMATION OF THE ECONOMY

"Orientation towards the knowledge society and thus the welfare of all Slovenian citizens and the promotion of investments in digital technologies."

In January 2022, the Strategy of Digital Transformation of the Economy was adopted, which discusses the broadest integration of advanced digital technologies in companies. It furthermore addresses the challenges of introducing advanced digital technologies, particularly in connection with the necessary skills and digital competences for prompt implementation of these technologies in business processes.

In June 2021, the Slovenian Industrial Strategy 2021–2030 was adopted, which encompasses the vision of Slovenia's industry development as green, creative and smart. With a balanced promotion of all three components of sustainable development (society, the environment, economy), the Slovenian Industrial Strategy will ensure the competitiveness of the economy and generate the conditions for industry restructuring by enhancing knowledge, creativity and innovation for new and high-quality jobs with more added value and the transition to a green, creative and smart economy.

Digital transformation of the economy is the foundation for improving productivity, competitiveness, resilience and sustainable development of the economy and the whole of society. Slovenia must exploit its intellectual potential and, as a small economy, build its success on knowledge. The two crucial challenges identified in Slovenia include the lack of investments in research and development, which are necessary for smart transformation and ICT, and the lack of suitable knowledge or personnel.

OBJECTIVES BY 2030 WITH REGARD TO THE DIGITAL TRANSFORMATION OF THE ECONOMY

proportion of companies using big data to be higher than 75%

proportion of companies using cloud computing services to be higher than 75%

proportion of companies using artificial intelligence to be higher than 75%

level of digitalisation in companies with more than 10 employees to be 53%

number of people employed or self-employed in ICT to be 60,000

increase of added value per employee to EUR 88,000

proportion of SMEs with Internet sales to be more than 30%

proportion of SMEs reaching at least a basic level of digital maturity to be 90%

proportion of companies providing education to use ICT to be 90%

IV. ROAD TO A SMART SOCIETY 5.0

"We advocate the use of digital technologies for the good of people in all fields of life."

Artificial Intelligence

With its results, artificial intelligence is already having an increasing effect on our lives, and this will be further accentuated in the future. To this end, Slovenia strives for artificial intelligence which will, as a tool, primarily serve humankind by improving the quality of our lives. We want to be among the leading EU member states with regard to artificial intelligence development and implementation in all pillars of Slovenia's development.

The National Programme on Artificial Intelligence (NpUI) was adopted, which aims at supporting the entire innovation life cycle of a product/service in six fields: health, industry 4.0, digital public services, language technologies, sustainable production of food and the environment, and spatial planning).

Vision of the NpUI

We wish to upgrade the research achievements of more than 40 years in the field of AI in Slovenia and become recognised internationally for the competences of knowledge transfer and top, ethical and safe AI technologies used in user-friendly and trustworthy services and products while ensuring our national cultural identity.

Artificial intelligence and other advanced digital technologies (blockchain, IoT and augmented reality) offer exceptional opportunities for inclusive sustainable growth, as they promote innovations, increase efficiency and improve services. Among other things, advanced technologies also pose a risk with regard to human rights, justice and human activities. It is crucial to ensure that the public accepts AI, and this must be based on trust that the introduction of AI will actually result in positive effects on the lives of people and society as a whole.

At the international level, Slovenia will enhance cooperation in the field of research, development and innovation; education; scientific and economic diplomacy; governance and regulation of development; implementation and application of AI in accordance with respect for human rights and fundamental freedoms; development of an appropriate legal and ethical framework; international development cooperation and enhancement of the North–South cooperation, support for sustainable development and the achievement of sustainable development goals.

Slovenia will strive for the exchange of good practice and joint projects in relevant fields, particularly with the EU member states and like-minded countries within the framework of international incentives and partnerships, such as the Global Partnership for Artificial Intelligence (GPAI), in which we are one of the founding members, and within international organisations, such as OECD, the Council of Europe, NATO, the UN and its specialised agencies, e.g. UNESCO and WHO.

Data to Benefit Society

Data represents a key component for economic growth, competitiveness, innovation, job creation and social progress.

Digital data is generated and collected in all activities of our lives. It is generated in a conventional manner (production of a document), during digitalisation process (e.g. scan), in smart products and devices or in online services with the use of online tools (e.g. digital footprint).

Digital services that are based on data improve healthcare, ensure safer and more efficient transport systems, reduce costs and increase the accessibility to public services and improve energy efficiency, while they also contribute to important social objectives, such as responsibility, equality and transparency.

In addition to the Open Data Directive, the European Data Governance Act is also important for the EU single market for data, while the Data Act on the reuse of data for commercial purposes is undergoing a legislative procedure.

The Digital Slovenia 2030 Strategy defines data as a strategic raw material and the driving force behind smart society 5.0. It also highlights the importance of providing up-to-date, timely and comprehensive data. The Digital Slovenia 2030 Strategy also observes the European Data Strategy and various regulations governing the field of data. Among these, it is possible to draw the attention to the Open Data Directive that defines the selection of high-value datasets from six thematic fields: geospatial, Earth observation and environment, meteorological, statistics, companies and company ownership, and mobility.

The objective of the Strategy concerning data is to facilitate data sharing and thus accelerate the use of data.

The establishment of common data spaces (as anticipated by the European Commission) will also enable networking and the exchange of good practice relating to the management of data in the public and private sectors and cross-border data management. All stakeholders will have to introduce data stewards for the functioning of the data ecosystem. These will serve as a connecting link of the ecosystem, while the principles of cooperation and partnership will be observed, which will also enable the development of innovation and entrepreneurship.

In this way, we will be able to pursue one of the objectives of the European Data Strategy, which wishes to establish a common European data space that will consist of various substantive data spaces.

In the last OECD Open, Useful and Re-usable data (OURdata) Index 2019, Slovenia ranked 10th among the countries which introduced an advanced open data policy in their systems with an elaborate portal and mechanisms for national coordination. Slovenia kept its 9th place in the Open Data Maturity Report 2022 published by the European Commission.

"We advocate for the concept of open data, so that the data being kept by public authorities is available and easily accessible on the Internet for reuse and further distribution."

To this end, the **OPSI portal** was established to encourage all stakeholders to contribute open data and promote its key role in secondary use in healthcare, education, science, etc.

Relating to data, Slovenia is currently active in the following projects:

- **OECD:** establishment of the data stewards network.

Each ministry, representatives of key state authorities and various stakeholders will have trustees within the development of the data stewards network who will know how the data can be used to facilitate decision-making.

- **UNICEF:** establishment of the U-Report platform and participation in the formation of policies involving data referring to children.

The project of including children and young people in policy-making that concerns them (through widely accessible mobile communication applications) and the introduction of appropriate policy on the collection of data about, and for, children.

- **Cooperation with the international NGO, Open Data Charter (ODC)**

We promote policies and practices that enable governments and civil society organisations to collect, share and use well-managed data and to respond efficiently and responsibly to the following main fields: fight against corruption, climate action and fair pay.

Blockchain

Blockchain technology brings innovations in numerous fields. Slovenia pursues the blockchain action plan, as it wishes to set the foundations for an accelerated application of blockchain technologies. The main activities anticipated in the action plan include:

- identification of relevant legislation for the implementation of blockchain solutions;
- identification of relevant technological fields to determine the testing environment;
- strengthening the implementation of blockchain solutions (together with other Industry 4.0 technologies: Internet of Things (IoT), Artificial Intelligence (AI), Augmented Reality (AR), Virtual Reality (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)
- creation of a regulatory framework for the introduction of blockchain solutions and provision of the legal basis to start or develop business operations based on blockchain in Slovenia, and
- definition of appropriate educational/training content and programmes, and the steps to introduce knowledge into companies, supporting environments and the education system (while observing a strong concentration of knowledge regarding blockchain in Slovenia).

The Blockchain Think Tank was established in Slovenia and operates under the auspices of the Ministry of Economic Development and Technology. Its main purpose is to act as a bridge between the public and the private sector and serve as a platform for collecting all possible knowledge on blockchain technology in one place.

Internet of Things (IoT)

In the Digital Slovenia 2030 Strategy, the Internet of Things is defined as a technological priority. The concept of the Internet of Things is to connect devices with built-in sensors to the Internet and enable them to communicate with each other and exchange data on the basis of which they can make decisions and function. In terms of content, the priorities of the Strategy are smart cities and communities. The objective of using the technologies of the Internet of Things in cities and communities is to develop a connected intelligent system that will support economic activities, increase citizens' satisfaction with public services, contribute to public safety, sustainable environmental management, more efficient city management and solving of other challenges encountered by cities and communities.

Smart Cities

Cities and communities are becoming starting points for the digital transformation of the whole of society. A smart city or community is capable of effective management of resources to satisfy social, economic and environmental needs for the benefit of its citizens.

A smart city or community is defined by four key elements, i.e. digital infrastructure, social and technological challenges and management.

Cities and communities must be encouraged to approach digital transformation systematically. The objective of introducing smart cities and communities must be based on the management of comprehensive entities while exceeding the management by silo fields. Systemic solutions and platforms based on common data models, unified standards, open data and real-time data are required.

Suitable education of the employees in local communities is also important.

"Slovenia's objective is to accelerate the development of smart cities and communities which will be compliant with our values and directed towards the wellbeing of the individual, wider society and the environment."

European Digital Innovation Hubs

The European Digital Innovation Hubs (EDIHs) are partnerships with complementary expertise which function with a not-for-profit objective of supporting companies, particularly small and medium-sized companies, and the public sector in their digital transformation. EDIHs are co-financed from the European and national funds and, as a result, their services for end users are most often free of charge or more affordable than on the market. EDIHs combine the advantages of presence in the region with the possibilities enabled by the pan-European EDIH Network.

EDIHs provide services to entities in Europe within the following fields:

- possibility of testing before investing,
- possibility of enhancing skills,
- support when seeking sources of financing,
- enhancement of the innovation ecosystem, and
- support to networking.

Slovenia has three EDIHs; two obtained European co-financing through a call and the third one received the Seal of Excellence.

EDIH DIGI-SI

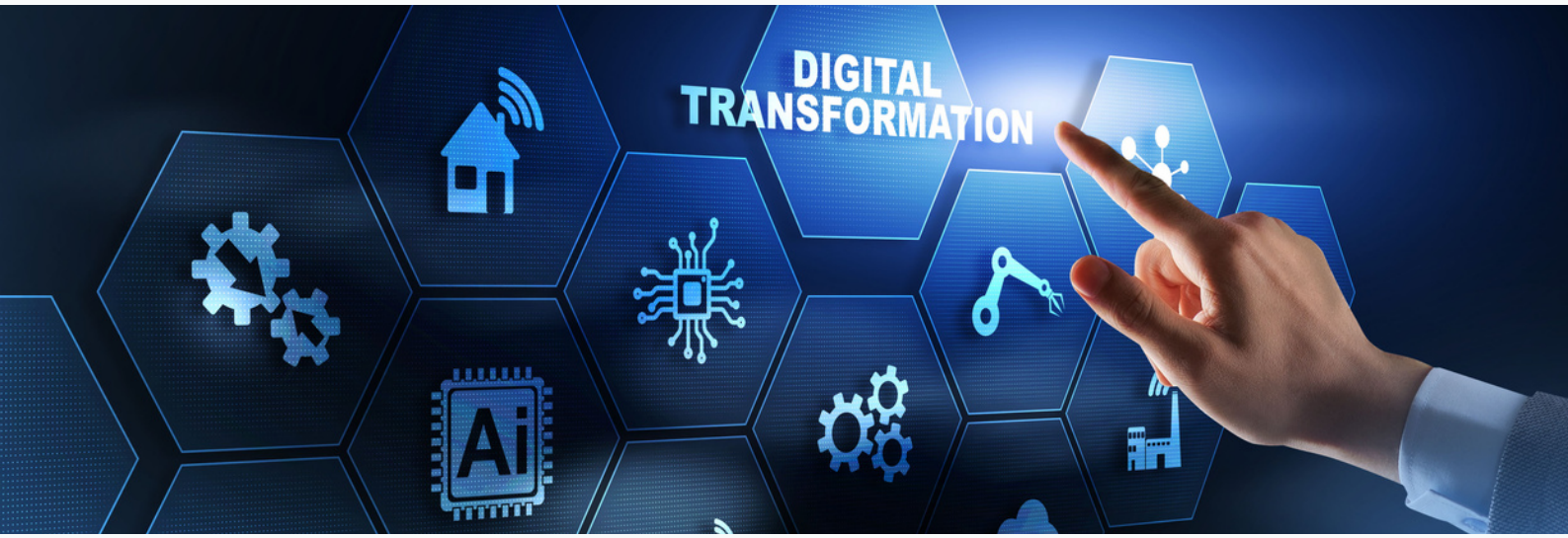
The DIGI-SI consortium consists of the leading partner, the University of Maribor, and six consortium partners. This EDIH promotes the digital transformation of small and medium-sized enterprises (SMEs), startup and large companies and public administration authorities in the following priority fields: agri-food, healthcare, manufacturing and tourism. Relating to support of digital transformation, the consortium provides a single entry point for the fields of artificial intelligence, high-performance computing, cyber security, and advanced digital knowledge and skills. DIGI-SI also provides technological services relating to robotics, the Internet of Things, big data, blockchain and augmented/virtual reality.

EDIH SRC

The SRC consortium is composed of the leading partner, the Development Centre Novo Mesto, and 15 consortium partners. SRC supports public administration authorities and SMEs when testing products, solutions and components in the real environment and the upgrade of their digital processes and the business models related to them. SRC contributes to the promotion of digitalisation in manufacturing SMEs and the digital transformation of public administration with advanced digital technologies while observing the pillars of the economic, environmental and social development. The consortium will also ensure access to prototypes and test environments. Furthermore, it will ensure support for the construction of an industrial ecosystem of companies with broad expertise and support when accessing European and national public and private funds for enhancing the capacities of companies to introduce digital innovations and increase their competitiveness.

EDIH 4PDIH

The 4PDIH consortium consists of the leading partner, the University of Ljubljana, and 14 consortium partners. The main activities of 4PDIH focus on the increase of innovation for SMEs and local communities and pilot projects of smart villages. The main activities are aimed at increasing digital competences, re-training and up-skilling of employees within the pillar of advanced digital skills with a special emphasis on creating suitable training content for public administration, particularly local communities, offering support when acquiring financing for innovative solutions and assistance to SMEs when obtaining financial resources. The emphasis is on connecting business and technological expertise and technologies, experimental and pilot environments, including best practices or methodologies necessary for the economy, public administration and broader communities to develop their digital potentials and innovation models to the greatest extent possible for successful digital transformation.



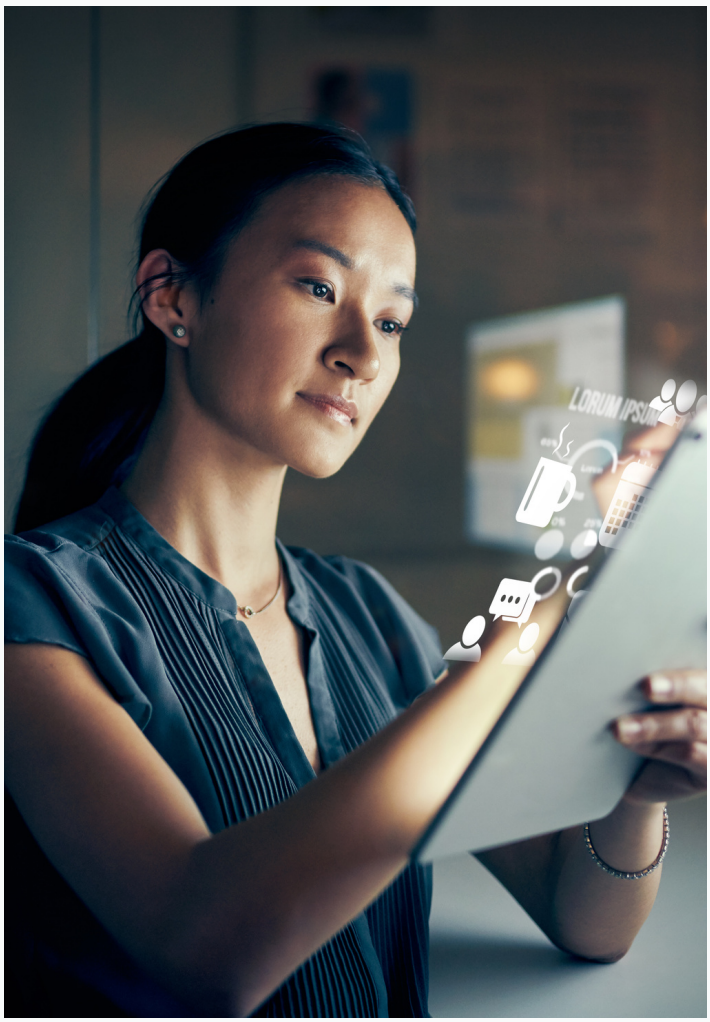
V. DIGITAL PUBLIC SERVICES

In December 2022, the Government of the Republic of Slovenia adopted the Digital Public Services Strategy 2030, the vision of which is for digital public services centred on citizens and business entities to enable the integrated, harmonised, safe and efficient interaction of citizens and companies with the public administration.

The digitalisation of public services is one of the key elements of Slovenia's digital transformation until 2030. Experience with the pandemic revealed the urgency for digitalisation in all fields, including public administration, as digital public administration is a prerequisite for efficient provision of services to the users (citizens, companies, municipalities, schools, etc.) in the event of emergencies and under normal conditions, which contributes to greater quality of life.

The Digital Public Services Strategy clearly outlined the development direction of digital public services while putting people and business entities at the centre of digital transformation. It is necessary to enable the development of simple services and promote their broad use. To this end, single digital identity, efficient use of modern information technology and infrastructure and a digitally empowered public sector are required. The ambitiously set objectives will be attained by co-creating public services with all stakeholders, more active integration of services of self-governing local authorities, promotion of digital services and highlighting the advantages of their use, and guaranteeing the security of user data.

The Digital Public Services Strategy encompasses all digital public services provided to the users by the providers in the field of public administration (state administration, municipal administrations and holders of public authorisations) and providers from the wider public sector.



Objectives:

Three strategic priorities of the digitalisation of public services, which represent digital objectives at the highest level and are also compliant with the strategic context of the European Union include:

- all key public services will be available on the Internet and accessible to all users by 2030,
- at least 80% of key public services that are available digitally will be carried out digitally, and
- at least 80% of users of public services will use digital identity.

Indicators:

	2022	2025	2030
Key public services available on the Internet and accessible to all users	79 %	85 %	100 %
Key public services that are available digitally and also carried out digitally	N/A	15 %	80 %
% of users of public services who use digital identity	30 %	40 %	80 %

Strategic priorities are divided into five strategic objectives that will help us attain the priorities set. The five strategic objectives consist of 23 carefully designed specific objectives, each one of which includes specific steps defined in the action plan. The plan will be updated every two years in order to integrate topical measures and review the situation on the basis of the measures already implemented.

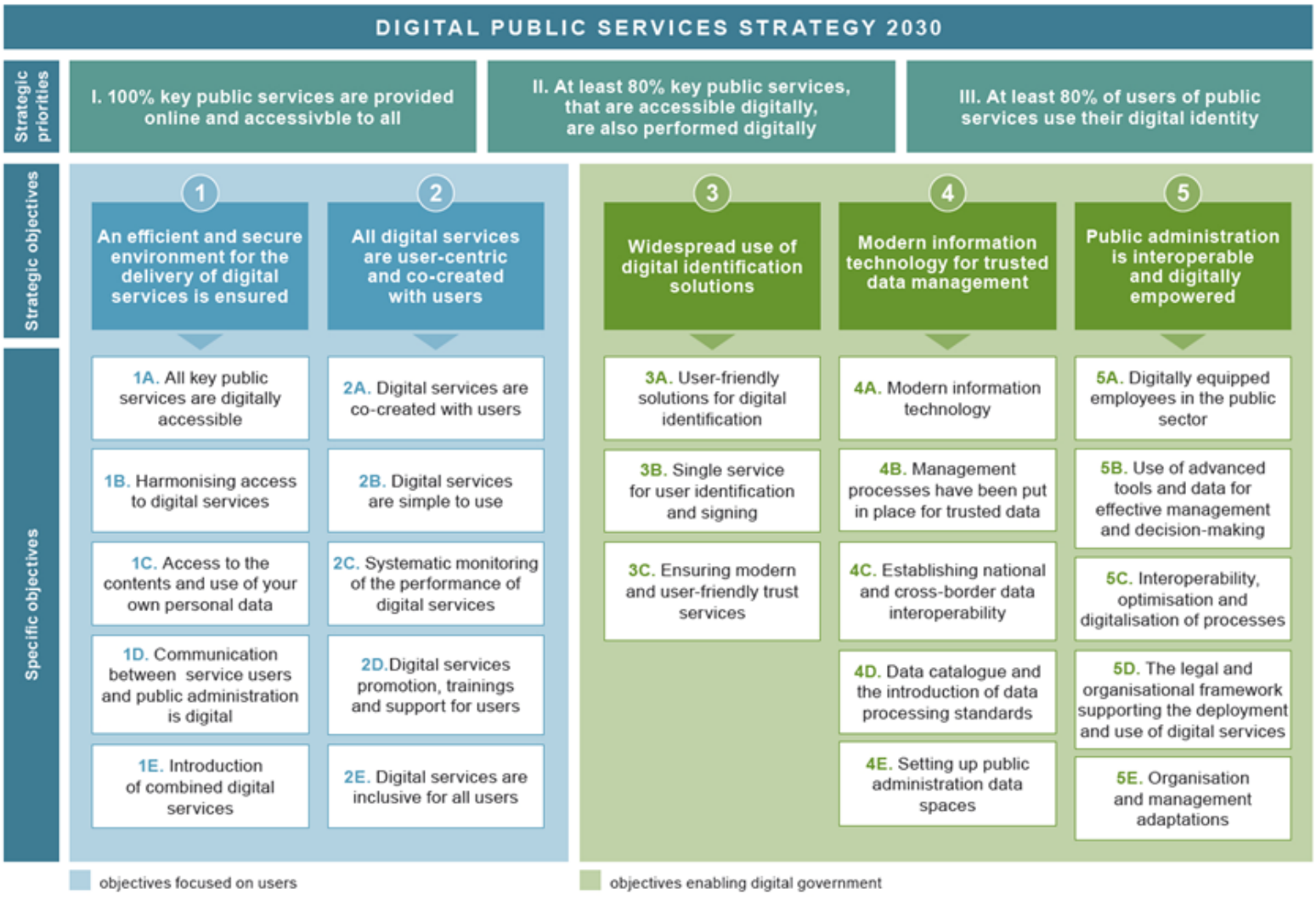


Figure 1: Graphic display of the Strategy structure

Strategic objectives include:

Efficient and safe environment for digital service provision is ensured – the aim is to build an environment that supports the development and introduction of digital public services. It addresses the need for the digitalisation of key public services and unified access to digital services, the option for users to view their data and their use throughout the entire range of records, irrespective of the authority managing the records, and the need for communication with the users in digital form and the introduction of composite digital services.

All digital services are co-created and directed towards users – this objective emphasises the urgency of co-creating digital services together with their users, ease of services for the users, monitoring the performance of digital services, systematic measurement of user satisfaction, promotions, education of users and helpdesk service, and the need to include everyone in the use of digital services.

Broad application of digital identification solutions – uniform digital identification of users when using services is a fundamental condition for the mass use of services. The objective defines user-friendly solutions for digital identification, cross-border interoperability, unified user identification service and electronic signing and the provision of modern and user-friendly trust services.

Modern information technology for managing trustworthy data – the objective aims to ensure modern information technology and establish management processes for trustworthy data, the establishment of data interoperability between institutions and across the border, the upgrade of the database catalogues, the introduction of standards for data processing, and the establishment of data spaces.

Interoperable and digitally empowered state – this objective addresses the conditions that a state must meet for successful digitalisation of public services – employees in the public sector must be digitally equipped, trained to use innovative methods and aware of the importance of high-quality operations. The use of advanced tools, methods and data enables efficient management and decision-making. Together with their digitalisation, business processes must be optimised and integrated in the digital environment. Legislation must be drafted in a digital business environment and substantively support the introduction and application of digital services in a way that does not hinder the ongoing progress in the field of digital solutions and distances itself accordingly from addressing technological and technical issues that are not prescriptive.

eGOVERNMENT

The eGovernment portal is a national portal of the Republic of Slovenia for citizens (natural persons), serving as an electronic entry point for various services performed by state authorities or public administration authorities.

It was the first portal that enabled users the authentication and e-signing of applications by means of mobile phones via the smsPASS service. Since November 2020, the portal has also been integrated with SI-CeV, the central solution for e-serving. In their My eGovernment personal space, the users may activate their secure electronic mailbox, to which they can receive official documents in accordance with the legislation on administrative procedure from more than 290 public institutions.

Several new successful electronic applications became available during the COVID-19 pandemic, including those that did not require an e-authentication in order to increase the number of possible users. The number of electronic forms sent increased significantly in comparison with previous years (+100%). A positive result of the epidemic is also shown in the fact that users became more accustomed to electronic commerce with the state. As a result, the number of daily visitors increased on average by 15%.

Greater use is also seen in the significantly higher number of the e-applications sent than before the epidemic (more than 480,000 applications were submitted in 2022), while the number of registered users exceeded 310,000.

More than 480,000 applications were submitted in 2022.

SPOT PORTAL

SPOT SLOVENSKA POSLOVNA TOČKA

The SPOT portal is a national business portal providing information to potential and existing entrepreneurs, companies and other business entities about the conditions for business operations in the Republic of Slovenia and enables electronic commerce with the state. It also provides information about the entire network of SPOT points that are available throughout Slovenia and offer free aid, information and consulting to potential entrepreneurs, companies and business entities.

The SPOT portal enables companies to use electronic services to establish companies and carry out other mandatory or frequent procedures. The users may conduct procedures independently via the Internet with a valid digital certificate.

The main advantages of the SPOT portal include free-of-charge registration of a sole proprietor, registration of a limited liability company and a number of other electronic procedures enabling business operations with the state.

The SPOT portal combines different information systems into an e-service to enable a re-use of the data already available from various registers and systems in accordance with the once-only principle.

An important new feature was introduced on the portal in 2020, i.e. electronic certificate of excused absence from work (sick note), which significantly reduced the administrative burden. The estimated cost savings for all participating stakeholders amounted to EUR 11.5 million a year.

In 2022, the users submitted more than 2.8 million applications via the SPOT portal. For comparison: 2.4 million were submitted in 2021.

STOP BUREAUCRACY

The Stop Bureaucracy portal plays a crucial role, as it serves as a link between the administration that drafts regulations and supervises their implementation and the public who can find all information about the administrative measures to reduce administrative and legislative burdens in one place.

The task of the portal is also to supervise the implementation of received complaints, which are transformed into measures with clearly defined objectives, deadlines and responsible institutions and are combined in a single document intended to improve the legislative and business environment. The interested parties can regularly monitor the status of implemented measures on the Internet.

GOV.SI portal

The GOV.SI portal is the central website of state administration authorities providing comprehensive information about their operations and easy access to services. It combines the content from the work fields of 200 state administration authorities, representations abroad and the Government on more than 90,000 websites. As the central website combining different sectors in the same substantive fields, it provides users with comprehensive information which is not duplicated. It also serves as a transparent collection of all publications, jobs, projects and service catalogues of state administration authorities through which users can access all digital services on service applications. New web content can be promptly and efficiently connected to this central platform. In the year of the epidemic, the GOV.SI portal had 28 million visits and has so far received almost 170,000 responses from users, of which more than 75% were positive.

NIO – Portal of the national interoperability framework

The portal of the national interoperability framework (NIO) is a web portal intended for the exchange of interoperable solutions and public sector products. The purpose of the portal is to publish information about the experience and good practices and recommend modern, user-friendly and interoperable public services, improve the interoperability of systems and organisations and contribute to the efficiency and transparency of the public sector. The circle of users includes all public sector institutions, including business entities, natural persons and other interested public.

GeoHub-SI portal

GeoHub-SI represents a joint geoinformation platform within the state cloud computing infrastructure (DRO) to meet the needs of state authorities regarding the use of spatial information technologies. The platform enables the implementation of work processes of the authorities, data hosting, spatial analysis of data, independent creation of online applications and services, independent creation of online services and (data) links to other components, applications or services (e.g. connection to eGovernment, etc.). This is an ecosystem of users and spatial infrastructure collected in one place.

OPSI portal

The national open data portal (OPSI) is a single website for the publication of open data for the entire public sector.

On the one hand, it represents 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 authorities. On the other hand, it represents a single website for the publication of data in open and machine-readable formats. The portal ensures the right to free and easy re-use of freely available data, published in an open format, for any purpose. The so-called ecosystem of open data, OPSI Hub, was established on the basis of the OPSI portal, which promotes cooperation between all interested parties concerned with the opening and/or re-use of data.

In various rankings, Slovenia is considered one of the top countries in the field of open data and it also guarantees a high level of protection of the right to access public information, which is aimed at increasing the participation of citizens and the responsibility of public authorities for good governance and the fight against corruption.

E-public procurement (eJN)

Electronic public procurement ensures the transparency of public procurements and the option of re-use and analysis of basic data. The use of electronic means for communication in public procurement procedures was made mandatory in 2018, particularly with regard to the electronic submission of bids, which facilitates operations and improves the transparency of procedures. The system has some 23,000 active users at the moment. The electronic implementation of the entire public procurement procedure has been in use since 2019.

zVEM portal and mobile application

zVEM is a one-stop patient portal. Patients can authenticate themselves with a digital certificate and access data which is stored about them in the eHealth databases. The zVEM portal gives patients complete access to their medical documentation, referrals, appointments, prescriptions and records on the medicinal products issued. Through the eAppointment service, the patients can book appointments for numerous health services. A new mobile application, zVEM, has been available since July 2021.

Some 420,000 users are registered at the patients' portal and about 210,000 users in the mobile application.

ePRESCRIPTION

The ePrescription (eRecept) system was established for prescribing and issuing medicinal products in a completely electronic manner. The system also enables physicians and pharmacists access to the databases on interactions between medicinal products. The patients can access their ePrescriptions via the zVEM portal and the mobile application.

eAPPOINTMENT

The eAppointment (eNaročanje) system ensures the processing of documents on referrals and services on booking appointments. The system is used by all healthcare service providers. An online waiting list for more than 1,700 health services is available, which is regularly updated by healthcare service providers. Patients can book their appointments via the zVEM portal and the mobile application. By the end of this year, a system for booking administrative services at administrative units will also be available.

My ZZZS

The second service linked with health is patient access to health insurance data that is kept by the Health Insurance Institute of the Republic of Slovenia (ZZZS). A registered user authenticated with a digital certificate can access their records in the eHealth databases. Patients can also find information on treatment costs (reimbursement or direct billing) on the ZZZS web portal.

eSPACE

The eSpace (eProstor) portal is an information and service portal intended for users, which contains data from the basic geodetic system, records on real estate, mass real estate valuation, state border, spatial units and house numbers, public infrastructure, and the topographic and cartographic system managed by the Surveying and Mapping Authority of the Republic of Slovenia. The portal serves as an entry point to various services enabling downloading or data processing.

ELECTRONIC TAX OPERATIONS

Electronic tax operations include a comprehensive business solution that combines various portals and applications (eTaxes (eDavki) and eCustoms (eCarine) portals, portal for occasional transport, etc.) with the integration of a back office. Since 2004, the system has enabled access to individuals and companies with the use of various electronic identifications. The system provides several e-services.

The most important ones include filling out of tax forms, declarations and calculations, access to data on taxpayers' tax liabilities, electronic serving of documents, transfer of authorisations, etc.

In 2018, the eTaxes portal was updated into a user-friendly version with easy access to information and e-services. A simplified method of signing documents was introduced in the eTaxes system in 2019, so that these no longer require a signature component and a qualified digital certificate. This enabled the use of the eTaxes portal in all operating systems and browsers, including its use on mobile devices. The development of this portal meant the beginning of unification of the eTaxes and eCustoms portals. Since 2019, users have been able to use the new mobile application, eTaxes, which also includes all e-services from the eTaxes web portal and additional e-services.

eCustoms portal

The eCustoms (eCarina) portal is the Slovenian single-entry point for customs and excise areas. The objective of the portal is to enhance the effectiveness of customs control and ensure an ongoing data flow. Users may register and file customs declarations and electronic excise documents via the portal. The portal consists of four main systems, i.e. the import, transit, export and excise system.

Portal for public payments management (eInvoices)

The Slovenian payment system (eRačuni) is a comprehensive business solution combining a web portal with the integration of back-end services. The system was developed in 2002 and enables state institutions the fulfilment of payment obligations against individuals and companies and online processing of tax payments with the use of a qualified certificate issued by any registered certification authority in the country.

The Public Payments Administration has enabled the use of the mUJPnet mobile application since 2019.

The mUJPnet mobile application enables budget users access to payment and other services through tablets and smart phones in a simple and swift manner, which allows the budget users to carry out payment transactions quickly and easily from various locations at various times or anytime (24 hours a day, 7 days a week) and monitor their status.

eINHERITANCE

The eInheritance (eDediščina) web portal enables the maintenance and use of the Register of Immovable Cultural Heritage and the Register of Intangible Cultural Heritage, the establishment and maintenance of the system of protected areas of heritage and efficient monitoring and supervision of archaeological field research.

At the My eInheritance portal, citizens can file proposals for inscription in the cultural heritage register, applications for the acquisition of a culture protection approval for research and removal of archaeological remains and can participate in e-public consultations on determining protection regimes for cultural heritage.

DATA EXCHANGE

National Computer Cloud

The Slovenian State Cloud (DRO) is based on the policy of open standards. It ensures connectivity of services, establishes a single service platform on the basis of common architecture to improve public accessibility to public services, enables service accessibility from anywhere and anytime, and establishes efficient information security. This infrastructure ensures services that use sensitive, personal and other data, which the state does not want to store outside its environment.

Activities for the establishment of a new generation of information infrastructure in a cloud are currently underway within the recovery and resilience plan, which will be energy efficient and will enable the implementation of a large number of e-services with the state and within it.

Central Building Blocks for Trust Services and Data Acquisition

"We ensure the operations of common building blocks to be used in application solutions, in which one set refers to trust services and the second one to electronic data acquisition."

Electronic identity card

The electronic identity card is a personal document by means of which citizens can prove their identity physically or electronically. The electronic identity card has been available since 2022. Citizens aged 12 and above receive an identity card with electronic identification means of high and low assurance levels and a qualified digital certificate for electronic signature. The electronic identity card can be used as a substitute for the health insurance card, i.e. when visiting a doctor or pharmacy. It can be used with a contact or contactless smart card reader. The most widespread and simplest way of using this card is with the help of the eOsebna mobile application.

The Slovenian biometric card won the prestigious title of the best new national ID card in Europe, Africa and the Middle East at the High Security EMEA™ Conference in Abu Dhabi, United Arab Emirates in March 2023.

SI-PASS – Service for online registration and electronic signature

SI-TRUST
Državni center za storitve zaupanja

The SI-PASS service, which represents the central solution, is intended to establish user identity when logging into information solutions and electronic signing of documents, whereby it ensures a high level of security and trust. The service can be integrated into their systems or portals by the providers in public and private sectors, and its users include individuals who want to carry out an electronic service via the Internet, e.g. submit an application through the eGovernment portal. Currently, SI-PASS has been integrated into more than 70 different e-service providers.

Mobile identity and e-signature smsPASS

The smsPASS service was introduced to enable the use of mobile phones for authentication and e-signature in the systems or portals that use the SI-PASS for this purpose.

As per the forthcoming revision of the Regulation on electronic identification and trust services (eIDAS Regulation), Slovenia will carry out a pilot establishment of the European digital identity wallet within the POTENTIAL pilot project which involves another 18 member states with the intention of proving identity and e-signing with the help of mobile phones. The use of the European digital identity wallet will be examined by Slovenia with regard to the login and e-signature within the main portals of eGovernment for citizens.

Qualified digital certificates and time stamps

Several trust service providers in Slovenia implement various qualified services as per the eIDAS Regulation. For example, they issue qualified certificates for e-signature, e-stamp and website authentication, qualified time stamps or provide other trust services. In accordance with the applicable legislation until 2026, the majority of eGovernment services has also been available upon the login with qualified digital certificates for e-signature issued by public or private providers of qualified trust services.

Central solution for e-serving

In 2020, the central service for e-serving, SI-CeV, was established, which enables electronic serving of official documents to citizens and between public institutions. The solution enables electronic serving of official decisions by public sector institutions from their document systems or the receipt of documents served from other institutions in accordance with the General Administrative Procedure Act. More than 290 public institutions are already incorporated in the e-serving system within their records or systems of documentary material. The following systems are currently connected, SPIS 1.45, SPIS 4, Krpan, Odos, Government Connect (GC) and e-storage AKTRP.

"Citizens can receive documents in their secure electronic mailbox opened at the eGovernment portal or with private sector providers (this is currently possible to VEP.si secure mailboxes), while the serving of documents to regular e-mail addresses is also possible."

MULTI-PURPOSE BUILDING BLOCKS FOR ELECTRONIC DATA ACQUISITION

"Institutions can make their work easier when it comes to the development of new information solutions by using the already existing solutions in the form of common building blocks."

When developing information solutions, the significance of using building blocks lies in the fact that the focus is on the development of solutions, while the support functionalities that all information systems have are supported by means of the already developed solution.

Tray, IO-module and Asynchronous module represent central building blocks for secure electronic data exchange, SOVD is a building block for electronic exchange of large files, and the Security Platform is a building block for uniform and secure authentication and authorisation.

SKRINJA – Business Intelligence (BI)

SKRINJA or the data warehouse and business intelligence are used as a central digital platform on which the government agencies rely when ensuring better services for citizens and companies. With the application of emerging technologies, Slovenia is introducing new concepts and tools that bring analytics closer to decision-makers. In this way, access to public sector data will be user-friendlier.

ERAR and STATIST

The Erar web portal enables the public to have an insight into the transactions of public institutions, state-owned companies and municipalities and the data of legal persons governed by private law, which ensures the transparency of state operations and reduction of corruption risks.

The Statist web portal is available to the wider public and ensures a comprehensive and updated publication of contracts (public procurements) from 2013 onwards. When viewing the Statist (concluded contracts) and the Erar (realised contracts) applications, users obtain a comprehensive and transparent insight into the field of public procurements.

VI. CYBER SECURITY

"We wish to provide a secure, resilient and reliable cyber space for everyone and thus improve the level of cyber security in the Republic of Slovenia in all segments of society."

A sector-specific cyber security strategy is being prepared which will define the measures and indicators for attaining objectives together with an action plan for its implementation.

Objective by 2030:

Placement of Slovenia among the first 20 countries as per the National Cyber Security Index.