



POLAND

2024 Digital Public Administration Factsheet

Supporting document



Main developments in digital public administrations and interoperability

JULY 2024



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Icons Glossary				
Political Communication	Legislation	Infrastructure		
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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

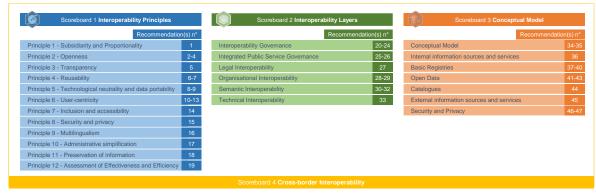
75% of companies using **Cloud, Al or Big Data**Double the number of **unicorn startups**90% of **SMEs taking up tech**

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

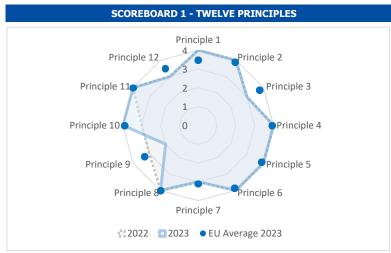
In 2017, the European Commission published the European Interoperability Framework (EIF) to give specific guidance on how to set up interoperable digital public services through a set of 47 recommendations divided in three pillars. The EIF Monitoring Mechanism (MM) was built on these pillars to evaluate 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 Poland 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

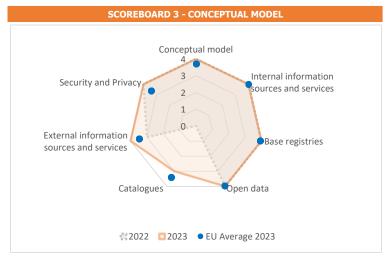
Poland's results in Scoreboard 1 show an overall good implementation of the EIF Principles, scoring at the European average for almost all principles. Poland's performance on Principle 10 (Administrative simplification) going from 2022 to four in 2023. Possible areas of improvements are particularly concentrated in Principle 9 (Multilingualism), as well as Principle 3 (Transparency) for which respectively the score of 2 and 3 shows a medium performance in the implementation

of corresponding recommendations. Indeed, the country could invest more efforts in information systems and technical architectures that cater for multilingualism when establishing a European public service (Principle 9 – Recommendation 16), as well as to ensure internal visibility and provide external interfaces for European public services (Principle 3 – Recommendation 05), to reach a higher score on this Principle.



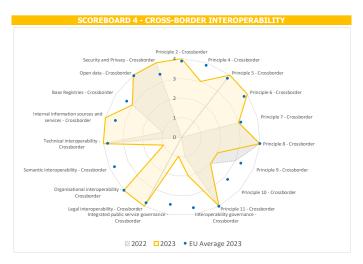
Source: European Interoperability Framework Monitoring Mechanism 2023

The Polish results for the implementation of interoperability layers assessed for Scoreboard 2 show an overall a strong performance with scores of four for almost all the layers. It must be mentioned that the implementation of the recommendations for the interoperability governance has enabled Poland to achieve a score of three in 2023. However, potential areas of improvement to enhance the country's implementation of the recommendations under Scoreboard 2 are still possible for the interoperability governance layer. More specifically, Poland could be improving its score by further consulting relevant catalogues of standards, specifications and guidelines at national and EU level when procuring and developing IT solutions (Recommendation 23).



Source: European Interoperability Framework Monitoring Mechanism 2023

Poland's scores assessing the Conceptual Model in Scoreboard 3 show an overall good performance, globally aligned with the European average, in the implementation of recommendations associated with all indicators of the conceptual model. Poland's results have improved for the external information sources and services indicator in 2023 thanks to the successful implementation of the corresponding recommendations. However, there is room for improvement regarding recommendations associated with Catalogues. More specifically, Poland could focus on putting in place catalogues of public services, public data, and interoperability solutions and use common models for describing them (Recommendation 44).



Source: European Interoperability Framework Monitoring Mechanism 2023

Poland's results on Cross-Border Interoperability in Scoreboard 4 show an overall good performance of the country. However, Poland could improve its scores for the indicators linked to integrated public service governance, as well as semantic interoperability, which both scored below the EU average. To improve its performance on both indicators, Poland could focus on establishing interoperability agreements, complemented by operational agreements and change management procedures (Integrated public service governance – Recommendation 26), as well as putting in place an information management strategy at the highest possible level to avoid fragmentation and duplication (Semantic interoperability – Recommendation 31).

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

Strategy for Responsible Development

The Strategy for Responsible Development for the period up to 2030 sets basic conditions, objectives and directions for the country development in social, economic, environmental and territorial terms for 2020 and 2030. The main objective of the strategy is to create the conditions for an increase in the income of Polish citizens while improving social, economic, environmental and territorial cohesion. The key indicators of the strategy include the growth of Polish gross domestic product (GDP) per capita up to 95% of the EU28 average by 2030, and a drop in the risk of poverty and social exclusion indicator to 17 by 2030.

Ensuring a high and stable growth rate will be facilitated by the implementation of the following measures, among others:

- Total investment growth to account for 25% of the GDP by 2030;
- Increase in the share of research and development (R&D) expenditures to 2.5% of the GDP by 2030;
- Average annual growth rate of exports of 6.8% by 2030; and
- A 15% share of advanced technology products in total exports by 2030.

The main objectives include eGovernment measures, particularly those involving the effective use of information and communication technologies (ICT) in the public administration. The concept of eGovernment and digital public services implies that high-quality services for citizens, including entrepreneurs, are to be provided by modern information technology (IT) solutions supporting a logical and coherent government IT system, developed and maintained with the cooperation of all actors at various levels of public administration. A priority task in the field of eGovernment is to allow the widest possible range of public services to be provided digitally, thereby enabling citizens to handle their businesses remotely. To that end, it will be necessary to ensure the interoperability of public IT systems and to computerise the internal processes of the administration.

Other elements link this strategy to the European Commission's Digital Single Market Strategy, whose implementation is governed and monitored be the Ministry of Digital Affairs.

Operational Programme Digital Poland 2014–2020 and European Funds for Digital Development 2021–2027

The aim of the Operational Programme (OP) Digital Poland 2014–2020, implemented until the end of 2023, was to strengthen the foundations for the development of a digital country, including broad access to high-speed internet, efficient and user-friendly public eServices, and an ever-increasing level of digital literacy in society. Within this OP, 629 contracts were awarded, with expenditures amounting to PLN 12.3 billion. Over 2 000 000 households were covered by high-speed internet and 11 689 schools were connected to high-speed internet. In addition, over 4 000 schools were equipped with computer hardware and software. Human capital-related actions resulted in 630 748 people trained in using internet, including eServices, and 195 565 students trained/advised in the field of digital competences. In the area of eAdministration, 232 public eServices were provided and 142 entities offered online access to public sector information (PSI), with over 17 million documents containing PSI which were digitalised.

The new edition of the OP Digital Poland for the years 2021–2027, which is named European Funds for Digital Development and is to be implemented with a similar thematic scope, was adopted by the government in January 2022 and approved by the European Commission in November of the same year. It contains the following components:

- 1. Broad access to ultra-fast internet. The goal of the component is to increase the number of households covered by the fixed broadband network by over 694 000 units, offering connectivity of at least 100 Mbps download speed (with the possibility of increasing it to gigabit capacity). The intervention also aims to increase the number of enterprises with access to the fixed broadband internet;
- 2. Implementation of advanced and user-friendly public eServices. The component will enable the construction, modernisation and further development of eServices (at a high level of maturity) and systems, providing new eServices, data and IT systems;
- 3. Digital cross-sector cooperation. Scalable digital solutions will be developed in the context of the component, such as:
- Ready-made IT solutions (applications, tools and services) to support the digital transformation of local government units to be used in local smart city/smart village projects, utilising artificial intelligence (AI), the Internet of Things (IoT), big data, blockchain and other breakthrough technologies;
- A platform enabling the creation of a digital twin, ensuring an intelligent model of city and municipality operation;
- · Virtual telecommunications networks for providing digital services; and
- Services and applications for specific target groups, as well as intelligent solutions for the implementation of smart cities, villages and agriculture.
- 4. Effective operation of the national cybersecurity system. The goal of the component is to increase the level of information security by strengthening resilience and capabilities to effectively prevent and respond to incidents in the State's information systems, as well as in entities essential to the economy;
- 5. Support for the digital skills of employees of public institutions. The goal of the component is to improve the competencies of personnel involved in providing digital services, products or processes. This involves supporting advanced specialised skills in areas such as cybersecurity, the data economy and digital accessibility. Digital Innovation Hubs for the administration will be developed to exchange experiences, adapt to changes resulting from digital development and improve operations. Additionally, educational and informational campaigns will be conducted to raise public awareness about the benefits of using digital technologies, including public eServices; and
- 6. Digital availability and reuse of PSI. The priority of the component is to increase the quantity and quality of PSI available for reuse, particularly high-value and dynamic data from administration, science and cultural resources (including non-PSI). The action involves supporting the creation of tools enabling access to PSI, including the development of application programming interfaces (APIs) for databases or registers containing public data, and the construction or modernisation and provision of IT solutions for advanced data analytics using new technologies.



Recovery and Resilience Facility for Poland

A part of the Polish Recovery and Resilience Plan aims to accelerate the digitalisation of the country through the digital transformation of the public sector, the economy and the society. It consists of three sub-components, based on its specific objectives:

- Improving access to high-speed internet;
- Developing and consolidating eServices, creating the conditions for the development of digital breakthrough technologies in the public sector, the economy and the society, as well as improving communication between public institutions, citizens and businesses; and
- Increasing security in the cyberspace, securing the data processing infrastructure and digitising the security services infrastructure.

The above-mentioned activities are expected to promote the digital transition by developing the Next Generation Access broadband infrastructure, enhancing the use of digital tools in the public sector and boosting eCompetences in society (companies, public administration, teachers and students). The plan should also contribute to optimising cybersecurity, improving data processing efficiency and upgrading the infrastructure of State services responsible for security. Finally, the potential deployment of innovative next generation cloud solutions is expected to create stable and sustainable cloud infrastructures.





Law on Electronic Communications

Poland has recently intensified work to implement Directive (EU) 2018/1972 establishing the European Electronic Communications Code (EECC) into the Polish legal system. The implementation of the EECC in Poland is achieved through the adoption of two legal acts: the new substantive act (i.e. the Law on Electronic Communications, replacing the Law of 16 July 2004 on Telecommunications) and a separate act (i.e. the Act Introducing the Law on Electronic Communications), including dozens of amendments to other acts. The main part of the provisions will enter into force six months after the date of promulgation of the acts.

To accelerate the implementation of the two acts, the Ministry of Digital Affairs obtained approval from the Secretary of the Council of Ministers for a separate legislative procedure. This special procedure accelerates the legislative process, facilitating the immediate implementation of the EECC into Polish law. The acts were included in the Council of Ministers' agenda on 29 January 2024 and a public consultation followed on 26 February 2024. The government aims to complete the legislative process by May 2024, with approval by the Parliament expected by May/June 2024. This will be followed by the endorsement by the President and the publication in the national Journal of Laws. Poland endeavours to ensure highest-quality regulation in the context of the alignment with the EECC, with the bills of the Law on Electronic Communications and the Act Introducing the Law on Electronic Communications providing comprehensive regulation of the electronic communications market, ultimately benefiting consumers' welfare.

Digitalisation of Internal Processes



Integrated State Digitalisation Programme

The Integrated State Digitalisation Programme (PZIP) was adopted in January 2014 and amended twice in 2022 and 2023. This strategic document defines government actions aimed to develop the public administration using modern digital technologies and, as a result, improve the functioning of the State, while creating conditions that facilitate citizens' communications with the public administration, and the use of information resources and shared solutions for their needs. In other words, the main objective of the PZIP is to modernise the public administration with the use of digital technologies, thus improving the efficiency of the State and the quality of the relations between the administration, citizens and other stakeholders. The validity of the PZIP has been extended until 31 December 2024.

Currently, the Ministry of Digital Affairs is working on a new digital transformation strategy. The document will be oriented towards the targets of the Digital Decade Policy Programme and the Digital Economy and Society Index (DESI) indicators. The strategy should be adopted in 2024. At the same time, the Ministry of Digital Affairs has developed a draft of the National Digital Decade Strategic Roadmap and submitted it to the European Commission by 9 October 2023.



Since April 2011, various Polish legal acts (with the exception of international agreements) have been submitted to the Government Legislation Centre for publication in the Journal of Laws exclusively in electronic form, using the eGovernment portal called Electronic Platform of Public Administration Services. The portal publishes the most important legal acts in Poland and serves all entities. The published acts are in digital form only and are signed with a digital signature. That way, bearing a digital signature, the electronic version of a legal act, which was previously only a supplement to the original paper version, can now be validated.

Samorzad.gov.pl

The samorzad.gov.pl portal was launched in September 2020 as a branch of the central RP Portal. It enables all local governments in Poland to publish and maintain in a unified way information related to their local laws and activities. New communities and municipalities have been constantly migrating to the samorzad.gov.pl portal since its introduction. Those interested apply via a questionnaire, the results of which are collected approximately every fortnight, and are then contacted by the managing authority. The platform is also open for cooperation with local schools and social centres. All websites in the portal are created according to WCAG standards and cybersecurity principles.



Public Information Bulletin

The Public Information Bulletin (Biuletyn Informacji Publicznej, BIP) is the official electronic journal providing access to public information. Information is distributed through a system of web pages of central and local administration authorities, designed with a uniform layout and following common content guidelines.



The Integrated Analytics Platform (Zintegrowana Platforma Analityczna, ZPA) is designed for storing and analysing data collected from both public administration and commercially available sources. The main goal of the project is to increase the effectiveness of public administration's activities in selected problematic social and economic areas, by supporting decision-making processes with high-quality analytical information.

The Integrated Analytics Platform is a response to several identified needs and aims to achieve the following objectives:

- Establishment of a one-stop shop for analytical tools supporting decision-making processes in public administration;
- Development of data access patterns and analyses for key social and economic areas;
- Creation of technical and organisational opportunities for social dialogue as well as cooperation of scientific communities with regards to the development of State analytics and increased effectiveness of social problem solving;
- Systematisation of technical methods and access guidelines to key State information resources for analytical purposes;
- Provision of access to public administration data for scientific research supporting decision-making by public policy makers, while ensuring appropriate data protection; and
- Improvement of the digitalisation of public administration in the scope included in the catalogue of recommendations regarding the digitalisation of the administration.

The objective is to create a common data format, which will make it possible to compare and analyse data, thus enabling public institutions to draw practical conclusions and make strategic decisions. By bringing together big data analytics and market intelligence, the platform will provide tools enabling to make forecasts, develop strategy models and finally make decisions based on reliable data.



Digital Transformation Programme for Enterprises

The Ministry of Economic Development and Technology is developing scenarios for the Digital Transformation Programme for Enterprises, which are intended to respond to the main needs and problems of Polish companies in the digital transformation process.

The programme will focus on the digital transformation of companies as a key factor in the development of the economy as well as on the main barriers to digitalisation. It will also be an attempt to fill the gaps identified in current support instruments, both in terms of the demand approach and the thematic scope (improving digital competences in companies, technologies supporting business in general, etc.). The programme will also cover activities aimed to build awareness, so that digital changes are not perceived as forced by law and involving incomprehensible costs, but rather associated with comfort, and time and money savings, and considered as a natural working environment.

Digitalisation Supporting the EU Green Deal



Innovation for the Environment Programme

The National Fund for Environmental Protection and Water Management is implementing a programme aimed at using innovative technologies in environmental protection. It implements projects targeting the country's economic development towards a modern, environmentally friendly and closed-loop economy. The selected projects are consistent with the do no significant harm (DNSH) principle and refer to six environmental objectives:

- Climate change mitigation;
- Adaptation to climate change;
- Sustainable use and conservation of water and marine resources;
- Circular economy, including waste prevention and recycling;
- Prevention and control of air, water and land pollution; and
- Protection and restoration of biodiversity and ecosystems.



The programme contributes to the achievement of the objectives of the EU Green Deal, including climate neutrality, green transformation of the economy and sustainable development, and is scheduled to be implemented between 2020 and 2027.

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Institute for Ecology of Industrial Areas

The Institute for Ecology of Industrial Areas is a research institute supervised by the Minister responsible for climate issues. The projects implemented by the Institute include Mod4Grin, RE-PLAN CITY LIFE and SoilHM:

- Mod4Grin is a self-sustainable, intelligent green urban infrastructure module. The project runs from 2020 to 2024, and benefits from the automation of the operation and monitoring of the Green Urban Infrastructure as a tool to support climate change mitigation and urban biodiversity restoration;
- RE-PLAN CITY LIFE aims at efficiently raising public awareness for the implementation of
 the circular economy through the use of recycled tyre materials (RTM) in the urban
 environment (to be implemented between 2022 and 2025). The project is aimed, among
 other things, at working with public administrations to develop solutions that will foster
 the implementation of environmentally friendly good practices for the use of RTM in
 municipal investments as well as in green public procurement procedures. The project will
 develop and implement an IT platform to support European stakeholders involved in
 increasing tyre recycling in line with the principles of the circular economy; and
- SoilHM is a project aimed at estimating the contamination of soil with heavy metals based on machine learning models trained on data acquired from hyperspectral aerial and satellite imagery. It was submitted under Infostrateg VI and a decision on its selection is expected by the end of the first half of 2024.

State Forests Holding 'Lasy Państwowe'

The State Forests Holding 'Lasy Państwowe' is implementing the development project Forest of Energy, aimed, among other things, at the energy transformation of the organisation. More in general, the primary objective of the project is to prevent climate change by reducing greenhouse gas emissions into the atmosphere. In this context, it aims to increase the share of energy from renewable sources (RES) in the country energy mix, improve Poland's energy security and ensure the energy self-sufficiency of State Forests. The project's outcomes will add significant value to the core role of State Forests in preserving the sustainability of forest ecosystems in Poland. The project encompasses various different, yet complementary, tasks and investments, including:

- Developing an energy strategy for State Forests;
- Leasing lands managed by State Forests for the construction and operation of RES;
- Producing energy from RES, particularly in photovoltaic installations, wind turbines and installations utilising green hydrogen, along with constructing energy storage infrastructure and upgrading transmission infrastructure on State Forests lands;
- Equipping State Forests with vehicles powered by electricity and alternative fuels, along
 with constructing charging infrastructure for both internal and publicly accessible use;
- Increasing energy efficiency through innovative energy management methods, including joint energy purchases for several State Forests units;
- Cooperating with national energy producers and energy clusters in the filed of investments;
- Cooperating at the technical level with universities in research and development, as well
 as in testing and implementing innovations in energy efficiency and RES; and
- Promoting and disseminating knowledge about the benefits of energy from RES and efficient utilisation technologies.

The Forest of Energy project is a continuation of the project titled 'Renewable Energy Sources as the Basis for Supplying Electricity to Buildings and Means of Transport of the State Forests Holding' carried out from 2017 to 2020.



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3. Interoperability and Data

Interoperability Framework

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State Information Architecture

In 2018, the Ministry of Digital Affairs, in cooperation with other institutions, created the State Information Architecture, and entrusted it with the task to organise the IT systems and adopt a method for managing their development in accordance with the guidelines of the PZIP. The State Information Architecture consists of a vision of the future architecture, as well as models, standards and documents, which form the basis for planning development and ensuring the consistency of IT activities undertaken by various institutions. By containing principles, standards, models and management processes, it seeks to implement the digital vision of the State covering the legal, organisational, semantic and technical layers. The developed concept allows for an agile approach to the process of organising and expanding the architecture of the State's information systems. Three processes were launched:

- Management of the Digital Administration Development, which is a process designed to reduce systems and products' complexity, including the architecture vision and IT Action Plan;
- Architecture Assurance, which is a process designed to ensure the conformity of projects with the architecture vision, the architecture principles and standards, as well as the IT Action Plan; and
- Principles and Standards Management, which is a process to define and maintain the architecture standards and produce a catalogue of standards.

The work is done in accordance with the European Interoperability Reference Architecture (EIRA) and the European Interoperability Framework (EIF).

D.

Regulation on the National Interoperability Framework

The Regulation on the National Interoperability Framework, Minimum Requirements for Public Registers and Information Exchange in Electronic Form, and Minimum Requirements for ICT Systems, adopted on 12 April 2012 by the Council of Ministers, was further amended in 2014, 2016 and 2017. Currently a new regulation and law on the National Interoperability Framework is being developed.

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Interoperability and State Information Architecture Portal

In February 2021, the Ministry of Digital Affairs launched the Interoperability and State Information Architecture Portal. The purpose of the portal is to increase the degree of regional, national and transnational interoperability, and ensure a widespread use of the State Information Architecture.

The website provides information on strategies and programmes, legislation, interoperability and architecture frameworks, standards and recommendations, and document structures, as well as on public IT systems and public registers. The portal also contains an extensive collection of information on the State Information Architecture, including its principles, vision, models and management processes. New videos and presentations on the State Information Architecture and interoperability are regularly published.



Act on the Computerisation of the Operations of Entities Performing Public Tasks

The Act on the Computerisation of the Operations of Entities Performing Public Tasks was adopted by the Sejm (i.e. the lower house of the Polish parliament) on 17 February 2005 and came into force on 21 July 2005 (and was subsequently amended in 2010, 2014, 2016, 2018, 2019, 2020 and 2021). It grants citizens and businesses the right to contact public authorities electronically. It also sets up horizontal/infrastructural programmes for all sectors of public administration and establishes a national interoperability framework for IT systems in the Polish public sector.

This law is essential for the standardisation and interoperability of public administration systems, front- and back-office integration of public administration systems, in particular the Electronic Platform of Public Administration Services (ePUAP) and the central repository of electronic document templates, as well as the supervision and support of IT projects in public administration



at both central and local levels. Moreover, it establishes the public electronic identification (eID) scheme under which two eID means for natural persons are issued. It also enables citizens to confirm their identity or rights (e.g. for driving licenses) using a mobile device instead of documents. The amendment in 2019 also introduced the System of State Registers as an organisational and technical tool serving public registers.

Since 2021, the Ministry of Digital Affairs have worked on the amendment to the Act on the Computerisation of the Operations of Entities Performing Public Tasks and the Code of Administrative Procedure. The amended acts will set out provisions related to e.g. reference data, interoperability recommendations and the interoperability repository, thus recognising the importance of the interoperability key concepts and definitions that are currently defined in the Regulation on the National Interoperability Framework. The new version of the acts will also provide the legal basis for (i) the State Information Architecture; (ii) the public IT systems inventory (SIST); (iii) the IT strategy document; and (iv) the Digitalisation Committee.

A additional amendment, aimed at introducing the 'digital by default' principle in the way the administration operates, is under preparation and is expected to enter into force by the end of 2024, though work was influenced by the end of the parliamentary term. The amendment will set out common rules for public entities, including digital documents and electronic communication by default in administration and the economy (i.e. the primacy of electronic communication), the possibility of using only one means of eID (i.e. the principle of one login for every citizen and entrepreneur), the use of one gateway to public services (GOV.PL), solutions limiting data redundancy and data exchange of public ICT systems. The solutions included in the proposal will make it easier for citizens to contact the administration by allowing their affairs to be carried out electronically and the administration to place greater emphasis on the use of electronic communication and modern technologies in its activities.

Data Access, Management and Reuse

Act on Access to Public Information

The Act on Access to Public Information, which came into force in January 2002, allows anyone to demand access to public information held by public and private bodies exercising public functions, as well as trade unions and political parties. These bodies have to officially respond to enquiries within 14 days. Public bodies are also required to proactively publish certain categories of information, i.e. on their policies, legal organisation and principles of operation, the contents of administrative acts and decisions, as well as public assets. The law requires that each of these bodies create a Public Information Bulletin to allow access to information via computer networks. The official electronic journal for public information - the Public Information Bulletin - was launched in July 2003.



Regulation on the Manner, Scope and Mode of Access to Data Stored in a Public Register

The short Regulation on the Manner, Scope and Mode of Access to Data Stored in a Public Register sets out the scope and mode of access to data stored in a public register by a public body or entity performing public duties under other regulations or by delegation. Furthermore, it clarifies the terms under which someone can resort to a second request for access to data stored in a register.

Open Data



Open Data Programme

In February 2021, the Council of Ministers adopted a resolution on the Open Data Programme 2021-2027. It is the follow-up document to the first governmental document dedicated to opening public data, the Open Data Programme 2016-2020. The document defines the priorities of the government in opening access to data. It aims to develop an ecosystem in which a large amount of good-quality data will allow for the development of innovative solutions, increase the transparency of the activities of administrative bodies and increase the quality of research, accelerating scientific progress.

Research and training activities are important components supporting the implementation of the Programme and helping to achieve its strategic goals. The latest undertakings in these areas include:



- Quantitative research carried out in public sector bodies on the implementation of the open data policy and data sharing;
- Expert qualitative research conducted among representatives of non-governmental organisations (NGOs) as part of the ex-post evaluation of the Open Data Act;
- Expert research on the impact of open data; and
- Training of over 300 local government employees during online workshops on opening data in 2022 and 2023, focusing on the use of the dane.gov.pl portal by local governments.

As part of the Open Data Programme implementation, cooperation is carried out with data openness officers, which also contributes to improving the quality of data and increasing their supply on the dane.gov.pl portal.



Open Data Standards

Opening public data makes public administration activities more transparent and allows civic control thereover. In 2018, the Ministry of Digital Affairs published guidelines to prepare and share data for reuse. The guidelines concern the API standard, the security standard, the technical standard and the legal standard. The Ministry of Digital Affairs elaborated them as part of the project 'Open data – Access, standard, education' to ensure that data provided by the public administration would be of a higher quality. Open data may now be reused for research or business purposes.

In 2019, open data standards were subject to extensive public consultations. Most of the proposals submitted during the consultations were implemented in the new versions of the documents published in 2020. The technical standard and the API standard were also included as appendices to the Open Data Programme 2021–2027. This will trigger an increase in the quality of data provided by the administration, and used in innovative products and services.

Act on Open Data and the Reuse of Public Sector Information

The Act on Open Data and the Reuse of Public Sector Information entered into force on 8 December 2021, regulating in a comprehensive manner the issue of open data in Poland and transposing Directive (EU) 2019/2024 on open data and the re-use of public sector information into national law. The main goal of the new act is to increase the supply of open data and enable their reuse on a larger scale than before. Moreover, it provides for an easier and less formalised process of accessing information for reuse, mandating that it can be requested in any way and should be provided within 14 days. The reuse of PSI is also possible via an IT system in real time. The act also distinguishes new categories of PSI, i.e. (i) high-value data, that is data the use of which is associated with significant socio-economic benefits; (ii) dynamic data, that is data that are updated frequently or in real time; and (iii) research data, that is data that are produced or collected as part of research activities financed from public sources. Furthermore, the act regulates the functioning of the network of open data officers. They are responsible for improving the quality and increasing the amount of data made available by Ministries, including the Ministry of Digital Affairs, and the Central Statistical Office. Finally, the act introduces a number of other solutions aimed at building a comprehensive regulatory environment, like formulating the principle of data openness, developing a comprehensive terminology and regulating standard licenses (e.g. creative commons) or the reuse of source codes when software is developed as part of a public task.

Base Registries

The following table lists Poland's base registers:

National				
Business and Tax	The Central Register and Information on Economic Activity Platform was launched in 2011. There, all individuals with a Trusted Profile or an electronic signature can clear all the formalities required to immediately start up, suspend or renew a business. This business register also has information on entrepreneurs running their own business as sole traders (self-employed) and partners in a civil law partnership composed of natural persons. The owner of the Register is the Ministry of Economic Development and Technology.			

- The National Court Register (KRS) allows for the registration and update of financial and legal information on entrepreneurs acting as legal persons. Cross-border access to information is ensured through the Business Registers Interconnection System (BRIS) interface. One of the new services of the register is the OPEN API, allowing to get complete and up-to-date information in PDF as well as JSON files. All the functionalities of the Register are available here. The owner of the Register is the Ministry of Justice.
- The National Official Register Responsible for Functions (REGON) includes legal persons, organisational units without legal personality and natural persons who operate/own agricultural or medical establishments. The REGON register contains the most complete set of entities and their reference data, including all registers of Polish public administration entities. The owner of the Register is Statistics Poland.
- The Central Register of Entities National Register of Taxpayers (CRP KEP) is a complete, nationwide register of taxpayers. It contains data of natural persons, legal persons and organisational units without legal personality subject to tax liability under tax laws. The Register also stores their identification and update applications, as well as certain other documents related to obligations arising from tax regulations (NIP number). It also serves as a reference node for data of natural persons and entities for other National Revenue Administration "Krajowa Administracja Skarbowa(KAS) systems and registers. The data is subject to fiscal secrecy. The owner of the Register is the Ministry of Finance.

Transportation / vehicles

The Government Central Vehicle and Driver Register (CEPiK) is a nationwide computer system containing a central database gathering data and information on vehicles and their owners, as well as persons who have the right to drive vehicles. The CEPiK System for Databases Management has operated since 2004, managing the processes of updating and giving access to data stored in CEPiK. The owner of the Register is the Ministry of Digital Affairs.

- The Land and Mortgage Registers (KW) collects data on real estate and its owners as specified by the Act of 6 July 1982 on Land and Mortgage Registers. The KW portal allows to view the content of the land and mortgage registers, request a document from the Register, verify its legal validity and view information on the status of a case for an entry in the Register.
- The Land and Building Register (EGiB) contains information about real estate, i.e. registered plots, land, buildings and premises, as well as their owners and other entities that own or manage these plots, lands, buildings or premises. It is a reference register for cadastral plots, buildings and premises, as well as for land use and valuation classes.

Land

- The State Register of Borders and Units of the Territorial Division of the Country (PRG) is a reference register of borders and areas of the country's territorial division, as well as address points and addresses.
- The National Official Register of the Territorial Division of the Country (TERYT) contains the identifiers and names of (i) the units of the basic three-level territorial division of the country, i.e. voivodeships, counties and communes (TERC); (ii) towns (SIMC); (iii) streets (ULIC), run as part of the address identification system for streets, real estate, buildings and apartments (NOBC); and (iv) statistical regions and census enumerations (BREC). It is a reference register of the country's territorial division. Its identifiers of towns and street names are commonly used in public administration registers.

The owner of registers related to Land is the Ministry of Justice.

- In November 2022, the Passport Document Register (RDP) was launched. It is a central register maintained in an ICT system which is used by voivodeships, consuls, the Minister of the Interior and the Minister of Foreign Affairs to handle matters related to the issuance and cancellation of passport documents. Citizens can use the following online services without leaving home:
 - Looking at one's own data stored in the Passport Document Register;
 - Checking if their passport or other passport document is valid;
 - Verifying if the passport or other passport document is ready for collection;
 - Confirming receipt of the passport or other passport document delivered by the courier (in the case of a passport application submitted abroad); and
- Reporting loss or damage of a passport or other passport document. Two more online services successfully implemented in 2023 include applying for a passport for a child and giving consent to the issuance of a passport for a child. By the end of 2023, 87 000 online applications for a child's passport had been submitted and 154 000 passport consents had been registered.

Population

- The System of State Registers combines the following registers: the Universal Electronic System for Registration of the Population (PESEL), the Register of Civil Status, the Register of ID Cards, the RDP, the System of State Awards, the Central Register of Objections and the Register of Contact Information. The registers in the System of State Registers include referential data which are made available for other registers. The interconnections between each of them allow for the provision of new services. Millions of operations take place annually involving data such as name, surname, address, identity document, citizenship, marital status, and death and birth date. The owners are the Ministry of Justice, the Ministry of Foreign Affairs and the Ministry of Digital Affairs.
- The Identity Node reduces the need to set up separate accounts for each system thanks to the connection with trusted identity providers. All formal notices published in the MSiG system (*Monitor Sądowy i Gospodarczy*) since 1996 have been made public on the website of the Ministry of Justice.
- Based on the provisions of the Act on Waste of 14 December 2012, an ICT system called Database on Products and Packaging and Waste Management (BDO) was established. Through the BDO system, entities indicated in the above-mentioned act obtain an entry in the relevant register, and can meet their waste records and reporting obligations electronically. The owner of the database is the Ministry of Climate and Environment.

Other

- The Contact Data Register (RDK) is growing in popularity. The up-to-date contact information in the RDK allows officials to contact each other by phone or email on important matters, without having to send a letter. By the end of 2022, more than 11.3 million citizens had submitted their data to the RDK. The owner of the Register is the Ministry of Digital Affairs.
- In 2023, legislation amending the Electoral Code came into force, enabling the launch of the Central Register of Voters (CRW) in the middle of the year. Since then, it has been used to establish the number of voters, compile the electoral registers and the registers of persons entitled to participate in the referendum, and verify the right to vote. As part of the CRW, the following online services have been made available to citizens:
 - Checking their data in the CRW;

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- Notifying their intention to vote by proxy;
- Notifying their intention to vote by correspondence;
- Applying to be added to the Register of Voters Abroad;
- Changing their polling place; and
- Changing their permanent voting precinct or adding themselves to the CRW.

The owner of the Register is the Ministry of Digital Affairs.

- The Debtor's National Register (KRZ) is a fully digitalised system allowing debtors, creditors, insolvency practitioners and courts to manage insolvency and restructuring proceedings regarding legal and natural persons. The integration with the eJustice Portal allows to search for information on ongoing or completed proceedings. All the functionalities of the Register are available here. The owner of the Register is the Ministry of Justice.
- The Register of Pledges is accessed through the PDI (Portal Dostępowo-Informacyjny) system. The owner of the Register is the Ministry of Justice.
- The Common Courts' Judgments Portal (Portal Orzeczeń Sądów Powszechnych) is an online database of decisions of Polish common courts created in 2012. All decisions added to the Portal are automatically anonymised by an advanced text analysis algorithm. The Common Courts' Judgments Portal is available for the public on its website and access is not restricted. It is possible to search the data through an API. The owner is the Ministry of Justice.
 - The Information Portal (Portal Informacyjny Sądów Powszechnych) enables registered (logged in) users to access information on cases pending before a common court. The system contains electronic versions of court documents, electronic hearing minutes (audio only) and information on the procedural steps undertaken during the case. It also allows to service court documents to professional legal representatives, submit a request for video hearing, deliver video hearing minutes and perform automatic voice recognition from audio hearing recording. The owner is the Ministry of Justice.
 - The Electronic Procedure by Writ of Payment, known as the electronic court (eCourt), allows claims to be pursued online. The plaintiff should refer to evidence in support of their allegations. The owner is the Ministry of Justice.

All formal notices published in the MSiG system (*Monitor Sądowy i Gospodarczy*) since 1996 have been made public on the website of the Ministry of Justice.

Sub-national

Base Registries



Master Data Management

With regard to Master Data Management, a concept to effectively share data from public registers has been developed at the State level. It is based on the management of the State's information architecture, i.e. on formally establishing reference registers in a specific area of data and making them available via APIs. The approach is planned to be incorporated into law. A concept is also being developed to implement central, shared mechanisms for making data available in specific areas of master data (individual person, entity, plot and property, etc.). Standard APIs models and recommendations are being developed for the Individuals data area, but it is planned to develop such standard models and recommendations also for other areas of master data (e.g. entity, plot and property, etc.). Regarding AIP recommendations, good practices for creating public registers are also published.

The main base registers are mostly connected, in particular with PESEL, REGON, the KRS, the Central records and information on business activities (CEIDG) and TERYT. Most registers use APIs to provide data.



Efficient State Strategy 2020

According to the Efficient State Strategy 2020, high interoperability of all IT systems and public registers is a fundamental condition for the implementation of common standards for electronic communication in the public sector and for the provision of reference data for current office work. The possibility of automatic verification of data provided by persons using public services with reference data from public registers will allow to improve the current work of public entities, which are obliged to perform the tasks specified in the law, and at the same time will speed up the settlement of matters. It is necessary to introduce and enforce principles for limiting to the necessary minimum the range of data which will be required from the citizen when dealing with official matters. Units keeping registers must have the obligation of mutual exchange of information and direct information requests from registered entities should only be possible if the data obtained from other records is insufficient. Two-way communication between secondary and primary records (supplied directly with data obtained from the registered entities) should be provided. A modern and secure IT infrastructure, built on robust integrated tele-information systems, is now the basis for the functioning of offices and the exchange of information between offices and citizens, as well as the offices themselves and other public bodies.

PESEL shall be a reference set of data about citizens. Since 1 January 2022, government administration bodies, as well as law enforcement bodies, courts, organisational units of the prosecutor's office, local government units and their bodies that keep a public register using ICT systems have to verify the data entered with the data in PESEL.



Reinforcement of Data Reference in Basic Registers

The formal designation of registers containing reference master data is planned in the amendment to the Act on the Computerisation of the Operations of Entities Performing Public Tasks.



Recommendations for Public Administration Registers - Good Architectural and Legislative Practices

The Ministry of Digital Affairs has developed recommendations for people designing public administration registers and the legal provisions that are the basis for the operation of these registers. The aim is to indicate good practices in the creation and development of registers and legal regulations regarding new and modified registers. The best practices concern registers providing reference master data and cooperation between registers, as well as the practical implementation of the Once-Only principle and the obligation to use reference data. Recommendations are planned to be published by the Committee of the Council of Ministers for Digitisation.



Act on Certain Acts Regarding Public Administration Tasks Related to Some Public Registers

The Act on Certain Acts Regarding Public Administration Tasks Related to Some Public Registers of 23 March 2017 introduces legal modifications to allow citizens to access public administration services without leaving their home, i.e. via IT systems. These changes are in line with the targets of the Paperless Cashless Poland Programme. They are another step to help citizens apply for benefits without having to visit many offices to collect various certificates. In particular, the act:

- Enables users to check online the number of penalty points drivers are assigned for traffic violations. Information on the number of points is available after authentication of the data subject with the Trusted Profile;
- Ensures environmental protection inspectorate bodies access to the Central Register of Vehicles (CEPiK); and
- Reduces the number of documents (certificates) that must be attached to applications for family benefits, the grand family card and childcare benefits.



Act on the Population Register

The main function of the Act on the Population Register is to define the rules for maintaining the population register in Poland, including with regard to implementing the registration obligation, registering data in PESEL (an element of the System of State Registers) and assigning

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the PESEL number. The act also sets out rules for making data from PESEL available. PESEL includes information on Polish citizens and foreigners, namely personal data, address of permanent or temporary residence, marital status, and identity document series and number.

Furthermore, the Act on the Population Register allows to use the following eServices (available after authentication):

- Registering for permanent or temporary residence longer than three months (including a transaction service enabling registration without the participation of an official);
- Deregistering from permanent or temporary residence (including a transaction service enabling deregistration without the participation of an official);
- Declaring departure from and return to a foreign country (including a transaction service enabling declaration without the participation of an official);
- checking one's or one's child's details in PESEL and downloading a certificate;
- Requesting or canceling the reservation of one's or another person's PESEL number;
- checking whether the PESEL number of another person has been reserved; and
- obtaining a certificate of one's data from the PESEL number reservation register.

With regard to the latter three eServices, solutions enabling the requesting and canceling of reservation of the PESEL number of adults to prevent the effects of unauthorised use of data were introduced in November 2023.

Act on Civil Status Registration

The Act on Civil Status Registration sets out the rules for birth, marriage and death registrations. Moreover, it defines the Civil Status Register (an element of the System of State Registers) as a source of special data connected with birth, marriage and death. The Register enables the creation of certificates concerning the above-mentioned occurrences, registration of divorces, recognition of fatherhood, etc. In addition, the Civil Status Register updates PESEL and ensures data exchange. Like other registers, it enables authenticated users to perform some electronic actions, such as applying for birth, marriage or death certificates, applying for marital status certificates and registering the birth of a child.

Data Platforms and Portals

The following table lists Poland's data platforms and portals infrastructures:

Dane.gov.pl	dane.gov.pl is an open data portal offering access to public data in various categories, such as education, culture and sport, environment, economy and finance, energy and health. Most of the data are made available in open formats. Data provided by the portal can be reused, for example, for creating applications and innovative products without any restrictions or requirements. Developers reusing public data are then invited to share applications through dane.gov.pl. The portal also offers tools for regular users and advanced professionals, e.g. access to data resources via API, a form to comment on a dataset or a button to download all datasets. In addition, the portal is the main source of knowledge, good practices and new activities in the field of open data in Poland. The portal targets citizens, companies, NGOs, researchers and officials. At the end of 2023: • the number of data resources available on the data.gov.pl portal was 35 652; • the number of data resources available on the data.gov.pl portal through APIs was 595; and • the number of State and local government offices, and private entities publishing data on the data.gov.pl portal was 378.
Geoportal	Poland's Geoportal became fully operational in 2009. The system is based on three different levels: local, provincial and central. It enables users to access systemised data available on different portals and in different institutions. The basic functionalities of the system include searching, exploring and downloading. The searching option employs geospatial solutions based on metadata. The exploring option means navigating, zooming and reading map legends. The downloading option allows users to obtain the full set of maps and geospatial data or parts thereof. The



portal focuses on providing services and data for citizens, entrepreneurs and the public administration. In 2023, more than 770 TB of geospatial data were downloaded via Geoportal and, noteworthy, the portal recorded more than 5.5 million visitors, which shows the significant popularity of the service.

Cross-border Infrastructures

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

EUCARIS	Poland is part of the European Car and Driving Licence Information System (EUCARIS) initiative.
TESTA	The Trans European Services for Telematics between Administrations (TESTA) network is used for a number of cross-border use cases.
EU Digital Wallet	Poland is part of the EU Digital Identity Wallet Consortium and POTENTIAL.
European Blockchain Services Infrastructure (EBSI)	Poland participates in the development of the European Blockchain Services Infrastructure (EBSI). The Polish EBSI node was deployed by the NASK National Research Institute (NASK PIB) in 2022 based on an agreement with the Ministry of Digital Affairs and the subsidy granted by the Ministry of Digital Affairs. The EBSI node has reached production readiness and has the status of a validator in the EBSI network, also used to test the new consensus protocol. It also has an independent pre-production and pilot environment. In 2023, the ISO 27001 cybersecurity certificate was awarded to the EBSI node. The development of the EBSI infrastructure is also supported by the large-scale EBSINE project, in the framework of which NASK PIB participates in a multinational consortium financed using a Digital Europe Programme (DEP) grant. The project will include the deployment of new nodes, the development of technical requirements, the implementation of improved cybersecurity measures, and the creation of a local helpdesk and a blockchain technology competence centre. NASK PIB also participates in the large-scale European projects DC4EU and VECTOR (also financed by DEP), which are tasked with developing EBSI applications in the university and social security sectors, including achieving compliance of EBSI with the requirements of the EU Digital Identity Wallet and the digital wallet for enterprises.
Single Point of Contact	The Single Point of Contact is a communication interface (node) between Schengen Member States or associated States. It allows for effective online communication, leading to regular implementation of tasks related to the exchange of cryptographic keys. In general, it will be used to exchange certificates between all countries of the Schengen area, which will enable the competent services (most often the Border Guard) to verify travel documents (usually passports). Suspicious persons (or suspects) will be subject to further verification of fingerprints with imprints placed in the document.
ePrescriptions	Poland has joined the countries that have launched cross-border ePrescriptions. Foreign patients can use ePrescriptions at a Polish pharmacy and Polish patients can use them abroad. As of January 2024, cross-border ePrescription exchange is possible with Croatia, Spain, Estonia, Portugal, Czechia, Greece and Finland.

4. Digital Transformation of Public Services



Digital Public Services for Citizens

Portal of the Republic of Poland

The Portal of the Republic of Poland (RP Portal) is the main service of the Polish government, the central gateway to digital information and eServices of the State, created by the Ministry of Digital Affairs in cooperation with the entire public administration. It contains all information related to the public administration, as well as press and multimedia materials.

Over 1 800 services are available on the RP Portal (GOV.PL), included in one list of units with a connected search engine. The RP Portal is based on a design system applicable to the whole administration. All GOV.PL websites comply with the web accessibility requirements specified in the appendix to the Act of 4 April 2019 on Web Accessibility of Websites and Mobile Applications of Public Sector Bodies.

The RP Portal also played a crucial role during the pandemic, since on the Portal citizens and foreigners could find all up-to-date information and statistics related to COVID-19, as well as other recommendations. Due to the war in Ukraine and the refugee crisis started at the end of February 2022, a subpage for Ukrainian citizens has also been published. The page contains information related to obtaining a PESEL number and access to education, healthcare, social benefits, the labour market and transportation, as well as additional helpful information connected to staying in Poland.

Widok.gov.pl

widok.gov.pl is a portal developed by the Ministry of Digital Affairs and the National Institute of Telecommunications. It contains information on currently accessible eAdministration services, along with their usage statistics. The portal is designed to increase the transparency of public administration's activities and the effectiveness of its communication with citizens regarding the use of monitored eServices, as well as other portals and websites.

Tax and Customs Electronic Services Portal

The Tax and Customs Electronic Services (PUESC) Portal is a portal of the Ministry of Finance and the National Revenue Administration which provides a two-way and secure communication with the external clients of the National Revenue Administration, delivering electronic public services in areas like:

- Import, export and transit of goods;
- Trade in excise goods;
- Transport of goods covered by the monitoring system;
- Statistics of trade in goods among Member States;
- Gambling; and
- Tax free VAT refund.

The PUESC Portal is mainly intended for economic operators, representatives and natural persons who trade in goods with foreign countries, and persons who cross the external border of the EU and are subject to duties, among others:

- All Polish and foreign economic operators who clear goods in Poland;
- Economic operators and natural persons who cross the EU's external border;
- Economic operators who trade in excise goods other than goods covered by the procedure of suspension of the excise duty;
- Taxpayers who acquire and import passenger cars in the EU; and
- Economic operators who trade in excise goods which are subject to fiscal markings.

A large number of online services are available on the PUESC Portal, with new services constantly being added. According to 2023 data, 107 electronic tax and customs services have been made available on the PUESC Portal and the number of user accounts has reached over 1.3 million. In addition, a new mobile application (mTAX FREE PL) was launched, containing all tax free documents issued in Poland.



Praca.gov.pl

The praca.gov.pl service portal allows individuals and entrepreneurs to deal with:

- Registration and benefits for unemployed persons and jobseekers;
- Submission of job, internship and apprenticeship offers;
- Employment of foreigners in Poland;
- Benefits in case of bankruptcy of the employer; and
- Registration in public registers for training companies and recruitment agencies.

praca.gov.pl provides a two-way exchange of data between users and clerks. Around 23 million electronic applications have been submitted through the portal and over 2.5 million users have verified their accounts.



Act on Electronic Delivery

The Act on Electronic Delivery was adopted by the Parliament on 18 November 2020 and came into force on 5 October 2021 (with prolonged *vacatio legis* for some specific provisions). The aim of the act is to set up the Electronic Addresses Register together with its online services, and enable public entities to send and receive as many correspondences as possible within the administration, and with citizens and entrepreneurs by means of trust services. As a result, since 5 October 2021 people who express such a statement of will have become able to receive registered correspondence from administration institutions without having to go to the post office. eDelivery is now the legal equivalent to sending a traditional registered letter with acknowledgment of receipt or delivering it in person.

Along with the adoption of the act, the eDelivery service standard, based upon ETSI standards, was completed. The document defines the manner of providing electronic registered delivery services by service providers, including the designated operator. The standard has been published on the Public Information Bulletin website of the Ministry of Digital Affairs (in Polish language).



mCitizen Application

mObywatel 2.0 is a free mobile application designed by the government to serve as a digital gateway to various public services and documents frequently used by citizens in their daily lives. These include essential documents such as ID cards, driving licenses, student ID cards, digital COVID-19 certificates, pensioner ID cards and more. Additionally, the app offers services like access to train tickets, discounts for large families, railroad employee cards and professional ID cards. Moreover, the app provides up-to-date vehicle information, traveller information with regard to foreign countries and ePrescription implementation services. In addition, users of the application have access to a service allowing them to easily report environmental violations and pollution. Also, the Diia.pl service was integrated in 2022, allowing Ukrainian citizens who arrived in Poland on or after 24 February 2022, and whose stay has been recognised as lawful, to confirm their identity within the EU using the mObywatel app. All these features make mObywatel 2.0 a comprehensive tool for citizens' needs, which is not only a mobile application but also an extensive website available at mobywatel.gov.pl. As of December 2023, the number of mObywatel 2.0 app downloads by Android and iOS users exceeded 12 million.

The mObywatel 2.0 application is constantly being developed with new documents and services coming every year. In 2023 new services were added to the app: (i) Wybory (elections), enabling the display of citizens' data from the Central Register of Voters together with information about the right to vote and the list of upcoming elections; (ii) eWizyta ZUS (eVisit to ZUS), enabling to plan a visit to the institution responsible for social insurance in Poland; and (iii) ePłatności (ePayment), piloting an online service handling ePayment transactions made available in the mObywatel 2.0 application. An additional service was made available to Polish citizens in January 2024, i.e. the PESEL number request, enabling citizens to easily restrict one's personal identification data by restricting the use of their personal identification number.

The government also strives to ensure that all messages from the public administration institutions go to one inbox, i.e. the mObywatel 2.0 app. In accordance with the mObywatel Application Act, the new version of the app will allow citizens to interact with all authorities and will send notifications when one receives for example, a tax refund, a subsidy from the municipality or information about the upcoming expiration date of one's documents, such as an ID card or a passport. Also, in the coming months the mObywatel 2.0 app will be integrated with the following two registers: (i) the Central Register and Information on Economic Activity; and (ii) the Register of Legal Advisers. Future development plans also include a chatbot service, that is a virtual assistant informing about State services available to citizens.

The mObywatel 2.0 app ranked third at the People's Lovie Award, and was awarded in the Emerging Europe Awards 2023 and in the Digital Excellence Awards 2022.





Act on the mCitizen Application

In July 2023, the Act on the mObywatel Application came into force. It introduced a new mobile document, mDowód (mID), which confirms the identity of the user within the territory of the Republic of Poland as well as Polish citizenship of the user. Thanks to this mobile document, Polish citizens do not have to carry a traditional plastic identity card.

In general, the improvement of the mObywatel 2.0 app is consistent with the philosophy of providing more eServices in Poland. The strategy of providing Polish citizens with more eServices is based on the principle of an easy access to handling official matters with the help of a smartphone. Thanks to the mObywatel 2.0 app., providing many documents and services, Polish citizens who are very keen on using technology in their everyday life can complete many of their public administration matters comfortably with their smartphone. Functional, intuitive and user-friendly documents and eServices are developed in the mObywatel app. In this context, digital accessibility and inclusion of people with disabilities are among the priorities. That is why the mObywatel 2.0 has been updated to the newest Web Content Accessibility Guidelines (WCAG 2.1). Also, the goal is to establish a closer cooperation with more public and non-public entities.

₫ Emp@tia

The Emp@tia Information and Service Portal enables individuals and entrepreneurs to carry out administrative formalities in the form of eServices with regard to:

- · Upbringing benefits;
- Family benefits;
- Alimony fund;
- Social assistance;
- Matters relating to disabled persons;
- Large family card; and
- Childcare for children under three years of age.

Emp@tia provides a two-way exchange of data, return correspondence from offices, and official confirmations of delivery and submission with systems at the central, provincial and local government levels.

Approximately 17.8 million electronic applications have been submitted through the Portal and over 1 million users have verified accounts.

eInvoicing

eInvoicing Infrastructure

eInvoicing within the eProcurement area is managed by the Ministry of Economic Development and Technology in cooperation with the Łukasiewicz - Poznań Institute of Technology. The National eInvoicing Platform (PEF) has been operating since 2019, enabling the exchange of eInvoices and other electronic documents in the post-award phase. The Ministry of Economic Development and Technology serves as Peppol authority and PEF operates within the international Peppol network.

eHealth and Social Security

eHealth Development Programme 2022–2027

The eHealth Development Programme was established by the Ministry of Health for the period 2022–2027. The main goal of the programme is to create, deliver, develop and maintain secure IT solutions for the healthcare system that meet the needs of users. The planned activities will contribute to better healthcare through the digital transformation of key areas of intervention and include, in particular:

- Patient involvement in activities that increase control over one's own health;
- Deinstitutionalisation of care and care coordination;
- Strengthening of the digital maturity of service providers with the support of horizontal eServices;
- Education of medical and technical staff;
- Development of telemedicine and mHealth;
- · Access to medical data and information;
- Application of AI;

- Development of back office services; and
- Support for actions on secure information processing, including the construction of a cybersecurity system, increasing the security of service providers, as well as secure and convenient signing of medical data.



The Act on the Health Information System specifies the organisation and principles of operation of the information system in healthcare. The information system processes data which is necessary to conduct the State health policy, improve the quality and availability of healthcare services, and finance healthcare tasks. The essential element of the information system is definitely the Health Information System, an IT system for processing data concerning provided and planned healthcare services, which is made available by service providers' IT systems. The law is constantly being expanded with new functions of the Health Information System that respond to the needs of society and the current health situation in the country.

The main change was the introduction in 2018 of a Patient Internet Account (IKP). The IKP enables to communicate electronically, obtain prescriptions and referrals, and view the history of medical services. The development of eHealth also led, among other things, to the introduction of the obligation to issue ePrescriptions as of 8 January 2020 and eReferrals as of 8 January 2021. It also made the exchange of electronic medical records via the Electronic Health System (P1) compulsory as of 1 July 2021.



Launched in 2022, the eHealth Portal contains descriptions of interfaces for service providers and integrators, e.g. in the area of the single patient account, eReferrals, ePrescriptions and trade in medicines. In addition, the portal provides standards for the collection and exchange of data in the field of medicine as well as medical registers that are updated daily.

The Ezdrowie interface is intended for health professionals and providers of health-related services or products.

The eHealth Centre, which has been operational since 1 August 2000, is a State budgetary unit set up by the Minister of Health which manages more than 50 central IT systems, including the Electronic Health System (P1), the medical registers (e.g. RPWDL, RHF, RA, RPL and RAM), the systems supporting prevention and treatment (e.g. EWP, eKrew and eTransplant) and the field ICT systems (e.g. SOLR, SOID, EPLOZ, SMZ and ZSMOPL).

Pacjent.gov.pl Portal, IKP and mojeIKP App

The pacjent.gov.pl portal was created as a platform to share information and educate the public about eHealth solutions in Poland.

On the portal users can set up the IKP to obtain information on their individual health data. The IKP is a single point of access where a patient can find all relevant information regarding one's health status. It allows the patient to have electronic access to their treatment history as well as to ePrescriptions and eReferrals, and gives the possibility to authorise other persons, including medical staff, to have access to the patient's account. Via the IKP, a patient can also submit the choice of the general practitioner, order ePrescriptions for permanent drugs or apply for an Electronic Health Insurance Card. Other functionalities are also available with regard to counteracting COVID-19 (eRegistration for vaccination, Digital COVID Certificate, etc.).

Since 2022, the IKP has also provided access to the patient's consent for cross-border ePrescriptions and offered the opportunity to evaluate the physician through an anonymous questionnaire called 'Rate Your Doctor'. In the same year, the Ukranian version of the IKP was launched. In 2023, the following services for patients were made available on the IKP: (i) eReferral to health resort treatment; (ii) Individual Healthcare Plan and Individual Healthcare Plan Schedule; (iii) eOrder for medical devices; (iv) blood donor services (blood donation information, appointments for blood donation, submission of applications for blood donors, etc.); (v) making/cancelling of appointments for vaccinations and laboratory tests under the prophylaxis programmes; and (vi) information on drugs available within the Free Medicines 65+/18-Programme.

In May 2021, the mojeIKP application was introduced as a mobile adaptation of the IKP, offering access to various IKP functionalities. These include ePrescriptions, eReferrals and COVID-19 vaccination registration, along with functionalities like displaying medical events, ordering ePrescriptions, using a body hydration counter, following a dedicated physical activity module called '8 Weeks to Health', accessing a first aid module, scanning drug barcodes, displaying



medical events and treatment history, compiling a 40+ Prophylaxis Programme questionnaire and following a 'Prescription for Movement' pilot programme.

The app also supports the Ukrainian and English languages. By January 2024, over 18 million patients had accessed their individual IKP and downloads of the mojeIKP app had surpassed 5.7 million.



eConsultation

eConsultation is a platform for conducting remote medical consultations, developed by the National Institute of Telecommunications at the request of the Ministry of Digital Affairs. The pilot implementation of the platform was conducted in the fourth quarter of 2023, involving nearly 90 cardiological medical units and 539 medical professionals. As part of the pilot phase, 2 360 remote consultations were conducted (indicating the number of times patients were served using the eConsultation system). The platform was then officially launched in December 2023.

The eConsultation platform was primarily created for patients, providing them with broader access to specialists from major medical centres, and equal access to the latest methods of diagnosis and treatment regardless of their place of residence. The users of the system include doctors and administrative staff of medical units. Users utilise eConsultation as part of their work in specific medical units, including family doctors' offices (i.e. Primary Care Units), specialised clinics (e.g. cardiology) and hospitals. The platform enables doctors to request and conduct consultations with specialists (or groups of specialists) from specific fields of medicine. The primary long-term benefit of using this solution is halting the progression of diseases and reducing the number of patient deaths.



ePraca (eJobs) App

A free mobile application called ePraca was implemented in 2021. The application enables quick and easy access to information on job offers and events published in the Central Job Offer Database by provincial and district Employment Offices and the Voluntary Labour Corps.

The application has a clear design (interface), and ensures easy and intuitive operation. After launching ePraca, users can quickly filter job offers by profession (entering the name of the profession) or by location (entering the name of the location or the postal code).

ePraca also has a positive impact on the reach of job offers. Thanks to the application, employers who post such free offers through Employment Offices in the Central Job Offer Database have the opportunity to reach a larger number of potential employees.

Currently, approximately 20 000 job offers are published in the ePraca application, with approximately 50 000 vacancies. The application can be downloaded for free in the Google Play store for Android mobile devices and in the AppStore for iOS mobile devices.

Other Key Initiatives



Podatki.gov.pl – eTax

The podatki.gov.pl portal allows legal and natural persons to declare their taxes online, obtain all necessary tax information and make an appointment with a tax office.

Since October 2019, the podatki.gov.pl portal has also been a starting point for the publicly available serviceproviding information from the Central Register of Beneficial Owners. The Register contains information about hundreds of thousands of legal entities and their beneficial owners, as well as information replying to a significant number of queries (millions per month). Data are available free of charge. A full range of legal entities have been included since November 2021.

In 2020 a new service called eTax Office (e*Urząd Skarbowy*) was launched on the podatki.gov.pl portal, allowing all customers of the National Tax Administration to handle their tax affairs quickly, easily and comprehensively, at any time and from any device. In 2023, almost 35 million logins and over 478 000 certificate requests, of which around 310 000 processed automatically, were registered on the eTax Office. Since the service was made available, 1.4 million users have also agreed to electronic communication, with over 1 000 000 letters sent to users' accounts since then. Furthermore, 11.94 million annual tax declarations have been filed through the Your ePIT service in 2023.

Over two years (from 2022 to 2023), customer satisfaction after a visit to tax offices increased from 88% to 90%, and the rate of dealing with cases during the first visit to the tax office increased from 83% to 87%.





Vehicle History eService

The Vehicle History eService is based on data recorded in CEP, which is part of CEPiK. As part of the service, one can get information about vehicles registered in Poland free of charge after providing three vehicle data on the website (registration number, vehicle identification number and date of the first registration). In addition to technical data, information is also provided on the number of owners, the current liability insurance or the technical inspections along with the odometer reading during testing. Furthermore, the website provides information on the risks (seven - theft, scrapping, accident, damage, suspicious mileage, unauthorised use of the vehicle and unauthorised use as taxi) reported for a given vehicle during the period when it was used outside of Poland. The service is also available in English.



Verifying a Driver's Right to Drive

The eService aimed to verify a driver's right to drive is based on the Central Register of Drivers data, which is part of CEPiK. As part of the service, one can get information on the issued driving licence, the categories included in the document and the status of the driving license after providing three data on the website (name of the holder, surname of the holder and series number of the driving license as indicated under the barcode).



Notification of the Sale or Purchase of a Car

An eService enables the previous owner (the seller) of a vehicle to notify the sale of the car and the new owner (the buyer) to notify the purchase of the car to the Registration Authority online after authentication with the Trusted Profile.



Safe Bus

An eService enables to check the basic data of a bus, such as validity date of the technical inspection and insurance capacity, after providing the registration number on the website. It has been developed for safety purposes (for instance, it can be used by parents whose children travel by bus during holidays).



Check your Vehicle

The Check your Vehicle eService is targeted to owners, co-owners and persons possessing vehicles, and allows to check information about their vehicles. The service provides data on registration, details on the vehicle and vehicle markings (such as brand, model, year of manufacture and homologation), data on the technical inspection of the vehicle (including odometer reading during testing), data on engine capacity and power, information on the type of fuel, and the validity dates of the insurance policy and technical inspection. Information is available after authentication of the data subject with the Trusted Profile.



Act on the Protection of Certain Services Provided by Electronic Means Based on, or Consisting of, Conditional Access

Adopted on 5 July 2002, the Act on the Protection of Certain Services Provided by Electronic Means Based on, or Consisting of, Conditional Access implemented Directive 98/84/EC on the legal protection of services based on, or consisting of, conditional access.



Electronic Court Payments

The Electronic Court Payments is a system that allows users to pay court fees electronically. Thanks to the automation of the process, fees can be easily allocated to individual court cases.



Payment Services Act

The Payment Services Act, passed on 19 August 2011, implemented Directive 2007/64/EC of the European Parliament and of the Council of 13 November 2007 on payment services in the internal market (the so-called PSD1 Directive). The law defines the rules for the provision of payment services, and the issuance and redemption of electronic money, as well as the basic rules for the functioning of the market for domestic payment transactions using payment cards. The law also contains provisions implementing Directive (EU) 2015/2366 of the European Parliament and of the Council of 25 November 2015 on payment services in the internal market (the so-called PSD2 Directive), which was implemented into the Polish legal order through the Act of 10 May 2018 amending the Payment Services Act and Certain Other Acts.



Adopted on 12 September 2002, the Act on Electronic Payment Instruments implemented Directive 2000/46/EC on the taking up, pursuit of and prudential supervision of the business of electronic money institutions. The act defines an electronic payment instrument, enables its holder to perform operations by means of an electronic device and enables the electronic identification of the holder, which is required in order to perform an operation.



Construction Law

On 10 August 2022, the Act of 7 July 2022 amending the Construction Law and Certain Other Acts entered into force (in principle). Its goal is to accelerate and further digitise the investment and construction process. The act regulates the functioning of the government application for the submission of construction process applications. Currently, applications are submitted as an electronic document via this portal.

Furthermore, the provisions on the Electronic Central Register of Persons Holding Building Licenses (e-CRUB System) entered into force on 1 August 2022, while the regulations introducing the Digital Book of Building Objects (c-KOB System) and the Electronic Construction Journal System (EDB System), replacing these documents in paper form, entered into force on 1 and 27 January 2023, respectively.

Currently, work is underway on another amendment to the Construction Law. Based on the draft published on 3 October 2022, it provides for, among others, the acceleration of the existing changes, and the complete digitalisation of the investment and construction process (submitting applications and notifications, setting up a building logbook, issuing a construction log, drawing up a construction project, etc.). To that end, the Construction Design Database and the System for Handling Administrative Proceedings in the Construction Industry will be created.

Digital Public Services for Businesses



Portal for Entrepreneurs

Biznes.gov.pl is an information and service hub for entrepreneurs, which for years has been offering users a wide range of public administration eServices as well as a comprehensive information base on the rights and obligations related to running a business. It is a service dedicated to people planning and conducting economic activity whose aim is to help in dealing with issues connected therewith by electronic means in a way that is easy and intuitive, and to simplify the formalities required for the establishment and conduct of a company.

To that end, the portal provides descriptions of the official services and forms for entrepreneurs, and brings together a number of services and functions, not only for entrepreneurs but also for the public administration. Overall, it offers access to nearly 400 online services (125 cross-border) and over 1 000 procedure descriptions. All information and eServices are available in Polish and English, and since 2023 in Ukrainian too.

One of the key modules on Biznes.gov.pl is the Entrepreneur Account, established in 2021. It stores and presents company data, and allows for effective use of online services by entrepreneurs and company representatives. In the future, it is planned to integrate an eDelivery mailbox and other services for enterprises, making it a place of communication between the company and the administration.

Another important functionality is the Help Centre for Entrepreneurs, which is an information point on conducting business for entrepreneurs and the administration. The Help Centre helps users of the Central Register and Information on Economic Activity Platform, and Biznes.gov.pl visitors answer questions through various communication channels, i.e. telephone, live chat, virtual official (automatically) or contact form. The tool is adapted for deaf people.

The results of the Biznes.gov.pl portal are the following:

- 3.3 million established business activities (+99 200 y/y);
- over 2.4 million accounts of entrepreneurs and almost 4 200 accounts of officials (+400 000 y/y);
- 13.0 million page views per month on average (+4.8% y/y; 1.3% in English); and
- 2.0 million eServices completed per year.



Act on Providing Services by Electronic Means

Adopted on 18 July 2002, the Act on Providing Services by Electronic Means entered into force on 10 March 2003. It transposed into Polish law the EU provisions on certain legal aspects of information society services, in particular electronic commerce in the internal market (eCommerce Directive). The act sets the obligations and exclusion rules of responsibility of the

providers of eServices, as well as the protection of personal data of natural persons using eServices. It also addresses the issue of spamming by adopting the opt-in principle. The act was amended a few times, most notably in 2019.

Public Procurement



eProcurement Project 2020-2026

In the years 2020–2023, the Public Procurement Office, in partnership with the Ministry of Digital Affairs, implemented the eProcurement Project in different phases.

In October 2021, a new service was launched enabling the submission of tenders, applications and design contest projects, meeting the needs and expectations of stakeholders of the electronic public procurement process in Poland. The new service provides a new, fully electronic channel for the exchange of correspondence between public administration, citizens and entrepreneurs. In October 2022, the eProcurement Platform was accepted and a set of services provided as part of the implementation of the project was thus made available.



Act on Electronic Invoicing in Public Procurement

Public institutions must be prepared to receive invoices in the form of electronic documents with prescribed structures. The new regulations aim to develop the so-called digital economy, limiting the use of paper, as well as saving time and money for entrepreneurs and public institutions. The changes resulted from EU legislation and were part of the implementation of the government programme 'From paper to digital Poland'.

The Act of 9 November 2018 on Electronic Invoicing in Public Procurement, Concessions for Construction Works or Services and Public-Private Partnerships was introduced in November 2018 to transpose the eInvoicing Directive (2014/55/EU). It has been in force since April 2019.

Pursuant to the act, the free eInvoicing platform PEF was launched based on the Peppol network. KSeF, a voluntary system enabling the handling of invoices both in the B2B and B2G areas, was also launched in 2022. The tools provided by PEF (covering the transposed provisions of Directive 2014/55/EU) and KSeF (using the national standard) are to be eventually integrated.

Work to make KSeF mandatory from 1 July 2024 was completed. However, on 19 January 2024 the Minister of Finance informed the public that the National eInvoicing System would not be implemented by the original deadline. The effective date of application of the obligation to use KSeF was made dependent on the results of an external IT audit to obtain an analysis of the project's implemented services. When deciding to postpone the KSeF implementation date, the Ministry of Finance considered the opinions of entrepreneurs. Ensuring stability and predictability in doing business in Poland, including the successful uploading of taxpayers' invoices to the system, is a priority for the Ministry of Finance. Therefore, it will make every effort to ensure that legislative changes and the implementing acts are completed as quickly as possible. In any case, entrepreneurs will be given adequate time to familiarise themselves with the changes and implement them.



Law on Public Procurement

Poland's current public procurement system is based on the Law on Public Procurement adopted on 29 January 2004, as subsequently amended. The responsible body for such matters is the President of the Public Procurement Office, assisted in his/her work by the Public Procurement Office. Entities obliged to follow the Law on Public Procurement include different types of public finance units. They are obliged to award contracts according to the rules of fair competition and equal treatment of economic operators, as well as impartiality and objectivity of those preparing and conducting the procedures specified in the Law on Public Procurement.

The Law on Public Procurement entered into force in March 2004. It enabled the development of eProcurement systems for Polish public administrations, the use of advanced eSignatures in the submission of tenders and the use of electronic auctions for certain contracts. In April 2006, the Law on Public Procurement was largely amended in order to implement the provisions of the EU Directives on public procurement (2004/17/EC and 2004/18/EC), including those relating to electronic auctions and the Dynamic Purchasing System. This amended version placed electronic communications between the awarding entity and the economic operator on the same level as written or fax communications, regardless of the procurement procedure in question. Furthermore, it defined cases where transferred data must be supplied with a qualified eSignature. In 2017, the Law on Public Procurement was amended again to include the changes introduced by the Act on Trust Services and Electronic Identification of 5 September 2016.



On 1 January 2021, a new Law on Public Procurement came into force. Following the most recent EU Directives on public procurement (2014/24/EU and 2014/25/EU), this law provides that all public procurement procedures must be electronic. This obligation applies to all proceedings, regardless of their value. The rules of the new Public Procurement Law consider the currently applicable solutions for electronic communications. The new solution allows to submit a bid bond in electronic form.



Public Procurement Office Portal

Poland's Public Procurement Office plays a central role in policymaking and in the coordination of the entire domestic public procurement system. The launch of the Public Procurement Office Portal (PPO Portal) managed by the Public Procurement Office has been essential for the functioning of public procurement in Poland. The PPO Portal also contains information and tools aimed at developing the eProcurement system.



State Purchasing Policy Internet Platform

Article 21 of the Law on Public Procurement stipulates the obligation to develop a State Purchasing Policy every four years as a medium-term strategy document. The first State Purchasing Policy was adopted by the Council of Ministers on 11 January 2022.

As part of the implementation of the State Purchasing Policy, the Council of Ministers required the Minister of the Economy to implement a number of measures detailed in the body of the policy. In particular, the Minister of the Economy is tasked with building an online platform for participants in the public procurement market. The platform will (i) collect materials, guidelines, good practices and knowledge in the field of public procurement, developed as part of the implementation of the State Purchasing Policy; (ii) enable practitioners to share their knowledge and experience in public procurement; (iii) make available training courses in eLearning form covering the most important elements of the public procurement system; and (iv) provide opportunities for audit bodies to exchange information on the results of the procurement audits carried out.

Digital Inclusion and Digital Skills



Digital Competence Development Programme

The Minister of Digital Affairs prepared the Digital Competence Development Programme, which was adopted by the Council of Ministers on 21 February 2023 as part of the reforms defined in the framework of the Polish Recovery and Resilience Plan. The Digital Competence Development Programme is a comprehensive and multiannual document taking stock of the status of digital competences in Poland, and containing activities planned in this area and addressed to specific groups (pre-school children, school students, university students, teachers and educators, digital technology users, persons taking their first steps in the digital world, employees, managers, entrepreneurs, public sector employees and ICT specialists). An established and proven mechanism of coordination and monitoring of activities will be applied at the government level, supporting the development of digital competences based on a regularly updated analysis of social needs, and including the latest technology and economic trends. The projects planned for the implementation of the programme by 2030 fall into five priorities:

- 1. Developing digital education;
- 2. Providing everyone with the opportunity to develop digital competences;
- 3. Supporting the digital competences of employees of various sectors;
- 4. Developing advanced digital competences; and
- 5. Strengthening the management of the development of digital competences.

The implementation of the Digital Competence Development Programme is expected to lead to the following results by 2030: (i) 80% of Polish citizens possessing at least basic digital skills; (ii) 40% of Polish citizens possessing above-basic digital skills; (iii) ICT specialists accounting for 6% of total workers; and (iv) women accounting for 29% of ICT specialists.



Act on the Accessibility of the Websites and Mobile Applications of Public Sector Bodies

The Act on the Accessibility of the Websites and Mobile Applications of Public Sector Bodies, setting rules on digital accessibility for persons with disabilities, fully implemented Directive 2016/2102 of the European Parliament and of the Council of 26 October 2016 on the accessibility of the

websites and mobile applications of public sector bodies. The act also specifies how to lodge a request or complaint in case a website, a mobile application or elements thereof do not comply with the requirements of the Act on Web Accessibility. It also explains how to monitor the accessibility of websites and mobile applications, and entrusts the Minister of Digital Affairs with supporting public sector bodies in ensuring the accessibility of their websites and mobile applications.



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5. Trust and Cybersecurity

eID and Trust Services

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Act on Trust Services and Electronic Identification

The Act on Trust Services and Electronic Identification was adopted on 5 September 2016 pursuant to Regulation (EU) No. 910/2014 of the European Parliament and of the Council of 23 July 2014 on electronic identification and trust services for electronic transactions in the internal market (eIDAS Regulation). It was then amended in 2018, 2019, 2020 and 2021.

The 2018 amendment establishes the availability of eServices in Poland through a national node, which is an organisational and technical solution integrating at a single point all ICT systems in which public online services are made available, with various eID schemes (provided by public or private entities). Users who use eID means issued in eID schemes connected to the national eID node can authenticate in any public online service.



Polish National Electronic Identification Scheme

Poland aligned its national legal system with the eIDAS Regulation through the adoption of the Act on Trust Services and Electronic Identification, establishing the Polish national eID scheme. Its purpose is to allow Polish citizens, companies and other entities to identify themselves online to access public eServices using any eID means connected to the national eID node. This was achieved by integrating eID schemes in the national operations to create a single, standardised access point to eID services.

As of now, over 500 eID means are available under two eID schemes connected to the national node, i.e. a public scheme provided by the Ministry of Digital Affairs and MojeID, a private scheme provided by Krajowa Izba Rozliczeniowa S.A. The public scheme comprises (i) a Trusted Profile, i.e. an eID means based on an immaterial unit containing personal identification data; (ii) a Personal Profile, i.e. an eID means based on the national ID card; and (iii) an mObywatel Profile, i.e. a new, mobile-based eID means (starting from July 2023). Notably, the first two eID means were notified under the eIDAS Regulation in April 2023. The MojeID scheme comprises private eID means issued by 528 banks.



Act on Identity Cards

The Act on Identity Cards establishes the procedure for issuing identity cards and the rules determining the Identity Card Register (an element of the System of State Registers). It identifies the data which can be processed as well as the rules for exchanging and verifying data, and describes how data from the Register can be made available or verified via eServices. The act also contains information on electronic layers and certificates on identity cards. Furthermore, it enables some actions via eServices (available after authentication):

- Applying for identity cards;
- Suspending and resuming certificates in the electronic layer (in case of temporary loss);
- Reporting loss or damage of the identity card (when the holder reports loss of his/her own document, it is registered automatically);
- Verifying identity card validity;
- Reporting unauthorised use of personal data;
- Verifying if the identity card is ready to be collected; and
- Accessing the registered holder's data with the possibility of getting a certificate with the data.

In 2019, the amendment to the Act on Identity Cards introduced an electronic identity card, a new secure tool enabling eID, and an advanced eSignature called Personal Signature. Advanced eSignatures have to be recognised by public bodies, not only administrative bodies. In a private sector relation, e.g. between client and business, they are recognised if all parties agree. If a user wishes to use the ID card, he/she may include a qualified eSignature certificate from a trust service provider chosen by the holder. Moreover, the International Civil Aviation Organisation (ICAO) application was also implemented in the identity card.

In 2021, an additional amendment to the Act on Identity Cards came into force, introducing an eID card containing a facial image of the holder of the card and two fingerprints in interoperable digital formats.

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Trust Services

The Act on Trust Services and Electronic Identification established the *Narodowe Centrum Certyfikacji* (NCCert). It is a public centre provided by the Polish National Bank issuing certificates to qualified trust service providers for the verification of advanced eSignatures or eSeals as referred to in Regulation (EU) No. 910/2014, as well as certificates for the verification of other trust services provided by qualified trust service providers. Apart from qualified eSignatures, two kinds of eSignatures shall have the equivalent legal effect of a handwritten signature for public entities: the 'personal signature', based on a certificate contained in an electronic chip of the Polish national eID card, and the 'trusted signature', i.e. a specific signature including a person's identification data taken from an eID means which is issued under a public eID scheme.

Assistance Act

In connection with the war in Ukraine, Poland has enacted an Assistance Act (Act on Assistance to Citizens of Ukraine in Connection with the Armed Conflict on the Territory of that State). In line with the Assistance Act, Ukrainian citizens can obtain a PESEL number and a Trusted Profile with a simplified procedure. That way, refugees will have access to the digital services of the public administration in Poland.

Trusted Profile

The Trusted Profile is a public eID means based on an immaterial unit containing personal identification data. It is issued in a special online account provided by the Ministry of Digital Affairs. This solution can also be used to submit a free online signature in a public service called 'trusted signature'. This is a specific signature which includes a person's identification data taken from an eID means which is issued under the public eID scheme. The authenticity and integrity of this signature are ensured by the Ministry of Digital Affairs, which seals signed data using an advanced eSeal based on a qualified certificate. The Trusted Profile can be authenticated on a dedicated website in the gov.pl domain. In 2022, following the armed conflict on Ukrainian territory, the possibility was launched of issuing a Trusted Profile in the process of assigning a PESEL number to Ukrainian citizens.

In 2023, over 2.6 million Trusted Profiles were created and the total number of users reached over 13.8 million.



eIDAS Node

The Polish eIDAS node is connected to the national node and is technically ready to enable the cross-border authentication of a person who has an eID means issued under an eID scheme that has been notified to the European Commission. Since their notification, Polish citizens have been able to use two public eID means – the Trusted Profile and the Personal Profile – in eServices provided by other Member States. Foreign nationals whose eIDAS node is integrated with the Polish can now use their notified national eID in selected cross-border Polish eServices.



Qualified Trust Service Providers under Polish Jurisdiction

Seven qualified trust service providers are active at national level in Poland: Asseco Data Systems S.A., Enigma Systemy Ochrony Informacji Sp. z o.o., Eurocert Sp. z o.o., Krajowa Izba Rozliczeniowa S.A., Polska Wytwórnia Papierów Wartościowych S.A., Poczta Polska S.A. and KFJ Inwestycje sp z o.o. The first five offer qualified eSignatures, qualified eSeals and qualified timestamps according to the eIDAS Regulation. Two providers offers qualified validation of signatures and seals, three others issue qualified website authentication certificates and three are currently entitled to provide qualified electronic registered delivery services (Poczta Polska, KFJ Inwestycje and Asseco Data Systems). Additionally, Asseco Data Systems offers qualified preservation services for qualified eSignatures.

Non-qualified trust services are also available in Poland (e.g. advanced eSignatures and eDelivery).



ID Card with Electronic Layer

The eID card is a secure tool containing certificates enabling electronic identification (an eID means called Personal Profile) and the creation of an advanced eSignature (called Personal Signature). It may also contain a qualified eSignature from a trust service provider (chosen by the holder). Moreover, the ICAO application is also implemented in the ID card.

From March 2019 to December 2022, over 10 million eID cards were issued, and more than 3.6 million people activated the electronic layer in the cards, and can now use identification and authentication certificates and personal signatures.



National Electronic Identification Node

The National Electronic Identification Node provides convenient access to public portals and eServices. It is an organisational and technical solution integrating IT systems at a single point in which public online services are made available, with various eID schemes (provided by public or private entities). Users using eID means issued in eID schemes connected to the National Electronic Identification Node can authenticate in any public online services and starting from July 2023 also in a growing number of private online services.

In 2023, 575 public service providers were connected to the node.



Video Chat as a Form of Identity Authentication

The first central eService in the form of a video chat was implemented in April 2020. During the COVID-19 pandemic, this eService allowed people to apply for a Temporary Trusted Profile (TPZ), i.e. a key to digital public administration services in Poland lasting three months, and set up an online appointment with an official without leaving home.

Due to the popularity of this eService and to meet the expectations of citizens, in 2021 identity authentication by means of video verification became one of the methods to also confirm a traditional Trusted Profile (VPZ), which is valid for three years. This was a significant step in the development of the Polish system of identity authentication. During the audiovisual conversation, the official verifies the applicant's identity document and accepts statements related to the application. The recording of the video verification, which lasts for several minutes, constitutes a proof of the establishment of a VPZ.



Commercial Certification Authorities Certificates

Qualified and unqualified certification authorities (CAs) issue electronic identifiers to individual persons. These identifiers are usually Integrated Circuit Cards (ICC) with crypto-controller, private cryptographic keys and public key certificates installed inside, or software-based tokens. In the case of eGovernment systems and applications, the most frequently used identifiers are the ones with qualified public key certificates. eSignatures with unqualified certificates are rarely used, and their use is mainly limited to message authentication, and authentication of servers, workstations and other IT equipment.



Commercial eSignatures

The National Certification Centre performs the role of the root certification authority for the infrastructure of qualified eSignatures in Poland. This responsibility was delegated to the National Bank of Poland by the Ministry of Digital Affairs in accordance with the Act on Trust Services and Electronic Identification of 5 September 2016.

Cybersecurity



Cybersecurity Strategy

In the course of 2018, Poland created a solid base for strengthening cybersecurity within the country. Then, in October 2019, the Council of Ministers adopted, by means of a resolution, the Cybersecurity Strategy of the Republic of Poland for 2019-2024. The State aims to increase the level of resilience to cyberthreats and protection of information in the public, military and private sectors, while promoting knowledge and good practices to enable citizens to protect information better.

The strategy is in line with the obligations laid down in the Network and Information Security (NIS) Directive with regard to the adoption of the national cybersecurity strategies by Member States. It also establishes an effective public-private partnership (Programme for Cooperation in Cybersecurity) with global and national technological companies that aims to strengthen cooperation in areas such as information sharing on incidents or vulnerabilities, education, cyberhygiene, etc.

The strategy defines five specific objectives that should be fulfilled by the government:

Developing the national cybersecurity system (including the adoption of the provisions of the Cybersecurity Act into the Polish legal system);



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- Increasing the level of resilience of information systems of the public administration and private sector, and achieving the capacity to effectively prevent and respond to incidents;
- Increasing the national capacity in the area of cybersecurity technology;
- Raising public awareness and competences in the area of cybersecurity; and
- Ensuring the Republic of Poland has a strong international position in the area of cybersecurity.

The objectives are executed through a dedicated action plan that was consulted within the government in 2020. The action plan identifies mechanisms and measures to strengthen Poland's cybersecurity capabilities by 2024. However, the pandemic showed that there is a need to rethink some previously proposed actions, such as addressing an increasing number of incidents inter alia in the healthcare sector. Moreover, the action plan needs to be fully in line with the actions to be implemented as part of the national Recovery and Resilience Plan

In the fourth quarter of 2023, activities were initiated to develop a new draft of the Cybersecurity Strategy of the Republic of Poland for 2025–2029. The document will respond to current challenges and threats occurring in the area of cybersecurity (thus taking into account the experience of the COVID-19 pandemic and the ongoing war in Ukraine), and cover planned changes related to the amendment of the Law on the National Cybersecurity System or the implementation of the NIS2 Directive. Moreover, the document's scope will include activities aimed at expanding the technological independence of the Republic of Poland (supply chains, research and development, software, hardware, semiconductors, development of new technologies such as AI and quants, etc.), including the area of information security and strengthening the development aspect of innovative start-ups.

Act on the National Cybersecurity System

The adoption of the Act on the National Cybersecurity System, on 5 July 2018, transposed Directive (EU) 2016/1148 concerning measures for a high common level of security of network and information systems across the Union (NIS Directive) into the Polish legal system. This legislation defines the national cybersecurity system, as well as the tasks and responsibilities of the entities in the system. The purpose of the national cybersecurity system is to ensure cybersecurity at national level, including the uninterrupted provision of essential services and digital services, by achieving an appropriate level of security for the information systems used to provide these services and by providing for incident handling. The act also provides for:

- The scope of the Polish National Cybersecurity Strategy;
- The establishment of a single point of contact for cybersecurity run by the Minister of Digital Affairs:
- The establishment of three Computer Security Incident Response Teams (CSIRTs) at national level and seven competent authorities responsible for cybersecurity within essential sectors in Poland (listed in the annex to the act). Based on the leading role of the three CSIRTs at national level (CSIRT MON, CSIRT NASK and CSIRT GOV), the act also creates a coherent incident response system, with a certain and clear division of responsibilities;
- The institution of the Government Plenipotentiary for Cybersecurity, responsible for the coordination of activities and the implementation of the government policy in the field of cybersecurity; and
- The addition of the public administration to the system with regard to incident handling and reporting.

The government decided to maintain and develop its decentralised approach towards the governance structure of its cybersecurity system. There is a clear division of responsibilities and capabilities between all the involved institutions established pursuant to the act. That way, the act allows the creation of an efficient, comprehensive system enabling stakeholders to detect, prevent and mitigate the impact of incidents that affect Polish national interests, while contributing to crucial societal and economic activities.

In this context, Poland has almost completed the identification and designation of operators of essential services. Also, a legal act (secondary legislation) – an Ordinance of the Minister of Digital Affairs on Organisational and Technical Conditions for Entities Providing Cybersecurity Services and the Internal Organisational Structures of Operators of Essential Services Responsible for Cybersecurity – was amended due to market needs.

In 2020, a process of amendment of the act was launched. The new amendment came into force during the third quarter of 2023. Based on a detailed evaluation of the functioning of the Polish cybersecurity system, new measures will be introduced, inter alia (i) the information sharing mechanism will be updated by establishing Information Sharing and Analysis Centres (ISACs) within the system; and (ii) the sectoral CSIRTs will be mandatory within the NIS Directive sectors.

Moreover, the new law will implement measures provided for by the 5G Toolbox and ensure full alignment with the provisions of the Cybersecurity Act.

In connection with the entry into force of the NIS2 Directive, in the first quarter of 2024 the Ministry of Digital Affairs took steps to implement the directive into Polish law. An analysis has been carried out on the regulatory changes that will be necessary to implement the Directive. Currently, solutions are being analysed that will ensure the most effective application of the Directive's provisions. With regard to the adopted solutions, working contacts have also been established with other public administration and EU bodies. Referral of the draft law for arrangements, public consultations and opinions were perfomed during March 2024. The draft will be published on https://legislacja.rcl.gov.pl/ and the Public Information Bulletin of the Ministry of Digital Affairs.

Act on the Protection of Personal Data

The initial Act on the Protection of Personal Data was adopted on 29 August 1997 and later amended. It transposed the rules established by Directive 95/46/EC on the protection of individuals with regard to the processing of personal data.

The process of making the Polish legal system fully compliant with Regulation (EU) 2016/679 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 and on the free movement of such data and repealing Directive 95/46/EC (General Data Protection Regulation) started in 2016 with widespread public consultations. The process was concluded with the adoption of the Act on the Protection of Personal Data of 10 May 2018, which came into force on 25 May 2018 replacing the act of 1997. The purpose of the new act is to ensure the application of the provisions of the GDPR. To make the Polish regulations fully compliant, the Minister of Digital Affairs proposed amendments to 162 Polish acts. The activities – involving close cooperation with all relevant institutions, business organisations, public administrations and NGOs – resulted in the Act of 27 February 2019 Amending Certain Acts Related to the Application of the General Data Protection Regulation.

The President of the Office for Personal Data Protection is in charge of enforcing legislation in this field. In case of a breach of the provisions on personal data protection, the President of the Office for Personal Data Protection is instructed to take legal measures *ex officio*. Under the GDPR, the President has both corrective and investigative powers, and can impose administrative fines under Article 83. He/she is also a supervisory authority taking part in the Cooperation and Consistency Mechanism under the GDPR.



6. Innovative Technologies

Artificial Intelligence

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Artificial Intelligence Policy of Poland

The Polish AI Development Policy was adopted by the Council of Ministers on 28 December 2020. The document defines actions and goals for Poland in the short (until 2023), medium (until 2027) and long term (after 2027). The policy covers six areas, each with a corresponding goal:

- AI and society: carrying out activities to foster awareness of digital competences;
- AI and innovative companies: supporting Polish AI enterprises, and fostering cooperation between start-ups and the government;
- AI and science: supporting the Polish scientific and research community in designing interdisciplinary challenges or solutions in the field of AI;
- AI and education: carrying out activities from primary education to the level of universities;
- AI and international cooperation: implementing activities supporting Polish businesses in the field of AI and technology development in the international arena; and
- AI and the public sector: supporting the public sector in the implementation of AI programmes.

The Ministries will prepare annual action plans for AI implementation. They will be regularly assessed by experts and special teams will be set up to advise public authorities on how to implement this technology as effectively as possible.

As part of the AI Development Policy, Poland is also establishing an ecosystem for AI governance which involves nominating the Task Force for Enforcement of the AI Policy, linked to the Ministry of Digital Affairs and headed by the Prime Minister's High Representative for Government Technology. The Task Force, representing all Ministries and relevant national agencies, will ensure effective coordination of the AI policy implementation process in strategic sectors. Its task is also to prepare the AI OP.

In 2024, i.e. the first short-term implementation period, Poland plans to review the implementation of its AI Development Policy and modify it, if necessary, to fully comply with the latest standards in the field of trustworthy AI. The constant updating of the AI Development Policy is particularly important due to the pace of technological changes, including, among others, the development of generative AI.

The AI Programme, launched in July 2019 and placed now under the responsibility of the Ministry of Digital Affairs, is comprised of three main pillars: education, strategy and technical projects. Projects developed under the Programme aim to provide both educational and technical solutions facilitating the implementation of AI in all sectors of the economy, with particular focus on the use of AI in public administration to improve the quality of services offered to citizens and businesses.



Artificial Intelligence European Digital Innovation Hub

In June 2022, the European Commission, in cooperation with Poland, established the European Digital Innovation Hub (EDIH) HPC4Poland, specialised in the dissemination of AI among Polish small- and medium-sized enterprises (SMEs). The vision of the EDIH HPC4Poland is to increase the competitiveness and innovation of Polish manufacturing companies and public organisations by raising awareness and availability of advanced digital tools and services based on secure, reliable and efficient high-performance computing (HPC), including cloud simulation (Platform as a Service or PaaS), sensor systems (IoT), augmented/virtual/mixed reality (AR/VR/MR), collaborative robots, automated guided vehicles (AGVs), autonomous mobile robots (AMRs), incremental technologies, AI analytics and big data.



AI4Youth Pilot Project

Between May 2021 and November 2022, the Ministry of Economic Development and Technology carried out a pilot project called AI4Youth (i.e. AI for young people). The project was implemented based on a license of Intel at the request of the Ministry by the Poznań Supercomputing and Networking Centre (PSNC) and SDA Spółka z o.o. The aim of the pilot project was to elaborate and test solutions to develop AI competences among young people in public





secondary schools as well as to promote AI-based entrepreneurship in high schools. The pilot project was implemented nationwide, with nearly 100 secondary schools (both general, IT and technical), over 120 teachers and about 2 000 students participating. As it aroused great interest among schools, teachers and students, it is expected to be scaled up in the coming years. Arousing interest among young people in prospective technological areas gives an opportunity to familiarise them with the competences of the future which the Polish labour market needs and which can be widely applied in many industries.

Artificial Intelligence Act

Poland, as an EU Member State, was involved in the negotiations and the trialogue process to approve the Artificial Intelligence Act. This act became directly applicable in Polish national law and jurisdiction. Consequently, no local legislative initiative in the domain of AI was needed, except for establishing a local authority exclusively entitled to enforce AI matters locally, as outlined in the final text of the Artificial Intelligence Act. In parallel, Poland is engaged in a negotiation process in the Council of Europe for approving the new Convention on Artificial Intelligence, Human Rights, Democracy and Rule of Law. After ratification of the Convention, local laws could need to be completed with specific measures to ensure that the Convention is properly implemented and enforced.

In addition, Poland is involved in the work of the OECD Expert Group on AI (AIGO) aimed at internationally coordinate AI policy, as well as in the work to implement the Recommendations of UNESCO on the Ethics of AI. The latter establish non-binding legal instruments, but binding provisions in local national laws could turn out to be necessary to ensure their effectiveness. Finally, Poland expects the upcoming results of the work of other international organisations (such as the World Intellectual Property Organisation in the domain of intellectual property for AI, the United Nations Commission on International Trade Law in the domain of data transactions for AI and the World Trade Organisation in the domain of digital trade for codes of AI). This input will be used by experts to conclude the drafting proposal for the negotiation process of Member States in these international organisations.

Artificial Intelligence Portal

The Ministry of Digital Affairs has created the Artificial Intelligence Portal to spread and aggregate knowledge in the field of AI. The goal was to build a site that will support entrepreneurs in searching for information about existing AI solutions, applications or training programmes with the aim to motivate more stakeholder groups to implement applications based on AI. The website is a collection and creation of a set of good practices that will support and facilitate the central administration and entrepreneurs in implementing solutions based on AI, as well as their dissemination in these groups. The portal also suggests how AI can be used while ensuring legal compliance and security. The website is being expanded constantly based on information provided by entrepreneurs, the public administration and the scientific sector.

Distributed Ledger Technologies

☆ Blockchain

Poland is a founder of the European Blockchain Partnership (EBP) and participates in the development of EBSI, a multi-country EU initiative aiming at deploying an energy-efficient, privacy-enhanced and cybersecure blockchain-based infrastructure for providing EU-wide use cases for cross-border public services, usable by national and local authorities, and at a later stage by private businesses. The node of the EBSI network is developed in NASK PIB.

Poland is also an active participant in the EBP Task Force on the creation of the EUROPEUM EDIC multi-country project, whose framework was created by the Digital Decade Policy Programme 2030. EUROPEUM will take over the tasks and resources of EBSI in 2024, and will enable the development of cross-border projects allowing the verification of the authenticity of documents in various areas of the public sector, increasing user convenience and anti-counterfeiting.

The large-scale European projects DC4EU and VECTOR, in which NASK PIB participates as part of international consortiums awarded grants under DEP, serve the development of blockchain applications for electronic identification in the university sector for cross-border recognition of diplomas, as well as verifiable credentials and documents in the social security sector. The projects are implemented in cooperation with the National Information Processing Institute, the National Research Institute (OPI), selected universities and social security authorities of the National Health Fund.



The Working Group for DLT/Blockchain that works under the auspices of the Minister of Digtal Affairs serves as a platform for cross-sectoral cooperation, where different points of view, interests, as well as legal, regulatory, organisational and cultural conditions can be explored and discussed. It has already become an opportunity to expand the debate about the application of blockchain technology in the sector of public services. Examples of joint work by the fintech blockchain market stakeholders are SIRA and the SIRA II standardisation platforms for a mobile wallet application enabling shareholders of non-public companies to manage shares registered in various banks.

Big Data

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

Cloud & Edge Computing

Cloud Platforms and Solutions

The dissemination of the cloud computing services model in the public administration is one of the main goals of the Common State IT Infrastructure (WIIP) Programme, which started in 2019. The programme has been divided in separate actions and projects focused on:

- Consolidation of the organisational and legal frameworks, and development of best practices in the use of cloud computing by public entities;
- Creation of cloud computing competences in the public administration;
- Simplification of the implementation processes of eServices and improved availability of the currently offered ones;
- Further development of the public registers;
- Modernisation of the governmental data centres; and
- Implementation of the Cloud Service Provision System (ZUCH) as a single access point for all cloud-related topics for the public administration in Poland.

The main products provided as a result of WIIP actions in 2022 are the preparation of the public cloud procurement model (developed by the central contracting authority), the implementation of the government cloud infrastructure and the testing of the new cloud services dedicated to the public administration. The Programme continued to be implemented in 2023 and 2024.

Internet-of-Things

Internet of Things

Since early 2023, the Working Group for the IoT (part of the Special Task Team for Breakthrough Technologies) has been working on a the SMART.PL project. It aims to inspire the development of the market for digital products and services using intelligent objects (devices) of the IoT, data and advanced algorithms, as well as the infrastructure related to these services. The draft document will be published later in 2024 and will include recommendations for actions the government should undertake to support the modernisation of industries of significant importance for sustainable growth, such as construction, energy, health, smart communities and agriculture.



Internet Platform for Advisory and Decision-making Support for Integrated Protection of Plants

An Internet Platform for Advisory and Decision-making Support for Integrated Protection of Plants was created in 2019 under the OP Digital Poland 2014–2020 as one of the main enablers for the Industrial Internet of Thigs (IIOT) or – more widely – the Industry 4.0.

H2020 DEMETER Project

The H2020 DEMETER project is a large-scale deployment of farmer-driven, interoperable smart farming IoT-based platforms, delivered through a series of 20 pilots across 18 countries (including 15 EU countries). With the participation of 60 partners, DEMETER adopts a multi-actor approach across the value chain (demand and supply), with 25 deployment sites, 6 000 farmers, and over 38 000 devices and sensors involved.

Quantum Computing



National Scientific Policy

In 2022, Poland adopted the document entitled 'National Scientific Policy' (*Polityka Naukowa Państwa*). It sets out the main priorities and directions for the development of science in Poland. This document highlights the importance of HPC and quantum computing, including the two fields among national priorities.



EuroHPC JU

Poland is one of the five locations chosen by the EuroHPC Joint Undertaking (JU) to host a new classical supercomputer with pre-exascale capabilities. Poland has earmarked EUR 11.2 million for this project. The mid-range supercomputer planned to be built in Poland will become part of the national PLGrid infrastructure, just like the currently fastest Polish supercomputer (Athena). The new machine is to be built by the end of 2024.



Quantum Computing Resources

In 2022, Poland decided to support a number of initiatives aiming at developing quantum computing resources:

- EuroQCS-PL A quantum computer will be built in Poland within four years. The project coordinator is the PSNC and the key partner is the Centre for Theoretical Physics. The latter brings together researchers from various fields that are essential for the development and application of quantum computations, including theoretical physics, astrophysics and natural sciences, classical and quantum field theory, quantum optics, quantum mechanics and quantum information theory;
- LUMI-Q A multinational consortium coordinated by Czechia aims to provide a European-wide quantum computing environment integrated with the EuroHPC infrastructure. The proposed concept allows the integration of the targeted EuroHPC quantum computer with multiple EuroHPC supercomputers, including KAROLINA in Czechia, LUMI in Finland and EHPCPL in Poland. The project is carried out as part of the EuroHPC JU. The Polish investment amounts to EUR 1 million.

Both projects concern quantum computers integrated in existing supercomputers. All in all, two out of the six quantum computers to be built by the EuroHPC JU will be located in or supported by Poland.



Quantum Technology Cluster

In May 2022, a significant number of national stakeholders joined to create a Quantum Technology Cluster (Klaster-Q). This organisation, consisting of 19 members, aims to enable consolidation and use of knowledge, competencies and resources at the disposal of private enterprises, scientific units, research and development units as well as institutions surrounding the high-tech sector. The Cluster includes private enterprises, universities and scientific institutes of the Polish Academy of Sciences.



Polish Supercomputers

Three Polish supercomputers are listed on the latest (November 2022) Top500 list of supercomputers with the highest computing power in the world:

- Athena, at the Academic Computer Centre CYFRONET (7 710 TFlops) ranking 113th;
- Altair, at the PSNC (5 880 TFlops) ranking 158th; and
- Ares, at the Academic Computer Centre CYFRONET (3 510 TFlops) ranking 323rd.



LUMI Supercomputer

Poland is a member of the Large Unified Modern Infrastructure (LUMI) consortium, hosting one of the pan-European pre-exascale supercomputers, located in the CSC's data centre in Kajaani (Finland). The supercomputer has been officially operational since June 2022. The initiative is part of the EuroHPC JU, which is pooling European resources to develop top-of-the-range exascale supercomputers for processing big data based on competitive European technology.



PRACE-LAB Project

The primary objective of the PRACE-LAB project is to increase the competitiveness of the scientific community and the economy on international markets, with particular emphasis on



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SMEs. The direct goal of the project is to build a widely available HPC infrastructure consisting of HPC servers, specialised processing units and flexible data management systems. The project also aims to provide scientific units and enterprises with services for research and development works and activities based on this commercial infrastructure.

PIONIER Network

The PIONIER Consortium was established in 2003 and includes the PIONIER fibre optic network, which is one of the most modern in the world and is evolving towards terabit bandwidths, offering services to support digital innovation. The PIONIER network is a key component of the science IT infrastructure in Poland and is part of the European Research Area (ERA). Since the beginning, PIONIER has been an active partner of scientific teams from many fields. It is also an important element of open science, developed in the EU as part of the European Open Science Cloud (EOSC) initiative.

Gigabit and Wireless High-speed Networks

National Broadband Plan

The National Broadband Plan (NBP) is the basic document defining the obligations of the government of the Republic of Poland in the field of providing citizens and the economy with access to modern, fast and secure electronic communication services. On 10 March 2020, the document was updated to respond to the challenges facing Poland until 2025 and to organise the activities necessary to meet these challenges - including financial, legislative and intervention measures. The most important activities planned on the basis of the updated NBP are discussed below.

Connectivity and Information Projects of the Minister of Digital Affairs

The Minister of Digital Affairs conducts numerous information activities supporting the development of the network in the country, including by publishing information material on charges for using a road lane in telecommunications investments as well as guides and brochures, such as 'Construction of telecommunications infrastructure in the road lane. A guide for road managers' and 'The Mega-bill and the reduction of costs of building broadband networks'. These publications concern issues related to the Act of 7 May 2010 on Supporting the Development of Telecommunications Services and Networks (the so-called Mega-bill), and the reduction of costs of building broadband networks. They were published on the website of the Ministry and widely distributed among local self-government units and telecommunications undertakings.

The activities of the Minister also include the popularisation of scientific knowledge on electromagnetic fields (EMFs) emissions. For example, the so-called 'White paper on EMFs in relation to public health concerns' has been published to tackle the growing tide of disinformation in that area. The Ministry also completed a project co-financed by the OP Digital Poland whose aim was to counteract disinformation in the wireless telecommunications environment and to build social acceptance for modern radiocommunication technologies. The project involved the preparation of dedicated training courses as well as information and educational materials for local governments, journalists and the general public. Broad education of selected social groups is the only effective method in the long term to combat systemic disinformation. This project also resulted in the publication of eleven scenarios of physics lessons explaining the basics of telecommunications to school-aged children.

¶ 5G in Poland

In 2022, Poland concluded the process of 700 MHz band refarming.

The process of awarding the band for 5G is planned for 2023/2024. On 19 December 2023 the process of awarding the 3400-3800 MHz band (C-band) was completed. That process was preceded by two rounds of public consultation on the auction documentation which took place from 20 December 2022 to 31 January 2023 (1st round) and from 6 April 2023 to 12 May 2023 (2nd round). The four winning operators received one 100 MHz block each and are obliged to meet both quantity and quality requirements. The former set out the minimum number of base transceiver stations (BTS) at 3800 MHz per operator within 48 months from the date of awarding of the band. The latter are related to the concept 'Quality of Service, Quality of Experience, Quality of Life' and refer to area coverage, bandwidth and ping time in relation to the whole country, households, State roads, and main railway lines and voivodeship (regional) roads. Within 60 months from the date of awarding of the band 90% of Poland shall be covered with 5G with

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bandwidth at 95 Mbps and ping time at 10 ms. Due to the lack of bilateral agreements with Ukraine and Russia, municipalities on the Eastern border strip of Poland are excluded from the commitments. Mobile network operators (MNOs) can implement the commitments using all frequency bands at their disposal.

At the same time, on 15 September 2023 the 3800-4200 MHz frequency band for terrestrial wireless broadband systems providing local-area (i.e. low/medium power) network connectivity (WBB LMP) was made available. The provision of this frequency band will allow to meet local needs (including those of local government units) for standalone private networks and networks providing fixed wireless access (FWA), including using 5G technology.

Finally, at the beginning of 2024, the Office of Electronic Communications (UKE) carried out a public consultation on the 26 GHz and 42 GHz bands to assess market demand for these bands.



On 30 August 2019, another amendment to the Act on Supporting the Development of Telecommunications Services and Networks, the so-called 'Mega-bill', was adopted by the Polish Parliament. This is primarily a legal tool for eliminating white spots in access to broadband internet, implementing even more effectively projects from axis I of the OP Digital Poland (initiative awarded in the context of the European Broadband Awards organised by the European Commission) or connecting schools to the Nationwide Education Network (OSE). Thanks to the introduction of statutory changes, it will be possible to increase the availability of broadband services for citizens, including high-performance ones, also in areas where it is currently not possible. This will be achieved thanks to improved profitability of investments in broadband networks through the implementation of cost reduction mechanisms.

On 15 September 2022, another amendment to the Mega-bill was adopted, making it possible to build the Information System on Access to Fixed Broadband Internet Services, also known as Internet.gov.pl or SIDUSIS. The system facilitates access to broadband internet services for consumers and enables providers of these services to adjust network expansion plans to the real needs of customers. It is a database that collects information about the availability of fixed-line internet services on the basis of notifications from customers and internet service providers. Thereby, anyone can check whether access to broadband internet is available at a given address. Internet.gov.pl also presents information about network expansion plans financed by private operators, and the National Recovery and Resilience Plan or the European Funds for Digital Development. Data on internet services is sourced from telecommunications operators, local government entities operating in the field of telecommunications and entities performing public utility tasks. The unique feature of the database is that data is updated on a regular basis. Entities with less than 50 000 address points in coverage submit data to the system once a month, while entities with more than 50 000 address points are required to do so every Friday. In contrast, all entities, regardless of the size, submit data on investment plans once a month. In addition to the possibility of checking the correctness of the data presented in the system, the user has the opportunity to request internet access and report vacancies. Internet.gov.pl was launched on 1 December 2022 for telecom operators and other entities, and has been available to all users, including citizens, since 1 January 2023. The system is very popular and has already recorded more than 20.5 million hits by more than 487 000 users. Around 55 000 Broadband requests were submitted. Internet.gov.pl is also a finalist of the prestigious European Broadband Awards 2023 in the 'Demand Generation and Connectivity Usage' category.

Connectivity-related Legislation

Several pieces of legislation related to connectivity and the deployment of broadband in Poland have been introduced since 2016, dealing with:

- Regulated rates of charges for the provision of technological channels Regulation of the Minister of Digital Affairs of 29 June 2016 on the Provision of a Technological Channel by Public Road Administrators (Journal of Laws of 2016, item 957);
- Effectiveness of the Telecommunications Information Point Regulation of the Minister of Digital Affairs of 31 July 2019 on Information on the Technical Infrastructure and Technological Channels, and on the Rates of Charges for the Occupation of a Road Lane (Journal of Laws of 2019, item 1618);
- Harmonisation of EMF limits Regulation of the Minister of Health of 17 December 2019 on the Permissible levels of Electromagnetic Fields in the Environment (Journal of Laws of 2019, item 2448);
- New EMF methodologies Regulation of the Minister of Climate of 17 February 2020 on Methods of Checking Compliance with Permissible Levels of Electromagnetic Fields in the Environment (Journal of Laws of 2020, item 258) as amended by the Regulation of the



Minister of Climate and Environment of 6 May 2022 amending the Regulation on Methods of Checking Compliance with Permissible Levels of Electromagnetic Fields in the Environment (Journal of Laws of 2022, item 1121); and

 The Broadband Fund – Regulation of the Minister of Digital Affairs of 13 April 2021 on the Detailed Conditions and Procedure for Granting Support from the Broadband Fund

Continuing on the adopted legislative path, the following legal acts were adopted in 2022:

- Regulation of the Minister of Digital Affairs of 29 March 2022 amending the Regulation on the Detailed Conditions and Procedure for Granting Support from the Broadband Fund;
- Regulation of the Minister of Digital Affairs of 19 December 2022 on the Inventory of Telecommunications Infrastructure and Services;
- Regulation of the Minister of Digital Affairs on Information on the Infrastructure of the Pipeline and Service Ducts and on the Rates of Charges for Occupying the Right-of-Way (signed on 8 March 2023 by the Minister and subsequently published);
- Regulation of the Minister of Digital Affairs on the Technical Conditions to be Met by Technological Channels and their Location.

In addition, the Polish government developed and submitted to the Parliament the following two bills: the Law on Electronic Communications and the Provisions introducing the Law on Electronic Communications. The work schedule envisages the completion of the governmental legislative process by June 2024, followed by parliamentary work in the third quarter of 2024.

Inventory of Telecommunications Infrastructure and Services

On 1 January 2023, the provisions of the Regulation on the Inventory of Telecommunications Infrastructure and Services entered into force. The inventory is public and is a source of reliable data on the coverage of telecommunications infrastructure and networks, available to all interested entities. It also provides information on the route of fibre-optic and other cable lines providing or enabling broadband internet access. The inventory allows for a significant improvement of the planning and construction of public telecommunications networks, including the rationalisation of their location by considering the route of existing networks. Entrepreneurs and local government units obtain information allowing more effective investment in the construction of telecommunications infrastructure. As a result, the availability of broadband internet access for end users increases, which in turn has a positive impact on the development of commercial and public services provided in electronic form and other IT applications in society. In addition, based on the information collected, the regulatory authority can identify areas lacking this infrastructure.

GovTech



GovTech Polska Programme

On 22 October 2019, the Council of Ministers adopted a resolution on the GovTech Polska Programme. Its main objective is to increase efficiency in implementing innovations in the public sector thanks to dialogue with both the public and private sector, and at international level. Three critical areas of action were identified:

- Developing innovative models to obtain information about needs and suggestions from citizens and within public institutions. The projects implemented under the Programme are to create mechanisms for dialogue with society;
- Co-financing or financing innovative projects improving cooperation with the public sector, with particular emphasis on solutions that enhance the interaction of citizens and entrepreneurs with public institutions; and
- Raising the competencies of the public sector regarding innovation and disseminating existing good practices in individual institutions, as well as supporting other institutions' current programmes through additional funding or substantive support.

Implemented by the GovTech Polska Programme Team, the Programme adopts a well-established methodology focused on a modular approach based on conducting pilot projects before scaling ideas. Thereby, the risk of failure is minimised and costs are optimised. The Programme provides co-financing for central and local public institutions, granting funds based on pre-established rules. It also supports international agreements and financing for international initiatives aligned with its objectives, fostering collaboration and innovation at both national and international level.

Others



Special Task Team for Breakthrough Technologies

The Special Task Team for Breakthrough Technologies was formed on 28 March 2022 by a decision of the chairman of the Committee of the Council of Ministers for Digitalisation (KRMC). The team is to develop and coordinate initiatives encouraging wide-spread deployment of emerging digital technologies both in public administrations and businesses.



Starlink Terminals for Ukraine

Since 2022, the Ministry of Digital Affairs has been supporting Ukraine in providing access to satellite communications using the Starlink system. In 2023, support was continued and further developed by providing subscriber terminals and enabling access to communications for a total of 24 710 terminals. Poland is the largest supplier of Starlink terminals to Ukraine in civil applications.



7. Digital Public Administration Governance



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

National

Ministry of Digital Affairs

In May 2023, after the reorganisation of the government, the Ministry of Digital Affairs was separated from the Chancellery of the Prime Minister. The Minister of Digital Affairs in Poland is Mr Krzysztof Gawkowski, who is also Deputy Prime Minister of the Republic of Poland. The main tasks of the Ministry of Digital Affairs are concentrated around three pillars: providing internet access, developing web content and services, and promoting digital skills.

The key departments within the Ministry of Digital Affairs are the following:

- Digital Transformation Department, whose tasks include building public digital services, maintaining and developing registers, records and systems as well as making data available from registers and improving data quality. In addition, the department is responsible for aspects related to digital identity;
- Digital Competence Development Centre, which pursues public policy in the area of digital skills and web accessibility, and coordinates all governmental activities in this field;
- Cybersecurity Department, which covers cybersecurity issues, including the development and implementation of strategic documents and legal acts in the field of cybersecurity, as well as national and international cooperation, and development of guidelines and standards for the implementation of appropriate measures to protect IT systems;
- Data Management Department, which is responsible for opening up PSI by creating legal bases for reuse of data held by public bodies and ensuring this data is accessible and usable, as well as maintaining and developing the dane.gov.pl portal, and conducting research and analyses on the data reuse and exchange market. It is also responsible for developing public policy in the field of personal data protection;
- Research and Innovation Department, which deals in particular with projects and activities (including shaping policy and public relations) related to the development and implementation of new technologies;
- Projects and Strategy Department, which is responsible for strategic matters and coordination of international policy in the field of digitalisation. In addition, the department deals with the State Information Architecture and its processes supervising the Architecture Repository;
- Telecommunications Department, which is responsible for issues related to legal regulations regarding the electronic communications market, including in the field of telecommunications, the development of telecommunications services and networks, and services provided electronically. It also coordinates issues relating to broadband network development in Poland; and
- International Cooperation Department, which is responsible for the implementation of tasks in the field of international cooperation in the area of digitisation, including the coordination of matters resulting from Poland's membership of the EU and other international organisations.

The Ministry of Digital Affairs is also the body responsible for interoperability activities. However, according to the national interoperability framework, each public institution, including the ones at self-government level, is accountable for assuring interoperability of its systems and infrastructure. Finally, the Ministry of Digital Affairs manages the key State registers that create a full system of State registers.

Committee of the Council of Ministers for Digitalisation

According to the current law, the Committee of the Council of Ministers for Digitalisation (KRMC), established in March 2007, acts as an advisory body to the Council of Ministers and the Prime Minister. Its role is to coordinate and facilitate the implementation of the key actions regarding



computerisation, and to ensure their compliance with the strategic direction of the State development. Its main task is to give opinions on the draft legal acts or projects related to computerisation to guarantee the interoperability, integrity and complementarity of the solutions to be implemented with the ones already in place or under preparation, as well as the compatibility of their architecture with the State Information Architecture.

Since 2016, the KRMC has been operating based a new approach providing tools for initiating, efficiently conducting and monitoring the implementation of IT projects in the following fields:

- Designing or modifying an IT system;
- Sharing data in electronic form for the purpose of using it to carry out public tasks; and
- Implementing public services carried out through public means.

These tools primarily include reviewing IT projects before their start, monitoring progress during implementation, and evaluating project execution and goal achievement based on a final report.

Council for Digital Affairs

The Council for Digital Affairs is an advisory body to the Minister of Digital Affairs and serves as a multilateral forum promoting cooperation between all digitalisation stakeholders in Poland.

Ministry of Economic Development and Technology

Within the Ministry of Economic Development and Technology, the Digital Economy Department is responsible for implementing projects related to the regulatory environment in the field of the electronic economy (eEconomy) in particular. The aim is to increase electronic business transactions, the standardisation and interoperability of solutions in the field of ICT for entrepreneurs, and the development of eCommerce, the data-based economy, the IoT and AI.

Supreme Audit Office

The Supreme Audit Office (NIK) is the auditing body aimed to promote economic efficiency and effectiveness in the public service. It monitors the execution of the State budget and the compliance with the monetary policy guidelines, and conducts audits upon demand of the Parliament or its bodies.

President of the Office for Personal Data Protection

The President of the Office for Personal Data Protection is an authority competent for the protection of personal data on the territory of Poland, regulated by the Act on the Protection of Personal Data of 10 May 2018. It is also a supervisory authority within the GDPR.

The duties entrusted to the President of the Office for Personal Data Protection include (i) supervising the compliance of data processing with the legal provisions on the protection of personal data; (ii) issuing administrative decisions and considering complaints with respect to the enforcement of the provisions on the protection of personal data; (iii) keeping the register of data filing systems and providing information on the registered data files; and (iv) initiating and undertaking activities to improve the protection of personal data.

Subnational (Federal, Regional and Local)

Regional and Local Authorities

The regional strategies regarding the development of eGovernment services are conceived and designed at the regional level in accordance with the national strategy. The activities of the KRMC support the implementation of the strategic goals in the field of the digital development of the State through guidelines that can be applied at central, regional and local level.

In view of the fact that two significant issues hampering digital development in Poland are the low level of interoperability of teleinformatics systems and the limited ability to exchange data between various public administration institutions, the following needs have been identified:

- Increasing the level of coordination in the development and modification of laws related to the construction or modification of public registers at the central administration level;
- Increasing the level of coordination in planning and monitoring the implementation of IT projects carried out by the central administration;
- Integrating, simplifying and increasing the efficiency of processes for planning and monitoring the implementation of IT projects by various institutions/organisations carrying out these activities based on different methodological requirements and project parameters, including (i) requirements developed for the implementation of projects co-



financed under UE funds; (ii) recommendations regarding the management and monitoring of strategic projects and programmes in government administrations; and (iii) internal guidelines for entities implementing projects;

Strengthening cooperation with local government administrations.

Coordination will be strengthened by, among others: (i) developing and adopting standards and guidelines for the interoperability of teleinformatics systems, and the creation of public registers, especially reference registers, including data exchange; (ii) expanding the range of projects included in the KRMC projects portfolio; (iii) turning regulations concerning the KRMC from ordinances of the Prime Minister into acts.

At the same time, integration will be facilitated by implementing a single tool, currently being developed and called MonAliZa 2.0, to support project monitoring and management processes, including for IT projects. The system is intended to support a standardised process of collecting and processing data from projects monitored by the KRMC, and carried out by a wide and diverse range of public administration units. This guarantees increased usefulness, accuracy, timeliness, punctuality, availability, transparency, comparability and consistency of data collected using public funds.

Cooperation with local government administrations will be strengthened, among others, by developing evaluation criteria for projects implemented under regional OPs based on the evaluation criteria adopted in the KRMC processes. These criteria will focus on ensuring interoperability and exchangeability of data and solutions, including those provided by the central administration.

Digital Municipality and Digital Community projects

Digital Municipality and Digital Community are government programmes (grant competitions) funded by the Recovery Assistance for Cohesion and the Territories of Europe (REACT EU) which aimed to support the digital development of local government institutions and to increase cybersecurity. In particular, the programmes enabled the purchase of IT hardware and software, as well as the licences necessary to implement eServices. They also provided digital education for local government units in terms of servicing the purchased hardware, software and licences. The intervention also contributed to strengthening the potential of local government units in the area of cybersecurity, through cybersecurity diagnoses, and the purchase of services and equipment. All the activities undertaken as part of the 'Digital Municipality' project mitigated the negative social and economic impacts caused by the COVID-19 pandemic.

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

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

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

Life and Travel

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

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

Doing Business

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

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

Last update: July 2024

The Digital Public Administration Factsheets

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

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



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

An action supported by Interoperable Europe

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

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

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

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