



NORTH MACEDONIA

2024 Digital Public Administration Factsheet

Supporting document






Main developments in digital
public administrations and
interoperability

JULY 2024

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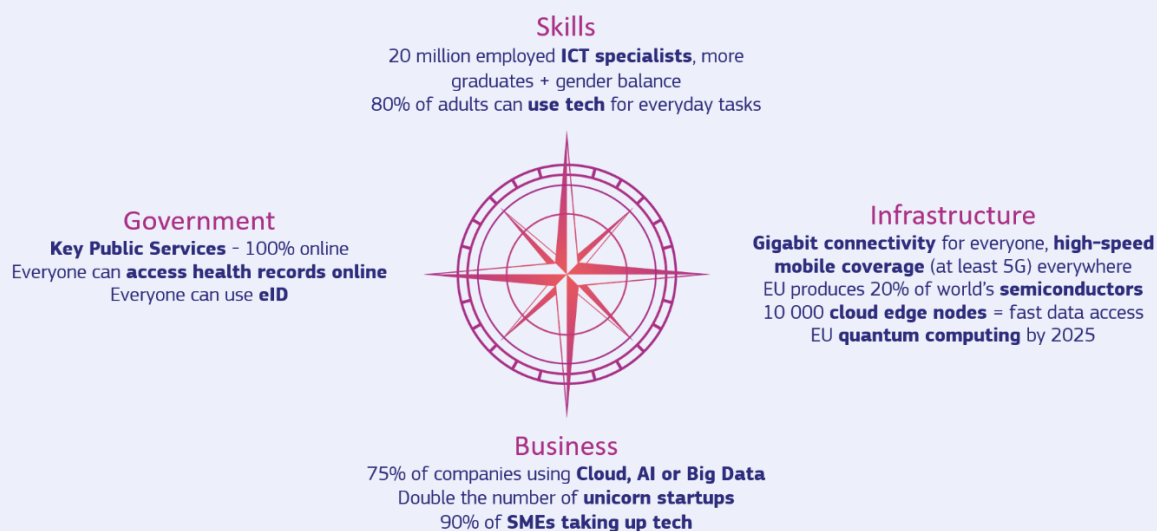
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2030 DIGITAL DECADE

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.



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.

1. Interoperability State-of-Play

This country is not yet part of the EIF data collection.

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



Strategic Plan of the Ministry of Information Society and Administration 2021-2023

Every year, the Ministry of Information Society and Administration (MISA) prepares and releases **strategic plans** for the next three years. The strategic plans define the measures needed to achieve the goals and objectives set in each of the two programme areas: (i) public administration reform, covering capacity building and the introduction of a modern system for human resources management, professional development of the administration and regulatory reform; and (ii) information society, covering infrastructure and support, eServices, eCitizens, single-point-of-services and open data.



Public Administration Reform Strategy 2023-2030 with Action Plan 2023-2026

The Public Administration Reform (PAR) is an ongoing process of restructuring public sector institutions and enhancing their administrative capabilities. PAR is one of the key priorities in the Accession Partnership and an important precondition in the process of European integration of the Republic of North Macedonia. Initiatives for the modernisation and promotion of the administration remain ongoing. The State and the public administration are seen as the basis of the overall public sector, which depends on the processes and developments in any democratic society. Public sector work should embody democratic values, with all institutions sharing the responsibility to enhance value for citizens and businesses. This effort contributes to social and economic development, ultimately leading to the overall prosperity of the State.

In light of the above, the MISA, together with relevant stakeholders, prepared the Public Administration Reform Strategy 2023–2030, along with the Action Plan 2023–2026. The relevant documents were adopted in July 2023. The strategy defines the measures to be taken over the next seven years to achieve the goals and objectives set in each of the priority areas:

1. Policy creation and coordination;
2. Public service and human resources management;
3. Responsibility, accountability and transparency; and
4. Service delivery and digital transformation.

Based on the priority areas, the PAR Strategy 2018–2022 had four general objectives (GO):

1. SO1: effective, efficient, inclusive and evidence-based policies;
2. SO2: depoliticised, professional and skilled public administration personnel;
3. SO3: responsible, accountable and transparent management of the institutions; and
4. SO4: digitalised public administration.

The goals outlined in the PAR strategy will be achieved through implementing measures to ensure effective evidence-based policy making, reorganisation, optimisation and the introduction of additional efficient operational methods in public administration. This includes advancing professional public administration through extensive digitalisation or digital transformation to create an optimal structure and innovative processes and techniques. The aim is to deliver high-quality and easily accessible services to citizens and businesses. The focus is on establishing a depoliticised, efficient, effective and accountable public administration that offers top-notch policies and services to the public. The public administration operates based on European principles and values, contributing to sustainable economic growth, the rule of law, social cohesion, and overall well-being.



Programme of the Government of the Republic of North Macedonia 2022-2024

The Programme of the Government of the Republic of North Macedonia for 2022-2024 was adopted in January 2022. One of the key priorities is the modernisation and increased efficiency

of the public administration, based on digitisation, enhancement of eGovernment, electronic communication between and within institutions, provision of digital services, and design of inclusive and easily accessible platforms.

It replaced the former [Programme of the Government of the Republic of North Macedonia for 2021](#) which covered a variety of domains, including digitalisation.

[National Long-Term ICT Strategy \(2020-2025\)](#)

During 2018, a roadmap was developed with directions to prepare a National Long-Term ICT Strategy, aligned with the Digital Agenda for Europe 2020. In September 2019, the MISA, with the support of the European Union, contracted a team of experts to make all necessary analyses and prepare the National Long-Term ICT Strategy.

In the period January–November 2020, three key strategic documents were prepared: (i) State of Play: Analysis of the Current State-of-Affairs; (ii) National Long-Term ICT Strategy 2020–2025; and (iii) Action Plan on the Implementation of Anticipated Goals. To prepare the three documents, visits were made to multiple institutions, State bodies, universities and chambers of commerce, i.e. all relevant subjects. In June, draft versions of the strategic documents were shared with members of the National ICT Council, its operational body, the Digital Forum, and the Broadband Competence Office (BCO) to gather their initial remarks and include them in the final document revisions. The National ICT Council adopted the [National Long-Term ICT Strategy 2020-2025](#) in late December 2020. MISA has drafted a version of the National ICT Strategy 2023-2030, along with the Action Plan 2023-2027, and published them on ENER.

[Law on Electronic Management and Electronic Services](#)

The [Law on Electronic Management and Electronic Services](#) (Official Gazette No. 98/2019) regulates the operations during the electronic exchange of data and documents, and the provision of eServices, when stipulated by law, among (i) Ministries; (ii) other State administration bodies, governing organisations and local self-government units; (iii) legal entities entrusted to carry out public duties; and (iv) legal entities delivering and providing public interest services, i.e. entities within the area of education, health, finances, banking, insurance, energy, water supply, electronic communications, postal services and utilities. The law also covers matters concerning the establishment and operation of the National eServices Portal, the Catalogue of Public Services, the Single Point of Service and interoperability. MISA drafted a law on amending and supplementing the Law on Electronic Management and Electronic Services in December 2023. The main goal of the proposed amendment is to align it with the strategic plans of the Republic of North Macedonia in the area of digitisation, using the infrastructure of the AD Post of North Macedonia – Skopje offices to offer a wider range of electronic services. The law is currently in the Parliamentary procedure.

Digitalisation of Internal Processes

[Law on Archive Material](#)

Adopted in 2012 (Official Gazette No. 95/2012), the [Law on Archive Material](#) regulates the protection, preservation, processing and use of archival material, as well as inspections and the responsibilities of the State Archive of the Republic of North Macedonia. For instance, the law provides for electronic documents to be kept in their original format following specific criteria for accessibility and integrity. The law was then amended in 2014 and 2015.

With the Decree on Office and Archive Operation with Electronic Exchange, MISA and the State Archive tasks were updated to improve the legal provisions for archival work to accommodate the introduction of electronic documents. Moreover, MISA created an initial version of a Law on Archive Activity to establish standards for processing archival materials and incorporate digitisation into archival practices. MISA is currently engaging experts to draft the law and to contribute to the system's development.

[eGovernment Sessions](#)

The upgraded portal for [eGovernment Sessions](#) is used by all Ministries and a great number of State bodies. The portal enables the preparation and submission of various materials, along with several collaborative features.





Government IT Network

The Government IT Network is designed to be the backbone communication infrastructure connecting all departments in a secure and interoperable environment. The aim of this project is to create a solid infrastructure among all government institutions. At the end of October 2008, a fibre optic connection was established bringing about the following benefits:

- Allow for a high degree of security in communications between institutions;
- Facilitate communication between institutions; and
- Reduce call costs.

According to the National Operational Broadband Plan (NOBP), by the end of 2029 all public institutions (schools, universities, research centres and other education institutions, healthcare facilities, Ministries, courts, local self-governments, and other State authorities and bodies) should have symmetrical internet access with a speed of at least 1Gbps. To achieve this national broadband target, Public Enterprise for Managing and Developing (PE MRD) will build and develop a National Backhaul Optical Infrastructure/Network connecting public institutions.

The construction of this network will use the free capacities of the existing optical infrastructure (optical cables, fibres, ducts, etc.) built with public funds. Such optical infrastructure is managed by MEPSO (the State-owned electrical company).

MISA is the leading beneficiary of the Feasibility Study project for the establishment of a National Optical Transport Network (NOTN). On 21 June 2023 it held a kick-off meeting with the consulting company selected by the EU delegation in the Republic of North Macedonia (RNM) for this project. The consultants prepared an Inception report in July 2023, on which the National Broadband Competence Office (NBCO) also expressed its opinion and remarks.



Human Resources Management Information System

The existing **Human Resource Management Information System (HRMIS)** includes, in addition to a register of public sector employees and organisational structures, a module for salary calculation.

In 2020, the Macedonian administration proceeded with the modernisation of the HRMIS by: (i) integrating inter-institutional electronic exchange of documents with electronic signing; (ii) including single-sign-on authentication of users; (iii) improving and streamlining business processes by introducing a dedicated business process management module; (iv) ensuring quick and accurate search for information and report generation; (v) enabling integration with other systems; (vi) ensuring increased operational efficiency by introducing new functionalities and enhancing the existing ones; and (vii) tackling risk reduction and management by increasing security and overseeing information access, reliability and data integrity.

Digitalisation Supporting the EU Green Deal

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





3. Interoperability and Data

Interoperability Framework

National Interoperability Framework

The National Interoperability Framework has been in force since 2015, with the [Law on Electronic Management and Electronic Services](#) as legal basis. The National Interoperability Framework consists of legal, organisational, semantic and technical aspects. Based on the European Interoperability Framework (EIF) 2.0, the National Interoperability Framework is planned to be updated following the guidelines and recommendations stipulated in the latest iteration of the EIF. MISA has upgraded the National Interoperability Platform from a star to a snowflake system, allowing more institutions to participate while using less resources.

Data Access, Management and Reuse

Open Data

Sixth National Open Government Partnership Action Plan 2024-2026

In February 2024, the Government of the Republic of North Macedonia adopted the sixth National Action Plan for Open Government Partnership 2024-2026. The new action plan was created through an inclusive and transparent process that began in June 2023. Many non-governmental organizations and government institutions were involved in developing the proposal for the commitment. The new action plan in the Open Government section contains 15 commitments and 57 achievements distributed in five priority areas, namely: (i) fight against corruption; (ii) participatory decision-making and citizen participation; (iii) legal strengthening and access to justice; (iv) development and use of digital technologies; and (v) promotion of climate change activities.

Apart from the section on Open Government, this action plan also includes separate sections on Open Parliament and Open Judiciary, acknowledging the independence of the legislative and judicial branches as distinct authorities in the Republic of North Macedonia.

Strategy of the Agency for protection of the right to free access to public information for 2021-2025

The Agency for the Protection of the Right to Free Access to Public Information in North Macedonia was established in November 2020 and has since began developing its strategy for 2021-2025 and an accompanying Action Plan under the IPA 2 project. However, due to the COVID-19 pandemic, several activities, such as the finalization and implementation of IT tools and training sessions for information holders, were postponed to 2021. Within the framework of the IPA 2 project, the Agency introduced two e-portals aimed at enhancing transparency and accessibility. These portals help citizens and civil society organisations submit requests for free access to information through the [Requestor Portal](#). Information holders can also use the [Portal for Holders to submit annual reports and receive notifications](#). In 2022, 90 requests were submitted through the Requestor Portal, showing its usefulness. The Agency also conducted training sessions for officials to help them understand these e-portals. Moreover, the Agency created various documents and materials like manuals, guidelines, and methodologies to promote transparency. Monitoring reports were carried out to assess proactive transparency across different institutions. Additionally, the Agency worked with the OSCE and the State Commission for Prevention of Corruption to develop e-learning courses to improve officials' skills.

Law on Public Sector Data Use

The [Law on Public Sector Data Use](#) was adopted in 2014, establishing the obligation for authorities and public sector institutions to publish the data created in the exercise of their responsibilities under the law. The law also enables natural or legal persons to create new information, content, applications or services. The purpose of this law is the use of data from the public sector to: (i) foster innovation; (ii) create new information, content and applications by



combining or crossing data, as well as new services and jobs; (iii) promote social inclusion, increased accountability and transparency of the public sector, and improved quality of data from the public sector; (iv) promote the economy and the development of competition; and (vi) develop an information society in North Macedonia.

All data from the public sector are subject to the above-mentioned rules on use, except:

- Data excluded by the Law on Free Access to Public Information;
- Data with limited access by law;
- Data whose creation is not subject to the authority of an institution from the public sector;
- Data for which third parties have a right to intellectual property;
- Data belonging to the public broadcaster and its bureaus, and to the institutions responsible for public service broadcasting;
- Data belonging to educational or research bodies and institutions, including organisations founded for research results exchange; and
- Data belonging to institutions in the field of culture, except libraries, museums, and archives.

Activities planned for the course of 2021 include extending support to institutions in the data opening process through open data trainings, as well as conducting ex-post and ex-ante analyses, along with preparing the law amending the [Law on Public Sector Data Use](#), planned for December 2021 as per the [Programme of the Government of the Republic of North Macedonia for 2021](#).



Law on Free Access to Public Information

In the Republic of North Macedonia, the right to free access to public information is a constitutionally guaranteed right (Article 16(3) of the Constitution of the Republic of North Macedonia). The first Law on the Protection of the Right to Free Access to Public Information (Official Gazette No. 13/2006) was implemented in 2006.

In the meantime, on 22 May 2019, the Parliament of the Republic of Northern Macedonia adopted a new [Law on Free Access to Public Information](#) (Official Gazette No. 101/2019).

In comparison with the previous law, some novelties are introduced under Article 30 of the current Law on Free Access to Public Information. According to this article, the Agency for the Protection of the Right to Free Access to Public Information, in addition to the competences it already had as Commission, gains additional powers in jurisdictions, especially in the area of conducting misdemeanour proceedings through its own Misdemeanour Commission and misdemeanour procedures. Additionally, the new law also increases the number of institutions that are obliged under the law to be registered as information holders. It also aims to increase the transparency of public institutions (Article 10) or extend the list of information that institutions must publish on their websites, among others.

In March 2020, the Agency Director, fulfilling her legal obligation under Article 34 of the Law on Free Access to Public Information, prepared bylaws to facilitate the implementation of the Guidelines on the Manner of Implementation of the Law on Free Access to Public Information of 2019 (Official Gazette No. 60/2020). The document is relevant both for the regulation of access to information and its restrictions, and for the proper implementation of the law.

In addition, the Agency adopted a [Decision on the Misdemeanour Commission Members](#) and developed guidelines for its work and bylaws, such as the Guidelines on the Form and Content of the Misdemeanour Payment Order (Official Gazette No. 177/2020) and the Internal Guidelines on the Misdemeanour Procedure. As a result, the number of undelivered annual reports decreased, with a tendency to minimise the instances of undelivered annual reports.

The Misdemeanour Commission, implementing the misdemeanour procedure for the first time, enforced the collection of a monetary fine through the Public Revenue Administration for officials and one responsible person, who, despite the decision of the Misdemeanour Commission, did not pay the fine within the specified period.



Open Data Portal

The new [Open Data Portal](#) was launched in December 2018. The portal created a dynamic ecosystem of open data in which data is produced, opened, enriched and reused by various stakeholders from the public, private, academic and civil sectors. This led to an improved delivery of services and efficiency of the public sector, increasing citizen participation, supporting efforts to fight corruption and contributing to the creation of an innovative climate with new economic opportunities for the business sector. In addition, this portal has a positive impact on the European integration process of the Republic of North Macedonia regarding the transparency and accountability of the government.

More in detail, the Open Data Portal provides/enables:

- An open data platform based on the best world practices;



- The opening of datasets in computer readable formats;
- A decentralised data management by institutions producing datasets in their day-to-day operations;
- The possibility of automatically collect ('harvest') datasets published by other open data portals;
- A statement of metadata for datasets; and
- An increased involvement of users in data reuse.

Each institution is responsible for the data published on the Open Data Portal, including complying with open data policies, removing sensitive elements from data before publishing, converting data to open formats, providing metadata of high quality, and regularly checking and updating data after publication.

A total of 652 datasets from 74 public sector institutions, and over 25 catalogues are published on the Open Data Portal. MINA implemented activities to support five institutions (Ministry of Local Self-Government, State Commission for the Prevention of Corruption, Public Revenue Office (PRO), Agency for Real Estate Cadastre and State Market Inspectorate) in their data opening process.

In addition, during 2020, three open data trainings were organised and attended by 63 participants from 28 State institutions. Furthermore, with a view to continuously promote skills, the initial activities have started to prepare an automated open data webinar (video-training) to be published on the portal www.data.gov.mk.

Base Registries

The following table lists the North Macedonian base registries:

| National | |
|-------------------------|---|
| <p>Business and Tax</p> | <p>The Trade Register and Register of other Legal Entities have been managed by the Central Registry since January 2006, when the jurisdiction was transferred from the Courts. This transfer occurred based on the Law of the One Stop Shop system and on keeping the trade register and register of other legal entities (Official Gazette No. 84/2005), which defines the registration of a legal entity with a unified administrative procedure. During the registration process, automatic data exchange was established with the PRO for automatic tax registration and to acquire tax numbers for each newly registered legal entity. Additionally, connections were made with banks through the clearing house to reserve the entity's initial bank account. In 2019, the One Stop shop system was upgraded to streamline the company registration process. This system now offers the convenience of automatically registering authorised persons as first employees for compulsory social insurance (including registration with the Employment Agency, Pension, and Health Funds) and facilitates the application for VAT registration with the PRO. The following links provide:</p> <ul style="list-style-type: none"> • The basic profile of a registered legal entity; • The latest announcements from the One Stop Shop system - completed registrations in the Trade register and Register of other legal entities; • A detailed information on the procedure for establishing a new legal entity (trade company); and • Access to the system for eRegistration - a part of the one-stop-shop system for filing application - electronic registration in the Trade register from a registered user <p>To better register the data of physical persons and stakeholders of legal entities in the Trade Register and Register of other Legal Entities, and to improve data quality, a project is underway to integrate those registers with the National Population Register for checking and reusing personal data.</p> |



| | |
|---------------------------|---|
| | <p>The data from the Trade Register and Register of other Legal Entities is used through APIs by several institutions (PRO, Employment Agency, Customs Office, Agency for Cadaster, Bureau for public procurement, etc.) and private entities (Clearing house, banks, Macedonian credit bureau, Macedonian telecoms, etc.)</p> <p>The One Stop Shop system has been built with well-known and reliable web and desktop application technologies, centralized relational databases, electronic signing with digital certificates (.X509) and XML as a format for data exchange. The registration attachments and documents are kept as binaries in their original format (pdf and docx).</p> |
| Transportation / vehicles | |
| LandA | |
| Population | <p>The National Population Register was published in October 2019 as key enabler and one of the main cornerstones in the digitisation effort in North Macedonia. The register provides a unified and unique way of managing individual databases based on established standards and procedures. In particular, the National Population Register represents a single integrated data register for all citizens aggregating data on the entire population, and thus enabling the implementation and monitoring of public policies in the domain of population management and planning. Based on the population register, the Ministry of Information Society and Administration (MIOA) has already implemented the State service for free use of eID at a low level of authentication for accessing eServices on the centralised electronic services portal and several other State institutions portals. The low level of authentication at the State eID service implies that citizens have already been identified in person, that their data are confirmed by the National Population Register, and that their profile always contains the latest updated personal information. Thanks to the catalogue of services, which is a legally regulated software tool, every institution can list its services and the required documents, and specify the level of authentication needed from the citizen to access the service. In Macedonia, we already have two private operators that enable the use of a remote qualified certificate, which is issued in the process of creating the electronic identity of a qualified signature creation device (QSCD) in the cloud. A process is underway to define rules and standards for integrating them into the eServices platform. This will make it easier to use eServices that require a high level of authentication and digitally signed service requests.</p> <p>The Law on the Central Population Register (Official Gazette No. 98/2019) regulates the competent bodies, the structure and the content of the Central Population Register, the conditions applying to the register as well as the exchange of information between the competent bodies and entities. With the establishment of the register, a unified and unique manner of database maintenance is to be determined, based on established standards and procedures, in accordance with the provisions of the law. The register's information is available to the competent bodies and other entities determined by the law and is used in accordance with the rules and conditions prescribed by the Law on Personal Data Protection.</p> |
| Other | <ul style="list-style-type: none"> • Register of Rare Diseases The Register of Rare Diseases records and monitors patients with rare diseases as well as data on therapy/medicines for rare diseases. It is part of the national system for electronic evidence in health. The register is not a public website and data cannot be accessed by the patient or unauthorised users, but only by authorised users with privileges. • Register of Diabetes |



| | |
|------------------------|---|
| | <p>The Register of Diabetes records and monitors patients with diabetes and is also part of the national system for electronic evidence in health. The register is not a public website and data cannot be accessed by the patient or unauthorised users, but only by authorised users with privileges.</p> <ul style="list-style-type: none"> Register of Repossessed Real Estate Intended for Sale The Register of Repossessed Real Estate Intended for Sale was established in December 2019. The legal conditions for the establishment and running of this register were created with the adoption of the Law on Modifications and Amendments to the Law on the Real Estate Cadastre. Real estate intended for sale is real estate acquired within a procedure for collection of receivables or on other grounds. The register contains spatial and descriptive data for such real estate, as well as data on the entity possessing the real estate. The Agency for Real Estate Cadastre (AREC) is responsible for maintaining the Registry of foreclosed real estate intended for sale. Graphical Registry of street and house numbers This database was established in 2023, and a web GIS application has been launched to provide insight into the collected data on streets and house numbers. Register of Life Events In 2021, the Administration for Keeping Family Registers has processed a total of 1 017 certificates through Key Information and Business Services (KIBS). Among these, 806 were birth certificates, and 211 were marriage certificates. In 2022, a total of 1 582 certificates were processed through KIBS. Among these, 1 254 were birth certificates, and 328 were marriage certificates. In 2023, a total of 1 835 certificates were processed through KIBS. Among these, 1 465 were birth certificates and 369 were marriage certificates. Register of retirees and disability pension (инвалидски пензии) The Register of Retirees and Disability Pensions portal securely maintains and regularly updates detailed records of retirees and disability pension recipients. |
| Sub-national | |
| <p>Base Registries</p> | <p>The Ministry of the Interior, the Ministry of Transport and Communications (UVMK) and the Central Register of Entities are official data sources of personal data. The Central Register of Entities is currently the source of the address register of residences, but the procedure for the address register to be taken over by the Real Estate Cadastre Agency is underway, for which a law has already been passed and active work is being done to take over the responsibilities in the area of the address register.</p> <p>Through web services and communication clients on an interoperability platform using a dedicated government optical network separated from the Internet, data is updated once a day from the sources. This ensures that the national population register has the latest data entered every day.</p> <p>The NPR system uses an MS SQL relational database.</p> <p>The master data management approach is the following :</p> <ul style="list-style-type: none"> The National Population Register is a holder of the ISO 27001 certificate, and all data access and processing is regulated by policies and procedures, both in terms of business continuity and prevention of potential risks. Within the National Population Register we have procedures for: (i) normalization of data formats; (ii) missing values; (iii) standardised values; and (iv) map attributes. |



Law on Electronic Management and Electronic Services

Under the [Law on Electronic Management and Electronic Services](#), for the purpose of accomplishing their tasks determined by law, State bodies shall exchange data and documents electronically, and use unified nomenclatures in their mutual electronic communication, through the National Interoperability Platform. Additionally, the law stipulates the existence of a Catalogue of Public Services, as well as institutional persons responsible for the verification of data in the Catalogue of Public Services, Single Point of Services and proxy agents.

Data Platforms and Portals

The following table lists the North Macedonian data platforms and portals infrastructures:

| | |
|----------------------------|---|
| <p>Open Finance Portal</p> | <p>The Open Finance Portal provides the public with insight into data on the budget transactions by all users of the budget of the Republic of North Macedonia, which is disbursed by the Treasury of the Ministry of Finance. The process was divided in two phases. During the first phase of implementation, all transactions by budget users of the central government were published. During the second phase, the transactions by the units of local self-government from their institutions' budget were published. The public can access information about the name of the budget user making the payment, the type of expenditure according to the economic classification, the assets received, the date of the executed payment, etc. This data is updated twice per month and users are able to download it in an open format.</p> |
| <p>CA</p> | <p>Within the External Domain (G2B), traders interact with their national customs administration, which is the body responsible for specifying and setting up the interfaces for them.</p> <p>For the purpose of data capture by the respective customs office, four methods should be considered:</p> <ul style="list-style-type: none"> • EDI – Electronic Data Interchange (XML); • DTI – Direct Trader Input; • Internet application; and • Data capture by the respective customs office. <p>Governmental domain (G2G) covers electronic integrated processes with other government agencies involved in the customs formalities.</p> <p><i>Common Domain</i></p> <p>The CD currently covers the common transit of goods transported from one contracting party of the Convention using a common transit procedure via or into another contracting party, namely EU or EFTA countries. This is also known as direct transit.</p> |

Cross-border Infrastructures

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

| | |
|--------------|--|
| <p>TESTA</p> | <p>The government signed a memorandum of understanding with the EU on the quality and security requirements related to the connection to the TESTA-ng network for data exchange between EU Member States and candidates. In 2018, TESTA-ng was used by the Ministry of Transport and Communications for the Tachonet application.</p> <p>In addition to the memorandum for the TESTA connection with Ministry of Transport, which has been in place for years, the Ministry of the Interior is now working on delivering the router that will be used in the forensics</p> |
|--------------|--|



| | |
|------------------------------|--|
| | department for data exchange with several EU countries from Southeast Europe. |
| CA - Common Domain (CCN/CSI) | The Republic of North Macedonia is a contracting party of the New Computerised Transit System (NCTS). NCTS5 shall cover transit declarations for both direct and indirect transit of goods within the EU and contracting parties of the Convention. |
| CA - SEED/SEED+ | Since its first implementation phase in 2010, the Systematic Exchange of Electronic Data (SEED) has enhanced border management in the Western Balkans, fostering the cooperation and the sharing of information among customs administrations. SEED, along the years, has also significantly contributed to overcome the inefficiencies in the management systems at the crossing points in the Western Balkans that resulted in complicated and time-consuming procedures for legitimate trade flows. SEED has also contributed to reducing security risks in the region. |

 **New Computerised Transit System**

The **New Computerised Transit System (NCTS)** is a modern tool using advanced technologies and electronic data processing for managing and controlling transit procedures in an efficient way through the exchange of electronic messages between economic operators and customs offices, as well as only between customs offices.

The NCTS system cover the common transit of goods transported from one contracting party of the Convention on a common transit procedure via or into another contracting party – EU or EFTA country (direct transit). The NCTS5 shall also cover the common transit of goods transported from one contracting party of the Convention on a common transit procedure through third country (neither EU nor EFTA country) via or into another contracting party – EU or EFTA country (indirect transit).

 **System of Electronic Exchange of Data**

The **System of Electronic Exchange of Data (SEED)** involves the customs administrations in the Western Balkan Region. The Systematic Exchange of Electronic Data (SEED) has enhanced border management in the Western Balkans, fostering the cooperation and the sharing of information among customs administrations. SEED has along the years significantly contributed to overcome the inefficiencies in the management systems at the crossing points in the Western Balkans that resulted in complicated and time-consuming procedures for legitimate trade flows. SEED has also contributed to reducing the security risks in the region.

4. Digital Transformation of Public Services



Digital Public Services for Citizens



National eServices Portal

The first eServices Portal was established in 2003, as the single point of access to information on government services. The portal was the result of the government's efforts to create a more efficient and transparent administration by presenting to the public all available services for both citizens and business entities. In December 2019, a **new national portal** was launched, offering, in addition to information on 789 services, the provision of 150 eServices for citizens, including payment and eDocument issuing. The new portal will closely relate with the National Central Population Register and offer single-sign-on for citizens.

One key component of the portal is the Catalogue of Public Services, whose data is published on the portal in three languages, and categorised by life events, categories and sub-categories, as well as the institutions responsible for the service (1 288 in total) and other tags. The **catalogue** is accessible only to authorised public servants.

The portal was developed with the funds from the IPA 2 programme. The development of new eServices, as well as the integration of the existing ones into the portal and the introduction of legal entities (businesses) as portal users, are underway and are funded under the IPA 3 programme ('Enhancing eGovernment' project).

During 2020, 9 804 citizens requested at least one eService on the portal, while the number of the registered users, at any eID level, is more than 31 000. The most used eServices during 2020 were those relating to the anti-COVID measures, such as the issuance of more than 100 000 moving permits and 2 500 vouchers for ICT training for young people, as well as the registration of more than 350 educational legal entities as providers of ICT training for young people.



Catalogue of Public Services

The Catalogue of Public Services is an electronic database serving for the structured entry and management of data for all public services, such as basic data, deadlines, payments, competent authorities, legal grounds, legal remedies, category, life event, etc. The Catalogue is a tool available to authorised public authorities' personnel only. 789 out of the 1 336 services data entered into the Catalogue of Public Services are published on the portal's public section. Prior to publication, data are entered, verified and approved by the competent authorities and the MISA.

The catalogue of services is maintained in electronic form by the MISA. The basic function of the catalogue of services is to provide a structured way to store the necessary information about the services for which the institutions are responsible, and which are imposed on individuals and legal entities.

Two types of users have access to the catalogue of services: system users/MIOA and institutional users/verifiers from institutions.

Each institution is obliged to record the services in a clear, precise and simple way in the Catalogue of services that it provides in accordance with the law. The provider of a service/institution is responsible for ensuring that the information in the Service Catalogue is accurate and up-to-date. Before publishing the information in the catalogue about the services each institution is responsible for individually, it must be confirmed and approved by the process verifier. Out of a total of 1 617 services entered, data for 921 services has been published on the public section of the Uslugi.gov.mk National Portal. Among these, 308 services are exclusively for natural persons, 289 are exclusively for legal persons, and 324 services cater to both natural and legal persons. Within the catalogue, there are 246 electronic services, with 107 services allowing direct application on the Uslugi.gov.mk National Portal, and 139 electronic services accessible through external information systems of institutions. Additionally, 675 services listed in the Public Services Catalogue are of an informative nature.



Service Delivery Platform

The Service Delivery Platform (eSDP) is a web-based solution enabling institutions to electronically manage administrative procedures by establishing internal business processes and resolving them within the system. The system is configurable with a multi-purpose architecture and can be used by a number of institutions by adapting it to the [Law on the General Administrative Procedure \(GAP\)](#) or the specific laws governing administrative procedures. The system is particularly useful for institutions that want to digitise business processes without having an IT capacity.

Portal for Electronic Communication

The Portal for Electronic Communication (PEC) is an online system for the electronic exchange of documents with the Custom Administration (CA) of North Macedonia. The system enables external users to submit different types of requests to the CA in electronic form and to monitor the status of their requests in real time.

This covers the relationship between the national customs administration and traders. This domain is under the sole responsibility of national customs administration concerned. Within the External Domain, traders interact with their national CA, which is the body responsible for specifying and setting up the interfaces for them.

For the purpose of data capture by the respective customs office four methods should be considered:

- EDI – Electronic Data Interchange (XML);
- DTI – Direct Trader Input;
- Internet application; and
- Data capture by the respective customs office.

ePayment for eServices

The [National eServices Portal](#) offers an ePayment feature for the fees and administrative taxes due, in total, for the eServices requested on the portal, regardless of the institution issuing/delivering the service. The portal sends a package of data for each different payment to the bank chosen for payment transactions and clears each individual payment order to the Treasury or commercial banks. The necessary data for the payment form are part of the data relating to each service in the Catalogue of Public Services. The procedure for ePayment when applying for eServices is described in a bylaw of the [Law for Electronic Management and Electronic Services](#).

In this part, North Macedonia has made significant progress, that is, a second virtual PoS terminal (second bank processor) has been integrated, and integration standards have been set for all interested banks that, according to the defined rules, will express their desire to become payment processors. With greater competition, the commission charged by the banks is expected to decrease. In addition, in February 2024, the [uslugi.gov.mk](#) web platform was connected to physical PoS terminals, for the 'One Point for Services' centres, which offer services in a single location. A protocol has been established for other banks to integrate and promote competition in this area, similar to the virtual PoS terminals.

eInvoicing

A technical specification has been prepared and the project is in the initial approval stage at the Ministry of Finance.

eHealth and Social Security

Portal for Health Insurance Services

The Portal for Health Insurance Services is meant for citizens, as well as medical institutions and businesses (pharmacists and general practitioners).

My-Term Portal

In direct cooperation with healthcare institutions of all segments of healthcare, the Ministry of Health is taking intensive action to work on the healthcare digitisation process. Among other things, it manages [MojTermin](#). MojTermin is a functional internet portal in the field of eHealth



whose main goal is to establish automated work processes in coordination with all levels of healthcare, healthcare administration and pharmacies.

The national eHealth system MojTermin is continuously developed as a National Integrated Health Information System. Notably, the system collects data from three areas of health:

1. Healthcare, including a scheduling system, waiting lists, eReferral, all created prescriptions and dispensed drugs in pharmacies, physicians' activities plans, daily medical reports, and electronic health records (EHR), among others;
2. Preventive healthcare, including scheduled exams, immunisation modules and prevention programmes; and
3. Public health, including individual medical reports and Health Registers.

The system is integrated with the National Drug Register as well as with other national systems with which it exchanges data daily. The system is continuously being upgraded with new modules and new functionalities in the existing modules.

In particular, MojTermin was upgraded with new modules to address COVID-19. The following new modules were developed and are now functional: (i) testing process for COVID-19; (ii) recording of patients receiving home treatment; and (iii) register of positive cases (including data from all laboratories performing testing). Additional modules are being developed to complete the entire recording process, from the testing itself, and the surveying and finding of contacts with a positive case, to the issuance of decisions for isolation.

Other Key Initiatives



ePersonal Income Tax Portal

The ePersonal Income Tax Portal (ePDD) was introduced in 2019 by the PRO on the basis of the changes in the Law on the Personal Income Tax (Official Gazette No. 190/2017) and the implementation of the IPA 2012 PPF project titled 'Simplification of Procedures for Reporting and Payment of Personal Income Tax for Taxpayers - Individuals', developing the business processes and software.

On 1 January 2018, a procedure for calculating and paying the personal income tax liabilities was introduced. The tax is now calculated by submitting an electronic calculation for income and tax to the PRO through the new ePDD system. The portal allows citizens to access a pre-filled annual tax return document. The PRO prepares a pre-filled annual tax return on the basis of the data from the electronic calculations of the payers submitted through the ePersonal Tax Portal, the calculations for the salary submitted through the Monthly Payroll Information System (MPIN), as well as the data received from third parties. Citizens only need to confirm or correct the completed annual tax return.

The ePersonal Tax Portal counts 697 513 registered and approved user profiles of natural persons on the ePIT system. Out of 795 953 pre-filled annual tax returns, 626 491 were submitted electronically and only 6 420 were corrected by taxpayers.

Thanks to the introduction of new user-oriented services for the personal income tax, the administrative burden was reduced, and the obligation to submit some returns and reports to the PRO was abolished, in addition to a number of other benefits.



ePension Portal

The ePension Portal allows citizens to check data from the Pension Insurance Register and submit a request for a decision on the use of the right to pension and disability insurance.



eEmployment

The Employment Service Agency is a portal for checking personal employment history data.



Upgrading and Maintaining IT Systems in the Tax Administration

The 'Development and Reengineering of Business Processes for the New Tax Integrated IT System IPA2/EUIF' project was completed on 31 January 2019, together with the modelled business processes (BPM2), showing that the global business process chart needs to be re-engineered and integrated into the new IT system.

The Delegation of the EU has engaged an expert to analyse the technical specifications for software and hardware (including for the Disaster Recovery Centre), carry out a market analysis and prepare the tender documentation for the new Tax Integrated IT System in accordance with EU PRAG procedures. On the basis of the market analysis, a decision should be made on financing



the new Tax Integrated IT System. The technical support to ensure quality control is foreseen in the twin project 'Improving Tax Collection, and Tax and Customs Policy'.

Based on the redesigned business processes resulting from this project, the PRO started implementing several projects:

- The upgrade of the electronic personal income tax system (ePDD) portal has started with the integration of the MPIN payroll reporting system and the PDD-DB application. The public administration is in the process of implementing the contract for upgrading and maintaining the eTax System, which is an external portal for taxpayers; and
- The upgrade of tax accounting and registry records applications, which are central to the main processes in the tax administration. This process provides, inter alia:
 - Better services for taxpayers;
 - More security of the information system of the PRO, and better technical and organisational measures for the protection of personal data;
 - Improved exchange of data with third parties in the country (including Central Registry, Clearing House KIBS Ad Skopje, National Bank, Credit Bureau, Ministry of Finance, MINA, Ministry of Labour and Social Policy, Health Insurance Fund, CA, Pension and Disability Insurance Fund, Real Estate Cadastre, Employment Agency, MoI, Office for the Management of Registers of Births, Marriages and Deaths, State Statistical Office, State Labour Inspectorate, Directorate for Technological Industrial Development Zones, Association of Protective Companies, Civil Aviation Agency, Captains of Ports – Ohrid, and others); and
 - Improved data exchange with third parties abroad (tax administrations and international organisations).



UVMK Portal

The UVMK Portal allows to order and pay online for **birth, marriage and death certificates**. Citizens then receive the official (paper) documents by registered mail. On 27 February 2020, the Office for the Management of Registers of Births, Marriages and Deaths started issuing birth and marriage certificates signed with trusted digital certificates issued by KIBS. From 27 February 2020 till 31 December 2020 533 birth and marriage certificates were issued electronically.



Unique National Electronic Registry of Regulations

The Unique National Electronic Registry of Regulations (ENER) is a portal where each draft of a law or bylaw must be published for public comments before being adopted by the government and Parliament. To increase stakeholder inclusion in the process of policy making, implementation, monitoring and evaluation, the regulatory impact assessment (RIA) templates are also published together with the draft documents. A technical upgrade of ENER was carried out in 2019, with ENER now enabling the electronic submission of initiatives and proposals by stakeholders, as well as consultations on other acts and documents (policies, strategies, action plans, standards, guidelines, etc.). Also, in 2023, an Albanian language version of the portal was put into production.



Strategy on ICT Development of the Customs Administration 2023–2025

The Strategy on ICT Development of the Customs Administration 2023–2025 was adopted in March 2021 and provides a roadmap for the development of ICT at the Customs Administration (CA) of the Republic of North Macedonia during the next five years (2023-2025). The strategy encompasses the mission, vision, strategic priorities and goals of the CA in ICT development, as well as the activities and resources needed for their implementation.

The strategic objectives which the CA aims to achieve in the ICT sector are:

- Interconnectivity and interoperability with the EU ICT systems;
- Implementation of the National interoperability platform integration standards;
- Modernisation of the ICT environment;
- Application of modern technologies and practices for implementing business requirements; and
- Modernisation of the use of the internet, intranet and social networks in customs operations.

For the period 2023/2026, the CA is planning to upgrad the current eCustoms systems ITE, CDEPS on national domain and develop new systems such as NCTS5, NSW,EORI, UUM&DS, and the Control and Investigation Management System.



Summary on ongoing systems upgrades and plans for new systems 2025/2026:

- NCTS 5, ITE and CDEPS upgrades in national domain will be financed from the National Budget;
- Implementation of NCTS5 project, also includes upgrade from CCN to CCN2;
- Upgrades of ITE, which consist in the implementation of the Surveillance module on National domain, along with the online submission of BTI for EO and the integration of BTI in Import and Export declarations;
- CDEPS upgrades, which refer primarily to customs decision system and required integrations with NCTS5, EORI, UUMS&DS, NSW;
- EORI and UUMS&DS, Automated border terminals and Control and Investigation Management System will be financed by IPA3 programme; and
- The CCTV&ANPR projects, along with the NSW are funded by a World bank loan.

Plan for the harmonization with the Work Programme for the implementation of the MASP-C 2025/2030:

- Full harmonisation and alignment with the Commission's Multi-Annual Strategic Plan (MASP) systems is planned prior to EU accession;
- The CA is participating on all meetings of the ECCG - Electronic Customs Coordination Group and actively follows the current activities and the foreseen strategy for the eCustoms future; and
- The CA has defined its own plan for the harmonization with Work Programme until 2030. This plan can be changed to align with changes in the EU's eCustoms strategy, especially regarding plans for centralization of systems.

For the period 2023–2025, the CA is planning to implement in the national domain the following systems: UCC Binding Tariff Information (BTI); UCC Customs Decisions; Direct trader access to the European Information Systems (Uniform User Management & Digital Signature); UCC Authorized Economic Operators (AEO) upgrade; and UCC Economic Operator Registration and Identification System upgrade (EORI 2).

For the period 2026–2030, the CA is planning to implement in the national domain the following systems: UCC Automated Export System (AES); UCC Information Sheets (INF) for Special Procedures; UCC Special Procedures; UCC Notification of Arrival; Presentation Notification and Temporary Storage; UCC National Import Systems upgrade; UCC Import Control System 2 (ICS2)); and UCC Guarantee Management (GUM).

Centralized EU systems and the components of the national systems that should be compliant with EU domain, will be implemented prior to EU accession. These include: UCC Registered Exporter System (REX); UCC Surveillance 3; UCC Proof of Union Status (PoUS); and UCC Centralised Clearance for Import (CCI)). Currently, only the UCC New Computerised Transit System (NCTS) will be fully EU compliant.



Customs Declaration and Excise Processing System

The Customs Declaration and Excise Processing System (CDEPS) was officially launched in June 2019. The introduction of the CDEPS marked the start of a new, digital era for customs operations in the country. In particular, the CDEPS provides: (i) a safe, interoperable electronic solution in line with the World Customs Organisation and EU standards; (ii) a completely paperless environment for customs (import and export) and excise procedures through the exchange of electronic data with economic operators and other government agencies; (iii) faster customs and excise procedures for economic operators; and (iv) full compatibility with the EU systems.

As of the end of 2023, around 8 000 economic operators and participants in the customs procedure were registered in the CDEPS and more than 840 000 declarations for import and export had been processed.

In 2020, the Excise System (EMCS) was fully developed and put into production within the CDEPS, completely supporting the implementation of the new Law on Excise Duties and the Law on Motor Vehicle Tax.

In 2022 the Green Customs Declaration has been introduced, which discharges the whole customs import and export procedure within 30 minutes provided that the customs declaration is on green channel.

According to the Ministry of Agriculture, Forestry, and Water Economy (MASP), the changes to the basic systems that make up CDEPS mentioned above are expected to take place by the end of 2027. This will include also changes to the data model of the Systems.



Refund of VAT on Individuals

The Law on Returning a Part of the Value Added Tax on Individuals (Official Gazette No. 133/2019) regulates the conditions and procedure for exercising the right to get a refund of part of the VAT indicated in the receipts of individuals. This legal solution gives the citizens of the Republic of North Macedonia the opportunity to obtain a 15 % refund of the total amount of VAT indicated in the receipts for each quarter. The purpose of the Law on Returning Part of the Value Added Tax on Individuals is to reduce tax evasion in the country.

A 'MYVAT' (MojDDV) application for citizens to submit receipts, which can be downloaded from the Play Store and App Store since 1 July 2019, was developed to scan the bar code from the receipts. The user profile of the ePersonal Income Tax Portal is used for registering in this system and as of 31 December 2019 the number of citizens registered was 213 055. Until then, 52 191 539 codes from receipts had been submitted.



Distribution System and Geoportal for Dissemination of Data and Services (One Stop Shop Portal)

OSSP provides data, information and services for individuals and legal entities (citizens, geodetic companies, notaries, internal users of AREC, etc.). Through this system AREC offers a customized solution, namely a web portal through which information, data and services from the real estate cadastre are offered. This solution is integrated with the electronic cadastre, Geodetic-Cadastre Information System (GCIS) and other AREC systems. The purpose of this system is to simplify and speed up the access and flow of information and data to all users.



eServices for Municipalities

In the Republic of North Macedonia, citizens can access several centralized online portals at local level, used by central and local governments. These are:

- The **Information System for Construction Land** covers all the procedures established in the Law on Construction Land, implemented only through this eService. This system allows municipalities and government to make auctions, legalisation and alienation of undeveloped construction land. The entire process takes place electronically and involves the use of digital signatures;
- The **Information System for Building Permits** covers all the procedures established in the Law on Building Permits, implemented only through this eService. This includes electronic submission and signing of necessary documentation by the investor, electronic preparation and submission of acts in the procedure, electronic notification and provision of necessary data and documentation from other involved parties, and electronic issuance of acts in the procedure;
- www.e-stvari.mk, for public auction/bidding regarding the sale and lease of real estate and movable property; and
- www.rob.zels.org.mk, for exchange of information and activities at local level in the area of gender-responsive budgeting.

In the Information System for Construction Land and the Information System for Building Permits, the procedures start when users send an electronic request submitted with their digital signature. The processing of all the required data is carried out in the system and ends when the contract/decision/solution is received and digitally signed by the authority.



Web Services in the Area of Justice and Home Affairs

40 new web services were developed for the needs of the institutions in the area of Justice and Home Affairs, thereby establishing new data exchanges between institutions.



National Spatial Data Infrastructure

The National Spatial Data Infrastructure (NSDI) is not limited to distributing data and services, but includes the policy, management, technology, standards, financial and human resources necessary to achieve this goal. Spatial data and services are published and available on the NSDI national geo-portal. During 2015, AREC developed a software solution for the establishment of a national geo-portal, whose implementation has been finalized in 2015. The portal was re-designed in 2020. The NSDI geo-portal functions as a shared web platform on which members and institutions of the NSDI can create and publish metadata for their spatial data and their web services.





Lidar Portal

In 2019, part of the territory of the Republic of North Macedonia was laser scanned in the context of the [Lidar Project](#). Data processing, production of appropriate products (DTM, DSM and pints cloud) and quality control of the Lidar products are ongoing. A Lidar Portal was also developed for users to view, select and download Lidar data.



Digital Public Services for Businesses



Law on Services

The obstacles encountered when starting an economic activity and providing service activities required the adoption of a general legal framework in the service sector, in line with the EU Internal Market Services Directive 2006/123/EC (Services Directive). The framework was intended to ensure: (i) the smooth movement of services through the removal of legal and administrative restrictions for performing service activities; (ii) the establishment of one place where service providers can submit requests for the necessary licensing procedures electronically; (iii) the promotion of cooperation among regulators from individual countries; and (iv) the improvement in the quality of services.

The [Law on Services](#) was adopted by Parliament on 21 May 2019 (Official Gazette No. 98/2019) as an horizontal framework law in the service sector. It provides the general legal framework for accessing the market of services and providing service activities by determining basic principles, including the principles of non-discrimination and simplification of the approval procedures. The activities to align the sector-specific legislation with the law are currently underway. The new Action Plan to align the sector specific legislation with the Services Directive/Law on Services was adopted by the Government in December 2023.

A draft decree has been prepared to improve the notification procedure and compliance assessment of all authorizations and requirements in draft regulations related to access to services or the practice of a service activity. This is aimed at avoiding any future inconsistencies between amendments to the national legislation and the Services Directive/Law on Services.

Furthermore, the law regulates the functioning of the Point of Single Contact (PSC), which will electronically provide the necessary information and assistance with regard to the procedures for market access and service provision. According to the Law on Services the National eServices Portal (uslugi.gov.mk) will function as a PSC. Development of the eServices for businesses is currently underway in order to meet functionalities required by the Services Directive/Law on Services.



Law on Electronic Commerce

The [Law on Electronic Commerce](#) was initially adopted by Parliament on 26 October 2007 (Official Gazette No. 133/2007), transposing the European Directive on certain legal aspects of information society services, in particular electronic commerce, in the Internal Market (Directive on electronic commerce).

The law regulates information society services related to electronic commerce and commercial communication, along with the responsibilities of the providers of these services. In particular, the law enables electronic documents to be treated as official contracts and defines their legibility as paper documents. Also, the law outlines the form and validity of contracts in electronic form, demanding that those contracts be concluded by electronic means.

In 2011, the law was amended to include recommendations by the European Commission to fully comply with the Directive (Official Gazette No. 17/2011). Further amendments to the law (Official Gazette No. 104/2015, 192/2015 and 31/2020) were made for the purpose of aligning with the Misdemeanour Law



Refund of VAT on Businesses

To speed up the administrative procedures for executing the VAT refund and offset procedure, a module for automatic refund and offsetting has been developed. Through an automation process, the system enables to process VAT refund requests in a shorter period.



Single Window System for Import, Export and Transit Licenses

The Single Window System for Import, Export and Transit Licences (EXIM) includes all requirements by government agencies (i.e. 60 licenses/certificates from 11 government agencies) related to the cross-border movement of goods. EXIM was implemented in 2008 and is becoming



more sophisticated each year, providing for greater efficiency and faster customs procedures. The number of registered users has been continuously growing, totalling around 8,173 at the end of 2023, with more than 1,342,167 licenses issued, with an average processing time for obtaining a permit of 0.5 days.

The system was upgraded in 2019, when it was integrated in the new CDEPS and the Integrated Tariff Environment (ITE). In the second quarter of 2020, a major improvement was introduced in the web services for data exchange with the CDEPS and goods discharge.

In the period August-September 2020, a new module was developed within the EXIM system that serves to record patients with COVID-19 and their contacts. It was developed in accordance with the needs of the State Sanitary and Health Inspectorate (SSHI) and in close cooperation with the CA. The data from the EXIM system are transferred to the RAAVIO system for automatic monitoring and stopping of persons who are trying to leave the country by plane.

The system is integrated with ITE systems for non-tariff measures and TARIM, as well as CDEPS for controlling the validity of the licenses regarding the EO, type of license, country, tariff and quantity.



National Single Window

In 2020, the **Project for the Development and Implementation of a new National Single Window (NSW) System** was launched within the Facilitation of Cross-Border Trade of Goods component of the Western Balkans Trade and Transport Facilitation project, financed by a World Bank loan. This project is expected to develop and implement a complete NSW, which is one of the most effective tools for facilitating cross-border trade. The new NSW should meet the needs and requirements of the CA, other government institutions responsible for the cross-border flow of goods and the business community, in order to further facilitate and accelerate cross-border trade, and align with the regulations and standards applied in the EU Member States.

The first activity of the project started in mid-October 2020, including the analysis of the applicable laws, the current situation and the existing problems, along with the development of the new model of NSW (blueprint). The blueprint document will also include a business process model, a functional and technical architecture, and detailed technical specifications for the implementation of the system, including the software development and hardware needs. The preparation of this document will take place at the regional level. In the first phase a blueprint document will be prepared for the implementation of the NSW in North Macedonia, Albania and Serbia, including an annex detailing the specific needs and requirements for each country.

The process of publishing the tender for the procurement of the NSW is expected to begin in April 2024 and the NSW will become operational by the beginning of 2026.



Integrated Tariff Environment

The Integrated Tariff Environment (ITE) is a centralised IT solution for managing customs tariffs, tariff and non-tariff measures, binding tariff information, customs quotas, samples and the customs duties calculator (TARIC, Quota2, Surveillance, EBTI, ISPP and ECICS). Even before the accession to the EU, the ITE provides the following advantages for economic operators in North Macedonia:

- Online (electronic) access through the TARIM module to information previously available in paper form (customs duties, VAT, excise and national non-tariff measures, and import and export restrictions);
- Access to information even after expiry;
- Access to the calculation module, allowing to accurately calculate customs and other duties, as well as to obtain information about the documents required for import and export;
- Faster, cheaper, easier and more transparent access to the information destined to economic operators; and
- Improved prevention and recognition of frauds.

The system was upgraded in 2019, when it was integrated in the new CDEPS and EXIM. During 2020, the tariff quota management module was upgraded; in August 2020 work started to upgrade the module for binding tariff information according to the prepared technical specification.

Upgrades of ITE consist of the implementation of the Surveillance module on a national domain, online submission of BTI for EO, and the integration of BTI in Import and Export declarations.



eRegistration for Businesses

eRegistration is part of the one-stop-shop system and is a portal for registering businesses and other legal entities, making amendments and deletions, paying registration fees and obtaining certificates in electronic or paper format. In the process of registering a business, the portal also provides an option for automatic registration of authorised persons as first employees in the compulsory social insurance (registration with the Employment Agency and hence in the Pension and Health Funds) and applying for VAT registration with the PRO through the one-stop-shop system and the national interoperability platform.



Data Warehouse and New Risk Management System

The current project 'Establishment of risk analysis and customs data warehouse for the Customs Administration of the Republic of North Macedonia' is financed by the Office for Development Assistance (ODA) of Korea. The two customs services are included as contractors. The project started at the beginning of 2024 and aims to develop and implement a risk management system and data warehouse for the needs of the CA, namely the implementation of customs procedures. The implementation of this system will allow for improved targeting of declarations that pose a risk of underpaying duties, incorrect customs classification, or inaccurate declaration of the goods' origin through alerts.

As per the project dynamics, the project is expected to be completed by the end of 2026. It will consist of three components:

- *Component 1.* Establishing a 'Risk Management and Customs Data Warehouse' involves introducing an advanced Risk Management System that will work seamlessly with existing systems. This system will include functions such as assessment, analysis, selectivity simulation and evaluation. Additionally, a data storage system will be set up to cater to customs requirements. This system will store customs data related to passenger information at airports, details about goods in transit during customs procedures, and other relevant data from various systems to generate reports for customs officials.
- *Component 2.* 'Capacity Development and Operational Support Program' through which Korean experts will strengthen operational capacities by providing training on how to use and operate the system. The programme includes two main components: (i) training senior management to understand the changes brought by the new risk management system, and (ii) training central administration, customs officers, and staff on using the risk management system and data warehouse, along with software and hardware operations for day to day activities.
- *Component 3.* Expansion of the existing IT infrastructure by providing hardware and software according to the needs of the project.

Public Procurement



Law on Public Procurement

A **Law on Public Procurement** was adopted in January 2019, harmonising the national legislation with EU Directives 2014/24/EU, 2014/25/EU and 2007/66/EU. The law came into force on 1 April 2019, further enhancing the use of electronic means in public procurement procedures by instituting mandatory eProcurement in all stages of the procurement procedure (ePublication of contract notices, eSubmission of electronic tenders, eEvaluation, eAuctions and eAward).

The Electronic System for Public Procurement remains the central ePlatform for the procurement system in the Republic of North Macedonia, enabling all of the abovementioned functionalities. A new module of eAppeal was also introduced, thus enabling economic operators to submit their appeals in electronic form through the system.

During 2019 and 2020, activities were undertaken to update the system in line with the new law. An eMarketplace for small value procurements has been developed and it has been functional since 2022. Also, red flags were developed and integrated in the system as anticorruption tools.



Association of Local Government Units

The **Association of Local Government Units (ZELS)** is a non-profit organisation and unique national association, including, on a voluntary basis, all 80 municipalities, with the City of Skopje as a separate unit of local self-government. The Association was founded on 26 April 1972. The president of ZELS is a member of the National ICT Council.





ZELS' unit supporting eServices for municipalities is an administrative unit that enables the implementation of priority eServices at local level. It provides one central support for all municipalities regarding maintenance of eServices and ICT infrastructure for several State information systems that are being used by the municipalities.

In coordination with several government ministries, the Association of Local Government Units (ZELS) is responsible for the implementation of part of the Law on Construction Land, the Law on Building Permits and the Law on the Use and Management of the State/Local Inventory, providing the tools needed for implementation.

eProcurement System

The **Electronic System for Public Procurement (ESPP)** is the national eProcurement portal which is used by all contracting authorities to conduct public procurement procedures. The **Law on Public Procurement** mandates that all public procurement procedures shall be conducted by using electronic means, notwithstanding the derogations to this rule in the EU Procurement Directives. The system is owned and developed by the Public Procurement Bureau (PPB), a body within the Ministry of Finance.

The portal provides a one-stop-shop for public procurement, thereby improving efficiency and transparency, streamlines complex procedures, and facilitates the interaction between businesses and government institutions. Moreover, the system is compliant with EU directives and supports all forms of public procurement. All public institutions and businesses can register with the system and obtain the obligatory digital certificates for posting tenders or sending bids. The latest version of the system, optimised for the newly adopted law and procurement procedures, was launched in 2019. Furthermore, the ESPP introduced an open data module on the public page, providing the general public with aggregated data on a number of procurement indicators. The PPB continues with the further development of the systems' modules and the enhancement of the existing ones, significantly simplifying and facilitating the use of the application.

Considering the above functionalities, the ESPP is the main tool providing transparency and efficiency in the public procurement system in North Macedonia.

In 2020, the PPB started developing a new platform only aimed at conducting small-value procurements in a simplified and effective manner. The specific objective was to introduce two new innovative electronic tools for procurement: eMarketplace and eCatalogues. In particular, a new software platform is developed for efficient electronic conduct of small-value procurement for goods and services up to the national threshold of EUR 10 000. The new platform is supplementary to (and connected with) the current ESPP and has been operational since 2022.

Digital Inclusion and Digital Skills

Learning Management System

The **Learning Management System (LMS) Portal**, offering eLearning for administrative servants, enables SCORM packages to be uploaded and made available to all public servants. eCourses include a test, with a certificate generated for the participant if passed. In 2020, the LMS System was upgraded and migrated to cloud infrastructure, including the integrated module for video conferencing.



5. Trust and Cybersecurity

eID and Trust Services



Agreements and Legislation on Trust Services and Interoperability

In the first half of 2020, all regulations stemming from the [Law on Electronic Documents, Electronic Identification and Trust Services](#) were adopted. This action established a comprehensive legal framework aligned with the EU Regulation on electronic identification and trust services for electronic transactions in the internal market (eIDAS Regulation).

As part of the Berlin process, a [Memorandum of Understanding on Regional Interoperability and Trust Services](#) was signed with Western Balkan partners on 2 November 2020. The document highlights joint actions and initiatives towards an enhanced regional cooperation to support digital integration and exchange of information in an open, interoperable, secure and reliable way, giving priority to regional interoperability and trust services.



Law on Electronic Documents, Electronic Identification and Trust Services

The [Law on Electronic Documents, Electronic Identification and Trust Services](#) (Official Gazette No. 101/2019) governs the creation, storage and processing of electronic documents, electronic identification, and trust services. It also outlines how electronic documents, signatures, seals, and trust services are to be used in administrative and court proceedings.

The purpose of the law is to ensure an adequate level of security of the electronic identification means and in the provision of trust services. Furthermore, the law aims to establish the legal framework applicable to electronic signatures, seals, time stamps, documents, electronic registered delivery services, website authentication services, and the storage and validation rules for electronic signatures or seals.

The Law on Electronic Documents, Electronic Identification and Trust Services is fully aligned with the eIDAS Regulation, which it transposes. This law came into effect in September 2020, leading to the repeal of the previous [Law on Data in Electronic Format and Electronic Signature](#). Further amendments, specifying the required elements of electronic documents, were introduced on 27 December 2019 (Official Gazette No. 275/2019).



Digital Certificates

In the second half of 2020, eight applications for registration in the Register of Trust Service Providers and Electronic Identification Scheme Issuers were submitted to MISA and processed by the competent working group together with the accompanying documentation. A total of four qualified trust service providers were registered in the [Register of Trust Service Providers and Electronic Identification Scheme Issuers](#). In addition, two issuers of electronic identification schemes were also registered with a high level of assurance.



eID

When a citizen registers on the Single Sign-On System (SSO) within the [National eServices Portal](#), an eID is created after a successful identity verification. eIDs are immaterial units containing a person's identification data. Users use these to verify their identity for eServices offered by competent authorities and other entities through the National eServices Portal. Various levels of eID are available, depending on how securely the identity verification is done during registration and login. The SSO accommodates three eID levels: basic user profile, low-level eID, and high level eID.

The basic level involves an anonymous user with a username and password, while the low level involves a user physically identified user by the Inland Revenue Service (IRS) or the Electronic Communications Agency (ETU), with a related profile. This profile includes downloaded personal data from the Central Register of Inhabitants, enabling the automation of (synchronous) services from specific institutions.



Single Sign-On System

The [Single Sign-On System \(SSO\)](#) allows users to register and login to the National eServices Portal. At present, only natural persons can register on the SSO. Details on the SSO registration process are available [here](#).



When logging in to the portal, users are automatically redirected to the SSO to identify with their username and password or qualified electronic signature certificate. After a successful identification, the SSO sends an authentication token to the portal, which, in turn, enables access to the portal's private section.

The national SSO is integrated with the authentication system of the PRO and uses the PRO as provider for the first identification of citizens. The SSO is already being used by other institutions as identity provider at the national level (e.g. the Office for the Management of Registers of Births, Marriages and Deaths). Activities for integrating additional institutions are ongoing, targeting three institutions by mid-2021.

The SSO supports the Open ID 2.0, SAML 2.0, WS Federation and OAuth 2.0 protocols.

The SSO tool is now being used by various institutions such as the Administration, the Employment Agency, and the Ministry of Health. Efforts are being made to expand its use to several other institutions as well. As per the Law on electronic documents, electronic identification and confidential services, all institutions offering electronic services must adopt a registered identification scheme. To streamline this process, the use of the registered scheme provided by MISA instead of creating their own is allowed.

Cybersecurity

National Cybersecurity Strategy and Action Plan 2018–2022

The [National Cybersecurity Strategy 2018–2022](#) was first adopted in August 2018, while the [Action Plan 2018–2022](#) was developed by the end of 2018. This strategic document fosters the development of a safe, secure, reliable and resilient digital environment, supported by high-quality capacities and based on cooperation and trust in the field of cybersecurity.

The '5C' goals of the strategy are:

1. Cyber Resilience: building a cyber-resilient ICT infrastructure, identifying and implementing adequate solutions to protect the national interests;
2. Cyber Capacities and Culture: promoting a cybersecurity culture to raise the public awareness and understanding of cyber threats, as well as building and advancing the necessary capacities for protection;
3. Combating Cyber Crime: strengthening the national capacities for the prevention of, research on and adequate response to cybercrime;
4. Cyber Defence: strengthening the capacities for the defence of the national interests, and reducing current and potential cyberspace risks; and
5. Cooperation and exchange of information: promoting cooperation and exchange of information at the national and international level.

The document highlights the responsibilities of the authorities identified in the strategy for the support of the goals and activities outlined in the document.

Law on Personal Data Protection

The harmonisation of legislation in the area of personal data protection has been one of the government's priority activities since 2002. In this context, the Law on Personal Data Protection (Official Gazette No. 7/2005, 103/2008, 124/2008, 124/2010, 135/2011, 43/2014, 153/2015, 99/2016 and 64/2018), amended to include recommendations by the European Commission, was drafted in 2004, adopted on 25 January 2005 and modified to fully comply with Directive 95/46/EC in 2008.

The law represents a *lex generalis* in the area of data protection in the country. According to the law, personal data shall be (i) fairly and lawfully processed; (ii) collected for specified, explicit and legitimate purposes; (iii) processed in a manner which is consistent and proportionate with these purposes, accurate and complete; and (iv) kept for no longer than the necessary timeframe for fulfilling the abovementioned purposes.

In February 2020, a [Law on Personal Data Protection](#), aligned with the General Data Protection Regulation (Regulation (EU) 2016/679), was adopted and published in the Official Gazette No. 42/2020. In addition, 13 by-laws arising from the new law were adopted by the Personal Data Protection Agency and published in the Official Gazette No. 122/2020.

Law on the Security of Network and Information Systems

The legal act transposing the Network and Information Security Directive (NIS Directive) is the [Law on the Security of Network and Information Systems](#), also deriving from the already adopted National Cybersecurity Strategy of the Republic of North Macedonia. According to the

National Programme for Adoption of the Acquis Communautaire (NPAA), the law is expected to be adopted by the end of 2021. In addition, the preparation of this law also concerns the fourth conclusions by the Sub-Committee on Innovation and Technology Development. In this context, the national authorities will intensify the efforts to implement the activities and create the legal framework provided by the National Cybersecurity Strategy.

The [Law on the Security of Network and Information Systems](#) was published in the [Unique National Electronic Registry of Regulations of the Republic of North Macedonia \(ENER\)](#) on 4 October 2019, with a consultation deadline of 50 days. Taking into consideration the commitment of the Republic of North Macedonia to undertake systemic measures for digitisation, the draft law was also delivered to the National BCO, that submitted adequate remarks for the improvement of the proposed systemic solutions.

Finally, to ensure a consistent alignment of the current economic and social situation in the Republic of North Macedonia with the transposition and implementation of the NIS Directive, the Government of the Republic of North Macedonia (GRNM) is considering few options for the creation of a body acting as a single point of contact and CIRT Secretariat, pursuant to the NIS Directive.





6. Innovative Technologies

Artificial Intelligence (AI)



AI Digital Assistant

North Macedonia's government announced on 10 April 2023 the launch of its first digital assistant in the public sector. This platform is based on an AI, ADA, and it will provide companies with information on the conditions for investing in the country and on the State aid available.

The entire procedure was carried out by the Fund for Innovation and Technological Development of North Macedonia (FITD, in cooperation with the Cabinet of the Deputy Prime Minister in charge of economic issues under the Government of the Republic of North Macedonia. For that reason, FITD issued a challenge titled 'Digital Assistant based on Artificial Intelligence for the State aid programmes of the Government of the Republic of North Macedonia under the Economic Growth Plan' released on 19 July 2021. The total estimated budget for the call was MKD 9 million, entirely covered by the FITD.

Through the AI-based digital assistant based, FITD users have access to a 24-hour service that allows for instant communication and prompt responses to their requests. The assistant can proactively engage with customers by offering personalised recommendations, enhancing the overall customer experience. AI-based virtual assistants help reduce costs associated with customer service.

Distributed Ledger Technologies

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

Big Data

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

Cloud & Edge Computing

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

Internet-of-Things (IoT)

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

Quantum Computing

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

Gigabit and Wireless High-speed Networks

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

GovTech

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

7. Digital Public Administration Governance



For more details on North Macedonia'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 Information Society and Administration

The Ministry of Information Society and Administration (MISA) is responsible for all issues pertaining to IT, including the policy and strategy for eGovernment and the modernisation of the Macedonian public administration. In this context, the Ministry publishes reports and strategies, and is in charge of drafting and implementing eGovernment-related international agreements and policies.

Government Ministries and State Bodies

Government Ministries and State bodies are responsible for the development and monitoring of national and local/domain-specific strategies and policies, as well as for the implementation of sectorial ICT and eGovernment projects.

National ICT Council

The National ICT Council was established in February 2018 to develop and oversee the implementation of the National ICT Strategy. It also provides guidance on annual public procurement plans and technical specifications for tender documents related to ICT equipment and software procurement in public sector institutions. The National ICT Council includes the relevant Ministers to ensure consistency in strategic decisions among State institutions.

National Cybersecurity Council

The National Cybersecurity Strategy and Action Plan included setting up a high-level body to define new strategic directions and recommendations for cybersecurity. This body would also be responsible for coordinating and monitoring the activities outlined in the strategy and the accompanying action plan. At the end of 2019, the Government of the Republic of North Macedonia established the National Cybersecurity Council, consisting of the Ministers of Defence (MoD), Interior (MoI), and Information Society and Administration.

Broadband Competence Office

The National Operational Broadband Plan included setting up a national Broadband Competence Office (BCO) in the Republic of North Macedonia. The BCO was established in 2019 as an expert body supporting the investments in broadband infrastructure (especially in rural areas) by increasing their efficiency.

Agency for the Protection of the Right to Free Access to Public Information

The Assembly of the Republic of North Macedonia held a parliamentary procedure on 25 December 2019 and appointed the new management of the Agency. Ms. Plamenka Bojceva was elected as the Director of the Agency, and Mr. Blerim Iseni as the Deputy Director. This transition changed the Commission for the Protection of the Right to Free Access to Public Information into the Agency for the Protection of the Right to Free Access to Public Information.

As of the end of December 2019, the Agency for the Protection of the Right to Free Access to Public Information, which succeeded the Commission for the Protection of the Right to Free Access to Public Information, has met all the legal requirements for functioning and decision-making.

Personal Data Protection Agency

According to the new Law on Personal Data Protection, the Personal Data Protection Agency is an independent and autonomous State administration body responsible for monitoring the lawfulness of activities carried out when processing personal data on the territory of the Republic of North Macedonia.

Macedonia, as well as for protecting the fundamental rights and freedoms of natural persons in relation to the processing of their personal data.

Subnational (Federal, Regional and Local)



Association of Local Government Units

The **Association of Local Government Units (ZELS)** is a non-profit organisation and unique national association, including, on a voluntary basis, all 80 municipalities, with the City of Skopje as a separate unit of local self-government. The Association was founded on 26 April 1972. The president of ZELS is a member of the National ICT Council.

In coordination with several government Ministries, ZELS is responsible for the implementation of part of the Law on Construction Land, the Law on Building Permits and the Law on the Use and Management of the State/Local Inventory, providing the tools needed for its implementation. ZELS' unit supporting eServices for municipalities, called ZUSE, is an administrative unit that enables the implementation of priority eServices at local level. It provides one central support for all municipalities regarding the maintenance of eServices and ICT infrastructure for several State information systems that are being used by municipalities.

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



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

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

Life and Travel

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

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

Doing Business

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

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

The Digital Public Administration Factsheets

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

The factsheets are published on the Joinup platform, which is a joint initiative by the Directorate General for Digital Services (DG DIGIT) and the Directorate General for Communications Networks, Content & Technology (DG CONNECT).



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

An action supported by Interoperable Europe

The 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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