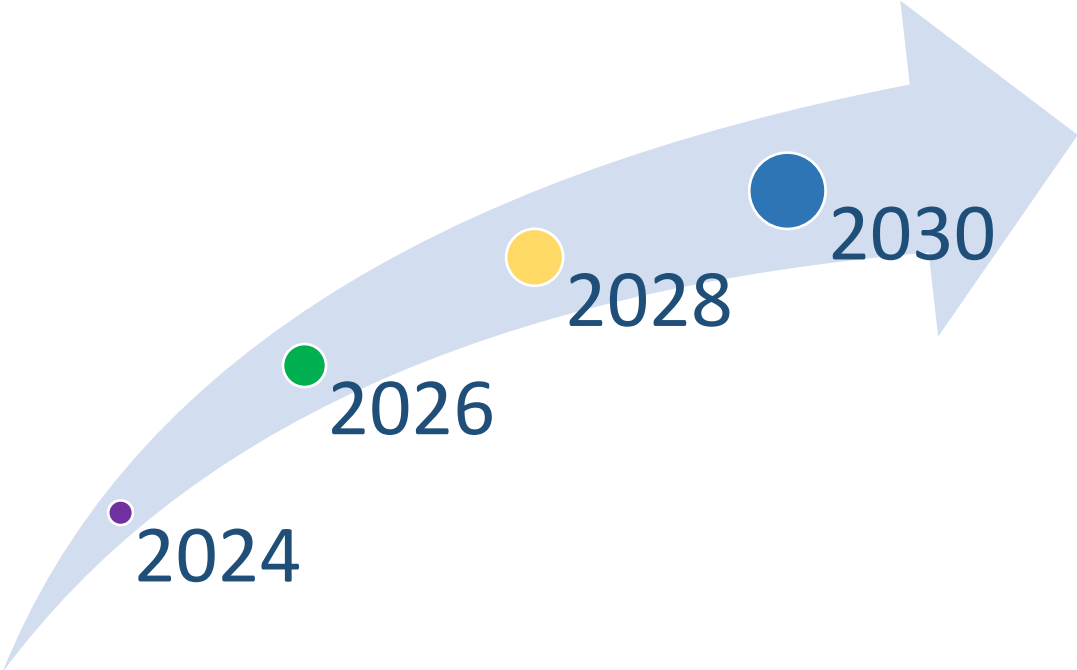


# ROADMAP FOR DIGITAL TRANSFORMATION



November, 2023

## ROADMAP FOR DIGITAL TRANSFORMATION

(2024 – 2026 – 2028 – 2030)

The Government of the Republic of North Macedonia has identified the digitalization of society as a key strategic priority. This focus extends across multiple sectors, with strategies in place for public administration reform, the national ICT strategy, and other sector-specific initiatives.

A significant document in this area is the Concept for Digital Transformation of Society, available at <https://vlada.mk/konceptDT>. Upon endorsement by the National Council for Digital Transformation of Society, under the leadership of Deputy President of the Government in charge of good governance policies Slavica Grkovska, and subsequently by the Government, this framework will establish the core principles that steer the process of digital transformation across all sectors of society. Collaboration among the government, public institutions, private companies, civil society, and the academic community is seen as crucial to the success of this initiative. The goal is to intensify activities and achieve a successful digital transformation, which will enable progress, combat corruption, and strengthen transparency and good governance.

The main principles of this concept include the Rule of law, social cohesion, and public-private partnerships, as well as Free access to public information, Single source of truth, Digital by default, and the "Once-only" principle.

To complement existing strategic documents, a Roadmap for Digital Transformation (RDT) has been developed. The RDT development is supported by the USAID, through Critical Infrastructure Digitalization and Resilience (CIDR) program under the broader Support for the Implementation of the Digital Transformation Roadmap initiative.

The Roadmap provides a visual presentation of proposed initiatives and projects, showcasing a timeline that indicates their recommended periods and durations of execution. These serve as a framework for implementation, categorized into short-term, medium-term, and long-term goals, with the first two to be achieved within two years.

To ensure optimal results, practical approach advice is provided to assist all stakeholders in achieving the desired outcomes.

Each initiative is accompanied by a brief explanation, proposed deadline, and estimated budget required for execution. It's important to note that these estimated values are only approximate and may not reflect the actual costs. As initiatives progress and projects are implemented, these estimates will be revised to ensure alignment with evolving needs and circumstances.

By embracing the initiatives outlined in the Digital Transformation Roadmap and adhering to the principles of the Digital Transformation Concept, the Government of North Macedonia, together with various stakeholders, aims to promote efficiency, transparency, and citizen-centric services.

# ROADMAP FOR DIGITAL TRANSFORMATION

## Graphic presentation of initiatives and projects

	Short-term		Mid-term		Long-term	
	2024	2025	2026	2027	2028	...
<b>1 Political principles</b>						
1,1	Agency for SNISDT					
1,2	Law e_ID cards					
1,3	Promote & Support Innovation					
1,4	IT personnel in PA					
1,5	Re-vit e-democracy					
<b>2 Free access to public information</b>						
2,1	data.gov.mk					
2,2	DA tools					
<b>3 Single sources of truth</b>						
3,1	Digital registers			continuous digitalization of the registers		
3,2	Law CPR					
3,3	e-Health Record - complete data					
<b>4 Digital-by-default</b>						
4,1	Human centered design					
4,2	Law ZEDEITS					
4,3	Infrastructure 1		Infrastructure 2			
4,4	Common systems					
4,5	Law LAM					
4,6			ARHIMAK			
4,7	e-ID cards					
4,8			Digital internal processes			
4,9	New e-services			Continuous digitalization		
4,10			Gov Cloud			
4,11			Data Embassy			
4,12			Central portal transport			
4,13			IFMS			
4,14	School Mgt System					
4,15	e-textbooks					
4,16	TTS & STT (with AI)					
4,17	eUDI Wallet					
<b>5 Once-only principle</b>						
5,1	Enhancing the IOP platform					
5,2	law ZEMES					

## APPROACHES FOR DIGITAL TRANSFORMATION PROCESS

### Guides to optimal digitalization results

Below, you will find a compilation of recommended guides and approaches that should be considered during the implementation of all recommended initiatives. These approaches are designed to prevent and overcome challenges, seize opportunities, and unlock the full potential of digitalization. By following these recommended strategies and aspects, you can effectively navigate the ever-evolving digital landscape and maximize the benefits of your digital transformation journey.

- 1. Regulate, regulate without overdoing it, ensure enforcing adopted regulations:** It is essential to establish legal foundations for all undertakings. Under regulations, we refer to laws, by-laws, decrees, guidelines, standards, methodologies, and other documents that refer to prescribing norms for enforcement. Ensure all regulation reinforces the promotion and protection of human rights and is technology neutral.
- 2. Engage, engage early, engage key contributors:** It is crucial to involve key individuals at the earliest stages of the process, right from the beginning. Key contributors may include, at the very least, process owners, main stakeholders, top management, and data managers.
- 3. Maintain Capacity, Collaboration and Consultation:** It is of utmost importance to maintain the knowledge and skills of institutional resources involved in the digitalization process, while also establishing organizational memory and enhancing the team with additional capabilities. Equally essential is fostering collaboration and consultation with knowledge sources such as academic sector, the business sector, civil society, experts, all political parties, and other valuable resources.
- 4. Ensure Infrastructure:** Infrastructure is an inevitable part of digitalization. Choose the best solution based on the needs, conditions, available technologies, existing state, the budget at hand, and other relevant factors.
- 5. Manage Data:** Take care of the data management, their integrity, accuracy, security, and personal data protection, as the data is essential for the ultimate goal, digitalization of services for the benefit of citizens.
- 6. Educate, educate from 7m to 77y:** Educate on digital literacy through formal and informal education, utilizing all available channels and media. Educate both users and creators of digital solutions, from ethical behavior to sophisticated development tools. Foster development and innovation.
- 7. Promote successes and achievements:** Inform users about the new portals, mobile applications, solutions, through various communication channels, so that they can start using them as quickly as possible.
- 8. Share and re-use:** Promote and support sharing and effective reuse of modules and functionalities within the software solutions, enabling streamlining processes, reducing redundant development efforts, and ultimately saving valuable time and financial resources.
- 9. Integrate Cybersecurity measures** into infrastructure and data processing by default. Ensure protection and resilience of systems against cyber attacks and guarantee data integrity.

## RECOMMENDED INITIATIVES AND PROJECTS

### 1. Political principles

#### **1.1. Establishment and full operationalization of the Agency for the Security of Network and Information Systems and Digital Transformation**, upon adoption of the Law on Network Security, Information Systems and Digital Transformation

The law, shall stipulate: Adoption of a Plan for the Digital Transformation of the Public Sector; Adoption of a National Cybersecurity Strategy; Establishment of a competent body for the security of network and information systems and digital transformation of the public sector, with determination of its competencies; Management of cyber crises, a single point of contact for the security of network and information systems, as well as a national body for responding to computer incidents; Measures for managing cybersecurity risks and reporting obligations; Rules and obligations for the exchange of information related to cybersecurity; Monitoring of the implementation of this law.

Deadline: 31.12.2025 / Budget: 2.000.000 EUR

#### **1.2. Legal introducing electronic ID cards by amending the Law on Personal Identification Cards.**

The introduction of electronic ID cards for citizens should be based on legally prescribed norms. The law describes the template and content of the data in the ID card, the process of issuance, the expiration period of the ID cards, the conditions for their replacement, and other relevant information.

Other laws related to the Law on Personal Identification Cards to be aligned with the amendments.

Deadline: 31.12.2025 / Budget: 0 EUR

#### **1.3. Promoting and supporting innovations**

Promote and facilitate research and development in the field of digital transformation, artificial intelligence, and other modern concepts and technologies by implementing policies that provide incentives, subsidies, temporary tax exclusions, and other forms of support. These efforts should go beyond frameworks and regulations, aiming to encourage and enable innovation without imposing unnecessary constraints. The goal is to foster an environment that nurtures innovation, establishes foundational elements, and provides guidance, mechanisms, and funding opportunities for research and development activities.

Deadline: 31.12.2025 / Budget: 2% of the GDP

#### **1.4. Improvement of the conditions for IT personnel in the administration**, upon Amending the Law on administrative servants

Conduct a comprehensive evaluation of the existing conditions for IT personnel in the administration, considering legal conditions and constraints. Additionally, analyze the Catalogue of working positions in the administration in order to standardize IT roles and prepare them for further current state and predictive analysis. Finding and recommendations from both analysis shall concentrate on strategies to provide and ensure enhancing the retention, motivation, mentoring, and re- and up-skilling of the human capital.

Amending the Law on administrative servants shall be implemented based on the findings and recommendations from both analysis, and wide public debate.

Deadline: 31.12.2025 / Budget: 0 EUR

### **1.5. Re-vitalization of the E-democracy and E-initiative concepts**

The concept of e-democracy and e-initiative involves utilizing digital technologies and platforms to enable democratic processes, citizen participation, and political engagement. These platforms aim to foster inclusive and transparent governance by incorporating diverse citizen perspectives and voices. They provide tools and processes for citizens to actively participate, provide feedback, and engage with their government and public institutions through various communication channels. Ensuring the meaningful application of human rights is especially crucial for people with disabilities and other vulnerable categories, fostering inclusivity, equal opportunities, and dignity in all aspects of life.

Implemented e-democracy and e-initiative platforms will consider user habits, ages, and skills to ensure a personalized and user-friendly experience. These platforms will utilize existing communication channels such as portals, social media platforms like Meta, TikTok, X, and other popular channels. They may also incorporate new channels that are yet to be invented or widely adopted in order to reach and engage a larger and more diverse audience. Furthermore, it is advisable to integrate the identification process with platforms such as X, Meta, Gmail, and other similar networks and email services.

By leveraging an array of communication channels, the revitalized e-democracy and e-initiative platforms will facilitate widespread and inclusive participation. Citizens will have multiple avenues to express themselves, share their opinions, and contribute to decision-making processes in a way that aligns with their preferences and technological capabilities. This multi-channel approach will enhance accessibility and encourage active engagement from individuals across different demographics, ultimately strengthening democratic processes and governance.

Deadline: 31.03.2025 / Budget: 200.000 EUR

## **2. Free access to public information**

### **2.1. Maintaining and enhancing data.gov.mk portal (Open-by-design)**

Maintaining an open-data portal with new data shall be implemented by systematic and efficient approach:

- Establishing and improving data collection methods to ensure accurate and reliable information.
- Regular updates of the data sets which is essential to keep the portal up-to-date and relevant.
- Proactively seeking out new datasets and collaborating with relevant stakeholders to obtain the latest information.
- Establishing data quality assurance procedure(s) to review and validate incoming data.
- Providing adequate storage and backup systems to ensure the security and integrity of the data.

Deadline: 30.06.2025 / Budget: 150.000 EUR

### **2.2. Enhancing/ upgrading the Open-data portal with data analytics tools**

Enhancing and upgrading the existing Open-data portal with data analytics tools, such as machine learning algorithms and statistical models. This shall allow for the processing and analysis of the vast amount of data available on the portal. These tools can uncover meaningful insights, patterns, and trends, empowering users to extract valuable information from the data. The tools shall provide intuitive visualization, allowing users to explore the data in a visually and interactive manner. Moreover, advanced analytical feature like real-time data analysis should be incorporated to provide additional value to users.

Deadline: 31.12.2024 / Budget: 100.000 EUR

### **3. Single sources of truth**

In the realm of single source of truth, ensuring data protection and especially personal data protection is crucial, as it ensures that sensitive information is consistently and accurately managed, reducing the risk of data breaches and enhancing overall security measures.

#### **3.1. Digitalization of the registers, Standards for Data Quality**

While some registers have already been digitalized, we shall focus on the further improvement in two directions. On one hand, we shall focus on enhancing the quality of data in the existing digital registers and on the other, on the digitalization of the remaining important registers.

Our priority is to maintain and preserve registers in digital format such as the Population Register, Civil Registration (Certificate Office), Land and Property Register, Business Register, Tax Register, Healthcare Register, Education Register, Vehicle Registration, Electronic Voting Register. Additionally, the following registers will be digitalized: Register of registers, Register of Institutions, Register of State Land, Register of guardians. Where necessary, we will make amendments to the laws in order to facilitate the digitalization process or to introduce, establish or re-define relevant registers.

The goal/ objective of the digitalization of these registers is to achieve comprehensive, accurate, and high-quality data that will be readily available and seamlessly integrated through the existing Interoperability platform. This initiative will not only streamline processes and enhance data accessibility but also pave the way for improved service delivery and increased efficiency throughout the organization.

Moreover, Standards for Data Quality shall be developed, adopted and established.

Deadline: 31.12.2026 / Budget: 1.500.000 EUR

#### **3.2. Law on Central Population Register**

In order to establish mechanisms and procedures for data correction at the single sources of data registered/reported by/at the Central Register of Population, amendments will be made to the Law on the Central Register of Population.

Deadline: 31.12.2024 / Budget: 0 EUR

#### **3.3. e-Health Record - complete data**

An e-Health Record (EHR), or e-Medical Record, is a digital version of a patient's medical history that is stored and maintained in an electronic format. It contains a comprehensive collection of a patient's health-related information, including medical history, diagnoses, medications, allergies, lab results, treatment plans, and other relevant healthcare data.

Designing EHR to be accessible to authorized healthcare providers and healthcare organizations involved in the care of a patient. The EHR shall enable the exchange and sharing of patient information across different healthcare settings, allowing for timely and accurate communication between healthcare professionals. Additionally, the EHR will include Predictive Analytics and Research that will serve for analyzing large datasets, researchers and healthcare aiming to identify patterns, trends, and risk factors, leading to innovative interventions and improved patient outcomes.

Deadline: 31.12.2025 / Budget: 750.000 EUR



## **4. Digital-by-default**

In the context of "Digital-by-default" principle, cybersecurity measures should be adopted as a horizontal approach that emphasizes the integration of secure and resilient digital technologies from the outset, ensuring that cybersecurity considerations are inherent in the design and implementation of digital systems and processes.

### **4.1. Human centered design**

Conduct training and introducing human-centered design in public administration as a standard for approaching service delivery design and policymaking. Human-centered design places the needs, experiences, and perspectives of citizens at the forefront of decision-making processes. It also promotes innovation and efficiency by continuously iterating and improving service delivery. By testing prototypes, gathering feedback, and refining solutions, administrators can ensure that public services are constantly evolving to meet the evolving needs and expectations of citizens.

Revising, adopting and establishing the practice of their regular application of the: Standards for Service Delivery, Methodology for Inclusion of the End-Users in the Process of Improvement of Public Services, Guideline for optimization of Service.

Deadline: 30.06.2025 / Budget: 100.000 EUR

### **4.2. Law on Electronic Documents, Electronic Identification and Trust Services**

Continuous amending the Law on order to maintain compliance with the eIDAS regulation with the aim of timely implementation of the regulatory requirements by all participants.

Deadline: 31.12.2025, and continuous / Budget: 0 EUR

### **4.3. Infrastructure**

Providing infrastructure from two perspectives:

- infrastructure needed by state servant to perform their daily tasks electronically (using digital solutions), and
- infrastructure intended for the regular and uninterrupted operation of established digital solutions.
- While the first group includes equipment such as: personal computers, printers, scanners, and network infrastructure,

the second group includes: Hardware (servers, data storage systems, networking equipment), Software (operating systems, database management systems), Licenses (licenses for using proprietary software and tools, as well as any necessary licenses for regulatory compliance), Security tools (firewalls, antivirus software, intrusion detection systems, encryption tools), Communication infrastructure (internet connectivity, network switches, routers, and other communication equipment necessary for transmitting data and facilitating communication), Data management systems (systems for data storage, backup, and recovery, as well as data integration and data analytics), Collaborative tools (tools for online collaboration, video conferencing software, project management platforms)

Deadline: 31.12.2026 / Budget: 4.000.000 EUR

### **4.4. Implementation of common systems across all state bodies**

Implementing common systems such as Document Management System (DMS), Enterprise Resource Planning (ERP), Human Resource Management Information System (HRMIS), Learning Management System (LMS), e-obvrski, and others, across all state bodies, aiming to streamline operations and efficient resource

utilization. By adopting these integrated systems, state institutions can enhance collaboration, optimize processes, and centralize data management.

The DMS facilitates document digitalization, storage, retrieval, and sharing, leading to reduced paperwork, enhanced document security, and improved information accessibility. ERP helps in centralizing and automating various administrative functions, including finance, procurement, inventory management, and reporting, ensuring standardized practices and improved decision-making. HRMIS enables effective management of personnel data, recruitment, employee performance evaluation, and training, leading to a transparent and efficient workforce management system. LMS facilitates online learning and training programs, enabling continuous professional development and knowledge sharing among government employees. E-obvrski is an electronic payment system that allows convenient and secure digital transactions between state bodies and the state treasury.

Deadline: 30.06.2025 / Budget: 70.000 EUR per state body

#### **4.5. Law on Recordkeeping**

The new draft Law on Recordkeeping is regulating the legal competencies of the State Archives, as well as administrative and archival workflow of the owners of the public and private documentary and archival material. By adopting and implementing this law, the processes of administrative and archival workflow will be improved and standardized. This law will ensure the protection, preservation, processing, and free access to the archival material, which represents significant cultural heritage of the state and a source of collective memory for the entire society.

Electronic documents will become standard, enabling full electronic exchange between public authorities and the provision of electronic services to citizens.

In addition to establishing electronic systems for administrative and archival workflow in the entire public sector, the Law stipulates an obligation for the State Archives to establish the ARCHIMAK system as the sole electronic system for the permanent preservation of and free access to archival material.

Deadline: 31.12.2024 / Budget: 0 EUR

#### **4.6. Implement the ARCHIMAK system**

Implementation of the ARCHIMAK system, regulated by the Law on Recordkeeping.

The creation of official electronic documents, as well as the keeping, protection, and use of electronic archival material, will be facilitated through the establishment of a single centralized information system with unified standards for document management, metadata, and information about archival material - ARCHIMAK. This will enable the State Archives to more effectively manage archival funds and collections and facilitate easier, faster, and higher-quality access to public documents for users.

The system will leverage resources from the Agency for Network and Information Security and Digital Transformation, specifically the G-cloud infrastructure. Additionally, the government's disaster recovery location in Prilep will be utilized to ensure the continuity and security of the system's operations.

Deadline: 31.12.2026 / Budget: 1.000.000 EUR

#### **4.7. e-ID and mobile ID**

An efficient, secure, and user-friendly electronic identification (eID) system serves as a crucial foundation for a successful digital transformation. In recent times, North Macedonia has demonstrated significant strides in translating the eIDAS legislative framework into domestic legislation. This progress establishes a

robust legal framework, laying the groundwork for the implementation of secure eID structures with comprehensive national coverage and the potential for cross-border acceptance.

The introduction of North Macedonia's national eID is anticipated to streamline the transition of public and private services to electronic platforms, reducing the need for physical visits to service centers. A universally accepted and widely adopted eID plays a pivotal role in fostering effective e-Governance, contributing to enhanced efficiency, transparency, and overall economic growth.

In order to successfully implement the national eID, it is imperative to approach it not merely as an ICT initiative but rather as national-level project. This necessitates the establishment of robust legal and policy frameworks to provide the necessary support for its seamless integration and operation.

The integration of eID functionality into ID cards represents a pivotal step in establishing a comprehensive eID coverage across the economy. This not only enables secure online onboarding for mobile applications, such as the Mobile eID, but also aligns with industry best practices. The Mobile eID, particularly appealing to the private sector, notably in banking, emerges as a key driver of enhanced user experiences.

For individuals who may choose not to utilize smartphones or prefer an alternative approach, the National ID card-based eID offers a viable substitute for the Mobile eID solution. Recognizing the exponential growth in the significance of electronic transactions in our daily lives, having this National ID card-based eID option serves as a valuable alternative, providing flexibility and serving as a dependable fallback solution.

Deadline: 31.12.2025 / Budget: 20.000.000 EUR

#### **4.8. Digitalization of specific internal processes**

Perform an in-depth analysis of the internal processes and the accompanying conditions referring their execution. Focus particularly on processes tailored to the unique needs of each institution, with the aim of accelerating their execution and enhancing user satisfaction through digitalization.

Based on the insights gained from these analyses, prioritize recommendations to formulate actionable plans for digitally transforming internal processes.

Deadline: 31.12.2026 / Budget: 150.000 EUR per state body

#### **4.9. New and enhanced e-services**

Providing new e-services for the citizens and businesses, undertaking at least:

- Developing of new e-services, aligned with user needs and institutional conditions,
- Enhancing existing e-services, introducing new features and improving user-friendliness to accommodate to a wider audience,
- Continuous updating data in the Service Catalogue of Public Services,
- Upgrading the Catalog of Public Services with new capabilities and functionalities to address the actual requirements,
- Connecting of all institutions in the interoperability platform, development of new web services and web methods and their exposure on the Interoperability Platform,
- Adopt and practice the doctrine of whole-of-government in government operations,
- Integrating the Single Sign On system on the National e-services Portal with other e-services systems,
- Upgrading the National e-services Portal to enhance its functionality.

Deadline: 30.06.2025, and continuously / Budget: 500.000 EUR per year

#### **4.10. Gov Cloud**

Establishing and managing the Government Cloud (specialized cloud computing infrastructure and services specifically tailored for government entities, agencies, and organizations), designed to meet the unique security measures, data protection mechanisms, and compliance frameworks to ensure the confidentiality, integrity, and availability of sensitive government data.

The key features and benefits of government clouds shall include: Enhanced Security, Compliance, Data Residency, Risk Management, Scalability and Flexibility, Collaboration and Interoperability, Disaster Recovery and Business Continuity.

Deadline: 31.12.2026 / Budget: 3.000.000 EUR

#### **4.11. Data Embassy**

A data embassy is a concept that involves the establishment of a facility or infrastructure located in another country where a government can securely store and process its sensitive data. It acts as a physical or virtual extension of a country's data center, allowing the government to maintain control over its data while providing additional protection against potential risks such as natural disasters, political instability, or cyber attacks.

The concept of a data embassy addresses concerns related to data sovereignty, resilience, and business continuity. By hosting critical government data in a secure facility located in a foreign country, this approach aims to ensure the availability, integrity, and confidentiality of sensitive information.

Data embassies can be established through bilateral agreements or partnerships, where two countries agree to provide each other's governments with secure storage and processing facilities for their data. The host country is responsible for maintaining the security and physical infrastructure of the data embassy, often subject to strict legal agreements and compliance requirements.

Deadline: 31.12.2029 / Budget: tbd

#### **4.12. Central point (portal) for national and international transport**

A central portal for national and international transport is a digital platform or website that serves as a central hub for accessing relevant information and services related to transportation. It aims to provide a convenient and unified platform where users can find comprehensive information, resources, and services related to various modes of transport. The central portal typically includes features such as: Timetables and schedules, Booking and ticketing, Route planning and navigation, Real-time updates, Travel information and guides, and others.

First steps, besides having a digital solution for individual transport system, encompass: 1. Standardization and Interoperability, i.e. establishing common standards and protocols across different transport systems and stakeholders, harmonizing data formats, interfaces, and communication protocols enables seamless integration and exchange of information. 2. Legal and Regulatory Framework, i.e. a clear legal and regulatory framework that include data protection and privacy laws, guidelines for data sharing, and adherence to relevant international standards and agreements, 3. Integration with Existing Systems, i.e. ability to integrate with existing national and international transport systems, databases, and platforms, for ensuring data sharing, real-time updates, and coordination between different stakeholders.

Deadline: 31.12.2027 / Budget: 500.000 EUR for the first steps

#### **4.13. Integrated finance management system**

Implementation and establishment of an Integrated Financial Management Information System aimed at consolidating and streamlining all financial and treasury processes within the Ministry of Finance, the Public Revenue Office, and the Customs Administration.

Deadline: 31.12.2027 / Budget: 20.000.000 EUR

#### **4.14. Upgrading the School Management System**

Upgrading the current School Management System (or Educational Management Information System) to assist educational institutions in effectively managing their administrative and academic processes. The system shall combine various modules and features to centralize data, automate tasks, and facilitate communication among administrators, teachers, students, and parents. Some common features of a school management system include: Student Information Management, Attendance Tracking, Gradebook and Exam Management, Timetable and Scheduling, Communication and notifications, Staff Information and Payroll, Reporting and Analytics.

Deadline: 31.12.2025 / Budget: 300.000 EUR

#### **4.15. e-textbooks for students (in addition to the printed ones) (e-book format)**

Establishing a National portal where all textbooks will be available in e-book format. An e-book, electronic book, refers to a digital version of a traditional printed book that can be read on electronic devices such as e-readers, tablets, smartphones, or computers. E-books typically replicate the content of a printed book, including text, images, and sometimes interactive features and are available in various formats. E-books are available in various formats, such as EPUB, PDF, MOBI, and AZW, and can be purchased from online platforms, borrowed from libraries, or downloaded for free from websites offering public domain literature. The portal shall offer portability, accessibility, customization, searchability, interactive features, and will be environmentally friendly.

Deadline: 31.12.2025 / Budget: 200.000 EUR

#### **4.16. Text-to-speech and Speech-to-text**

Making significant progress in utilizing of AI in text-to-speech (TTS) and speech-to-text (STT) solutions to make significant improvements in upgrading and integrating their existing capabilities. With this enhancement we aim to bring benefit both to the citizens with disabilities and the public at large, across various sectors such as customer support and call centers, public services, transportation, and communication centers.

Deadline: 31.12.2026 / Budget: 200.000 EUR

#### **4.17. eUDI Wallet implementation**

Many individuals are already familiar with OEM wallets, such as those offered by Apple, Samsung, and Google, which serve as platforms for storing digital payment cards on mobile devices. As its name implies, the EUDI Wallet is designed to fulfill a comparable function but with a broader scope, encompassing various schemes. This includes not only IDs but also credentials like driving licenses, health records, and digital travel documents.

Crucially, the EUDI Wallet is not positioned to replace the existing ID documents, whether in digital or physical form, utilized by EU citizens. Instead, its purpose is to offer a convenient digital rendition of these documents.

However, the EUDI Wallet transcends its role as a mere repository for digital IDs, attestations, and entitlements on mobile handsets. It embodies a multifaceted utility that goes beyond mere convenience.

Deadline: 31.12.2026 / Budget: tbd

## **5. Once-only principle**

### **5.1. Enhancing the IOP platform**

Enhance the Interoperability Platform (IOP) by introducing cutting-edge technologies, allowing for seamless integration and communication between different systems, through:

- Incorporating both the Push and Pull approaches, enabling real-time data updates as well as allowing users to retrieve information on-demand.
- Further optimize the platform's capabilities, facilitating efficient data exchange and enabling the development of innovative services by leveraging the power of APIs.

Deadline: 31.12.2026 / Budget: 2.000.000 EUR

### **5.2. Law of Electronic Management and Electronic Services**

Amendment of the law regarding the introduction of a List of fees for public e-services, provided by the National e-service portal or other official e-services portals.

Deadline: 30.06.2025 / Budget: 100.000 EUR