POLICY BRIEF

FROM EGOVERNMENT TO DIGITAL TRANSFORMATION: AN OVERVIEW OF KEY CHALLENGES IN MONTENEGRO

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Introduction

Digital transformation implies using new information technologies to reform work processes and public administration services, and delivering that reform in a way that extends beyond "online" access to traditional administrative services. The Organisation for Economic Co-operation and Development (OECD) uses the term "digital government" to convey taking strategic decisions about and using digital technologies and data to rethink how policies and public services are designed and implemented to meet the changing needs and expectations of citizens.[1] Therefore, in the context of digital transformation, it does not suffice to merely digitalise existing services, which do not necessarily have to be user-oriented, but to adapt them to new technologies with the aim of achieving the best possible user experience.

Digital transformation of public administration and society in Montenegro is an objective proclaimed by a series of strategic documents - primarily, the Public Administration Reform Strategy and the Digital Transformation Strategy, which were both adopted in late 2021.[2] Particular focus is placed on further digitalisation of public administration services, which should be measured by indicators related to the number of digitalised services on a single portal (e.g. 20 so-called life-event services like eStudent, eBirth, eEnrolment, eNGO registration, eProfessional exam, etc. by 2026 compared to 0, which is the current baseline); the number of interconnected electronic registers managed by institutions (e.g. 50 by 2026 compared to the current baseline of 8 connected registers); as well as connecting all local administrations to a single system for electronic data exchange (Government Service Bus - GSB). The Report on the Implementation of the Public Administration Reform for 2022 showed that no progress was made in terms of the number of digitalised services on a single portal. This translates to citizens of Montenegro still not being able to fully receive services from the public administration electronically, without

1 Felipe Gonzales Zapata, Marianne Piccinin-Barbieri, *Making the leap from e-government to digital government*, OECD. Available at: https://www.oecd-ilibrary.org/sites/1e7a17e2-en/index.html?itemId=/content/component/1e7a17e2-en
2 Strategies are available at the webpage: https://javnepolitike.me/strateski-dokumenti/

visiting a counter. The number of pairs of electronic registers connected through GSB has increased from eight to twelve, although no more information is offered in relation to which pairs of registers are connected and how they affect provision of specific services.[3]

However, digitalisation does not "end" with public administration reform; rather, it is an all-pervasive issue upon which progress in numerous other sectoral reforms depends. With the aim of contributing to a better understanding of the challenges and progress in the area of digitalisation in all sectors, this paper provides an overview of the key challenges in further digitalisation and provides recommendations for improving the strategic approach to digital transformation of public administration.

Digitalisation by sectors: inconsistency in the perceived need for it

In addition to the two key strategies, both of which promote the concept of digital transformation, Montenegro offered a whole series of strategic documents that contain numerous activities and objectives aiming at improving the situation in the sectors of democracy and good governance; economic development and the environment; traffic, energy and information infrastructure; employment, social policy and health; financial and fiscal policy; science, education, culture, youth policies and sports; foreign and security policy and defence.

Strategic documents within each of these sectors stress the importance of digital transformation to varying degrees. Priorities and challenges common to all sectors can be divided into the following key areas:

- Digitisation of data - information systems for improved data management;
- Digitalisation of services - introduction of new, and digital transformation of existing services with the help of information technologies;
- Education and training for the use and application of new technologies in work and service provision, including research and innovation;
- Cyber security.

Strategies adopted in the recent period place particular emphasis on the importance of these aspects of digital transformation, which shows that the awareness of the importance of using and applying new technologies in the work and provision of services is maturing in the Montenegrin administration. Such an approach is also encouraged by the European Union (EU), through initiatives such as is the Digital Agenda for the Western Balkans.[4]

Introduction of electronic registers, i.e. digitisation of data, is most often cited as a priority, given that it is prerequisite for improved monitoring and provision of services in many areas. To a lesser extent, focus is placed on planning **digitalisation of services** by sectors. The issue of cyber security is mainly concentrated in strategies within the security and defence sector: Cyber Security Strategy, Strategy for Countering Violent Extremism,

3 Report on the implementation of the Action Plan for the implementation of the Public Administration Reform Strategy for the period 2022-2026. for 2022, 30. 05. 2023. Available at: https://www.gov.me/dokumenta/d549cffb-73ce-4dfe-b255-7cbf41c63bb5

4 The goal of this agenda is to support the region's transition to a digital economy and enjoy the benefits of digital transformation, such as faster economic growth, greater employment, and better services. This support is primarily reflected in three fundamental priorities: Increasing cyber security and trust, and digitalisation of the industry; Strengthening the digital economy and society. The digital agenda also pledged to support the introduction of tools in the area of eGovernment, eProcurement and eHealth as well as development of digital skills among citizens, to encourage research and innovation, through the establishment of national research capacities and contribute to the development of the most modern e-infrastructure in the Western Balkans. See: https://ec.europa.eu/commission/presscorner/detail/en/IP_18_424277

Strategy for Combating Human Trafficking, while the Digital Transformation Strategy contains a separate section dedicated to these issues. Improving digital literacy and related competencies is an adequately recognised need. However, lack of effective coordination of these efforts is evident, which is explained in more detail in the following sections. These sections provide an overview of key measures and objectives in relation to the four challenges listed above in the area of digital transformation in Montenegro through various public policy sectors, as well as an overview of the management of the digital transformation process.

Data digitisation/ information systems for improved data management

Since 2015, when the Government reviewed the Information on Keeping of Registers of the State Administration and Local Self-government Units with a proposed set of measures to improve the situation, there has been no data on the number of records and registers in Montenegro, nor has there been complete information on how many registers are available in physical, paper format, vs. in electronic format. At the time, there were over 600 registers kept in state administration bodies and local self-government units, and the exponential growth in the number of data "has not been accompanied by adequate technological support in terms of data exchange and the creation of new services that result from it."[5] Meanwhile, the GSB was launched, as a technical prerequisite for linking of electronic registers, the benefit of which is the greatest for citizens, given that it should enable rapid exchange of data by default. Additionally, it should enable bypassing trips to several different counters, where citizens receive different certificates, given that institutions should be exchanging data directly, thereby making the exchange faster and easier. However, only twelve registers are currently connected to GSB, and there is no information available about which registers they are and what types of data can be exchanged through this unique information system.

The Law on Electronic Government introduced the obligation to maintain a meta-registry, which includes a set of data on electronic registers and information systems maintained and managed by administrative bodies and other entities, in order to create conditions for electronic data exchange. According to that law, the meta-register should be published on the MPA website, in an open format. However, in May 2023, during the finalization of this analysis, it was only available on the open data portal. The published version of the meta-registry contains information on 16 different registers, the largest number of which are under the jurisdiction of the Ministry of the Interior, the Ministry of Education, the Ministry of Justice and the Ministry of Labour and Social Welfare[6]. Electronic registers are particularly underdeveloped at the local level. According to the Public Administration Reform Strategy, more than half of all municipalities do traditional record-keeping, using physical books.

5 Information on the management of registries held by public institutions and local self-government units with recommendations for improvements, Government of Montenegro, December 2014.
6 Metaregister reviewed by visit of the following page:
https://data.gov.me/dataset/metaregistar/resource/91fe262c-9f05-4da2-9b00-2bcadc2586ae?page=53

The new Electronic Document Law made it possible for a **digitised act** to have the same evidentiary force as the original act, if digitisation was completed in line with the law,[7] which was expected to give momentum to further digitisation of data held by institutions, a need that is also recognised by a number of sectoral strategies[8]. On the other hand, certain sectoral strategies show that digitisation per se is not sufficient, if there is a lack of effective control and coordination. The Human Resources Management Strategy in the Police Directorate 2019-2024 places strong emphasis on the fact that planning of human resources is hampered by an ineffective system of electronic records of police officers, which consists of as many as three different electronic databases. The Strategy underlines that "existing electronic databases are not interconnected, which is why time is wasted on data entry in three different electronic systems, which are not a reliable source of information about human resources in the police", warning that digitisation, if dysfunctional – as it is in the case of police, cannot be the sole guarantor of reform.[9] In other sectors as well, the lack of functional electronic records, from ship registers to information on the environment and electronically supported energy databases, stand out as challenges.

The Development Strategy of Official Statistics 2019-2023, as one of the umbrella documents for data production and management by institutions in Montenegro, recognises the importance of using new techniques in data collection (CATI, CAWI, Web scraping, Web scanning, etc.) through new investments in the IT system for data collection, processing, analysis and dissemination. The associated 2023 Action Plan states that, among activities to develop an IT integrated system for collecting, processing, publishing and documenting the results of official statistics, data collection has been improved, which enabled improvements in the quality of official statistics production. One of the development initiatives include a plan to establish an IT system for electronic archiving and documentation.

Digitalisation of services - introduction of new services using information technologies

As discussed above, the Public Administration Reform Strategy is predominately focused on the so-called services aimed at key life events, such as birth certificates, enrolments in educational institutions, etc. However, we are simultaneously seeing changes implemented in numerous sectors, driving development and digitalisation of services. Among them, the electronic fiscalisation system and the electronic public procurement system stand out as particularly noteworthy. Both systems have been active since 2021, and in addition to simplifying procedures, they also feature anticorruption aspects.[10] It is now possible to electronically approve, order and issue excise duty stamps, which ensures additional transparency in monitoring the movement of products marked with Montenegrin duty stamps. Electronic registration of single-member companies with limited liability has

7 Electronic Document Law, adopted in December 2022, available at: https://zakoni.skupstina.me/zakoni/web/app.php/akt/2905

8 For example, the Strategy on Migration and Reintegration of Returnees in Montenegro foresees establishment of an electronic database and improvement of the system of identification, registration and data connection on migrants, while recalling the previous introduction of electronic records of registration of residence for foreigners, which significantly modernised the system of registration and deregistration of residence for foreigners. The Strategy for Tackling the Illegal Possession, Abuse and Trade of Small Arms and Light Weapons and Ammunition 2019 - 2025, underlines that an electronic database is necessary for an effective arms control system, as well as inter-institutional linking and data exchange, as well as improved storage management records. In the financial and fiscal policy sector, an integrated revenue management system (IRMS) in the Revenue and Customs Administration is to be developed by the end of 2023. Additionally, with the aim of further reducing the informal economy, electronic record management of tourist traffic has started, which includes improved system of recording the stay of tourists in Montenegro by linking the records of registration of residence of foreigners - RB90 with the Central Tourist Register through a mobile application for guest registration.

9 Human Resource Management Strategy in the Police Administration for the period 2019-2024, October 2018, available at: https://www.gov.me/dokumenta/2c05c605-1915-4324-922e-f0a814e54e59

10 The automated access and exchange of information contribute to the transparency and fight against corruption in respective fields.

been made possible, and services have been set up for, among other things, ordering certificates issued by the Companies Register and for changing company data.

Interestingly, even back in 2011, the Government of Montenegro, i.e. the then Ministry of Information Society and Technologies, recognised the importance of using open source technology for the development of new services.[11] "Open Source Software (OSS) represents software programs that are available in their programme codes, which means that their code can be read and modified, adapted to certain needs and are generally free, i.e. the license for their use is free", as stated in the Strategy, which provides for a systematic guarantee for long-term development of the Open Source approach in Montenegro.[12] However, although there have been individual initiatives for creation of certain services for public administration employees through the OSS technology (e.g. My Personal File for civil servants), there have been no systematic activities to exchange and upgrade these non-commercial codes in order to design new services and transform existing ones.

A review of existing sector strategies reveals a plan to introduce applications and a series of electronic services, which include e.g. development of an application that enables facilitated visa applications; improvement of the Employment Agency IT platform in order to provide inclusive services to all users, greater interoperability with other databases in the system, and more adequate data exchange with the aim of improved monitoring of unemployed persons; development of e-services on the web platform for digital nomads; establishment of a unique electronic health record as a basis for implementation of the digital transformation process in the health system of Montenegro; and digitalisation of the vessel registration procedure. Strategic documents in the field of road traffic show an aspiration for the so-called intelligent transport system (ITS), which implies introduction of "new and developing information technologies - computers, sensors, communication systems, electronic devices, etc., with the aim of increasing the safety, efficiency, availability and sustainability of the traffic network".[13] To that end, electronic toll collection systems have been provided on certain roads (Sozina tunnel, Bar-Boljare highway on the Smokovac-Mateševo section). Facilitation of cross-border electronic data exchange between competent state authorities, clients and relevant ITS service providers has been defined as a priority, followed by introduction of a system for monitoring and controlling public transport vehicles and a unique electronic ticket for public transport.

The Public Administration Reform Strategy entails a plan to compile a catalogue of offline and online services with an analysis of their condition/quality, embedding the concept of "human-centred design". Years of Institute Alternative advocacy work have, in part, contributed to this measure, which could in turn potentially contribute to a better overview of progress made in the process of digitalisation of services in all sectors. According to the report on the implementation of the Strategy in 2022, the establishment of the catalog of services in the pilot institutions was started, but it has not yet been fully implemented.

11 Government of Montenegro, *Strategy of Using Open Source Technologies in Montenegro*, September 2011, available at: https://www.gov.me/dokumenta/8ad5bb33-4ef2-42c5-a846-c2b2f87b46e0
12 *Ibid*
13 Government of Montenegro, *Programme for the Development and Introduction of Intelligent Transport Systems in Road Traffic 2022-2026.*

Education and training for the use and application of new technologies in work and service provision

A significant aspect of digitalisation and training of employees in public administration for the use and application of new technologies is lifelong learning, and increasing digital literacy of various target groups. The Digital Transformation Strategy defines an objective and associated activities in this area, but for progress to be achieved, the digitalisation aspect ought to be included in all key education and professional development programmes. In that segment, we note that improvement of digital literacy to a certain extent also permeates sector strategies.[14]

However, an analysis of the education sector, which was produced under the auspices of UNICEF, pointed out vulnerabilities in the system. Despite the rapid establishment of distance learning mechanisms, the crisis caused by Covid-19 revealed "weaknesses in terms of the availability and quality of digital content, insufficient capacity of schools to use digital technology, and pointed to a digital gap, where every sixth child in Montenegro did not have a laptop or computer at home to follow online classes".[15] It underlines that in 2018, Montenegro was among the five worst countries in terms of PISA testing results measuring the number of computers per student. The analysis indicated the need to integrate digital skills into new curricula.

In response to these and other recognised challenges, in December 2021 the Government adopted the Education System Digitalisation Strategy, which is focused on three key strategic goals: improvement of the information system of education; development and improvement of the digital ecosystem (including improvement of computer infrastructure in educational institutions, development of digital educational content, establishment of a platform for independent learning); and development and improvement of digital skills and competencies.[16] However, there are still no available reports on its implementation, nor are there any reports on the Digital Transformation Strategy. It was only a year into the adoption of both strategies, which are crucial for improvement of digital competences, that the first constitutive meeting of the coordinating body for managing the digital transformation process was held.[17]

Cyber security

The cyber-attack that took place in 2022, the consequences of which are still reverberating in May 2023, showed the extent to which the field of cyber security had been neglected. The Cyber Security Strategy 2022-2026 recognised various challenges in this area, even before the attack took place, pointing to poor implementation of

14 For example, the Strategy for the Development of Women Entrepreneurship 2021-2024, contains measures related to support for improving digital literacy among women in business (entrepreneurs and managers) and/or increasing the capacity of their companies in the field of digitalisation of business and business processes (organisational processes, human resource management, online promotion and trade). The Strategy for the Promotion of Gender Equality also strives to achieve a higher percentage of female students in undergraduate, master's and doctoral studies in STEM fields (Electrical Engineering, Mechanical Engineering, Metallurgical Technology and Natural Mathematics Faculty at the University of Montenegro), which are all related to improvement of digital skills. In 2019, the Government of Montenegro established the Smart Specialisation Strategy (S3), which is highly relevant for digital transformation of the country, as it is imbued with numerous activities related to support for the start-up community and digital transformation of companies, advisory services in the field of new technologies etc.

15 Miriam Viser and Tinde Kovač-Cerović, *Education Sector Analysis for the period 2015 – 2020*, UNICEF Montenegro and the Ministry of Education, Podgorica, 2022, available at: https://www.unicef.org/montenegro/media/22586/file/ESA%20-%20CG%20verzija.pdf

16 Government of Montenegro, 2022-2027 Education System Digitalisation Strategy, January 2022, available at: https://www.gov.me/dokumenta/ffcaa638-e50a-4445-96b2-af7940a161ae

17 Constituent Meeting of the Coordination Body for the Management of the Digital Transformation Process, 27. 03. 2022. Information available at: https://www.gov.me/clanak/organizovan-prvi-konstitutivni-sastanak-koordinacionog-tijela-za-upravljanje-procesom-digitalne-transformacije

the previous strategy in the context of protection of critical IT infrastructure and centralisation of cyber expertise and resources.

The Cyber Security Strategy aims to strengthen capacities in this area, especially in terms of financial and human resources, improving the response to cyber incidents, including through the establishment of a Cyber Security Agency; improvement of prevention measures and education on cyber security; improving the response to cybercrime; improved data protection and cooperation. Therefore, key challenges in this area have been recognised strategically, but the Government reports on developments in this area are not sufficiently transparent, although it should aim to increase such transparency following the cyber-attack from 2022.

"It is clear that Montenegro does not have adequate mechanisms for detecting cyber threats, as well as mechanisms for a sufficiently quick response, i.e. recovery from cyber-attacks. Additionally, a lack of experts in the field of cyber security is recognised as a global problem, while in Montenegro, due to limited human resources, this problem is even more pronounced."

Cyber Security Strategy 2022-2026

The Public Administration Reform Strategy did not sufficiently take into account the potential impact of threats to cyber security on the objectives and activities of the Strategy. The cyber-attack that Montenegro was exposed to in August 2022 had a negative impact on the first year of implementation of this Strategy. According to the Government's Report on Public Administration Reform for 2022, " the attack resulted in suspension of the information infrastructure until October 2022, and entailed reinstallation of a significant number of systems on computers, and the loss of important archival material and documents in the making."[18]

When Institute Alternative requested that the Ministry of Public Administration and the Ministry of Internal Affairs provide a report on the cyber-attack, they responded that they did not have that document in their possession. The Ministry of Public Administration even underlined that creation of such a report was not an obligation under their competence.[19] According to media reports, the American FBI made a report on the cyber-attack, but our institutions did not proactively report on the scale of the attack and its consequences, although the consequences are still visible at the end of May 2023 – from annual reports on the work of the institutions no longer being made proactively available[20] to the fact that that cooling systems in institutions does not function.[21]

In July 2022, the Government established an Information Security Council, as an umbrella body tasked with informing the Government of Montenegro about all important issues related to information and cyber security, initiating and proposing measures to improve the overall situation and cooperation in this area.[22] Institute Alternative did not manage to get hold of the minutes from the sessions of this body, because they are classified

18 Government of Montenegro, *Report on the implementation of the Action Plan of the 2022-2026 Public Administration Reform Strategy*, 3. 05. 2023. Available at: https://www.gov.me/dokumenta/d549cffb-73ce-4dfe-b255-7cbf41c63bb5
19 Damira Kalač, *Who Has The FBI Report, Vijesti online*, 16. 02. 2023. Available at: https://www.vijesti.me/vijesti/drustvo/643617/kod-koga-je-izvjestaj-fbi
20 For example, the Administration for Inspection Affairs requested from the IA in a response to Freedom of Information (FoI) request a fee of 60 EUR for the access to two annual work reports which were supposed to be publicly available according to the Law on Free Access to Information. Only after the public pressure, the reports were uploaded on the website, while the Administration claimed in a correspondence with the IA that there were no longer available because of the cyber-attack.
21 Mirko Kotlaš, *Cyber-attacks Shut Down the Cooling System in Ministries at Rimski Trg*, Vijesti online, 30. 05. 2023. Available at: https://www.vijesti.me/vijesti/ekonomija/658776/sajber-napadi-ugasili-klime-u-ministarstvima-na-rimskom-trgu
22 Government of Montenegro, *Decision on the Establishment of the Information Security Council*, 09. 07. 2022. Available at: https://www.gov.me/dokumenta/af193a37-9034-442b-8a86-4dcf0e371512

as "internal". Additionally, even aggregate information pertaining to the number of Council sessions held or the agenda of the sessions is unavailable, although this should not be subject to restrictions in terms of the relevant regulations on confidentiality of data and free access to information.

From the Annual Report of the Ministry of Public Administration for 2022, it follows that as many as 28 out of 39 institutions under the auspices of the Government do not have their own IT support, so the Ministry of Public Administration is directly and solely in charge of all interventions related to the proper functioning of IT equipment and services, and ongoing provision of assistance.[23] The international community is also active in the domain of cyber security. Representatives of France and Slovenia supported the establishment of a Regional Centre for Cyber Security and Cyber Capacity Development (WB3C), the goal of which is to build the capacity of countries in this region for cyber security and the fight against cybercrime. The regional centre started operating in May 2023,[24] and the first training was organised in the same month.

However, despite the clear emphasis on cyber security at the central level, this topic is not integrated in most sector strategies, even in cases where the launch of new information systems, digital platforms, etc. is planned. Cyber security as a topic in a wider sense is only raised through a couple of sectoral strategies.[25]

Management of the digital transformation process

In December 2021, the government of Zdravko Krivokapić adopted the Information on the Launch of the Montenegro Digital Programme, which aimed to manage the process of digital transformation at the level of the Government as a whole. An additional objective was to ensure coordination of the process, especially through the definition of digital standards, optimisation of consumption in procurement of IT equipment, software solutions, licenses and implementation of digital solutions, creation of an open digital market, as well as agile development of policy processes and platforms according to the needs of citizens. More than half a million EUR was planned for these needs, and EUR 290.000 was planned for a parallel establishment of a Digital Academy - a platform for education of public servants and other relevant stakeholders in Montenegro in the field of digital and complementary skills.[26]

In the meantime, certain pilot programmes were launched at the Digital Academy (transformational leadership and change management, cyber security and introduction to human-cantered design)[27], but Montenegro Digital Programme did not take off in its original form. According to the Report on the Work of the Ministry of Justice for 2022, only guidelines for accessibility standards were adopted in terms of development of internet portals,

23 Ministry of Public Administration, The 2022 report on the work and state of affairs in the administrative areas pertaining to the scope of competences of the Ministry of Public Administration, 20. 04. 2023. Available at: https://www.gov.me/dokumenta/07c9adb6-7a42-489e-ad11-f45c2deb8c52

24 B.H., "Big Day for Montenegro": First Regional Training Centre for Cyber Security Opened in Podgorica, 08. 05. 2023. Available at: https://www.vijesti.me/vijesti/drustvo/655589/veliki-dan-za-crnu-goru-prvi-regionalni-centar-za-obuku-iz-oblasti-sajber-bezbjednosti-otvoren-u-podgorici

25 For example, the Strategy for Prevention of Money Laundering and Terrorism Financing recognises the need for preparation of a training plan on the use of high-tech communication systems and digital networks for proliferation of radicalisation and recruitment for the purpose of terrorism, as well as an analysis of the current situation in the matter of opposing the use of high-tech communication systems and digital networks for proliferation of radicalisation and recruitment for terrorist purposes. The Strategy for Countering Violent Extremism provides for a series of activities aimed at suppressing the spread of extremist content on the Internet, while the National Gender Equality Strategy 2021-2025 recognises the danger of multiplying gender stereotypes and the increasing presence of online violence due to the increasingly intensive use of social media.

26 Government of Montenegro, Information on Launching of the Project "Montenegro Digital", 24. 12. 2021. Available at: https://www.gov.me/dokumenta/b97e774d-75ac-411a-91da-b2fd79eb9375

27 Internet presentation of the Digital Academy, available at: https://www.gov.me/mju/digitalna-akademija

and activities were initiated to draft amendments to the Law on Information Security with the aim of defining information security standards.[28] The draft of this law was published in March 2023 and provides for the establishment of the Agency for Cyber Security, which will be responsible for implementing security measures in accordance with EU standards. It is also planned to provide the Agency with information on cyber threats and incidents, with the aim of better management in this area.

The government of Zdravko Krivokapić was defeated on a motion of no confidence in February 2022. Dritan Abazović, the president of the 43rd Government elected at the end of April 2022, announced the establishment of an Office for Digitalisation and Innovation,[29] but its formation did not take place. As previously mentioned, more than a year into the adoption of the Digital Transformation Strategy, the first constitutive meeting of the coordinating body for managing this process was held. According to the information on its establishment, this coordinating body has a broad mandate "aimed at running cross-sectoral development that would accelerate overall development of the country and enable the use of digitalisation development potentials, with the aim of positioning Montenegro as a competitive digital environment, digitalisation of industry and entrepreneurship."[30] The relationship between the activities of this body and earlier ideas about launching the Montenegro Digital Programme is not clearly stated. The Government adopted a Conclusion obliging the Ministry of Public Administration to determine the structure and establish the body. The IA has obtained the decision on its establishment based on the Freedom of Information (FoI) Request. With a total of 26 members, this body represents a relatively wide forum, which includes representatives of business, IT and academic community, as well as representatives of various ministries and agencies, covering mid-level expert and managerial positions. Apart from including minister of public administration and the state secretaries from three ministries, this body was not established at a wider political level, which would provide for wider political support for this process at the top of the Government. Its list of tasks is primarily connected to the digital transformation strategy with additional list of more broadly formulated tasks, which are not specific and action-oriented. There is no reporting obligation on the work of the body. It is only stated that it "can provide report on its work to the Government, at least once per year".[31]

28 Ministry of Public Administration, *The 2022 report on the work and state of affairs in the administrative areas pertaining to the scope of competences of the Ministry of Public Administration*, 20. 04. 2023. Available at: https://www.gov.me/dokumenta/07c9adb6-7a42-489e-ad11-f45c2deb8c52

29 The expose of the then's Prime Minister Designate reads: "In order to establish digital transformation of society, this Government will form an Office for Digitalisation and Innovation. The office will focus on digitalisation of public administration, reform of the education system with an emphasis on strengthening digital skills, and inserting the IT industry a strategic branch of economic development in Montenegro." https://www.gov.me/dokumenta/08ef2c04-9e94-4712-8336-f4d7f240b7d0

30 https://www.gov.me/clanak/saopstenje-sa-39-sjednice-vlade-crne-gore

31 Ministry of Public Administration, *Decision on the establishment of the Coordination body for the management of the process of digital transformation*, No. 01-078/23-1661, March 24, 2023

What comes next?

Awareness of the importance of digital transformation is maturing in Montenegro. In addition to strategic documents that directly concern the introduction and use of new technologies, there is a whole series of sectoral strategies, which take into account certain aspects of digital transformation, mostly through the introduction of new information systems, data digitisation, and to a lesser extent, digitalisation of services.

However, there is a degree of "uncertainty" and inconsistency when it comes to managing the digital transformation process, which is best reflected in the modest launch of the Montenegro Digital Programme, the promotion and apparent abandonment of the idea of forming the Office for Digitalisation and Innovation, and the fact that the coordination team for digital transformation was formed more than a year into the adoption of the relevant Strategy.

The 2022 cyber-attack was an alarming reminder of a lacking response to cyber incidents, although the relevant ministry had previously issued warnings about the lack of results in this area through a series of strategic documents. However, rather than patching ***ad hoc*** solutions and remedying the consequences, the issue of cyber security ought to be integrated as a horizontal, all-pervading issue through all sectoral reforms, because it potentially concerns all areas, from sustainable functioning of electronic procurement portals to the Companies Register.

In the domain of so-called data digitisation, and interconnection of electronic registers, only slow and limited developments have taken place. Such a situation has a negative impact on digitalisation of services - a process that should be the most tangible result of digital transformation for citizens.

Recommendations:

Coordination of the digital transformation process

The Government should opt for and provide a more permanent structure that will manage coordination of the digital transformation process at the level of the entire public administration. In this sense, the idea of launching the Montenegro Digital Programme was commendable, as it entailed a plan to define and apply digital standards in a uniform manner; optimise consumption in the procurement of IT equipment, software solutions, licenses and implementation of digital solutions; create an open digital market as well as agile process for policy and platform development, in line with the needs of citizens. Therefore, the programme should be continued under the auspices of the recently formed coordination team for digital transformation;

The Government should prepare and make publicly available a report on the implementation of the Digital Transformation Strategy;

The coordinating body for managing the digital transformation process should harmonise and provide reporting on all efforts in this area, in addition to reporting on the implementation of the Strategy. It should consider all reports that refer to the implementation of sectoral strategies, such as, for example, the Education System Digitalisation Strategy, and this should be explicitly included in the mandate of the body.

Digit(al)isation of data and services

The Government should update the Information on Record-keeping in the Montenegrin Public Administration, including traditional paper records and electronic registers, in order to create a clear "road map" for digitisation of existing records, as a basic prerequisite for their interconnection and the design of new electronic services;

Reports on progress in connecting new registers to the unique information system for electronic data exchange should clearly state specific benefits in terms of provision of services for citizens, in addition to the existing quantitative review;

The catalogue of online and offline services, the creation of which is planned within the Public Administration Reform Strategy, should serve as a basis for improved coordination of further digitalisation of services, and unification and setting of clear priorities in further efforts in this area;

The Government should renew its strategic approach to the use of open source technologies for the creation of new electronic services.

Professional development

All relevant ministries and organisations that exercise public powers should be involved in defining the Digital Academy Training Programme, through a clear methodology of needs analysis and training planning, in order to ensure accessibility of opportunities for professional development of public administration employees in terms of improving digital literacy and digital competence.

Cyber security

- The Information Security Council should improve the transparency of its work, through reporting on the sessions it held, the agenda of the sessions, as well as all points that are not subject to restrictions on access to information, in line with the relevant regulations;
- The relevant line ministries, in cooperation with the line Ministry of Public Administration, the Regional Cyber Security Centre and the future Cyber Security Agency, should incorporate cyber security matters into key strategic documents;
- Efforts to standardise and define digital standards and procurement of IT equipment, software and licenses should take into account any unique requirements regarding cyber security, in order to ensure that new information systems and services meet the latest standards in this area.