

DIGITAL AGENDA OBSERVATORY

FINAL RESEARCH ON THE STATE
OF E-GOVERNMENT DEVELOPMENT & DIGITAL LITERACY IN THE
TARGETED WESTERN BALKAN COUNTRIES 2022

SKOPJE, DECEMBER, 2022

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Kosovo*

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The Increasing Civic Engagement in the Digital Agenda – ICEDA project aims at increasing the engagement of the civil society organizations (CSOs) in the shaping and implementation of the Digital Agenda in the Western Balkans (DAWB).

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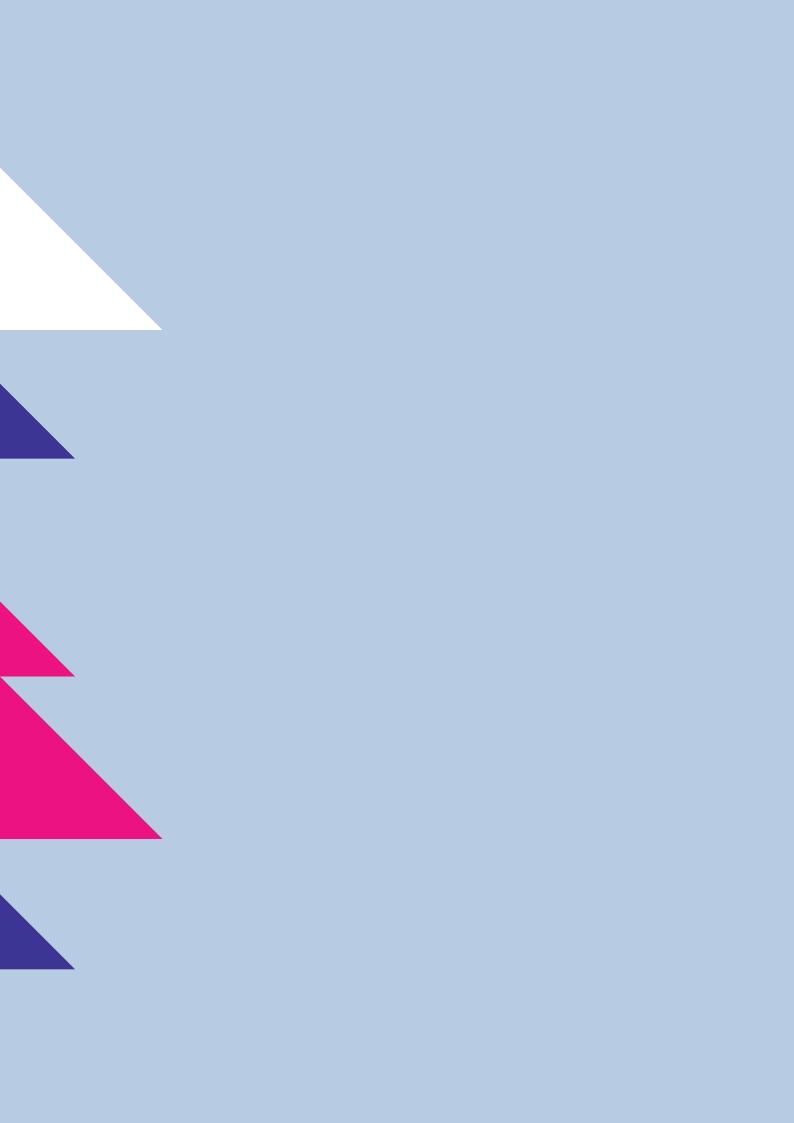
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Abbreviations

- **AEC** Agency for Electronic Communications
- ADISA Agency for the Delivery of Integrated Services Albania
- **CCSDA** Cross Cutting Strategy on Digital Agenda
- CDA Centralized Digital Agency
- CSO Civil Society Organization
- **DA** Digital Agenda
- **DAO** Digital Agenda Observatory
- **DMS** Document Management System
- eID electronic Identification Document
- **ENER** Electronic Register of Regulations
- **EU** European Union
- ICEDA Increasing Civic Engagement in the Digital Agenda project
- ICT Information and Communication Technologies
- **INSTAT** Institute of Statistics of the Republic of Albania
- KODE Kosovo Digital Economy Project
- MISA Ministry of Information Society and Administration
- MKD-CIRT National Center for Computer Incident Response
- NAIS National Agency for Information Society
- NALED National Alliance for Local Economic Development
- NAP National Action Plan
- NCSI National Cyber Security Index
- **OGP** Open Government Partnership
- RNM Republic of North Macedonia



PRFFACE

As stated in the previous regional and national reports, digitalization in all spheres and for all social groups is an effective mechanism for improving the well-being of citizens. The need for digitalization became even more apparent due to the COVID-19 pandemic, as it pointed to the urgent need for mechanisms, tools and adapted regulation for better organization and a fully functioning society. In the COVID-19 aftermath, it is even more evident that there is a need for digitalization in order to make the citizens, businesses and societies as a whole more resilient and able to withstand external shocks and changes.

The Digital Agenda (DA) covers the development of the information society in the broadest sense. To actualize the issues of DA in the countries of the Western Balkans, the project "Increasing Civic Engagement in the Digital Agenda – ICEDA" is currently being implemented with the financial support of the European Union (EU). The project is implemented by a partner consortium of CSOs from the Western Balkans region: Metamorphosis Foundation for Internet and Society (North Macedonia) as a leading partner, in cooperation with the e-Governance Academy (Estonia), Partners for democratic change (Serbia), NGO 35mm (Montenegro), Open Data Kosovo (Kosovo*) and by Levizja Mjaft! (Albania).

The term "Digital Agenda" is often difficult to define due to its broadness. Usually, the term is used jointly with the other terms such as information society, digital society, and e-government. Most often, information society corresponds with the term digital society while e-government should be used exclusively to denote electronic services provided by the public administration. The activities and studies of the ICEDA project are mainly focused on the implementation of: e-government, raising public awareness, digital literacy and civic participation. Within this framework, in the period between March and May 2022, research consistent with the baseline study (conducted in the period between May-June 2020) and 2021 study (conducted in the period between March-May 2021) was conducted in each of the targeted Western Balkan countries, namely Albania, Kosovo*, Montenegro, North Macedonia, and Serbia. The aim of the research is to measure the progress in relation to the initial state of the areas correlated with the DA.

Specifically, this document represents a cumulative report of DA advancement in each of the targeted Western Balkan countries from the Baseline research¹ up until this research, which provides a comparative overview of the current situation in this field. More specific information for each country can be found in the individual Country reports, links which are available in the Roadmap section of this document.

This designation is without prejudice to positions on status and is in line with UNSCR 1244/1999 and the ICJ Opinion on the Kosovo* declaration of independence.

Digital Agenda Observatory - Baseline research of the state of e-government development & digital literacy in the targeted Western Balkan countries 2020. August, 2020. Metamorphosis Foundation. Available at: https://cutt.ly/gBkU95n



Research methodology

The research methodology of the Digital Agenda Observatory (DAO) builds on the previous country reports and roadmaps for Digital Agenda advancement in the targeted Western Balkan countries and focuses on the topics on which CSOs have the greatest impact. The research is conducted based on key indicators contained in a previously prepared questionnaire. The indicators are foreseen to enable a regional comparison between the selected countries from the Western Balkans, which should further contribute towards a positive competition and serve as a motive for further implementation of the Digital Agenda.

The research is based on conducted desk research (review of conducted research, existing policy documents, national strategies, programs of the Government and central institutions of the targeted Western Balkan countries, publicly available reports, and other relevant sources), semi-structured interviews with persons directly involved and affected by the digitization process, as well as the testing of one national policy and three electronic services. The time period in which the main research sources (country reports) have been conducted is March-May 2022. This aggregate regional report has been created during September and October 2022.

Based on the research conducted in this way, a report and a roadmap with recommendations have been prepared for each targeted Western Balkan country. The report provides an overview of the current state of development of the Digital Agenda and provides insight into the role of CSOs in this area from all the targeted Western Balkan countries. The report and the roadmap can serve as a basis for additional in-depth research, but also as a motive and argument for creating strategic documents that will lead to enhanced digital transformation.



SHORT OVERVIEW - CURRENT CLIMATE IN THE WESTERN BALKANS

Since the beginning of the ICEDA Digital Agenda (DA) Observatory, the DA development across the region has been severely shaped by external conditions, most notably the COVID-19 pandemic. The pandemic influenced the developments in the DA domain both as an enabler and an inhibitor. On the one hand, COVID-19 spurred all means of electronic communications on all levels. Because of the physical restrictions and lockdown, everyone was forced to embrace different services related to ordinary life. More importantly, people coming from categories that had not been using services before the pandemic, such as the elderly, started adopting new means of communication. Certainly, this constituted a huge jump in e-services penetration among the population in the region.

On the other hand, the pandemic slowed and hindered the progress in certain aspects such as drafting and adopting of new strategic documents, projects, and initiatives implementation, or public administration could not devote enough resources to respond to the sudden demand as they were also mitigating the aftermath of the on-going pandemic. Although the response of certain sectors of public administration was adequate, the rest struggled to keep up with the new reality they had to face. For instance, the vaccination sign-up, access to test results, and distribution of vaccination certificates were enabled by a quick response to develop a national e-portal. But efficiency showed in this aspect was not replicated in the other sectors. Often, one or more strategic documents regarding the DA, such as strategies and action plans, expired without new ones being adopted as a replacement and continuation of the process. This created a limbo where institutions were waiting for the adoption of formal documents before pursuing new goals and/or implementing activities.

Due to the challenges posed by the pandemic, governments in the region had to focus on other issues thus pushing DA down on the political agenda. Although political willingness to tackle challenges in the DA domain never lacked, the reality in which they found themselves diverted their attention. Considering the fact that the COVID-19 pandemic is slowly but surely becoming a thing of the past, we could expect developments in the DA domain to resume at their usual tempo.

Other factors that influenced the DA progress and should be noted are the election cycles and political instability. While these circumstances did not substantially change the dedication toward DA related issues, the effects they had on the overall progress are evident. Having that in mind, with the energy crisis looming over Europe, the region could find itself with more pressing issues in the near future.





PRECONDITIONS FOR IMPLEMENTATION OF E-GOVERNMENT

1.PRECONDITIONS FOR IMPLEMENTATION OF E-GOVERNMENT

The EU eGovernment Benchmark examines where e-government services around Europe and "compares how governments deliver digital public services across Europe." In addition to the EU member states, it includes Western Balkans countries thus being a useful analytical tool to compare countries in our research and how they are progressing. It tracks e-government development through 4 clusters, namely:

- **1. User Centricity** indicates the extent to which a service is provided online, its mobile friendliness, and usability in terms of available online support and feedback mechanisms.
- **2. Transparency** indicates the extent to which governments are transparent about: the process of delivery; the responsibilities and performance of public organizations; the personal data processed in public services.
- **3. Cross-Border Mobility** indicates the extent to which users of public services from another European country can use the online services.
- **4. Key Enablers** indicates the extent to which technical and organizational pre-conditions for eGovernment service provision are in place, such as electronic identification and authentic sources.

Unsurprisingly, this research places Western Balkans countries at the bottom of the list. While the average eGovernment digital maturity of the EU27+ is 68%, it is only 43% for the Western Balkans countries (with the available data).



ALBANIA

EGOVERNMENT STATE OF PLAY 2021

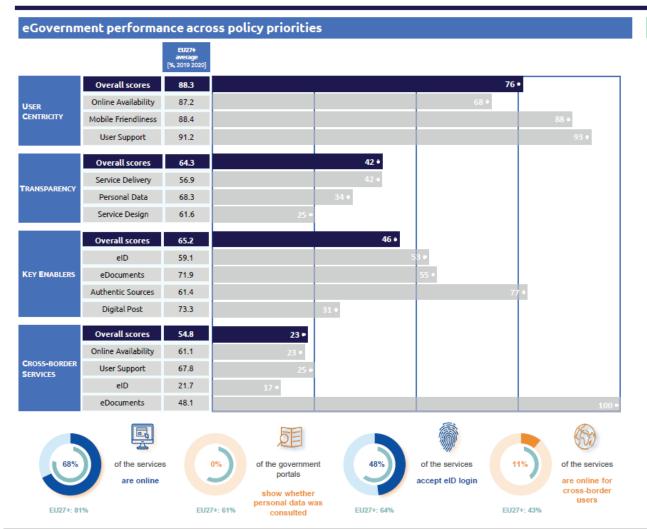


Figure 1: eGovernment benchmark 2021 - Albania country factsheet³

³ European Commission, Directorate-General for Communications Networks, Content and Technology, (2021). eGovernment benchmark 2021: entering a new digital government era: country factsheets, Page 4. Publications Office. https://bit.ly/3X9TU1L



MONTENEGRO

EGOVERNMENT STATE OF PLAY 2021

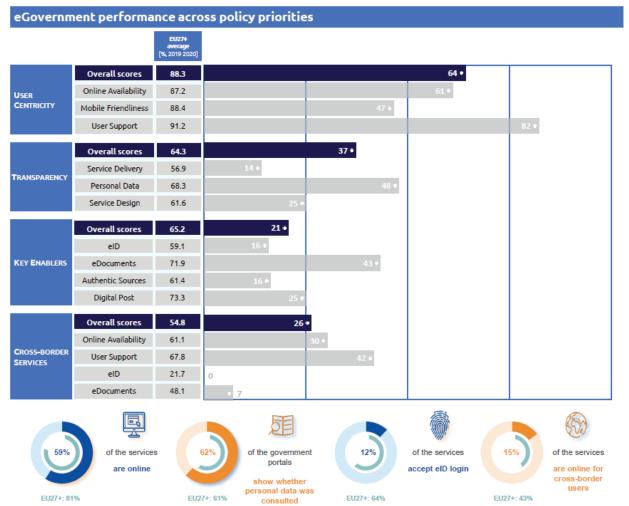
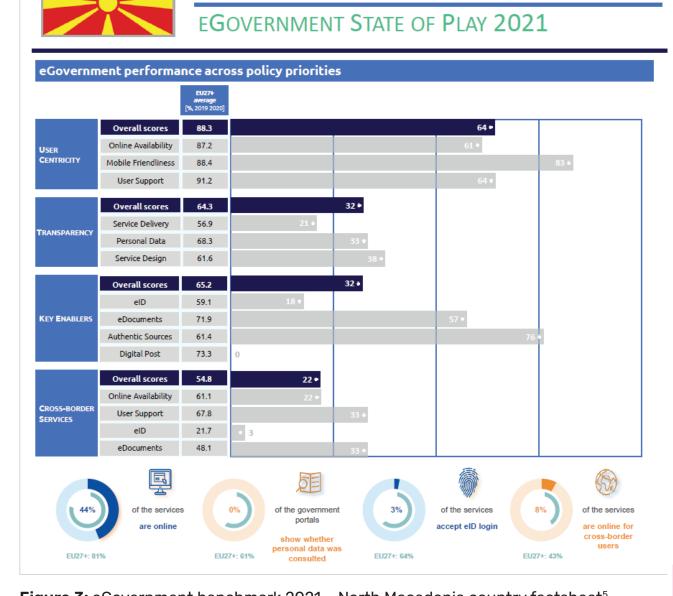


Figure 2: eGovernment benchmark 2021 - Montenegro country factsheet⁴

⁴ European Commission, Directorate-General for Communications Networks, Content and Technology, (2021). eGovernment benchmark 2021: entering a new digital government era: country factsheets. Page 67. Publications Office. https://bit.ly/3X9TU1L



NORTH MACEDONIA

Figure 3: eGovernment benchmark 2021 - North Macedonia country factsheet⁵

⁵ European Commission, Directorate-General for Communications Networks, Content and Technology, (2021). eGovernment benchmark 2021: entering a new digital government era: country factsheets, Page 69. Publications Office. https://bit.ly/3X9TU1L



REPUBLIC OF SERBIA

EGOVERNMENT STATE OF PLAY 2021

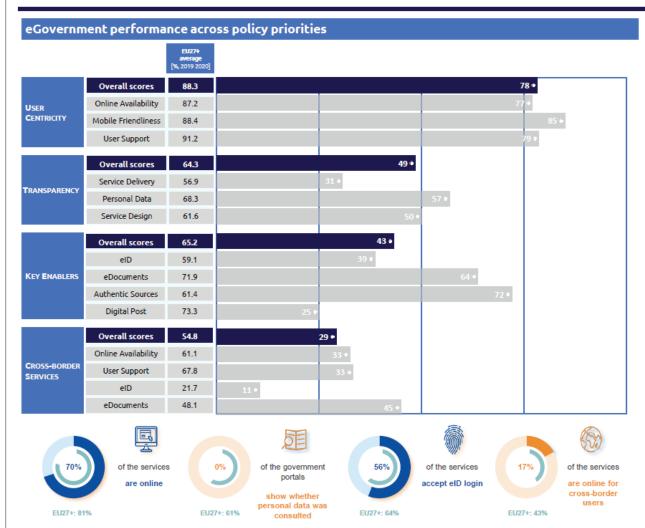


Figure 4: eGovernment benchmark 2021 – Serbia country factsheet⁶ Unfortunately, there is no data available for Kosovo*.

⁶ European Commission, Directorate-General for Communications Networks, Content and Technology, (2021). eGovernment benchmark 2021: entering a new digital government era: country factsheets, Page 88. Publications Office. https://bit.ly/3X9TU1L

Table 1: Share of e-government users within total population

	20	22	2021		
	E-government registered users	% of users in total popula- tion	E-government registered users	% of users in total popula- tion	
Albania	2.545.311 ⁷	91,1%	1,210,093 ⁸	42,8%	
Kosovo*	648.939°	36,6%	5.945 ¹⁰	0,3%	
Montenegro	80.000 ¹¹	12,9%	9.02812	1,5%	
North Macedonia	72.932	4,0%	34.834	1,7%	
Serbia	1.320.305	19,4%	1.026.347	14,9%	

The total number of registered e-government users on the national e-service portals¹³ is perhaps the main metric indicating growth and development of Digital Agenda implementation. This figure has increased in each country in comparison with the previous reporting period. The fact confirms that all countries are heading in a positive direction when it comes to Digital Agenda implementation, especially relating to the area of e-services. The most notable progress was made in Montenegro and Kosovo*, while Albania has come very close to 100% of share of e-government users within the entire population.

Table 2: Internet household penetration

	2022	2021	2020	Current report : Baseline report (increase in per- centages)	
Albania	88,3%	83,3%	82,2%	+7,4%	
Kosovo*	96,1%	96,4%	93,0%	+3,3%	
Montenegro	80,8%	80,3%	74,3%	+8,7%	
North Macedonia	83,7%	79,9%	81,8%	+2,3%	
Serbia	81,5%	81,0%	80,1%	+1,7%	

Internet penetration in households is one of the main preconditions for Digital Agenda implementation. Each country started from a relatively high share of penetration in the baseline report and continued with steady and stable growth throughout 2021 and 2022. Most notable progress was seen in Montenegro and Albania, growing 8,7% and 7,4% vs. baseline report respectively. Although growing the fastest, Montenegro has the lowest share of internet penetration (80,8%), followed by Serbia with 81,5%. The highest internet penetration is recorded in Kosovo* in all years.



⁸ Total number of citizens and businesses served through the e-Albania portal

⁹ Both citizens and businesses

¹⁰ Both citizens and businesses

 $^{11 \}qquad \text{Both citizens and businesses } \underline{\text{https://www.zzzcg.me/wp-content/uploads/2022/02/strategija-digitalne-transformacije-sa-ap-1.pdf}$

¹² Number of requests

¹³ NB: The numbers were last retrieved in May 2022.

Table 3: Fixed broadband connection availability

	2022	2020	Current report : Base- line report (increase in percentages)
Albania	78,3%	56,6%	+38,3%
Kosovo*	94,0%	n/a	n/a
Montenegro	81,5%	n/a	n/a
North Macedonia	88,0%	69,8%	+26,1%
Serbia	91,7%	79,6%	+15,2%

Data for fixed broadband connection availability are scarcer than the ones for internet penetration. From available data, Kosovo* and Serbia have the highest share of broadband connection, 94,0% and 91,7% respectively, while Albania is recording the highest progress with 38,3% increase compared to the baseline report.

Albania

According to the latest Institute of Statistics of the Republic of Albania (INSTAT) report, 79.3% of people between 16-74 years possess internet access. Out of those, 91.7% of them use the internet daily. Mobile phones are the preferred option for internet access. Compared to the previous year, numbers remain steady with 98.7% of the population using mobile internet while laptops' share is only 22.8%.

The World Bank data measuring the proportion of the individuals using the internet and the total population indicates that Albania lags in regional rankings. Although its year-to-year score increased from 68.55 to 72.24, it is still behind Kosovo* (89), North Macedonia (81), Serbia (78), and Montenegro (78).

According to the report Digital 2021 Albania¹⁴, 62.5% of the population lives in urban areas while 37.5% of citizens live in rural areas. Further, this report measures internet penetration at 69.6%, or 2 million citizens, which is almost ten percent lower than the percentages in the official government report.

Also, Internet World Stats¹⁵ projects that 76.3% of the total population has internet access.

Although percentages vary, we can conclude that more than 2 million Albanians possess internet access.

Kosovo*

According to the data, 96.1% of households had internet access in 2021. When compared with 2020, internet penetration decreased insignificantly as the drop amounted only to 0.3% points. Further, more households possess fixed broadband access than the mobile one. Currently, the Ministry of Economy and the World Bank are jointly implementing the KODE Project¹⁶ with the main goal of high-speed optic internet and 5G infrastructure deployment.

Digital 2021: Albania / access the link here: https://cutt.ly/2X0Hbd2

¹⁵ Internet Stats and Facebook Usage in Europe 2022 Mid-Year Statistics July 2022 / access the link here: https://cutt.ly/kXOKFrZ

¹⁶ Kosovo Digital Economy Project - KODE. https://bit.ly/3MOboer

In March 2021, the e-portal **e-Kosova**¹⁷ was launched by the Agency of Information Society (AIS). As of April 2022, it offers more than 30 e-services and has 648.939 registered users, including both citizens and businesses. Since its launch, the portal offered around 700.000 services to its users while the half of requests were connected to the health aspect of COVID-19 pandemics (certificates, vaccination appointments). Although the e-Kosova portal is designed to be a focal point offering all e-government services, certain public institutions such as Kosovo* Tax Administration and Business Registration Agency are offering e-services separately through their own platforms/websites.

Montenegro

In 2021, internet penetration recorded a slight increase. According to the official Government Statistic Agency report on ICT use, internet access had 80.8% of households. Compared with 2020, this increase represented just 0.05% from the initial 80.3%. Further, Report indicates that 81.5% of households possess broadband internet while 61.1% of households rely on mobile internet.

Rural/urban division in internet access still remains relevant with the significant gap between these categories. While 85.4% of households in urban areas possess an internet connection, only 70.3% of rural households access the internet. Also, this gap has been widening as the percentage of rural households with internet access fell from 70.9% to 70.3% between 2020 and 2021. On the upside, in 2021 more than 50% of low-income households (up to 300 EUR a month) possessed internet access. That was a 7% increase on a year-to-year basis.

Of the whole population, 90% of Montenegrins use the internet daily. Breakdown of internet users by age shows that there is almost universal internet use in the 16-44 age group while percentages fall as we move towards older segments of the population. In age categories 45-54 and 55-64, more than 80% of individuals use the internet daily while 68.9% of persons from the age group 65-74 access the internet every day.

North Macedonia

The upward trend of internet penetration continued to be the case in 2021 as well. According to the official data published by the Statistical Office, 83.7% of households in North Macedonia had internet access. Compared with the previous year, this represents an increase of 3.8%. Out of those households with internet access, approximately 88% of them possess fixed broadband access. 82.8% of households possess internet speed between 30 and 100 Mbps which is sufficient enough to cover the needs of the average user.

Although mobile internet penetration reached almost 100%, there are still struggles with its utilization as mobile internet usage remains at 65%. Almost every business has internet access (94.1%) but only half of them (54.5%) have an online presence through websites.

At the time of the creation of the country report, there were almost 73.000 users on the national e-services portal. Compared with 2021, the number of users doubled from 35.000 users at the end of the year. However, it is impossible to measure the total number of citizens using e-government services as certain services are offered outside the

national portal. In comparison with the total population, the number of users represents only 4% of the population. There is no additional stratification of e-government users so we are unable to conclude which category is the most frequent user. It should be noted that there are no systemic government efforts to promote Portal itself. Because of that, it is not a surprise that the Portal has an insignificant number of eservices available to citizens – only 51¹⁸ out of 816 services offered on the portal are truly electronic.

Serbia

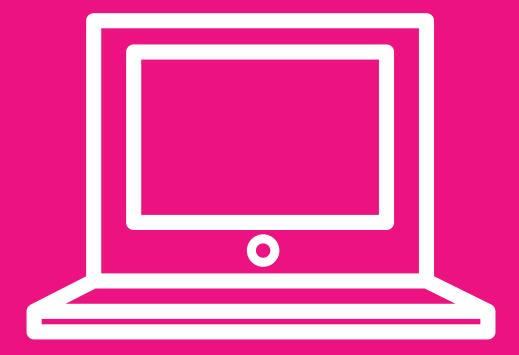
In 2021, internet penetration recorded a minor increase of 0.5 percent bringing the number to 81,5%. There is no great divide between urban and rural areas with internet access as percentages are 85.6% and 74.7% of households respectively. Those who still do not have internet access state no need for the internet as the main reason for such behavior. Part of the population that never used the internet or PC is decreasing, however, this trend does not apply to the differences between less and more educated segments of the population where difference remains persistent. Also, over 90% of people use mobile internet to surf the web.

More than 60% of the population possess internet connection faster than 50 Mbit/s while 36.5% possess even faster one, over 100 Mbit/s.

According to the official statistical report, 40% of citizens using the internet are also users of e-government services. However, this is a rather wide formulation of using e-government services as the report includes activities such as obtaining information from institutions' websites as accessing eservice.

In August 2021, the Office for Information Technologies and eGovernment launched the initiative "Digital Expedition" to raise awareness of contemporary practices and trends in the digital world through interactive lectures, discussions, and workshops.

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POLITICAL WILL AND STRATEGY

2. POLITICAL WILL AND STRATEGY

Political will and strategic dedication towards the Digital Agenda is clearly seen throughout the entire region. Most of the relevant strategic documents are already adopted, with associated programs and action plans. This can be seen as improvement compared to the baseline research, when all the countries were facing the situation in which main strategic documents were valid until 2020. What remains as a challenge is the operationalization and execution of the adopted strategies. This is a common challenge for all targeted countries and economies.

In the previous three years, it can be concluded that there was an overall similar progress of the countries when it comes to political will and strategy – relatively stable and medium-paced. Some countries had digitalization included in their respective government plans which in turn proliferated relevant strategies and action plans (North Macedonia and Serbia), while others focused on Digital Transformation/Agenda strategies which paved the way forward for digitalization efforts relevant to the Digital Agenda (Albania, Kosovo* and Montenegro).

Albania was the boldest in executing parts of the strategies, shifting almost 100% of public services online, positively effecting the progress towards full digitalization on one side, and opening other risks such as vulnerability of the entire system on the other.

Next-level initiatives were recorded in Serbia and North Macedonia which focused on artificial intelligence as a significant part of the Digital Agenda development. Serbia managed to produce a national strategy related to this area.

Albania

The government's commitment to the digitalization of processes and services remains a priority. At the moment of the Country report preparation, 95% of public administration services were being offered online through the central e-Albania platform. In May 2022, in order to further push toward e-government, the Albanian government decided to stop the in-person submission of requests for public administration services. This means that Agency for the Delivery of Integrated Services Albania (ADISA) counters, which represented integrated one-stop centers, no longer serve citizens. The authorities claim that closing ADISA points increased the use of the eservices at the e-Albania portal by 2.4 times.

Further, a new cross-cutting strategy for Digital Agenda 2022 – 2026 (CCSDA) has been adopted. It focuses on investments in domains such as advanced informatics and data processing, artificial intelligence (AI), cyber security, and advanced digital skills. Outlined goals include **digital government**, **digital business**, **digital citizens**, **and digital education**.

Kosovo*

Political changes on both national and local levels that occurred in 2021, combined with the COVID-19 pandemics, slowed progress in the Digital Agenda domain. Although there is strategic commitment, they were somewhat sidelined during last year.

Responsible for the Digital Agenda implementation is the Ministry of Economy. During 2022 it was preparing a new **2030 Digital Agenda Strategy** and **Action Plan**¹⁹ and drafts of these documents are expected to be adopted in 2022. Strategic objectives under this plan would be the following: advanced and secure digital transformation (5G, Internet of Things, Artificial Intelligence, etc.); the digital transformation of businesses (as a cross-sectorial strategy); digitalization of the public services (e-governance); digital skills and innovative ecosystem for R&D; strengthening the cybersecurity system.

While the new strategy for 2022-2026 is being prepared, the **2015-2020 Strategy of the Modernization of Public Administration** was implemented in 2021 during the transitional phase.

There are government efforts to join **Open Government Partnership (OGP)** and application will probably follow at the end of 2022. Right now, the **2022-2024 National Action Plan (NAP)** is being prepared in the OGP framework implementing a co-creation process with an emphasis on cross-sectoral cooperation.

Montenegro

Change of Government brought formal changes in public administration design. On 28 April 2022, the previous Ministry of Public Administration, Digital Society and Media, became just the Ministry of Public Administration.

In 2022, several important strategies in the Digital Agenda domain were adopted by the relevant government bodies:

• 2022-2026 Montenegro Digital Transformation Strategy supplemented by the 2022-2023 Action Plan for its implementation.

This Strategy represents a development framework outlining strategic goals of improvement of capacities for Montenegro's digital transformation and strengthening both population's digital awareness and ICT sector competitiveness.

2022-2026 Montenegro Cybersecurity Strategy

New Strategy is based on the previous ones and mostly follows the vision and goals pursued previously. It established five strategic goals based on an analysis of shortcomings identified in the past nine years.

2022-2026 Public Administration Reform Strategy

Strategy puts forward 'once only principle' in services design in the future hoping to achieve simple, accessible customer experience in all public services, responsible and efficient public administration, public institution openness and improvements in the public policy formulation process.

2022-2027 Educational System Digitalization Strategy

Adopted Strategy strives to develop a large number of e-services, improve public administration functioning and cross-sectoral cooperation; establish necessary conditions in educational institutions to improve digital processes in it; and develop and improve pupils' digital skills and incentivize them to pursue ICT careers in the future.

Also, worth mentioning is the **Program for Attracting Digital Nomads**, adopted in December 2021, which should improve the overall business environment for both digital nomads and citizens by introducing new eservices.

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North Macedonia

In the Government Plan for 2022, advancing the Digital Agenda is identified as one of the Government's strategic goals. This includes but is not limited to the digitalization of processes in institutions; development of digital payment services; increased coverage of e-services; Internet access in rural areas.²⁰ This is further elaborated in strategies such as 2019 – 2023 National Broadband Strategy, 2018-2022 National Cyber Security Strategy, 2018 – 2020 Open Data Strategy, National Operational Broadband Plan, 2018 – 2022 Strategy for Public Administration Reform, 2021-2023 Economic Reform Program, 2021-2023 MISA Strategic Plan, 2021 – 2031 Strategy for Regional Development of RNM.²¹

North Macedonia still does not have an ICT strategy although it has been drafted and awaits adoption by the authorities.²² Priorities for e-government development are outlined in the 2018 – 2022 Strategy for Public Administration Reform.²³

With the majority of documents relevant to Digital Agenda and e-government being outdated, **2021-2023 Economic Reform Program²⁴** and **2021-2023 MISA Strategic Plan²⁵** represent the main documents within the Digital Agenda domain.

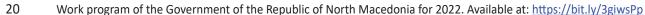
Efforts have been made to draft a **National Strategy for Artificial Intelligence** but, apart from the initial step of establishing a working group, no progress has been made.²⁶

To sum up, there is a political will and administrations' commitment to the digital transformation of public administration but the implementation of strategic initiatives often lags behind.

Serbia

The government remains dedicated to the e-governance development and transformation towards a digital economy. Although e-governance was not among the main goals of the Prime Minister's expose in 2020, it was outlined as one of the priorities for the new Government. Still, after the 2022 parliamentary elections, it remains to be seen how high on the new Government's agenda e-governance would be.

Additionally, in cooperation with the World Economic Forum, the Center for the 4th Industrial Revolution was established in February 2022. In the future, the Center will focus on artificial intelligence and bioengineering. One of the main goals of the adopted Strategy for the Development of Artificial Intelligence in the Republic of Serbia for the period 2020-2025 is the improvement of public administration by utilizing artificial intelligence. However, the Action plan for implementation of the Strategy is in its final year but a comprehensive report on the status of the Action plan implementation is still missing.



²¹ Amended proposal of the Strategy for regional development of RNM 2021-2031. Available at: https://bit.ly/3TMJgLJ

²² Draft National ICT Strategy 2021-2025, available at: https://bit.ly/3TLIHCS

Public Administration Reform Strategy 2018-2022. Ministry of Information Society and Administration. Available at: https://bit.ly/3U1j1kR f

Economic Reform Program for the period 2021 - 2023. January, 2021. Ministry of Finance. Available at: https://bit.ly/3Amu9BO

²⁵ Strategic plan 2021-2023. Ministry of Information Society and Administration. Available at: https://bit.ly/3EICqCG

²⁶ National AI Strategy. Innovation and Technological Development Fund. Available at: https://bit.ly/3Eg61C0



COORDINATION OF E-GOVERNMENT IMPLEMENTATION

3. COORDINATION OF E-GOVERNMENT IMPLEMENTATION

There are similarities throughout the region related to the institutions leading and advancing the Digital Agenda efforts. The most common approach is that there is a national agency that is intensively involved and/or leading the Digital Agenda, with several ministries joining the efforts – ministries of economy, public administration, trade and telecommunications to name the most usual ones. Compared to the baseline research, each country became more streamlined regarding the coordination part of e-government implementation. In 2020, only two countries had the least diversified jurisdiction of public authorities for coordination of e-government implementation efforts. According to the latest national reports, it can be concluded that all the countries realized that a more centralized approach can bring more benefits from the Digital Agenda process.

Montenegro and North Macedonia rely more on the ministries leading the activities on e-government implementation, Albania and Kosovo* have an approach which leans on national agencies leading the activities, while Serbia has a combined approach with several public institution sharing the responsibilities.

Albania

The **National Agency for Information Society (NAIS)** is an institution with the mandate for the Digital Agenda implementation, responsible for the implementation and coordination of initiatives, maintenance of the e-Albania portal, and promotion of new technologies and investments.

Although the new 2022 – 2026 CCSDA strategy includes a wide range of government bodies in the Digital Agenda processes, findings of the DAO report show that there is a lack of collaboration among public institutions. For instance, one of the focus group findings was that three different institutions (NASCCS, Ministry for Youth and Children, and Municipality of Tirana) are working on educational programs for youth without necessary collaboration due to the lack of institutional communication.

On a local level, the Municipality of Tirana is spearheading digitalization efforts through various initiatives and projects. In addition to the existing Open Data platform, eKioska, and Digital Tirana, the Municipality is designing a new institutional strategy for digitalization and innovation.

Kosovo*

The most important institutions for the Digital Agenda implementation remain the **Ministry of Economy**, and the **Agency of Information Society (AIS)**, within the **Ministry of Internal Affairs**. AIS tackles issues related to e-governance and the operational implementation of strategies. As of March 2021, it operates under the Ministry of Internal Affairs as the previous Ministry of Public Administration was abolished and merged with Internal Affairs.

At the moment, there is no stand-alone e-government strategy and it remains part of the other, wider strategies such as IT Strategy. This strategy covered the period up to 2020 and AIS is drafting a new one for the following years.

It should be noted that, due to the changes on the political spectrum, full commitment toward e-government development in Kosovo* has been missing.

Montenegro

Although it went through a name change, the new-old Ministry of Public Administration remains in charge of the country's digital transformation.

2022-2026 Montenegro Digital Transformation Strategy acknowledges as an important issue compartmentalization of the digital transformation process between various government bodies, institutions and councils. Thus, one of its goals is to establish a central coordinating body to govern Montenegro's digital transformation in a holistic manner, avoiding authority clashes between different stakeholders and fragmentation of goals among them.

According to the 2021 Government Plan, government bodies that are focusing on digital society development and digital transformation are:

- Council for innovation and smart specialization
- · Council for competitiveness
- · eGovernment Council
- Public Administration Reform Council
- · Council for Open Data Portal management
- · A platform for idea exchange

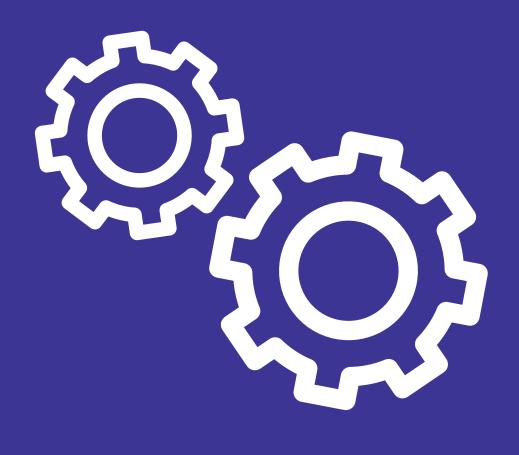
North Macedonia

In charge of the Digital Agenda is the **Ministry of Information Society and Administration (MISA).** It performs activities related to the development and promotion of the information society, as well as activities related to the integrated information and communication network, databases, interoperability and information exchange, security aspects and infrastructure development. However, frequent changes of ministers leading the Ministry hindered progress. Also, under the 2021 – 2025 National ICT Strategy of North Macedonia, a **Centralized Digital Agency (CDA)** was planned hoping to centralize government efforts and resources when developing and delivering government eservices.

Additionally, the **Cabinet of the Deputy Prime Minister in charge of policies for good governance** has taken upon an active role in the digital transformation of the public administration, taking crucial steps in this direction some of which are the commencing the process on the preparation of a National digital transformation strategy, and creation of the National digital transformation council.

Serbia

The **Ministry of Trade, Tourism and Telecommunications** is, among other things, responsible for performing activities in the field of information society and its development. Alongside the Ministry, other government bodies that are executing e-government and digital society agenda are the **Office for Information Technologies and eGovernment** and the **Ministry of Public Administration and Local-Self Government**.





LEGAL FRAMEWORK

4. LEGAL FRAMEWORK

Based on the data from previous research, below is an overview of the legal framework in place in the selected countries. Please note that there are certain semantic differences between the Laws' names in each country and the authors tried to group them together. Also, it might be possible that between the latest 2021 Country reports and the publishing of this Report certain changes have occurred.

Table 4: Regional overview of the legal framework related to Digital Agenda

	Albania	Kosovo*	North Macedonia	Montenegro	Serbia
Electronic Signature Law	৶	৶	⊗	♦	
Data Protection Law / Personal Data Protection Law	≪	৶	<	⋞	<
Electronic Communication Law	৶	৶	⊗	♦	
Law on Electronic Trade	৶		⊗	♦	
Electronic Document Law	৶	৶	<	৶	<
Law on the Database of State / Central Population Register Law	≪		⊗	⋞	<
Law on Free Access to Public Information		৶	∜	⋞	≪
Electronic Identification and Trust Services Law	≪	≪	<	⋞	8
Electronic Government Law	৶	৶	<	৶	♦
Information Security Law / Cybersecurity Law		৶		∜	⊗

Albania

Between the two reports, there were no changes in the legal framework. Necessary laws were adopted thus creating a favorable environment for the digital transformation and the implementation of the Digital Agenda. Apart from law updates and the adoption of certain bylaws, there were no substantial changes.

Currently, the most important document guiding the Digital Agenda developments is the **2022 - 2026 Cross-Cutting Strategy on Digital Agenda.**

Kosovo*

The Law on Electronic Identification and Trusted Services in Electronic Transactions was adopted by the Assembly in 2021, thus regulating important fields of eID, electronic signature and seal, and electronic document.

Montenegro

Apart from the adoption of several strategies, there were no substantial changes to laws regulating Digital Agenda fields or the adoption of new ones.

North Macedonia

It should be noted that in North Macedonia exercising rights stipulated by these laws often remains problematic. Often, different public institutions behave differently thus further confusing citizens about the validity of eservices and their applicability in real-life situations.

After the mutual agreement between North Macedonia, Serbia and Montenegro, mutual recognition of qualified services was established.

Serbia

In addition to the laws listed in the table above, there are several strategies and associated action plans that are very important for the Digital Agenda implementation.

Strategies:

- New Generation Network Development Strategy until 2023
- 2020-2025 Artificial Intelligence Strategy and Action Plan 2020-2025
- 2020 2024 Digital Skills Development Strategy
- 2021-2026 Information Society and Information Security Development Strategy
- 2021 2030 Public Administration Reform Strategy, with Action Plan 2021-2025
- 2020 2022 Electronic Administration Development Plan and Action Plan 2020-2022
- 2020 2027 Smart Specialization Strategy





STATE OF E-SERVICES

5. STATE OF E-SERVICES

The state of e-services is getting better year after year across the region. The most common emphasis was on increasing the usage of e-services, indicated in the number of users and number of services provided. The next area of focus for the entire region needs to be the qualitative aspect of the services, as well as more practical and user-friendly communication of e-services for all target groups. The most relevant indicator of the progress made is perhaps the 2022 UN E-Government Survey. The most important indicators can be seen in the table below. Serbia made the highest leap compared to the previous Survey, improving by 18 places on the ranks. Montenegro also recorded an improvement in the rank, while Albania and North Macedonia had slightly lower positions compared to 2020.

Table 5: Regional progress overview in the 2020 and 2022 UN E-Government Surveys²⁷

Survey Year	Country Name	E-Government Rank	E-Government Index	E-Participation Index	Online Service Index	Human Capital Index	Telecommunication Infrastructure Index
2022 vs 2020	Montenegro	4	0,0254	-0,0817	0,0116	0,0144	0,0502
2022 vs 2020	Albania	-4	0,0014	-0,0838	-0,0230	0,0021	0,0252
2022 vs 2020	North Macedonia	-8	-0,0083	-0,1401	-0,0392	0,0167	-0,0025
2022 vs 2020	Serbia	18	0,0763	-0,0146	0,0573	0,0052	0,1665
Survey Year	Country Name	E-Government Rank	E-Government Index	E-Participation Index	Online Service Index	Human Capital Index	Telecommunication Infrastructure Index
Survey Year 2022 vs 2020		E-Government Rank		·	Online Service Index 2,1%	·	
	Montenegro		3,6%	-14,9%	2,1%	1,7%	6,8%
2022 vs 2020 2022 vs 2020	Montenegro	5,6%	3,6% 0,2%	-14,9% -9,9%	2,1%	1,7%	6,8%

Albania

At the moment, there are 1.225 eservices offered at the national platform e-Albania that are provided by 200 public administration institutions. In July 2022, there were 2.679.806 registered users. e-Albania portal serves as the central gateway between citizens and public administration e-services as it is connected to the public administration records and electronic systems through the interoperability platform. Currently, there are 55 electronic systems connected to the portal. The most used services are the issuance of e-certificates, to schedule appointments, and electronic payments of fees such as the annual tax on used vehicles. The platform also offers the possibility to provide feedback about user experience and rate how the process went.

As of May 1, 2022, all public services can be applied for or accessed only through the e-Albania portal. This means that citizens no longer can use physical, public administration counters and offices to obtain documents or apply for a certain service. Due to the unknown level of the digital literacy of Albanian citizens, it is expected that this reform will cause certain issues and pushbacks in its implementation. However, due to the data breach in July 2022, the portal had to be shut down and could not function for three weeks.

During the last year, several data leakages happened thus compromising the integrity of both citizens' personal data and the electronic systems of the institutions. Despite laws on data privacy in place, prevention of such breaches remains an issue.

General impression of the tested quality of e-services is evaluated as good in the areas of accessibility and user-friendliness, while there was mixed feedback related to the back-office and general criteria.

Kosovo*

E-government services are streamlined through the e-Kosova portal. According to the Agency of Information and Society (AIS), the majority of the public institutions possess their own electronic records (databases). Institutions that still lack e-databases are supported by the AIS in establishing it. At the moment, the interoperability platform in place connects 24 electronic systems of different institutions so data exchange is possible between them. Still, interoperability is a work in progress that is tackled through a project funded by the World Bank. Now that Electronic Identification and Signature have been regulated by the Law it should further increase e-services offerings and improve personal data security.

When it comes to the quality and user-friendliness of online services, it can be concluded from the national report that the tested services are user-friendly and don't contain any difficulties. There are only several difficulties which the citizens can encounter, but they do not damage the entire experience. For all tested services there was no possibility to rank them after usage.

Montenegro

E-government services are available on the central portal euprava.me²⁸. However, the portal doesn't have all services which are relevant for the citizens, e.g. e-health, e-enrollment etc. For this reason, there isn't any unified information on the exact number of e-service users on the national level. The portal itself was established in 2011 and it hasn't changed since the first DAO report, as it remains outdated and has an insufficiently user-friendly design. According to available reports, there are some 80.000 users of the e-government portal.

According to the Ministry of Interior, 200.000 citizens obtained electronic IDs as of May 2022. Montenegro is the first in the region to implement the concept, however it is still working on developing the services to enable the use of eID. The main difference between the new eID is that it comes with two digital certificates – e-Identification and a qualified electronic signature certificate. Having these certificates at their disposal, citizens are able to sign documents in electronic format and use certain eservices that require electronic identification. However, before being able to use it, each ID has to be activated which represents an additional obstacle in utilizing the options it offers.

In accordance with the Law on ID, TrustME is providing services of issuing digital certificates used for eldentification and qualified electronic signature certificate.

Overall feedback on the quality and user-friendliness of provided e-services is somewhat mixed. Some services are evaluated as confusing and difficult to go through, diminishing the benefits they were supposed to provide. On the other hand, some services that are already familiar to the citizens were evaluated as satisfactory and easy to complete.

North Macedonia

Although the Document Management System (DMS) was rolled out in 2020, its utilization in public institutions remains low. Research showed that only 9 of 101 institutions that participated in it had the DMS while 75% of them kept documents on local networks or personal PCs. Without unifying all public institutions under the DMS, it is not possible to establish full interoperability.

Only once principle is yet to be implemented and remains a priority of Government and relevant authorities.

Interconnectedness and exchange of data between public administration as well as the private sector is done through the Interoperability Platform. In November 2021, there were 39 entities on the platform. According to MISA, in May 2022, there were 567 online services available in which public administration could exchange data between themselves.

As for the e-services portal, the general impressions from the testing stated that the process of registration on the portal uslugi.gov.mk for services must go through the Public Revenue Office even for the use of basic services. Almost nothing is received via e-mail, i.e. access is very limited. Additionally, except for the announcement on uslugi. gov.mk, the pages of the institutions are not interconnected, and for some services it is necessary to create an additional profile of the respective institution. Some services that are marked electronically are not electronic at all, and for some of the services such as the tested example only one step is electronic (creating a request), but to get the full service you have to go to the counter of the institution. Additionally, when testing services, it was noted that the certificate of non-conviction (which is often required when terminating employment, or exercising some rights) is still obtained from the court where the person was born, regardless of their current residence, i.e. residence according to the ID card. A lot of time is needed for the e-services a, which is not appropriate for their meaning and purpose. Regarding the use of services in other languages (Albanian and English), uslugi.gov.mk is partially translated, while the name of the service exists only in Macedonian.

Serbia

E-government services have been developing steadily for the past several years. The COVID-19 pandemic served as an accelerator to more widespread acceptance and usage of e-government services by the citizens. However, there is still significant room for development and bringing e-services even closer to the citizens.

Two main areas that can potentially enable e-government services to reach the next level are user-centricity and product management. These topics were emphasized in interviews and focus groups as something that is crucially needed in order to have better e-government services overall. Alhtough very common-sense, user-centricity and product management is something that is a long-term commitment, and needs to be embedded structurally in all levels of government. It will require serious focus, work and dedication to be implemented successfully and in a permeating way.

Encouraging fact is that certain institutions are aware of this need. For example, Office for ITE is using concepts such as agile, design thinking, user personas etc. which is a very significant indicator of future approaches. Another good example is the Team for public administration reform and e-government at the Office of the Prime minister, which uses

similar concepts as Office for ITE, together with co-creation concepts. This was applied in creating and introducing the e-service of issuing parking tickets and parking spaces for people with disabilities. Still in its nascent stages, these kinds of approaches need to be promoted and implemented in the entire e-government structure.

Available e-services are centrally situated on the e-Government portal **e-Uprava²⁹**. In April 2022, the total number of available services to the citizens was around 50 while the total number of e-Citizens (number of registered accounts on the Portal for electronic identification) was 1.320.305. The most popular and frequently used services were first and foremost the ones related to COVID-19. More details and numbers can be found in the 2021 Country Report.







DIGITAL LITERACY

6. DIGITAL LITERACY

Digital literacy is perhaps the most crucial element influencing further development of Digital Agenda in the region. There have been regional initiatives related to this topic (e.g. the RCC (Regional Cooperation Council) efforts), however they are still in nascent stages. Considering the ambitious goals that each of the targeted countries and economies have, the level of digital literacy is still insufficient to reach them. Therefore, a significant part of near- and long-term future focus needs to be devoted to this area.

In the DAO regional baseline research, there were only statistics from Serbia and North Macedonia related to computer and ICT literacy, respectively. Things have not moved significantly further from the moment of DAO's baseline research. There is still a lack of a uniform way to measure and track the progress of digital skills both nationally and regionally. Although different efforts can be seen across the region in terms of creation of relevant documents related to digital literacy, the lack of standard measuring and monitoring methodologies was and remains one of the key challenges for each country and the region as a whole.

Albania

A strategic document tackling digital literacy is the newly adopted **2022 - 2026 Cross-Cutting Strategy on Digital Agenda**. The strategy's first goal labeled digital government aims to improve both the digital literacy of the public servants in the Republic of Albania and the whole population by transforming teaching and learning methods. Achieving this goal is based on several main pillars: the creation of a digital culture of learning; teaching and learning process; safe buildings and internet connection; scientific research in higher education institutions.

However, data on digital literacy in Albania is difficult to find. Digital literacy reports and/or statistics published by official institutions are almost nonexistent. This was confirmed in the interview with the NAIS representatives in which they stated that the government does not possess data on digital literacy. Still, an INSTAT report shows that 51.1% of people in the 65-74 age category never used the internet. After closing physical ADISA counters, this could become an issue as obtaining certain services such as pension procedures and ID issuance are now done through the e-Albania portal.

Kosovo*

According to the Kosovo* Institute for Public Administration (KIPA), a body responsible for the education and training of employees in public administration, the skills of the bureaucracy are at a satisfactory level. In 2021, a total of 382 public administration employees went through different training/education in the IT field such as the electronic system for the management of requests training, project management, cybersecurity and data protection.

In addition to that, approximately 4500 bureaucrats attended training on the topics of public administration modernization, public policy process, European integration, public finances, and local governance.

Also, CSOs are providing educational programs to improve the digital literacy of citizens. For instance, Open Data Kosovo focuses on working with the young population while the Ministry of Economy is tackling the improvement of digital skills through the KODE project. A segment of the KODE project focuses particularly on the unemployed and under-employed young people. During the 2020-2030 period, the goal is to have 4000 citizens that participated in the Youth Online and Upward (YOU) Program that will teach them specialized technical skills such as software development.

Montenegro

2022-2026 Montenegro Digital Transformation Strategy identifies the improvement of skills and capacities for digital transformation as its primary strategic goals. It goes hand in hand with the strategic goal of improving digital awareness in the society and competitiveness of the ICT field. That being said, one of the initiatives launched was Digital Academy – an educational platform dedicated to bureaucrats, students, and vulnerable groups.

The goals and efforts envisaged through the **2022-2027 Educational System Digitalization Strategy** are also worth mentioning here. One of its strategic goals is the improvement of digital skills and digital competencies with operational goals such as raising the level of digital skills and competences of employees in educational institutions, raising the level of students' digital skills and competencies, improving the safe use of technology, improvement of digital skills and competencies and application of digital technologies through promotional campaigns.

Another goal of the Ministry of Public Administration was to ensure interoperability of shared information systems used by various public administration institutions in order to create a fully integrated system. To achieve so, the Ministry aimed to develop and launch at least 10 eservices for both citizens and businesses. However, it remains unclear whether it will achieve any progress in this domain.

North Macedonia

2021-2027 National Employment Strategy with 2021-2023 Action Plan³⁰ and **2021 - 2025 National ICT Strategy of RNM** (to be adopted) focuses on the development of the population's digital skills. To improve digital literacy, Government efforts would focus on the following aspects:

- Introduction of relevant classes/courses in the education system;
- Improving digital skills of citizens in order to improve their employability, particularly of unemployed ones;
- Enhancing digital skills of bureaucrats in public administration.

The Strategy's goal is that after implementing planned measures, the rate of adult participation in education and training reaches 16% per year by 2027. Also, another goal is 45% of the population to have digital skills by the end of 2027.

For North Macedonia, It can be concluded that there are measures to promote digital skills at the national level, but the results of the implementation will take time.

Serbia

2020 - 2024 Digital Skills Development Strategy³¹ remains the most important strategic document for navigating digital literacy development in the country. It links digital skills with the transition to the digital economy and states the necessity to empower people for future jobs and an economy of knowledge.

According to the research and interviews conducted with citizens in local communities³² data shows that they are interested in using eservices, however, complicated processes and lack of information present real obstacles. Thus, investing in education and digital skills is needed.

Also, conclusions from the interviews done with the focus group participants confirm that accessing certain e-services is confusing. This confusion often arises from missing guides and/or insufficiently clear instruction on the portal.

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ACCESS TO E-SERVICES AND RAISING AWARENESS

7. ACCESS TO E-SERVICES AND RAISING AWARENESS

Access to e-services is being provided through the national portals, and there has been progress across the region compared to the baseline report. However, in order to grow the number and quality of services and usage, more focus needs to be dedicated to user-centricity and user-friendliness of the portals and the access to them.

Albania

There are approximately 200 public institutions that provide their electronic services in e-Albania platform. Currently there are 1200 public services offered online, or approximately 95%. The Albanian Government has invested in the development of the electronic services, digitalization of archives, increasing the number of connected systems into the interoperability governmental platform, data exchange, increase the number of e-services in the platform, infrastructure, development of specific platforms to exchange legal documents, electronic stamp and signature etc. e-Albania platform serves as a centralized gateway through which, any interested individual can receive via the Internet, electronic services provided by public institutions in Albania. This platform is connected with the interoperability governmental platform, which is the basic architecture on which interaction with the electronic systems of public institutions is enabled. Interoperability platform is connected through governmental net GovNet with currently 55 electronic systems of public administration .

Kosovo*

The launching of the **e-kosova** portal was a major breakthrough in bringing closer e-services to citizens. Although it is still in the early phases and the number of services offered remains rather limited, it is expected that new eservices will be available now that eID and electronic signature aspects are regulated by law. The portal offers more than 30 e-services and has 648.939 registered users, including both citizens and businesses.

During last year, CSOs were active in advancing the Digital Agenda. Through various initiatives and projects, CSO worked together with local public administration in developing certain e-services aimed to improve life in the community, raising awareness about available e-services and e-kosova portal, and providing education. However, public administration should take a more active role in promoting e-governance and available e-services as well as provide info-guides on how to access these e-services and use them.

Montenegro

Currently, **e-uprava**³³ portal that centralizes all e-services has over 80.000 users and offers 523 eservices for both citizens and businesses. However, a report³⁴ shows that out of those numbers, only 181 are dedicated to citizens while the rest 321 are dedicated to the business sector.

There is an **Open Data Portal**³⁵ where citizens can access data in possession of the public institutions and download it in an open and machine-readable format. So far there have been approximately 195.000 downloads from the portal.

North Macedonia

The focal point of e-services is the **National Portal for e-Services** ³⁶ which currently has 212 services available. However, it seems that only 75 of them are rolled out and ready to use while the rest are either in the development phase or just announced. In most cases when e-services are not available, there is a written guide on how to access a particular service in person.

Supported by the Association of Local Self-Government Units of RNM, there are positive examples of e-services development on the local levels of public administration. For instance, e-construction permits³⁷, the portal for management of B-IPPC permits and environmental reports, e-construction land³⁸, applications e-stvari.mk and e-urbanizam.mk.

Serbia

By comparing the total population of Serbia (6.9 million) and the total number of **e-Up-rava**³⁹ users (1.2 million), we can conclude that approximately 17.8% of the population has used e-government services at least once in their life.

This is in line with the findings of the NALED's research on e-government⁴⁰ that approximately half of the population is familiar with e-government services while 18% of citizens are still not aware of this possibility. Additionally, as reasons for not using e-government services, they are citing an over-complicated process(es) and the belief that it is easier to do it in person. Interestingly enough, 46% of respondents prefer accessing e-Uprava by mobile or tablet.

Still, the most frequent problem with obtaining access to digital signatures is the fact that citizen IDs issued before 2014 are incompatible with digital signatures.

eGovernment Portal of Montenegro. https://bit.ly/3gamklx

³⁴ Institut Alternativa report available at: https://bit.ly/3EklxeX

³⁵ Montenegro Open Data Portal. http://bit.ly/3ApkzOq

National e-Services Portal. http://bit.ly/3AoVO4X

³⁷ eDozvoli. https://bit.ly/3TR4zvj

³⁸ e-Construction land portal. https://bit.ly/3UPDA4M

³⁹ National eGovernment Portal of the Republic of Serbia - https://bit.ly/3gcZcsT

⁴⁰ Public Opinion Survey on the egovernment services. https://bit.ly/3GpTNct

Raising awareness of the Digital Agenda and especially e-services to increase the citizen demand for quality e-services is one of the goals of the ICEDA project. The key stakeholder for promoting and increasing awareness are the CSOs included in the ICEDA project. Each of the countries participating in the project started with three CSOs who's main goal was to establish and manage the civic centers for e-Government support. Through those centers the CSOs managed to empower approximately 32.000 citizens from the targeted Western Balkan countries to use certain e-services and spread digital literacy.

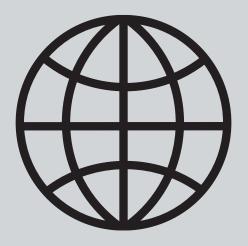
For example, in Kosovo*, a network of CSOs from Kosovo* have made a direct contribution to the support and the advocation of the e-governmental services through the ICEDA project. The first group of CSOs engaged through the project have implemented their 18-month initiatives to support the e-government services. Serving as support centers to the institutional stakeholders responsible for the provision of different e-services, these CSOs have also utilized their own capacities and expertise in providing support to the implementation of the Digital Agenda.

In North Macedonia, through the ICEDA initiative, three CSOs established and managed three e-government support center in Skopje, Kicevo and Prilep, also covering certain rural areas, for the purpose of assisting citizens in using specific public e-services. The centers managed to also assist more vulnerable groups coming from low socio-cultural standard, Roma, illiterate and/or "technically illiterate" persons, the elderly, persons with long-term unemployment, and persons with basic information literacy, rural ethnic and mixed religious population.

In Serbia, several initiatives were undertaken by the sub-grantees. One was the implementation of the project "Digitalization - the link for the future", which assumed organization of trainings on the basics of using modern technologies and digital content for citizens. Also, a website was created with the aim of bringing electronic services closer to citizens in the use of digital tools. Another initiative assumed conduction of research of more than 600 respondents examining the usage of e-services in the city of Pančevo. Additionally, ten educational videos were created aimed to alleviate the use of e-services for the general population. In the city of Niš, interested citizens participated in the research "eServices in the city of Nis", and the aim of the research was to gather information on the use and quality of existing eServices.







CYBERSECURITY

8. CYBERSECURITY

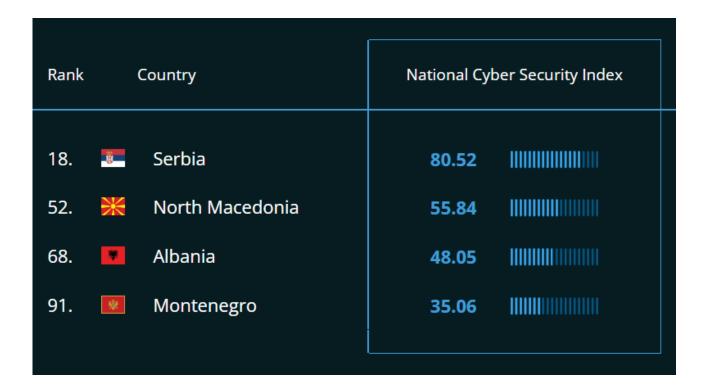


Figure 5: National Cyber Security Index (NCSI) comparison of the selected WB countries in this NCSI report⁴¹. Unfortunately, there is no data for Kosovo* available.

According to the NCSI, Serbia has the greatest fulfillment of the selected indicators that cover policy, education, security, and crisis management aspects. This is slightly surprising considering the fact that the other listed countries are part of the NATO alliance – cyber defence is part of NATO's core task of collective defence. Additionally, NATO's main focus in cyber defence is to protect its own networks, operate in cyberspace (including through the Alliance's operations and missions), help Allies to enhance their national resilience and provide a platform for political consultation and collective action. 42On the other hand, having in mind that Albania, Montenegro and North Macedonia have all accessed NATO in different moments (2009, 2017 and 2020 respectively) there might have been different security and defence priorities until today.

Comparing the NCSI to the one cited in the DAO regional baseline research, it can be concluded that North Macedonia made the most progress, both in terms of rank and index. It has moved up eleven places in the rank (from 63rd to 52nd) and increased its index by 23%. Albania moved up for one place in the ranks (68th from 69th) while increasing the index by 16%. Serbia and Montenegro worsened their positions in the ranks, by two and seven places respectively, while marginally improving their indices (3% and 4% respectively).

Further, Pricewaterhouse Coopers' (PwC) Western Balkans: Emerging Cyber Threats - Cybersecurity Ecosystem Report states that cybercrime dominates the threat

⁴¹ NCSI index is held and developed by e-Governance Academy Foundation from Estonia. https://bit.ly/3V95xnJ

⁴² NATO Cyber defence - https://bit.ly/3EjJ8gY

landscape, with the most frequent attack types being malware, phishing, ransomware, and, to some extent, distributed denial of service (DDoS).⁴³

Albania

According to the latest National Cyber Security Index, Albania was ranked 68th with a score of 48.05 points. In comparison with the previous year, it compared to the 72nd of the previous year's performance.

In July 2022, Albania's e-government suffered the biggest cyber attack so far. As a consequence of the attack, the whole system was out of function for almost three weeks. The severity of the attack was such that the official recommendation of the authorities was to not take into consideration any electronic documents issued between 16 and 24 July.

In December 2021, personal data on 637.000 citizens of Tirana, containing personal data such as salaries, were leaked. Investigation showed that a public administration employee downloaded the database and then sold it to a third party. Not only that, but the database was made publicly accessible via links that circled around social media and messaging apps. Further, among other issues, the investigation discovered that there is a lack of systematic implementation of the laws in force, difficulties in managing ICT resources, unrestricted access to data, lack of procedures, and existing procedures being ignored.

Kosovo*

The Directorate of Operation and Security within the **Agency of Information and Society (AIS)** is responsible for drafting policies and standards related to information technology security. It should be noted that there is no separate cybersecurity strategy so it is part of wider strategies. Most likely this will continue to be the case in the future as cybersecurity is part of the Digital Agenda Strategy 2030. At the moment, Cybersecurity Law is being prepared and one of the provisions is the establishment of the State **Cyber Security Agency**. It will be responsible for overseeing, controlling, and setting cyber security standards.

Montenegro

At the moment, the Ministry of Public Administration prepared a new **Montenegro Cyber Security Strategy for the time period 2022-2026** and a subsequent **Action Plan for the year 2022**, which was adopted. This Strategy addresses the necessity of improving the security of the digital domain, adhering to the NATO and EU rules and regulations, and establishing an institutional framework for the response to cyber incidents. Also, the draft of the Strategy envisioned the establishment of an **Agency for Cybersecurity** which would represent a new government agency that would aim to tackle cybersecurity issues in Montenegro.

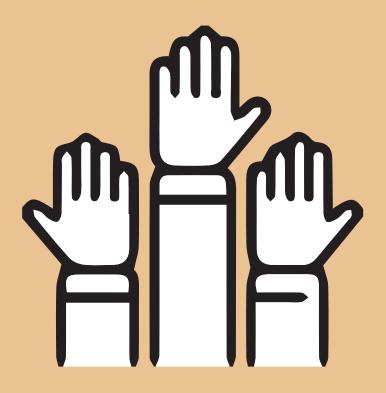
North Macedonia

2018 -2022 National Strategy for Cyber Security of the Republic of Macedonia regulates the cybersecurity domain. Agency for Electronic Communications (AEC) is in charge of rules set to ensure the security and integrity of networks. Further, the National Center for Computer Incident Response (MKD-CIRT) was established as a separate department in the AEC according to the Law on Electronic Communications. CIRT's scope of work covers both network and information security and protection, especially of critical infrastructure.

Serbia

2021- 2026 Information Society and Information Security Development Strategy still remains central for the development of cybersecurity capacities.

Often, the lack of necessary cybersecurity protection is jeopardizing citizens' personal data. This was the case after the introduction of mandatory COVID Green Digital Certificates for accessing closed venues in fall 2021. Due to the flaw in the security design of the application, persons that were verifying certificates could access the citizens' private data after scanning certificates. This was addressed shortly after but still demonstrated vulnerability.







E-PARTICIPATION AND E-DEMOCRACY

9. E-PARTICIPATION AND E-DEMOCRACY

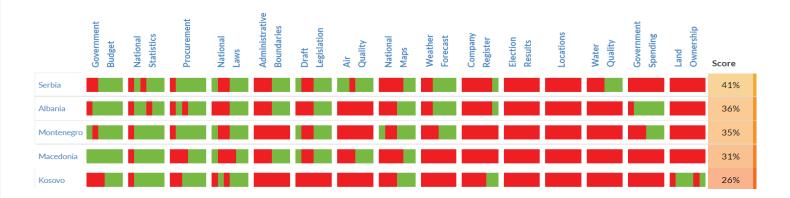


Figure 6: The Global Open Data Index44;

E-participation has been introduced across the region through different legislation. Although there are formal implementations in place, related both to legislative and technical aspects of e-participation, it seemed to have increased the gap between citizens/CSOs and the government as it enabled mechanisms for more one-way communication.

This impression can also be seen by looking at the E-government index from the UN's E-government survey 2022. All the countries worsened their results compared to the 2020 survey. Serbia had a slight negative change of -1,8%, followed by Albania with -9,9%. Montenegro and North Macedonia recorded double-digit decreases of their E-government index, with -14,9% and -16,8% respectively. These numbers are shown in Table 5 of this report.

Albania

E-participation is regulated by law and there is a national platform for such procedure. However, the example of the adoption of the new National Cross-Cutting Strategy on the Digital Agenda showed that there is still significant room for improvement. For instance, the period for consultations was only two weeks while the responsible institution (NAIS) did not officially invite stakeholders to take part in consultations. Ironically, the newly adopted strategy emphasizes the importance of public consultations in the decision-making process as a way to increase transparency and inclusiveness.

Kosovo*

E-democracy and e-participation remain at a low level despite government efforts to promote it. The Office of the Prime Minister established the **e-Consultation Platform**⁴⁵ through which citizens can get involved in the legislative and policy-making process. However, there is no data on usage in the past. Additionally, an e-participation platform





for Parliament is being developed through an international project supported by National Endowment for Democracy (NED).

Managed by the Agency of Information Society (AIS), **Open Government Data Portal**⁴⁶ provides access to the various public administration datasets. Still, due to the lack of updates, the number of available datasets is limited.

Montenegro

In Montenegro, e-participation and e-democracy are pursued through two platforms: **eP-articipation**⁴⁷ and **ePetition**⁴⁸. These platforms are established with the goal of bringing the democratic process of law creation and policy formulation closer to its citizens by allowing them to exercise their democratic rights electronically. ePetition allows citizens to submit their initiatives directly to the relevant Ministries. Formal requirements are at least 3.000 signatories, a person submitting has to have legal residence in Montenegro and to be over 18 years old. However, the Government holds the final say and could potentially reject any petition perceived as harmful to the key foreign or domestic policy priorities.

Although both platforms are functional and user-friendly, their popularity among citizens is rather low. For example, since 2019 there were only 21 petitions submitted through the ePetition portal. Even when submitted, citizens' engagement remains low. To illustrate, the last three petitions on the portal barely collected 10 signatures in total!

North Macedonia

For citizens of North Macedonia, e-participation is available through several portals: Single National Electronic Register of Regulations (ENER)⁴⁹, Government's Open Data Portal⁵⁰, M-Community⁵¹, Open Government Partnership Portal of North Macedonia⁵².

Through ENER, citizens are able to participate in the consultation process, review and make comments on laws, policies and initiatives as well as provide feedback such as filling complaints or reporting unethical behavior. Also, ENER is a successor of the former e-democracy portal that was used in the past.⁵³

2022 Openness Index⁵⁴ data shows that North Macedonia has a steady improvement in government transparency, however this success is not equally distributed among the different levels of institutions. Certainly, this is partially a success of the initiative dubbed Open Government Partnership (OGP) which is currently implementing its fifth national action plan for the period 2021-2023. As an advisory body to push forward OGP imple-

- 46 RKS Open Data. http://bit.ly/3AoCGnN
- 47 eGovernment Portal of Montenegro; eParticipation. http://bit.ly/30ias3v
- 48 Portal ePetitions. http://bit.ly/3EH07Lv
- 49 Single National Electronic Register of Regulations (ENER). http://bit.ly/3GuyAOC
- 50 Government's Open Data Portal. http://bit.ly/3TLpCj4
- 51 M-Community. http://bit.ly/3V54Llv
- 52 Open Government Partnership Portal of North Macedonia. http://bit.ly/3UWAThw
- 52 53 E-democracy Portal. Available at: http://bit.ly/30g0Mqk
 - 54 <u>Metamorphosis</u> » Assessment of good governance in North Macedonia and the region through the Openness Index Assembly and Executive branch of power 2021 measurement

mentation, the Council for Coordination and Monitoring was established. It consists of 16 members coming from both public administration and civil society.

2019 - 2021 RNM Government Transparency Strategy⁵⁵ anticipates that the whole public administration is required to submit legislative proposals to the ENER platform and make it available for public consultations. So far, this has not been the case.

Serbia

After the new Law on Referendum and People's Initiatives was adopted in November 2021, initiatives submitted in electronic format became regulated by law.

E-consultations⁵⁶ portal represents a centralized location for the participation of citizens or civil society organizations in policy-making processes in Serbia. However, its fundamental value is often discarded due to the fact that Government, Parliament, or public administration institutions frequently pay little to no attention to the comments submitted through the portal. Thus, CSOs prefer "analog" and "offline" modes as a way to participate in policy-making processes.

Open Data Portal⁵⁷ provides public access to the data held by the public administration. Currently, there are almost 2000 data sets from 110 institutions published, 1600 users, and 36 use-cases based on available data.



eConsultations Portal. http://bit.ly/3ULygzp

⁵⁷ Open Data Portal. http://bit.ly/3URtHDF



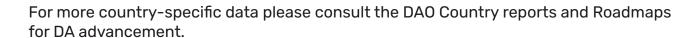


ROADMAP FOR DIGITAL AGENDA ADVANCEMENT IN TARGETED WESTERN BALKAN COUNTRIES

10. ROADMAP FOR DIGITAL AGENDA ADVANCEMENT IN TARGETED WESTERN BALKAN COUNTRIES

Advancement of the Digital Agenda is a continuous process and therefore requires a continuous approach towards all activities related to it. This practically means that there is not a clear end of the process, rather a continuous improvement with the ultimate goal of improving everyday lives of the citizens. Having researched and aggregated proposals from the roadmaps of each national report, here is the list of the most important joint initiatives and steps that could lead the advancement of the Digital Agenda across the region:

- Ensure proper and substantial implementation of current regulation, strategic frameworks and planned deadlines.
- Promote and bring closer strategic, legislative, and administrative framework and documents to as wide an audience as possible. Focus should be on every segment of the society since the COVID-19 pandemic showed that even the senior citizens can use e-services with ease.
- More frequent, hands-on and practical exchange of best practices from the region, especially among the targeted countries and economies. The region is very similar in its challenges, yet in different stages of Digital Agenda development when observed nationally. For example, Albania provides public administration services only in digital/electronic form, while Kosovo* launched its e-services portal only recently. The variety of experiences from all the processes is something that can be of great value if used properly.
- Significantly improve raising awareness of the existence and benefits of e-services to
 the entire population. Communication with the citizens related to the Digital Agenda
 is still on a relatively low and basic level and needs to be significantly improved to
 increase the usage of e-services. This is the area commonly highlighted as one of
 the most important ones throughout the region.
- Make digital literacy a priority, not only in strategic documents but in practice as well.
 Introduce a uniform monitoring and measuring methodology related to digital skills, both nationally and regionally.
- Significantly improve the training programs, competences and skills related to user-centricity, project management and program management within the public sector. These competences and skills are crucial in advancing the Digital Agenda and e-government to higher levels of performance.
- Regular publishing of achievements and results related to Digital Agenda and e-governance. This needs to be done in a simple and straightforward manner so that every interested organization or individual can interpret and understand the progress and significance in an easy way.
- Engage experts from the areas of design thinking, service development, customer experience, co-creation, product development and management to share and increase the level of knowledge and e-service outputs.
- Strengthen efforts related to increased cyber-security, not only on the national but on a joint regional level as well. Incidents from each of the targeted countries and economies clearly signal this need.



Albania

- z 2020 https://cutt.ly/2gL30Wc
- z 2021 https://cutt.ly/Blqgn8K
- z 2022 https://cutt.ly/8MCvVBq

Kosovo*

- z 2020 https://cutt.ly/igDrDw0
- z 2021 https://cutt.ly/QYLIt9a
- z 2022 https://cutt.ly/FMCkMA6

Montenegro

- z 2020 https://cutt.ly/xWX79WK
- z 2021 https://cutt.ly/fWX74o1
- z 2022 https://cutt.ly/HMCIYNo

North Macedonia

- z 2020 https://cutt.ly/gWXJduv
- z 2021 https://cutt.ly/3WXH21y
- z 2022 https://cutt.ly/DN2wNsF

Serbia

- z 2020 https://cutt.ly/agPgYa0
- z 2021 https://cutt.ly/0YHBJdi
- z 2022 https://cutt.ly/HMCl8YE

Western Balkans

- Baseline reasearch of the state of e-government development and digital literacy in the targeted Western Balkan countries (2020) https://cutt.ly/pWXJRz1
- Digital Agenda Observatory, Cumulative report on Digital Agenda advancement in Albania, Kosovo, Montenegro, North Macedonia and Serbia (2021) https://cutt.ly/rN2rmYA

Project partners:

e-Governance Academy (eGA) is a non-profit think tank and consultancy organization: a joint initiative of the Government of Estonia, Open Society Institute (OSI) and the United Nations Development Programme. EGA creates and transfers knowledge and best practice in the area of digital transformation: e-governance, e-democracy and cyber security. www.ega.ee

MJAFT! (Albanian: Enough!) is a non governmental organization in Albania that aims to raise awareness of the many political and social problems facing Albania. Mjaft's role ranges from catalyst, mobilizer and innovator to several public advocacy campaigns. Mjaft! has vigorously embodied the function of public advocate for the causes of various groups such as students, pensioners, the Roma community, military retirees, people with sight disabilities, the vocationally disabled, people with sensory and motor impairments, fishermen, taxi drivers and high difficulty laborers. www.mjaft.org

Open Data Kosovo is a nonprofit organization that believes in using civic-tech and digital humanitarianism to open government. Its goal is to bring government transparency and accountability through technology, opening government data, and engaging in digital humanitarianism. ODK is dedicated to promoting the idea that governance data should be made freely available for everyone to use and republished as they wish, without restrictions from copyright, patents or other mechanisms of control.

www.opendatakosovo.org

Non-governmental organization 35mm works on the creation of a better society in Montenegro and the wider region. "Better society" implies respect for human rights and the rule of law, especially public responsibility and transparency of governments and their institutions, and also civic freedom of speech. Our vision of Montenegro and the region presumes access to these reconciled, multicultural, and mature democratic societies to the community of European countries. www.nvo35mm.org

Metamorphosis Foundation for Internet and Society is an independent, nonpartisan and nonprofit foundation based in Skopje, North Macedonia. It is guided by openness, equality and freedom, with the mission is to contribute towards the development of democracy and towards increasing the quality of life through innovative use and sharing of knowledge. The program areas that Metamorphosis operates in are Media for Democracy, Education for Innovation, Social Accountability and Human Rights Online.

www.metamorphosis.org.mk

Partners for Democratic Change Serbia is a civil society organization established in Serbia in 2008. Partners Serbia works to strengthen rule of law, good governance, human rights and democracy in Serbia, primarily in the domains of government transparency, protection of privacy, anti-corruption, and alternative dispute resolution.

www.partners-serbia.org

