



**ICEDA**

Increasing Civic Engagement  
in the Digital Agenda

# DIGITAL AGENDA OBSERVATORY

BASELINE RESEARCH OF THE STATE OF E-GOVERNMENT  
DEVELOPMENT & DIGITAL LITERACY IN THE TARGETED  
WESTERN BALKAN COUNTRIES 2020

AUGUST, 2020

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Metamorphosis' mission is to contribute to the development of democracy and increase the quality of life through innovative use and sharing of knowledge. Our guiding values are openness, quality and freedom.

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## Abbreviations

BA/ Bsc	Bachelor of arts/Bachelor of science
CIRT	Directorate for Information Security and Computer Incidents
CSO	Civil Society Organiastion
EU	European Union
eGA	eGovernance Academy
EPI	E-Participation Index
FAQ	Frequently asked questions
ICEDA	Increasing Civic Engagement in the Digital Agenda
ICT	Information and Communications Technologies
ID	Identity document
IT	Information technology
KODE	Kosovo Digital Economy
KPMG	KPMG International Cooperative
Mbps	Megabits per second
MKD - CIRT	National Center for Computer Incident Response
MP	Members of Parliament
NA	Not Available
NATO	North Atlantic Treaty Organization
NGO	Non-governmental organization
OECD	Organization for Economic Co-operation and Development
OGDI	Open Government Data Index
OGP	Open Government Partnership
OSCE	Organization for Security and Co-operation in Europe
OS X	Operating System for Apple's Mac computers
RATEL	The Regulatory Agency for Electronic Communications and Postal Services
SIGMA	Support for Improvement in Governance and Management
SME	Small and medium-sized enterprises
SSL	Secure Sockets Layer
TLS	Transport Layer Security
TV	Television
UNDP	United Nations Development Programme
UKAID	United Kingdom Agency for International Development
USAID	United States Agency for International Development
VAT	Value-added tax



## Preface

Only with a clear and understandable approach to all citizens, without exception, can there be a sustainable digitalization in all spheres as an effective mechanism for significantly improving the lifestyle of the population. When we talk about digitalization in all spheres, we refer to the advancement and bigger efficiency of the institutions, organizations and other entities. Being witnesses of the pandemic crisis, we can note that this is a more than needed step for a better functioning of the society, and we can see how this unfortunate circumstance has accelerated the spread of knowledge about the benefits from the digitalization. However, we must be aware that the swift digitalization has also brought up a lot of issues, where we gave devices to citizens who are not taught how to use them properly, which is why we are faced with hate speech, fake news and misinformation, cyber bullying, cybercrime, etc.

As we have not come across any comprehensive research of this kind, in this report we have tried to provide a baseline for the state of e-Governance development and digital literacy in the Western Balkans countries: Albania, Kosovo<sup>1</sup>, Montenegro, North Macedonia and Serbia, in order to provide a starting point for further measuring of the advancement in these areas in correlation to the Digital Agenda and to provide further recommendations for improvement.

The Digital Agenda is an initiative developed by the European Union, which has also been extended and adopted for six countries in the Western Balkan. It aims to ensure that citizens of the region can fully reap the benefits of the digital transformation. The commitment to the Digital Agenda will ensure that citizens have the skills to match the demands of the new economy and will help modernize public administrations, strengthen cyber security, increase connectivity, and improve the business climate.

This research is part of the Digital Agenda Observatory and is implemented in five Western Balkan countries as part of the project Increasing Civic Engagement in the Digital Agenda – ICEDA, co-funded by the European Union and implemented by Metamorphosis Foundation (North Macedonia) as the leading partner, e-Governance Academy (Estonia), CRTA – Center for Research, Transparency, and Accountability (Serbia), NGO 35mm (Montenegro), Open Data Kosovo (Kosovo) and Lëvizja Mjaft (Albania). The issues addressed by the reports are specifically related to the chapters relevant to the Digital Agenda in particular Chapter 10 – Information Society and Media from the EU’s acquis, with a goal to reinvigorate the issues of the Western Balkans Digital Agenda on the EU agenda.

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<sup>1</sup> 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.

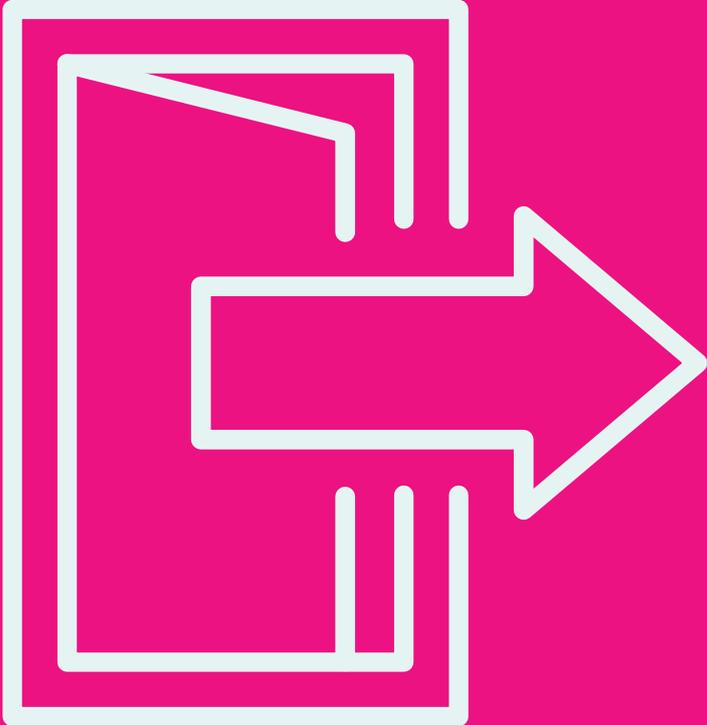


## Research methodology

The quantitative data extracted and analyzed derives from the desktop study and information requests to the relevant information holders, including the collection of the secondary data by reviewing the strategy and policy documents, concept papers and international project reports implemented by the project partners on a national level. Descriptive data analysis method was used to answer the research questions i.e. the indicators of the current efforts of the Digital Agenda implementation by the government, civil society and media. Collected data were used for drafting the country reports which were subsequently used as a source of information for the Regional report. The research was implemented in the period between April – June 2020.

To understand the attitude, motivation and experience of stakeholders related to the Digital Agenda issues, qualitative research methods by collecting the primary data using interviews, online survey and semi-structured focus group discussion with different stakeholders (institutionalized and non-institutionalized civil society representatives (CSOs and civic activists), representatives of state authorities, journalists and representatives of media) were conducted about their views of the state of the Digital Agenda and needs for improvement. During the research period, 42 stakeholders were interviewed coming from public institutions, media and CSOs, 6 focus groups organized and on-line questionnaires were sent out to public institutions, media and CSO receiving 156 total of answers.

The research methodology was designed by the e-Governance Academy (eGA). eGA is a non-profit think tank and consultancy organization from Estonia that creates and transfers knowledge and best practices and empowers central and local government decision in the area of digital transformation: e-governance, e-democracy and national cyber security.



## Summary

The efforts in bringing the broadband internet to all the citizens of the Western Balkans region are well recognized, however, countries need to be more diligent in updating their strategic and regulatory documents. Countries are late with harmonization of legal acts and even more in delay with the implementation of innovations. Having in mind the nature of the process of digitalization, it should go in line with the market requests otherwise it threatens to remain at all times outdated and too expensive. Furthermore, these efforts should be complemented with ambitious campaign of raising citizens' awareness about the benefits of digitalization. Since, all of the countries are currently experiencing political instability and facing elections in this year, accompanied by the pandemic crisis, the fear of slowing down the progress generated in the commitment to the Digital Agenda implementation, lingers. If the new governments decide to keep it off the list of priorities, discontinuation of the process will significantly affect its results.

Digitalization of services in the Western Balkans region is mostly driven with financial aspect, and most of the electronic services (e-services) provided are intended for the business sector. Governments should be induced to define their criteria for introducing e-government services based on the citizens' needs. In parallel, more efforts should be invested into educating the citizens whose digital literacy is currently low, to enable understanding the benefits of the digitalization.

Digitalization is an integral part of the public administration reform. It directly influences the efficiency of administration and budget savings. The greatest undertaking for all the countries is the interoperability of all data bases handled by various government institutions. Once this process is finished, citizens will be able to obtain any administrative service by simply initiating the procedure on-line, while the rest of the process is automatized. So far, the governments offer partial solutions, with more or less success, whereas still some parts of the procedure rely on the traditional public administration.

Resistance to digitalization in one part comes from the establishment of public servants. The reform implies changing of their long-term routine, the need for more education, changing of procedures, adapting to new technologies, etc. There is a generational gap in being accustomed to e-technologies, and what is inevitably normal and easy on younger population remains difficult to those that were introduced to it in more mature ages.

Having in mind that all of the Western Balkan countries aspire to the membership in the European Union and still have to harmonize with the EU standards in terms of the democracy and the rule of law, the Digital Agenda remains one of the segments to be tackled on their way.



# 1. PRECONDITIONS FOR THE IMPLEMENTATION OF THE DIGITAL AGENDA

## 1.1. Internet penetration

Regarding the internet penetration and usage, the five countries show similar status of the Digital Agenda implementation. Although, the average of the internet penetration in the region is just slightly lower than the average in the European Union (for 5%), there is still the need to provide one fifth of households with internet infrastructure, with special emphasis on Albania and Montenegro that have the lowest percentages of coverage. Additionally, generations that are over 55 years of age are in need of education and stimuluses to use the potential of internet services. Less than 50% of population of that age in Serbia and North Macedonia do not use the internet. There is also the need to tackle female population that tend to use it less than male population, especially in Kosovo and Serbia where these differences are the highest.

Internet penetration in all Western Balkan countries, who were subjected to this research, ranges from 74% to 93%, which may be considered as moderately high, since the average in the European union is 89,4% and the world's average is 59,6%<sup>2</sup>. Best internet coverage is provided in Kosovo with over 93% of households supplied with internet connection. Serbia and North Macedonia are both ranked in the middle, with percentage of around 80%, and the lowest percentages of internet penetration are in Albania and Montenegro with around 74%.

**Table 1. Internet penetration per country in percentages**

	Country	Population	Internet penetration (% of households)	Broadband connection (% of households)
1	Kosovo	1.739.825	93% <sup>3</sup>	NA
2	Serbia	6.963.764	80,1% <sup>4</sup>	79,6%
3	North Macedonia	2.077.132	81.8% <sup>5</sup>	69.81%
4	Montenegro	620.029	74.30% <sup>6</sup>	NA
5	Albania	2.845.955	73.50% <sup>7</sup>	NA

<sup>2</sup> Available at: <https://cutt.ly/OfswXlF> (Last accessed on 21.07.2020)

<sup>3</sup> Kosovo Agency of Statistics <https://cutt.ly/ufsw9AM>

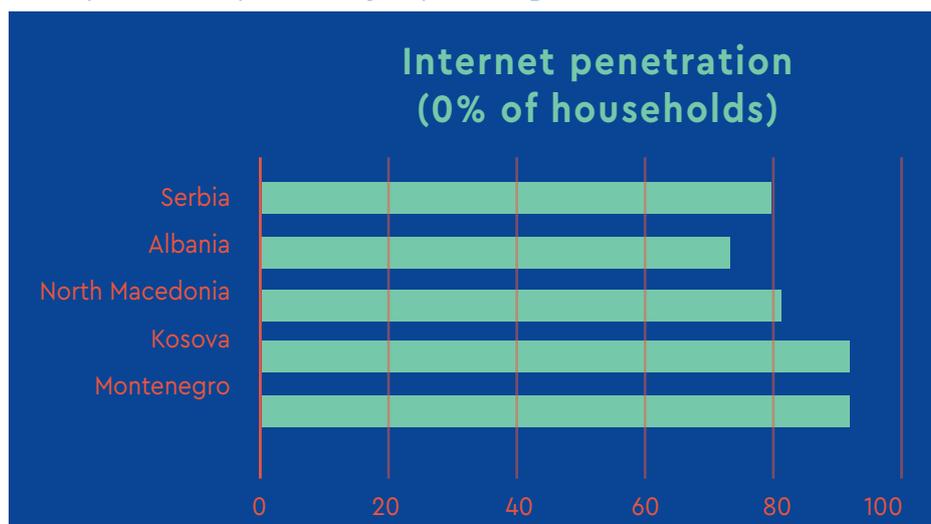
<sup>4</sup> Statistical Office of the RS <https://cutt.ly/MfswNyc> (Last accessed on 02.05.2020)

<sup>5</sup> State Statistical Office of the Republic of North Macedonia <https://cutt.ly/MygjrnP>

<sup>6</sup> Usage of information and communication technologies (ICT) in Montenegro in 2019, MONSTAT <https://cutt.ly/gfsw8mK> (Last accessed on 01.08.2020)

<sup>7</sup> Available at: <https://cutt.ly/rfsw0q3> (Last accessed on 21.07.2020)

Graph 1. Internet penetration per country in percentages



Both Serbia and Kosovo, under the scope of international donations, are in the process of improving these numbers. Namely, Serbia is initiating the project of construction of broadband communication infrastructure in rural areas where there is no economic interest of operators for the development of new generation networks, i.e. high-speed internet access. The first phase of the project, that begins in the spring of 2021, implies construction of infrastructure that will enable high-speed internet access (100 Mbps) for 90,000 households in rural settlements. This project is financed by the European Bank for Reconstruction and Development and implemented by the Ministry of Trade, Tourism and Telecommunications.<sup>8</sup>

Expansion of internet penetration in Kosovo is a result of the implementation of the Kosovo Digital Economy Project (hereinafter "KODE Project"). With this project, the Government of Kosovo has received a credit from an International Development Association of the World Bank to implement the project from 2019 until 2023. The KODE Project works in two main activities: enabling access to Kosovars to high-speed internet and better-quality digital infrastructure and supporting digital economy opportunities - usage of services, and learning.<sup>9</sup>

Table 2. Telecommunication Infrastructure Index<sup>10</sup>

	Country	Telecommunication Infrastructure Index (TII)	Mobile cellular telephone subscriptions per 100 inhabitants	Percentage of Individuals using the Internet	Fixed (wired) broadband subscriptions per 100 inhabitants	Active mobile broadband subscriptions per 100 inhabitants
1	Montenegro	0.7366	120	71.52	25.33	73.16
2	North Macedonia	0.6442	94.53	79.17	20.55	64.72
3	Serbia	0.62	95.78	73.36	17.63	66.02
4	Albania	0.5785	94.18	71.85	12.56	62.79

\*Very high level (0.75 to 1.00), High level (0.50 to 0.75), Middle level (0.25 to 0.50), Low level (0.0 to 0.25)

<sup>8</sup> Public Procurement „Rural Broadband Rollout“, for Preparation of detailed mapping and feasibility study was announced on June 11 2020. It is financed by the EBRD project <https://cutt.ly/Ofsw7PB> (Last accessed on 29.07.2020)

<sup>9</sup> Available at: <https://cutt.ly/Ffseqv9> (Last accessed on 01.08.2020)

<sup>10</sup> E-Government survey 2020, United Nations, Department for Economic and Social Affairs <https://cutt.ly/hfsrSUU> , Kosovo was not included in the survey (Last accessed on 29.07.2020)

Regarding the quality of the broadband internet connection in the Western Balkan region, Montenegro, Serbia and Kosovo resulted in average download speed of over 20 Mbps while Albania and North Macedonia average around 12 Mbps. Compared to the Eastern Europe region with average speed of 39.08 Mbps, it is still low. The fastest three were Hungary 99.74 Mbps, Slovakia 72.26 Mbps and Slovenia 65.46 Mbps. The slowest three were Bosnia and Herzegovina 15.66 Mbps, Albania 12.36 Mbps, and North Macedonia 11.48 Mbps. Average speed of broadband internet in the Western Europe is around 81.19 Mbps which makes it the fastest of the 13 global regions overall.

Table 3. Broadband internet speed <sup>11</sup>

Position	Country	Mean download speed (Mbps)	Unique IPs tested	Total tests	How long it takes to download a 5GB movie (HH:MM:SS)
63	Montenegro	25.07	6,330	20,245	0:27:14
65	Serbia	24.74	386,454	2,465,261	0:27:36
73	Kosovo	20.30	3,471	8,406	0:33:37
104	Albania	12.36	12,989	42,944	0:55:15
109	North Macedonia	11.48	13,634	28,763	0:59:27

### 1.1.1. Structure of internet users

While the obvious trend of internet usage among generations shows that the most active population is the youngest one, age 16 – 24, in each of the countries (more than 95% of population of that age are internet users), and the percentage of internet users decreases with the age (there is a large discrepancy among data related to the eldest population). Namely, the data for Serbia and North Macedonia show that 47 – 50% of population aged 55 – 74 uses the internet, while the data for Montenegro and Kosovo show 74 -75% for the same age group, although the numbers for the previous age groups correspond in all four countries.

Table 4. Internet usage per generation in percentages

	Age					
	16-24	25-34	35-44	45-54	55-64	65 – 74
Serbia <sup>12</sup>	97.4	96.3	95.2	83.2	63.9	30.1
Kosovo <sup>13</sup>	95				74	
North Macedonia <sup>14</sup>	99.1	92			49.6	
Montenegro <sup>15</sup>	99.6	96.3	88.6	79.6	77.9	72.8
Albania	no data					

<sup>11</sup> Worldwide broadband speed league 2020 by Cable.co.uk. Research on broadband speed measurements in 221 countries and territories across multiple 12-month periods. <https://www.cable.co.uk/broadband/speed/worldwide-speed-league/#map> (Last accessed 10.09.2020)

<sup>12</sup> Statistical Office of the RS <https://cutt.ly/ufsee0b> (Last accessed on 02.05.2020)

<sup>13</sup> Available at: <https://cutt.ly/3fseyoQ> (Last accessed on 01.08.2020)

<sup>14</sup> State Statistical Office of the Republic of North Macedonia <https://cutt.ly/MygjrnP>

<sup>15</sup> Usage of information and communication technologies (ICT) in Montenegro in 2019, MONSTAT, <https://cutt.ly/dfseisn> (Last accessed on 01.08.2020)

Regarding the gender differences in internet usage, the data for Kosovo and Serbia show significant difference in percentages that go in favor of male population for over 17% for Kosovo and 7% for Serbia. North Macedonia and Montenegro percentages are balanced, varying just 1-2% in favor of one gender.

**Table 5. Internet usage per gender in percentages**

	Gender	
	Male (%)	Female (%)
Serbia <sup>16</sup>	81,2	73,7
Kosovo <sup>17</sup>	55.8	38.7
North Macedonia <sup>18</sup>	82.1	80.8
Montenegro <sup>19</sup>	87.4	88.5
Albania	no data	no data

The process of developing the Digital Agenda in the Western Balkans is supported by international stakeholders through different projects, tackling various segments. Thereby, the European Union supports the public administration reform in the Serbia, Montenegro and in the North Macedonia. World bank projects are active in Serbia, Kosovo and North Macedonia. UNDP, UKAID and the British Embassy support open data development in the Serbia and SwissPro supports e-government on local level. Both USAID and British Embassy are also active in the North Macedonia, supporting projects related to the Digital Agenda. Additionally, Montenegro receives assistance from OECD through its SIGMA initiative and UNDP and KPMG financed projects related to public administration reform.

## 1.2. Digital literacy of citizens

Although governments of the region are investing into broadband internet to make it available even in the most secluded rural areas, digitalization that should bring benefits to economy of the country and ease everyday lives, remains ineffective without recognizing the problem of the digital literacy of the citizens. There are no researches and analysis on defining the digital literacy, percentage by sex or age groups available in most of the countries. Out of the five countries, only Serbia has made moderate progress in this area in terms of scanning the problem and adopting appropriate measures for the next four years, whereas North Macedonia's efforts were interrupted by the pandemic crisis. According to statistical data, as much as 51% of the population of Serbia is digitally illiterate. If the situation is similar in other Western Balkan countries, then this could represent one of the major obstacles in further digitalization of services and implementation of the Digital Agenda.

In regards to ICT skills of the citizens of **North Macedonia**, the analysis<sup>20</sup> shows that the respondents believe that they have the most skills in communication through the social networks

<sup>16</sup> Statistical Office of the RS <https://cutt.ly/Zfsep6i> (Last accessed on 02.05.2020)

<sup>17</sup> Available at: <https://cutt.ly/tfsezd3> (Last accessed on 01.08.2020)

<sup>18</sup> State Statistical Office of the Republic of North Macedonia <https://cutt.ly/MygjrnP>

<sup>19</sup> Usage of information and communication technologies (ICT) in Montenegro in 2019, MONSTAT, <https://cutt.ly/zfsehyc> (Last accessed on 01.08.2020)

<sup>20</sup>

(64.9%) and Internet browsing (63%), while they are the least skilled in blog writing, creating and uploading video and news content, etc. The most used social networks are Facebook (79.1%), YouTube (65.7%) and Instagram (47.7%). The most frequent online activity among the respondents is communicating through social networks (73.8%) and communicating through chat applications (69.8%) such as Skype, Viber, Messenger, WhatsApp, Hangouts, etc. Other frequent online activities that the analysis detects are following informational content from different websites (30.1%), listening and downloading music (26.1%), using e-mail (20.3%) and browsing for useful data necessary for their work or studies (20%). The analysis emphasizes that the advanced Internet usage is far less common, having only 6.5% of the respondents who use e-banking daily of several times a week, or 5% posting or sharing content that users created themselves. North Macedonia is currently in the process of creating the Strategy for Digital Skills that was initially expected to be finalized during March 2020, however the pandemic crisis has postponed it.

The data on computer literacy in **Serbia** show that 34.2% of persons aged 15 and over are computer literate, while 14.8% of persons are partially computer literate. Observed by gender, the share of men and women is almost equal among computer literates (50.4% of men and 49.6% of women are computer literate), while the share of women (54%) is higher than of men among computer illiterates (46%).<sup>21</sup> Computer literate people are people who can perform four basic activities on a computer, namely: word processing, making spreadsheets, sending and receiving e-mail and using the Internet. Persons who are partially familiar with computer work are persons who can perform one, two or three activities on a computer, but not all four listed, while computer illiterate persons are persons who are not able to perform any activity on a computer. These data indicate the number of persons who need to be provided with digital literacy at least at the basic level, given that computer illiterate persons in Serbia are 51%.<sup>22</sup>

**Table 6. Computer literacy of the population in Serbia**

	Women	Men	Total
Computer literate	49,6%	50,4%	34,2%
Partially computer literate	49,1%	50,9%	14,8%
Computer illiterate	54,0%	46,0%	51,0%

One of the measures for increasing the digital literacy of the citizens of Serbia from an early age is newly announced, introducing of obligatory subject into first grades of elementary schools: "Digital world" since September 2020.

<http://www.mpn.gov.rs/digitalni-svet-za-buduce-prvake/>

21 Statistical Yearbook of the Republic Office of Statistics for 2018, Belgrade 2018 <https://cutt.ly/vfsr5M1> (Last accessed on 02.05.2020)

22 Strategy of development of digital skills 2020 – 2024 <https://cutt.ly/mfstqSn> (Last accessed on 02.05.2020)

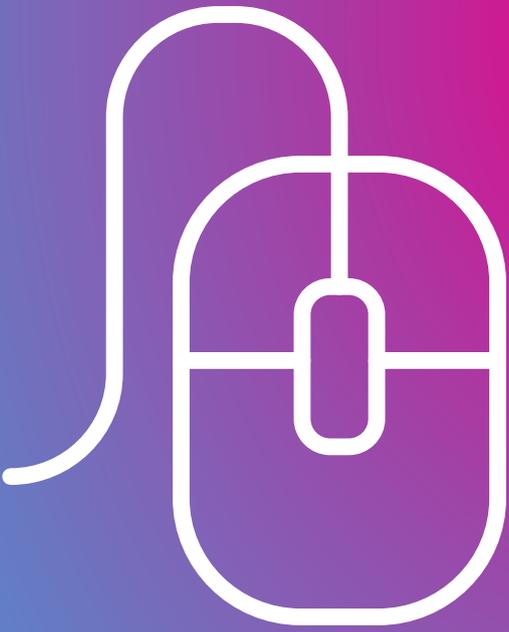
In order to improve the status of digital literacy, the Government of Serbia adopted the Strategy of the Development of Digital Skills in the Republic of Serbia for the period from 2020 to 2024<sup>23</sup>, in February 2020, assessing that this initiated the process of inclusion of the entire population and economy into a digital society. The overall objective of the Strategy of the Development of Digital Skills 2020 - 2024 is to improve the digital knowledge and skills of all citizens, including members of vulnerable social groups, to enable the monitoring of the development of information and communication technologies in all fields and to meet the needs of the economy and the labor market.<sup>24</sup>

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23 In 2020, the OSCE Mission in Skopje in partnership with the Agency for audio and audiovisual media services published an analysis: "Mapping of media literacy levels in the Republic of Northern Macedonia among the population over 16 years of age" <https://cutt.ly/oyM64mM> (Last accessed on 05.05.2020)

24 Available at: <https://cutt.ly/ffsteQP> (Last accessed on 02.05.2020)





## 2. ADMINISTRATIVE AND DIGITAL CAPACITIES

### 2.1. Strategic and legal framework, administrative capacities

#### 2.1.1. Strategic framework

All countries have adopted relevant strategies to tackle the areas related to the Digital Agenda, however their approach slightly differs. They all rely on the Strategy for Public Administration Reform as an umbrella document. Albania and Kosovo have comprehensive Strategies on the Digital Agenda while other countries strategically tackled various topics from the Digital Agenda in separate strategic documents. However, in 2020, most of the strategic documents are expiring and the countries face the adoption of the new ones. There are also loopholes in the legal framework to be tackled with some of the laws being seriously outdated.

**Albania** acts under the:

- 🔄 Strategy on the Digital Agenda of Albania (2014–2020)<sup>25</sup>

in its efforts to introduce the benefits of the digitalization.

**Kosovo**, however, even prior to the adoption of the Western Balkans Digital Agenda, adopted its own Digital Agenda in line with the Europe's Digital Agenda.

- 🔄 Kosova Digital Agenda (2013–2020)<sup>26</sup>
- 🔄 IT Strategy of Kosovo<sup>27</sup>

Both strategies are aiming to develop the IT sector to contribute to digitalization of services especially for businesses.

**Montenegro** disposes with two strategic documents that regulate information society and cyber security:

- 🔄 Strategy for the Development of the Information Society by 2020
- 🔄 Cyber Security Strategy (2018–2021)<sup>28</sup>

**North Macedonia** has regulated the implementation of the Digital Agenda through several high-level strategies:

- 🔄 Strategy for the Development of Information Society<sup>29</sup>
- 🔄 Cyber Security Strategy (2018–2022)<sup>30</sup>
- 🔄 Cyber Defense Strategy (2019–2023)<sup>31</sup>
- 🔄 Strategy for Information-Communication Technology in Justice (2019–2024)<sup>32</sup>

25 Available at: <https://cutt.ly/pfseCiN> (Last accessed on 01.08.2020)

26 Available at: <https://cutt.ly/sfsekRG> (Last accessed on 01.08.2020)

27 Available at: <https://cutt.ly/kfsezaO> (Last accessed on 01.08.2020)

28 Available at: <https://cutt.ly/sfSkqgn> (Last accessed on 16.09.2020)

29 Available at: <https://cutt.ly/kytaqlj> (Last accessed on 14.04.2020)

30 Available at: <https://cutt.ly/EygcQA1> (Last accessed on 14.04.2020)

31 Available at: <https://cutt.ly/iy5z6ij> (Last accessed on 11.06.2020)

32 Available at: <https://cutt.ly/iy56oe9> (Last accessed on 11.06.2020)

- And in addition two accompanying national plans:
- National Plan for Quality Management in the Public Sector (2018–2020)<sup>33</sup>
- National Operational Broadband Plan (2019–2029)<sup>34</sup>

North Macedonia is currently in the process of preparing the National Long-Term ICT Strategy, aligned with the Digital Agenda for Europe 2020, with the support of the EU. Another document that is also on its way is the Strategy of the development of Digital Skills. The Strategy was initially expected to be finalized during March 2020, however, the pandemic crisis has postponed it.

In **Serbia** both strategies that represented the Digital Agenda for Serbia: Strategy for the development of electronic communications in the Republic of Serbia from 2010 to 2020<sup>35</sup> and Strategy for the development of the information society by 2020<sup>36</sup> are being replaced by the newly adopted:

- Strategy for the development of digital skills (2020 – 2024)<sup>37</sup>

These master documents, are supported by other strategies aimed at development of information technologies and information security:

- Strategy for the development of next generation networks by 2023<sup>38</sup>
- Strategy for the development of the information technology industry (2017 to 2020)<sup>39</sup>
- The information security development strategy in the Republic of Serbia (2017 to 2020)<sup>40</sup>

One of the advanced, and the newly adopted strategic document in Serbia, that is antecedent in the region is:

- Strategy for the development of artificial intelligence<sup>41</sup>

33 Available at: <https://cutt.ly/ky582Si> (Last accessed on 11.06.2020)

34 Available at: <https://cutt.ly/ryjSyxX> (Last accessed 04.05.2020)

35 Available at: <https://cutt.ly/wfsev2G> (Last accessed on 02.05.2020)

36 Available at: <https://cutt.ly/bfsemfq> (Last accessed on 02.05.2020)

37 Adopted on 27. February 2020. <https://cutt.ly/NfseWO8> (Last accessed on 02.05.2020)

38 Available at: <https://cutt.ly/HfseR4E> (Last accessed on 02.05.2020)

39 Available at: <https://cutt.ly/mfseUHM> (Last accessed on 02.05.2020)

40 Available at: <https://cutt.ly/OfseOP2> (Last accessed on 02.05.2020)

41 Adopted in December 2019. <https://cutt.ly/mfseAiN> (Last accessed on 02.05.2020)

Government just recently, in June 2020, adopted an Action Plan for the development of artificial intelligence 2020 – 2022. One of the measures is the improvement of teaching contents in primary and secondary schools. The goal is to introduce one subject in primary school in which artificial intelligence is included in the curriculum, by 2021. According to the action plan, there were two such subjects in high schools in 2019, so it was planned to have four in 2021 and seven in 2022. Establishing the Institute for Artificial Intelligence is planned for 2021. When it comes to the development of public services based on AI, it is planned to create regulatory conditions for the introduction of the restricted market exception “regulatory sandbox” in order to test solutions based on artificial intelligence in 4 areas of public importance (health and medicine, agriculture and forestry, transport, smart cities).

## 2.1.2. Legal acts

In **Albania**, the following Laws regulating e-technologies were adopted mainly in the period from 2008 – 2010 and should be updated: Law on the electronic communication in the Republic of Albania<sup>42</sup>, Law on the electronic signature<sup>43</sup>, Law on the electronic document<sup>44</sup>, Law on electronic trade<sup>45</sup>, Law on state operated databases<sup>46</sup>.

**Kosovo** is experiencing loopholes in the legal framework that regulates the digital identity, including digital signature and stamp, which would have to be amended for easier access to necessary public documents, as well as an older version of the Law on Electronic Communication<sup>47</sup> from 2012.

On the other hand, **Montenegro** recently, in December 2019, adopted the new Law on Electronic Administration<sup>48</sup> that will become effective in mid-2020. The previous Law concerning this area, adopted in 2014, regulated the establishment of e-government portal. The biggest novelty if compared to the previous version, is the fact that use of information and communication technologies will be mandatory<sup>49</sup> for the state and local institutions when performing tasks within their competence in communication with citizens, companies, other legal entities and entrepreneurs.

**North Macedonia** shares this practice by adopting in 2019 the Law on electronic management and electronic services<sup>50</sup> that regulates issues related to the establishment and functioning of the national portal for e-services, the Catalogue of services and One service point. Furthermore, the Law on central population register<sup>51</sup> regulates the population register in North Macedonia which comes in electronic form only.

**Serbia** has the most outdated version of the Law on Electronic Communication. The new Law has yet to be adopted and to align the Serbian legislation with the EU regulatory framework from 2009.<sup>52</sup> The current Law on Electronic Communications originates from 2010<sup>53</sup>, although it underwent changes in 2013, 2014, 2018, which were of no significant scope. A new draft of the Law on Electronic Communications was prepared in 2018, however, it was withdrawn from the parliamentary procedure by the Government. Another draft is currently in the process and is expected to be completely aligned with the European Electronic Communications Code<sup>54</sup>.

42 no 9918, adopted on 19.05.2008, replaced with the Law no. 102/2012 in compliance with the developments of the EU acquis <https://cutt.ly/rfse30T> (Last accessed on 01.08.2020)

43 no. 9880, adopted on 25.02.2008 <https://cutt.ly/Ofse40a> (Last accessed on 01.08.2020)

44 no. 10273, adopted on 29.04.2010 <https://cutt.ly/afse67w> (Last accessed on 01.08.2020)

45 no. 10128 adopted on 11.05.2009, replaced with the Law no. 135/2013 <https://cutt.ly/QfsrqPp> (Last accessed on 01.08.2020)

46 no. 10325, adopted on 23.09.2010 <https://cutt.ly/sfsrwQj> (Last accessed on 01.08.2020)

47 Available at: <https://cutt.ly/LfsrepC> (Last accessed on 01.08.2020)

48 Available at: <https://cutt.ly/efSj06T> (Last accessed on 16.09.2020)

49 In the previous law text institutions had only the right to communicate via information and communication technologies

50 Available at: <https://cutt.ly/2ygvdrI> (Last accessed on 29.04.2020)

51 Available at: <https://cutt.ly/hyjS3rp> (Last accessed on 04.05.2020)

52 Republic of Serbia Report for 2019 <https://cutt.ly/NfseNl7> (Last accessed on 02.05.2020)

53 Law on Electronic Communications <https://cutt.ly/Hfse1PV> (Last accessed on 02.05.2020)

54 Last updated on 11 September 2019 <https://cutt.ly/Rfse9u7> (Last accessed on 26.06.2020)

Both North Macedonia and Serbia made additional legislative efforts. The Government of **North Macedonia** is working on a by-law act that is supposed to regulate electronic storage. The Regulation on conditions for preparation of documents for electronic storage and qualified electronic storage and document formats suitable for storage<sup>55</sup> is currently in governmental procedure for its adoption, while the Methodology for accreditation of conformity assessment bodies and assessment laboratories and standards, the Methodology for implementation of procedures and technological solutions for electronic storage and qualified electronic storage of documents and the By-law for standards for electronic storage and qualified electronic storage of documents, shall be published in the Official Gazette. In June 2020, **Serbia** adopted the e-government Development Program 2020-2022 and the Action Plan for its implementation, which paves the way for further development of the e-government in Serbia. The program envisages as many as 300 new e-services<sup>56</sup>.

### 2.1.3. Administrative capacities

In **Albania** originally the Digital Agenda was approved by the Council of Ministers under the responsibility of the Ministry of Innovation and Public Administration. However, with the change of the government structure, the Digital Agenda is now under the competencies of the Ministry of Energy and Infrastructure. Additionally, the Department of Development and Good Governance, at the Prime Minister's Office has established the National Agency for Information Society / Thematic Group for e-government that monitors the harmonization with the National Plan for European Integration.

**Kosovo** has two ministries responsible for the implementation of the Digital Agenda and e-government, namely, the Ministry of Economic Development and the Ministry for Public Administration/Agency for Information and Society. However, there is no specific body which directly deals with Digital Agenda and most of the responsibilities that derive from the Digital Agenda of the EU are distributed among different institutions. The Ministry of Economic Development is in charge mostly on the promoting and coordination of the usage of technology in the government aiming to contribute to the digitization of the services. The department of ICT with the KODE Project<sup>57</sup> works on proposing, compiling and providing for the implementation of information technology sector policies/strategic documents and support direct the usage of technology for economic development. Within the ministry and the Strategy of the Digital Agenda for Kosovo, a steering committee group is composed of governmental officials and representatives of the IT industry association and chambers of Commerce. On the other hand, the Ministry of Public Administration is directly authorized for the implementation of e-governance, whereas this responsibility is passed at the Agency of Information and Systems<sup>58</sup>. Moreover, the Agency for Information Society has built the State Data Center, which is used as a state "electronic repository" for the accumulation, administration, dissemination, and storage of electronic data. The Agency for Information Systems has been established by the Law on Information Society. In order to manage the IT resources, the Agency has created the IT

55 Available at: <https://cutt.ly/MykSBXN> (Last accessed on 05.05.2020)

56 Available at: <https://cutt.ly/jfsrrOI> , (Last accessed on 26.06.2020)

57 Available at: <https://cutt.ly/vfsrsqV> (Last accessed on 01.08.2020)

58 Available at: <https://cutt.ly/NfsrdwL> (Last accessed on 01.08.2020)

departments/divisions in all public institutions at local and central level which will enable direct communication and collaboration with IT departments.

Both Albania and Montenegro have the least diversified jurisdiction of public authorities over the Digital Agenda. In **Montenegro**, the Ministry of Public Administration is coordinating the development of e-government. It participates in the preparation of regulations and policies related to e-administration, as well as other regulations related to the field of the information society. It monitors the implementation of the Strategy of Public Administration Reform and Strategy for Development of the Information Society. Furthermore, other ministries have its sectoral roles.

In **North Macedonia** the Ministry of Information Society and Administration<sup>59</sup> bears the responsibility for all issues pertaining to information technologies, as well as for policies and strategies related to the e-government.<sup>60</sup> Furthermore, the Agency for Electronic Communications (AEC) was established to create favorable conditions for effective and sustainable competition in the electronic communications market to serve the interests of users, the economy and the communications industry, through effective, transparent, appropriate and proactive application of regulatory tools. Under its jurisdiction, the National Computer Incident Response Center was established as a special organizational unit as an official national point of contact and coordination in dealing with security network and information system incidents. The National Council for Information and Communication Technologies<sup>61</sup> was established as a body that would prepare and monitor the implementation of the National Long-Term ICT Strategy and other strategic documents in this area, which further, due to the need for monitoring of the implementation of the National Strategy for Cyber Security of the Republic of Macedonia (2018-2022), has grown into the National Council for Information and Communication Technologies and Cyber Security. The Council acts as a coordinator and monitors the implemented activities in accordance with the strategic goals, but also defines new strategic guidelines and recommendations related to the areas of information technologies and cyber security. In October 2019, the duties of this body related to cyber security were handed over to the newly formed National Council for Cyber Security<sup>62</sup>, which includes the Ministers of Defense, Interior and Information Society and Administration. An expert advisory body, namely the Digital Forum for Information and Communication Technologies was established<sup>63</sup> with the purpose of coordinating and participating in the development of the information society of the public, private, civil society and academic community. Apart from the Minister of Information Society and Administration, the membership within the Forum is consisted of 12 representatives of the civic and academic sector, and Chambers of Commerce related to information and communication technologies.

In **Serbia** the Digital Agenda is being tackled by four public institutions simultaneously. The Ministry of Trade, Tourism and Telecommunications, Digital Agenda Department<sup>64</sup> prepares the legal framework for the process. The Government Office for Information Technologies and e-government that is directly under the authority of the Government, manages the process, e-government and implements the projects<sup>65</sup>. Within the cabinet of the Prime-minister is the

59 Available at: <https://cutt.ly/Kfsrg8t> (Last accessed on 13.04.2020)

60 Available at: <https://cutt.ly/pygvETB> (Last accessed on 13.04.2020)

61 Official Gazette 207/2019 <https://cutt.ly/TygzBZo> (Last accessed on 15.04.2020)

62 Official Gazette 207/2019 <https://cutt.ly/TygzBZo> (Last accessed on 15.04.2020)

63 In February 2019

64 Ministry of Trade, Tourism and Telecommunications, website, <https://cutt.ly/jfsrtHH> (Last accessed on 02.05.2020)

65 Office for information technologies and e-government, website, <https://cutt.ly/DfsryVm> (Last accessed on 02.05.2020)

Delivery unit that is composed of advisors for various topics related to the ICT. The Ministry of State Administration and Local Self-Government is in charge of the domain of public administration reform and the e-government. This Ministry coordinates the e-government development at the regional and local level.<sup>66</sup> Additionally, the duty of the independent agency - The Regulatory Agency for Electronic Communications and Postal Services (RATEL), is to effectively implement the established electronic communications policy, promote competition in the area of electronic communications networks and services, enhance their capacity and quality, contribute to the development of electronic communications market and protect the interests of users of electronic communications and postal services. In addition, RATEL is responsible for the operation of the National Centre for the Prevention of Security Risks in Information and Communication Systems, conducting coordination, prevention and protection from security risks in ICT systems.<sup>67</sup> Furthermore, the first City Data Center<sup>68</sup> was put into operation in the city of Kragujevac that will store the data of the city administrations, public companies and institutions, as well as provide interoperability of republic databases. Within the field of business, the Serbian Chamber of Commerce established Center for Digital Transformation, coordination and implementation of digital transformation in all private sector industries, with a particular focus on SMEs.<sup>69</sup>

## 2.2. State of development of e-Services

Majority of the Western Balkan countries have established their e-government portals, offering e-services to their citizens in one place, except from Kosovo. What is also common for all of them is that the most effective implementation of e-services is related to the business sector, especially to tax related services and issuing of permits. Less attention is dedicated to developing of e-services of general interest for the citizens. Even for those that are provided on-line, the digital cycle is not being brought to an end. Namely, at some point the services are being downgraded by redirecting the user to regular administration, whether through requesting of physical evidence of payment or by delivering of paper documentation with stamp to physical address of the requester. The usage of e-government portals in the previous couple of months, that were affected by the pandemic and worldwide confinement, progressively increased, as well as introducing of new on-line services.

<sup>66</sup> Minister recalled in his statement that 188 local administrative procedures were signed in order to harmonize the practice in order to avoid differences in management practices in cities and municipalities in Serbia. Minister pointed out that the Local Government Fund financed the introduction of e-Government and information technologies into the work of 18 municipalities in Serbia last year, adding that this year the Fund has been increased by 50 percent and that various projects with which local self-governments will be supported with close to half a billion dinars can compete until April 1st. <https://cutt.ly/UfsruKy> (Last accessed on 02.05.2020)

<sup>67</sup> The Regulatory Agency for Electronic Communications and Postal Services, website, <https://cutt.ly/lfsriUO> (Last accessed on 02.05.2020)

<sup>68</sup> The project is a donation from China in equipment and system software worth about \$ 2 million <https://cutt.ly/GfsroIH> (Last accessed on 02.05.2020)

<sup>69</sup> Center for Digital Transformation, <https://cutt.ly/wfsrpR6> (Last accessed on 02.05.2020)

The unique portal **e-Albania**<sup>70</sup> offers a total of 591 e-services. In 2018 there was a total of 726.280 registered users<sup>71</sup>, while in 2019 this number rose up to 1.028.348<sup>72</sup>. 97% of the users are citizens (87% within Albania and 13% Albanians living abroad), whereas 3% of them are businesses. Individuals log in through their personal ID number and a private password, while businesses and other entities use their NUIS number and the private password. Private businesses or public administration officials can apply also for the service of electronic signature. The most used services by the citizens are: access to family certificates, certificate on individual contributions, health card, personal certificate, application for construction permit (e-permit), certificate for unregistered individuals, certificate for marital act, etc. The most used services by the business are: application for the construction permit (e-permit), confirmation on the active status of the vehicle, certification for payment clearance, certification for contribution clearance from the subject, electricity bill, etc. It remains unclear how the privacy of data policy is being implemented in terms of what data are being collected and processed, who has access to this data, and whether the privacy is respected. The e-governance portal offers an option of asking for information about the usage of private data or even deleting or amending the data in cases in which the regulation is violated, however, there is also a total lack of public awareness on this matter. In parallel with the e-Albania, the most used portal providing e-services to Albanian business is e-filing<sup>73</sup>, the online platform for tax declaration. The interoperability among public institutions is still weak.<sup>74</sup>

**Kosovo** has its state portal<sup>75</sup> which gives a general overview and information about public institutions in Kosovo, however there is not a functioning e-services platform which would aggregate the services or at least provide an overview of them. The services are only available in the respective websites of the institutions that provide them. Thus, the citizens do not have a clear picture of the services offered to them. However, the e-services provided on the websites of the institutions<sup>76</sup> are easy visible. Most of the institutions have created video content and manuals on how to use the platforms and how to access them. The video content and manuals have been promoted via social media channels, TV broadcasting and YouTube channels. One of the biggest recent campaigns in the promotion of the e-services was by the Ministry of Finance to promote the Property Tax Payments online, whereas this service is fully available online from 2018.<sup>77</sup> What is missing is the institutions providing technical support to citizens on how to use the platforms. Even if they provide a mechanism for complaints, it takes time to receive an answer, which affects the usage of e-services. Moreover, when making electronic payments of services, citizens need to acquire a proof of payment from the bank in physical form and submit it to the institution. The methods used for identification in public sector e-services are with the unique personal identification number whereas one can open accounts with username (usually e-mails) and password. There is no data available on how much the e-services are being used by the citizens on a monthly or yearly bases. The only available data about transactions

70 Available at: <https://e-albania.al/Default.aspx> (Last accessed on 01.08.2020)

71 Available at: <https://cutt.ly/tfsrOYw> (Last accessed on 01.08.2020)

72 The Agency lacks information on the number of users in 2019, but according to the presentation from the National Coordinator Against Corruption there were 302.068 of new users registered in the previous year.

73 Available at: <https://cutt.ly/xfsrPLS> (Last accessed on 01.08.2020)

74 According to the perception of the interviewed representatives of CSOs and media

75 Available at: <https://cutt.ly/RfsrjPg> (Last accessed on 01.08.2020)

76 Available at: <https://cutt.ly/afsrk4k> , <https://cutt.ly/6fsrl4E> , <https://cutt.ly/8fsrx7b> ; <https://cutt.ly/4fsrcVO> (Last accessed on 01.08.2020)

77 Available at: <https://cutt.ly/ufsrba1> (Last accessed on 01.08.2020)

or exchange of data between systems is within the Interoperability Platform from the Agency for Information and System while providing services to citizens or businesses:

- Municipal Intranet system has 2.096.411 communications
- The Business Register has 104.133 communications
- The Food and Veterinary system has 94.351 communications
- The social welfare system has 83.109 communications
- The Health Information System has 220.232 communications
- The electronic student management system has 33.485 communications
- Property Registry System 27.086 communications
- The pharmaceutical stock system has 20.638 communications.

The most used on-line services are: Information about the Urban Plan in your Area, Payment of Waste Management, Cultural Grants Application, Online Chat with Municipality of Prishtina, E-Kiosk - a machine open 24/7 to receive birth certificates, and other personal documents from the municipality of Prishtina, Property Tax Payment, , Online Tax Services, e-KESCO Kosovo Energy Supply Company, Integrated Water Billing, CSO Centre, Online Application for Drivers Licence, System for registration of businesses, Students Management System and Pension Management System.

The largest number of e-services in **Montenegro** is concentrated on the e-government portal<sup>78</sup> which groups numerous services for individuals and businesses. The services are related to personal documentation issuing, health, employment, tourism, education, finances etc. FAQ section exists, but consist of only 5 questions. Additionally, user support exists with the e-mail address of the contact person and short guidelines for the use of e-government portal<sup>79</sup>. Unfortunately, filing complaints using the Portal itself is not possible. Based on the last available reports<sup>80</sup>, at the end of 2019 number of 585 services provided by 51 public institutions were listed on the Portal<sup>81</sup>. However, only 174 of them were electronic by its nature, while other were informative, i.e. provided information on how and where to apply for some service and what documents should be submitted in person. Additionally, even the electronic ones were just partial – at some point of the procedure, in most of the cases, the applicant will be forced to visit institution in person. Furthermore, data<sup>82</sup> show that in 2018 e-government portal was visited 96.560 times, while 8.551<sup>83</sup> requests were submitted. Data for 2019 are not yet available, but comparative analysis from September 2019 shows that a number of requests was about 10% higher than in respective time in 2018. However, one more drawback was detected – 90.4% of the requests<sup>84</sup> submitted in 2018 was related only to two services - application for the Government's internship program for BA/Bsc students and student loan application. Submission of these requests online is mandatory, which shows that individuals did not use an on-line mechanism by their choice. Within the e-government portal, there is a special section dedicated to e-Licenses<sup>85</sup>. Through it, an individual or legal entity can gather information on all administrative procedures for obtaining or renewing licenses for performing economic activity. Currently, 337 e-Licenses are published within the e-License system, of which 21 with electronic filing capability. The

78 Available at: [www.euprava.me](http://www.euprava.me)

79 Available at: <https://cutt.ly/DfSjC01> (Last accessed on 16.09.2020)

80 Report on the activities and state in the administrative areas for 2019 <https://cutt.ly/UfSjOR2> (Last accessed on 16.09. 2020)

81 564 services were available on the portal in 2018, while the number was 249 at the end of 2017

82 Analysis of the state of e-Government in Montenegro <https://cutt.ly/ofSjJKh> (Last accessed on 16.09.2020)

83 This number is slightly higher than in 2017 (8.369) and lower than in 2016 (8.807)

84 7728 requests out of 8551

85 Available at: [www.euprava.me/elicence1](http://www.euprava.me/elicence1) (Last accessed on 01.08.2020)

portal e-Health<sup>86</sup> has incorporated 4 services. Namely, individuals can: appoint a visit in the local healthcare center, receive an e-Prescription from the doctor without visiting healthcare center, receive laboratory findings online, check which pharmacies on territory of Montenegro have medicaments, etc.

In **North Macedonia** the national Portal for e-services is a single point of interaction between the citizens and public authorities. The Portal has also a separate section for e-services<sup>87</sup> with 136 e-services so far. It was first promoted in December 2019<sup>88</sup> and has a total of 17.241 registered users. According to the most recent Analysis of the available e-services<sup>89</sup>, 68% of the e-services are not fully available through the portal, but there is information about the service and a link to another portal where the whole process of obtaining the specific e-service is being processed. The analysis further elaborates on the sophistication of the e-services where the majority of them can fully be executed on-line and without any need of physical visits to the institutions. It also emphasizes the necessity of the institutions to digitalize primarily the life services that citizens need most during their lifetime, at least to the degree to which the service can be digitalized. It was the crisis with pandemic that launched following services to be most used during this period: Movement permit during the validity of the Decision on prohibition of movement for legal entities and their employees, Movement permit during the validity of the Decision on prohibition of movement for natural persons providing third-party care, care for the elderly and debilitated person, Exercising the right to monetary compensation in case of unemployment, Certificate of Right to Separate Allowance, and Issuance of Employment Contract History. A positive example of a functioning on-line portal is MojTermin<sup>90</sup> run by the Ministry of Health with the main aim to establish automated work processes in the coordination of all levels of health care. A recent addition to the healthcare services was the introduction of e-Prescription<sup>91</sup> for chronic therapy for chronically ill people, which was mainly put in implementation due to the pandemics. Other positive examples of the digitalization of services is the introduction of the e-Highway tool system<sup>92</sup> that has been hailed as success with over 12 thousand e-payment devices sold in the first two months, as well as the introduction of the online e-Tax system<sup>93</sup> that simplified tax reporting which was previously done only in hardcopy. As an extension of this system, the mobile application My VAT<sup>94</sup> was created which enables VAT return for individual taxpayers which has over 100.000 downloads and has decreased the level of fiscal bill-related tax evasion, and brought additional revenue for the state budget.

In **Serbia**, the Government has established an e-government portal<sup>95</sup> as a unique place where all the public e-services are gathered. According to recent data from that portal, the most used services are in close correlation with the recent state of emergency<sup>96</sup>. Each web-page of the

86 Available at: [www.eZdravlje.me](http://www.eZdravlje.me)

87 Available at: <https://cutt.ly/2ygvASF> (Last accessed on 27.04.2020)

88 Available at: <https://cutt.ly/XfsrE2k> (Last accessed on 15.04.2020)

89 Centre for Crisis Management <https://cutt.ly/VyM8NTm> (Last accessed on 09.06.2020)

90 Available at: <http://mojtermin.mk/> (Last accessed on 16.06.2020)

91 Available at: <https://vlada.mk/node/21234> (Last accessed on 16.06.2020)

92 Available at: <https://cutt.ly/YuvhGDc> (Last accessed on 16.06.2020)

93 Available at: <https://etax-fl.ujp.gov.mk/> (Last accessed on 16.06.2020)

94 Available at: <https://cutt.ly/Ouvjzo2> (Last accessed on 16.06.2020)

95 Available at: <https://cutt.ly/3fsrb6Q> (Last accessed on 03.05.2020)

96 The Republic of Serbia underwent State of Emergency due to COVID virus pandemic from 15 March 2020 by 6 May 2020

service provides detailed instruction on how to acquire it. However, the Portal itself has no quality mechanisms of user support. The only interactive option it offers is a contact form<sup>97</sup>. There is no possibility of providing feedback or filing of complaints. The portal has 1.008.490 registered users, and 76.028 services provided in the month of April 2020.<sup>98</sup> Besides the Portal itself, the survey shows that 7.5% of the internet population uses internet services instead of making personal contacts or visiting public institutions or administration bodies. Over 1.550.000 persons use electronic public administration services. The survey also found that 34.2% of the internet population used the internet for obtaining information from the public institutions websites and 21.1% for downloading official forms.<sup>99</sup> There were several campaigns of the Government to promote the e-government concept. In July 2019, service e-inspector won third place as the most innovative initiative of the year on the international competition “Europe in the making”.<sup>100</sup> Related to the period of the year and to pandemic crisis, the most used services were: Motion for movement of physical persons during a restraining order, e-Kindergarten, Expressing interest in primary school enrollment, Renewal of vehicle registration at authorized technical inspections (service for physical persons).

Table 7. Overview of the e-government portal users

Country	e-Gov portal	No. of users	No. of e-services
Serbia	<a href="http://www.euprava.gov.rs">www.euprava.gov.rs</a>	1.008.490	521
North Macedonia	<a href="http://www.uslugi.gov.mk">www.uslugi.gov.mk</a>	17.241	136
Montenegro	<a href="http://www.euprava.me">www.euprava.me</a>	8.551*	174
Albania	<a href="http://www.e-albania.al">www.e-albania.al</a>	1.028.348	591
Kosovo	NA	NA	NA
	*no. of requests submitted, and not of registered users		

97 Available at: <https://cutt.ly/TfsrnDR> (Last accessed on 03.05.2020)

98 Available at: <https://cutt.ly/Hfsrmgf> (Last accessed on 03.05.2020)

99 Use of information and communication technologies in the Republic of Serbia, 2019. pg. 24 <https://cutt.ly/ifsrQwO> (Last accessed on 03.05.2020)

100 Available at: <https://cutt.ly/LfsrEye> (Last accessed on 02.05.2020)

Table 8. Most used services from the e-government portals in the period of implementation of research April – June 2020

Serbia	Kosovo	North Macedonia	Montenegro	Albania
Motion for movement of physical persons during a restraining order	Information about the Urban Plan	Movement permit during the validity of the Decision on prohibition of movement for legal entities and their employees	Application for the Government's internship program	Access to family certificates
e-Kindergarten	Payment of Waste Management	Movement permit during the validity of the Decision on prohibition of movement for natural persons providing third-party care, care for the elderly and debilitated person	Student loan application	Certificate on individual contributions
Expressing interest in primary school enrollment	Cultural Grants Application	Exercising the right to monetary compensation in case of unemployment	e-Licenses	Health card
Renewal of vehicle registration at authorized technical inspections (service for physical persons)	Online Chat with municipalities	Certificate of Right to Separate Allowance	e-Health	Personal certificate
	E-Kiosk	Issuance of Employment Contract History	e-Participation	Application for construction permit (e-permit)
	Property Tax Payment		e-Petition	Certificate for unregistered individuals
	Online Tax Services			Certificate for marital act
	e-KESCO Kosovo Energy Supply Company			Confirmation on the active status of the vehicle
	Integrated Water Billing			Certification for payment clearance
	CSO Center			Certification for contribution clearance from the subject
	Online Application for Drivers License			Electricity bill
	System for registration of businesses			
	Students Management System			
	Pension Management System			

All of the governments are increasingly investing efforts during the pandemic crisis to accelerate e-government process. However, two of the countries, Albania and Serbia have been recognized according to the research conducted in 2019 to be more advanced in the e-government development. According to the e-government Survey<sup>101</sup> that measures e-government effectiveness in the delivery of public services and identifies patterns in e-government development and performance, as well as countries and areas where the potential of Information and Communications Technologies (ICT) and e-government has not yet been fully exploited and where capacity development support might be helpful, thirteen countries among which Albania and Serbia have highly developed human capital, but the state of their infrastructure may be impeding further progress in e-government development. Similarly, 16 of the 58 countries in the upper-middle-income group among which Albania and Serbia have very high On-line Service Index values and in online services provision are closer to the high-income countries.

**Table 9. E-Government Development Index**

	Rank	Country EGDI	Level	EGDI	Online Service Index	Telecommunications Infrastructure Index	Human Capital Index
1	58	Serbia	High EGDI	0.7474	0.7941	0.62	0.828
2	59	Albania	High EGDI	0.7399	0.8412	0.5785	0.8001
3	72	North Macedonia	High EGDI	0.7083	0.7412	0.6442	0.7395
4	75	Montenegro	High EGDI	0.7006	0.5412	0.7366	0.8239

\*Global average for 2020 is 0.60

\*\*Very high level (0.75 to 1.00), High level (0.50 to 0.75), Middle level (0.25 to 0.50), Low level (0.0 to 0.25)

What describes best the current status of the usage of e-services by the citizens concerning the ongoing pandemic crisis is the statement of the representative of the civil society organization<sup>102</sup> from Montenegro: “I think that this situation with the pandemic showed the real relevance of e-services and that even people who previously had resistance to e-services simply realized in the situation that befell them that e-services simplify the process to finish something and then they started using them.”

### 2.3. Digital identity and signature

The Western Balkan region still relies on the use of username and password method for identification. Slight progress is made in the banking sector, with the use of tokens. Montenegro, North Macedonia and Serbia have recent versions of the laws on electronic identification, adopted in 2017 and later<sup>103</sup>, while Albania still relies on the version of the document from 2008 whereas Kosovo has no regulation in this area. The three countries that have updated versions of the regulation are

101 E-Government survey 2020, United Nations, Department for Economic and Social Affairs <https://cutt.ly/hfsrSUU>, Kosovo was not included in the survey (Last accessed on 29.07.2020)

102 Interview with the representative of the CSO from Montenegro that requested to stay anonymous, conducted on April 2020

103 Montenegro and Serbia in 2017 and North Macedonia in 2019

facing a period of adjustment to this mechanism. E-government portals are also offering these means of verification, depending on the complexity of the services.

**Albania** has the Law on Electronic Signature<sup>104</sup> as of 2008, however there are no available data on its implementation. Having in mind that it has not been amended ever since, it did not follow the harmonization with the legislation of the European Union and the recent technical developments in this area.

**Kosovo** has not introduced the Digital Identity and Digital Signature yet. The methods used for identification in public sector e-services are using the unique personal identification number, whereas you can open accounts with a username (usually e-mails) and password to access these accounts.

In **Montenegro**, the Law on Electronic Identification and Signature<sup>105</sup> regulates the conditions for using electronic stamps, electronic time stamps, as well as electronic signature, which is also the most frequently used method in Montenegro. It enables the citizens to use the available services on the e-government web portal and sign the documents in digital form. However, the use of certain services requires the possession of an electronic certificate, which depends on the stage of authentication required by the public administration authority providing the service. The web portal is accessible to anonymous users, users who have registered by e-mail as well as to registered users. Specifically, only registered users can use services that require a higher level of identification and these users must have an electronic certificate that verifies all of its information.<sup>106</sup> For example, 475 e-Services from the e-government portal can be accessed using e-mail login and 83 of them using digital certificate (out of those 83, for 71 digital signature on e-Form is needed). An electronic certificate confirms the identity of the signatory.<sup>107</sup> The Postal Office of Montenegro is the certifying body that issues qualified digital certificate for advanced electronic signature, as well as qualified digital certification for electronic signature to individuals and legal entities. When it comes to government institutions, the Ministry of Public Administration is responsible for issuing certificates to government officials, as well as to other officials in the public administration. Apart from media reports, no precise statistics are available on the use of electronic signatures in Montenegro.<sup>108</sup>

The most common digital identification methods in use in the public<sup>109</sup> and private sector<sup>110</sup> in **North Macedonia** are username and password, but in banks for example, there is the option of using tokens<sup>111</sup> for identification, similar to the practice in Serbia. With the establishment of the National portal for e-services which is in line with the Law on services<sup>112</sup>, the e-ID<sup>113</sup> mechanism for ensuring the citizen digital identity came into use in three levels: basic user profile, low e-ID

104 Law on the electronic signature, no. 9880, date 25.02.2008, <https://cutt.ly/Kfsr0Y4> (Last accessed on 01.08.2020)

105 Available at: <https://cutt.ly/5fsrVJW> (Last accessed on 26.07.2020)

106 Guideline for the usage of the e-government web portal <https://cutt.ly/BfsrNqW> (Last accessed on 01.08.2020)

107 Law on Electronic Identification and Signature <https://cutt.ly/QfsrMu6> (Last accessed on 01.08.2020)

108 The press release dating from June 2018 Portal Bankar <https://cutt.ly/3fsr1cb> (Last accessed on 01.08.2020) states that 400 digital certificates have been issued for citizens and 20,000 for businesses, which is most recent information released by the Ministry of Public Administration.

109 Available at: <https://cutt.ly/KygvOPQ> ; <https://ener.gov.mk/Default.aspx> ; <https://cutt.ly/oygvOuN> (Last accessed on 13.04.2020)

110 Available at: <https://grouper.mk/users/login> ; <https://www.cineplexx.mk/> ; <https://cutt.ly/HygvPjW> (Last accessed on 13.04.2020)

111 Available at: <https://cutt.ly/qyrm1wj> (Last accessed on 13.04.2020)

112 Available at: <https://cutt.ly/Ey5sp6D> (Last accessed on 11.06.2020)

113 Available at: <https://cutt.ly/XyrQQ2v> (Last accessed on 13.04.2020)

level and high e-ID level. Furthermore, through a Memorandum<sup>114</sup> signed between the Government of North Macedonia and Mastercard in February 2020, North Macedonia became one of the first countries in the world to get a digital identity service that aims towards improving the everyday experience, while at the same time increasing the efficiency of the public and private services on its way towards greater economic growth. The digital signature is also in use and is regulated by the Law on electronic documents, electronic identification and trust services<sup>115</sup>.

The most used digital identification methods in **Serbia** are still username and password, unlike in the banking sector where codes and tokens are the most used means of verification. However, in this very moment, digital signature is experiencing a rise of popularity. It is the business sector that mainly embraces the advantages of such tools, followed by an increase in physical persons applying for the same. It is regulated with the Law on Electronic Document, Electronic Identification and Security Services in Electronic Commerce<sup>116</sup> adopted in October 2017. The Ministry of Interior issues a digital signature free of charge directly to the ID card (embedded in the chip), however it works exclusively on computers with Windows operating systems. Apple users must go to the Post Office and pay for their digital signature. Therefore, the Post Office is the only certification body that issues digital signatures for individuals that can be used on almost all platforms (Windows, OS X, Linux).<sup>117</sup> The Office for the IT and e-Government became the first institution registered in the Register of Providers of Electronic Identification Services and Electronic Identification Schemes in the Republic of Serbia, in compliance with the Law on Electronic Document, Electronic Signature and Trust Services in Electronic Business. With this act, the Office has become the only institution that guarantees the reliability of electronic identities of citizens, as well as the safe use of e-government services. This means that citizens of Serbia and foreign citizens who have been granted permanent residence in Serbia will not have to remember numerous passwords for using e-government services on various state portals, nor will they have to login and register for each of the individual portals and web presentations. It is enough to identify themselves electronically on the e-government Portal. Electronic identification on the e-government Portal is possible with different levels of security: basic level of reliability using a user account and password, medium level of reliability using two-factor authentication using an application on a mobile phone or tablet, or high level of reliability using a qualified electronic certificate.<sup>118</sup>

In August 2019, North Macedonia and Serbia have signed an Agreement for Acceptance of Trust Services used in both states. This means that documents issued by electronic means from institutions in North Macedonia, such as the Central Register, the Customs Office, the Office for Management of Registers of Births, Marriages and Deaths would be equally recognized and accepted in Serbia, and vice versa. The citizens will no longer have to go through administrative procedures to obtain documents from one state that they already have and that have been issued in the other state. Qualified trust services provided by qualified trust service providers are mutually accepted, in compliance with laws regulating electronic documents, electronic identification and trust services, those being: qualified electronic signature, qualified electronic seal and qualified electronic timestamp.

114 Available at: <https://finance.gov.mk/mk/node/8530> (Last accessed on 16.04.2020)

115 In effect since 22.05.2019 <https://cutt.ly/CfsrCkK> (Last accessed on 26.07.2020)

116 Available at: <https://cutt.ly/ffsrHg5> (Last accessed on 03.05.2020)

117 Available at: <https://cutt.ly/XfsrJV6> (Last accessed on 03.05.2020)

118 Available at: <https://bit.ly/35SGb7z> (Last accessed on 02.05.2020)

## 2.4. Privacy and data protection

Privacy and data protection, according to the legal framework has been diligently tackled in all five countries. All of them have effective laws on personal data protection, that oblige the data operators to provide the citizens with the information on how they collect, process and store personal data and who can access them. Aside from North Macedonia, that assigned overseeing of implementation to the government directorate, others have assigned this task to independent organs/agencies that are at the same time in charge of access to information of public importance.

Data Privacy in **Albania** falls under the responsibilities of **the Office of the Commissioner on the Right of Information and Data Protection**<sup>119</sup>. Public authorities, as well as CSOs or other units that process private data in their daily activity, are obliged to establish an internal regulation on data protection. Additionally, each institution that deals with private data must develop a tool to get the approval of citizens to process their data, as well as to inform them on how their data is going to be archived or destroyed. Each citizen can get a confirmation if their data is being processed, upon an official request. If the citizen notices that their data are being processed contrary to the Law, they can rightfully request for correction of the procedure or destruction of their personal data, or complain to the Commissioner for Data Protection.

Data Privacy in **Kosovo** is overseen by **the Agency for Information and Data privacy**. Public institutions and entities that process the data are obliged to provide information within one month regarding the data they process for the data subject (citizen), the purpose of data processing of the data subject, then to reveal the potential recipients of that data, and especially the destination where that data can be transferred outside the Kosovo, which must be done after the authorization received from the Information and Privacy Agency. The data operator must also share with the requesting party (data subject) the data about the employees who have access to that data, then for the terms of their storage, the security measures that it undertakes to provide them from unauthorized access. In addition, the controlling entity is obliged to share with the citizen (subject of personal data) the contact details of the official for the protection of personal data employed within the institution or private company. This right of citizens can be exercised by making a written request or other means to the institution (company) that processes the personal data of the citizen. However, the Law on databases is missing, therefore the ownership of the data, who is allowed to administer them, how it will be administered with other data etc, remains unregulated.

The data protection in **Montenegro** obliges any government body to notify data subject in case when their personal data are not collected directly from the subject and are planned to be processed further. Notification must be released before the beginning of the processing of personal data. It contains information what specific data will be processed and to which third party they will be transferred. The data subject has the right to submit a written request to any government body for a notification about whether it processes any of its personal data and to expect response within 15 days. This right can be limited if that is required for the purposes of national defence, national and public security, prevention of crimes, detection and persecution of perpetrators of crimes, protection of economic and financial interests, as well as protection of other people, their rights and freedoms, to the degree which is required for accomplishment of the purposes for which the limitation is introduced. When it comes to overseeing the

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119 Available at: <https://www.idp.al/> (Last accessed on 01.08.2020)

privacy protection, **Agency for Personal Data Protection and Free Access to Information**<sup>120</sup> is responsible for monitoring the application of the Law on the Protection of Personal Data. In carrying out tasks within its scope, the Agency is independent and it has the status of a legal entity, with advisory powers.

In North Macedonia the **Law on the protection of personal data**<sup>121</sup> was last updated in February, 2020. The Law gives the citizens the right<sup>122</sup> to know which personal data the controllers<sup>123</sup> collect, process and store, and whether they operate in compliance with the Law, as well as the right to be informed of the identity of the controller and their representative in North Macedonia.<sup>124</sup> The **Directorate for Personal Data Protection**<sup>125</sup> acts as a government authority which oversees the privacy protection. Nevertheless, in North Macedonia it is almost never the lack of legal acts that hinders the processes but the implementation, monitoring and assessment of the same, as well as the lack of trained human resources.

In Serbia protection of personal data is regulated with the **Law on the Protection of Personal Data**<sup>126</sup> whose implementation began in August 2019. The Law itself is in great deal in compliance with the General Data Protection Regulation (EU GDPR). For the most part, the text is an adapted translation of the GDPR as well as of the so-called Police directives, governing the processing of personal data by the competent authorities in relation to criminal proceedings and threats to national security.<sup>127</sup> Overseeing of the privacy protection was attributed to the already existing institution of Commissioner for Information of Public Importance, which became **the Commissioner for Information of Public Importance and Protection of Personal Data**<sup>128</sup>. The operator is obliged to provide the data subject with the information about the recipient, or group of recipients of the personal data, if any.<sup>129</sup> With this Law, citizens are guaranteed their right to be informed at any time about who is using their personal data and for what purposes. Furthermore, the recently adopted, e-Government Development Program 2020-2022 and the Action Plan for its implementation will enable the citizens to check what personal data the authorities store, to submit a request for change or to find out who uses that data and how.

120 Available at: <http://www.azlp.me/en/home> (Last accessed on 01.08.2020)

121 Available at: <https://cutt.ly/vygbRxS> (Last accessed on 15.04.2020)

122 Available at: <https://dzlp.mk/en/node/2201> (Last accessed on 23.04.2020)

123 The Law is harmonized with the European regulations in the field of personal data protection, as follows: Regulation (EU) 2016/679 of the European Parliament and of the Council of 27 April 2016 on the protection of individuals with regard to the processing of personal data, free movement of such data and terminating Directive 95/46 / EC (General Data Protection Regulation) CELEX No. 32016R0679.

Law, Article 4, point 7 - "... a natural or legal person, state authority, state body or legal entity established by the state to exercise public authority, agency or other body which independently or together with others determines the purposes and manner of processing personal data, and when the goals and the manner of processing the personal data are determined by Law, the same Law determines the controller or the special criteria for its determination."

124 Available at: <https://dzlp.mk/en/node/2201> (Last accessed on 23.04.2020)

125 Established on June 22nd, 2005

126 Law on the Protection of Personal Data <https://cutt.ly/gfsr204> (Last accessed on 02.05.2020)

127 Guide through the Law on the protection of personal data and GDPR, Share Foundation, pg. 13 <https://cutt.ly/Ffsr3tu> (Last accessed on 02.05.2020)

128 Information Booklet of the Commissioner for Information of Public Importance and Protection of Personal Data, <https://cutt.ly/3fsr4UH> (Last accessed on 02.05.2020)

129 Article 24

## 2.5. Cyber security

Countries have established different types of institutions that regulate cyber security. It is evident that those that are members of NATO (Albania and Montenegro) rely upon the membership in this alliance in terms of cooperation in the field of cyber security. Having in mind that North Macedonia just recently joined the NATO (in March 2020), it remains to be seen in what way will it define this cooperation. Researches show that countries developed their cyber security policies but are failing in other areas like cyber threat analysis and information.

Image 1. Ranking of countries by National Cyber Security Index for 2018<sup>130</sup>

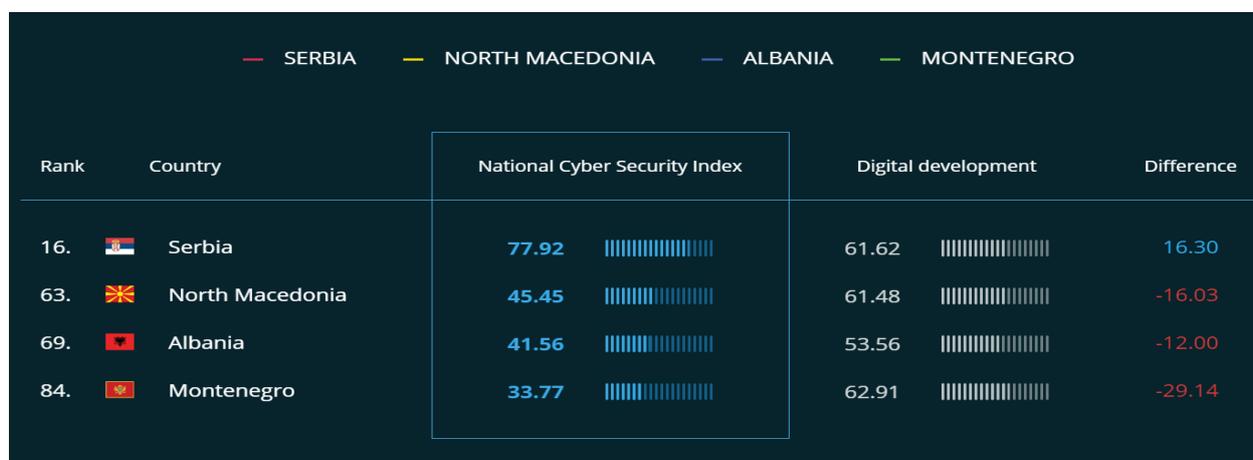


Image 2. Ranking of countries under General cyber security indicators<sup>131</sup>



130 National Cyber Security Index (NCSI), e-Governance Academy, <https://ncsi.ega.ee/> (Last accessed on 29.07.2020)

131 Ibid.

Cyber security in **Albania** is under the authority of the **Ministry of Defense**. Within this ministry there is a special department dedicated to cyber security for both monitoring and developing of strategies. Nevertheless, the perception is that after Albania was admitted into NATO, the cyber security was taken under its scope. The Ministry of Defense develops regularly a two-year Strategy on **Cyber Security**<sup>132</sup>.

The responsible governmental body for cyber security in **Kosovo** is the **Agency of Information and Society, within its Directorate of Operation and Security**.<sup>133</sup> The Directorate is engaged in drafting policies and standards related to the information technology system of Kosovo, including the National Data Center and ICT security. In line with its responsibilities, the Agency has developed **the National Cyber Security Strategy and Action Plan 2016 – 2019**<sup>134</sup>. There is currently no data on the state of cyber security in Kosovo in comparison to other states.

The strategic planning of cyber security in **Montenegro** is based on **the Cyber Security Strategy for Montenegro 2018-2021** that defines mechanisms and instruments for the implementation of national security interests. In the institutional sense, establishing of the **Directorate for Information Security and Computer Incidents (CIRT)** in 2012 was a key measure in the field of information and cyber security. It is the central institution for the coordination of prevention and protection against security incidents on the internet and other security risks. National CIRT which is an organizational unit of the Ministry of Public Administration, coordinates the work of local CIRT teams<sup>135</sup>. In compliance with the Law on Amendments to the Law on Information Security, **the Information Security Council** has been established, presenting a framework for monitoring and improving cyber security in the public and private sectors. Furthermore, the National Security Agency, the Ministry of Defense, the Ministry of Interior, the Ministry of Justice, the Ministry of Education and the Directorate for Protection of Confidential Data, were recognized as institutions responsible for cyber security. Also, **High-Tech Crime Group** has been founded at the **Ministry of Interior** with the aim of strengthening capacity of state law enforcement authorities. This institutional body is dealing with the issue of high-tech crime such as classical acts of computer crime, child pornography, credit card abuse, and copyright abuse. Additionally, a memorandum of understanding was signed between Montenegro and NATO, which should facilitate co-operation and assistance between Montenegro and NATO in the field of cyber security.

132 Available at: <https://cutt.ly/ifstp9Q> (Last accessed on 01.08.2020)

133 Available at: <https://cutt.ly/1fstaNd> (Last accessed on 01.08.2020)

134 Available at: <https://cutt.ly/AfstdnW> (Last accessed on 01.08.2020)

135 Seven CIRTs were created within the most important companies from the field of telecommunications (Crnogorski Telekom, Telenor, M:tel), IT (Wireless Montenegro, Telemach, M-kabl) and banking (Société Générale Montenegro Bank). Furthermore, creation of new CIRTs is planned in cooperation with universities and the state owned power distribution company. 79 local CIRT teams were established by the end of 2019, with the aim of strengthening cyber infrastructure at the local level. Targeted value from the Cyber Security Strategy by the end of 2021 is 100 local CIRT teams, 60 within public institutions and 40 within private legal entities.

"I recently used the [www.document.me](http://www.document.me) site to order a document and noticed that the site does not have an SSL certificate at all, that is, it does not have an https protocol, so, the browser itself warns that you should not share any sensitive data on such a site. And this is a Government site that asks for all personal data (ID number, name, parent's name, etc.), you should enter all your data on a site that your browser says is not secure. I want to believe that it is well protected in the background, but such a site is a bad practice. It is difficult enough to make people use the services, and it is very bad that if people who started using the service, give up for security reasons."

From an interview with the representative of CSO from Montenegro that requested to stay anonymous, conducted on April 2020

The research of the Startit, from June 2020, showed that the majority of state institutions' websites of the Republic of Serbia are unsafe. Based on the verification of 113 websites of the various state authorities 70% is marked as unsafe. Privacy of data exchange and authenticity is not guaranteed by 78 out of 113 sites of republic bodies. They are marked as insecure because they do not have an SSL/TLS certificate. Ministries unlike the administrations and independent bodies had the best results of the clusters of public organs. What is shocking is that the websites of the Tax Administration, National Assembly, Constitutional Court and Republic Public Prosecutor did not dispose of this certificate.

[https://startit.rs/posetili-smo-vise-od-100-sajtova-drzavnih-institucija-70-nebezbed-no/?fbclid=IwAR0d6C7mxeTOJl0E5eqp4Oq-SIWlss9BI8B2ISTC\\_6w8ydkOyehaZbNF1h](https://startit.rs/posetili-smo-vise-od-100-sajtova-drzavnih-institucija-70-nebezbed-no/?fbclid=IwAR0d6C7mxeTOJl0E5eqp4Oq-SIWlss9BI8B2ISTC_6w8ydkOyehaZbNF1h)

**North Macedonia** is lacking certain legislatives or bodies such as a specialised official or unit responsible for national cyber security policy development. There is no competent authority in the field of cyber/information security that has the power to supervise operators of essential services, regarding cyber/information security requirements<sup>136</sup>. However, in compliance with the **National Strategy for Cyber Security (2018-2022)**, the **National Cyber Security Council** was established in October 2019 for the purpose of coordination and monitoring of its implementation. According to the review of the maturity of cybersecurity capacity<sup>137</sup>, there is the need for several legal acts or actions to be adopted: amending of the Criminal Procedural Code concerning the requirement for consent to cross-border access to stored computer data, the development of new legislative provisions on consumer protection on-line and human rights online, and the development of a platform for sharing electronic evidence between regional cybercrime forces.

136 Ibid.

137 In August 2018, the Global Cyber Security Capacity Centre (GCSCC) undertook a review of the maturity of cybersecurity capacity in North Macedonia <https://cutt.ly/XygvQEx> (Last accessed on 27.04.2020)

Cyber security in North Macedonia is familiar to only 60% of the population, while only 12.4% are familiar with the risks of cybercrime. 45.9% of the population expressed their concern in becoming a cyber-victim, and only 26.2% think they can protect themselves through an anti-virus software. Around half of the population is worried about identity theft and becoming a bank card fraud victim. A fifth of the population (16%) has already been cyber bullied, mostly through malware detection. Regarding taking measures when becoming a crime victim, half of the respondents would turn to the police in cases of identity theft, finding child pornography or bank card fraud. 37.5% would turn to the website if the supplier commits fraud in online purchase, but when it comes to child protection, the majority would talk to their child about the Internet usage risks and follow their activities, while one fifth would limit the time their child spends on the Internet. Electronic payment is present at 33% of the population, the majority being between 35-39 years of age (53.6%), self-employed (64.1%) and students (79.2%). Worried about the safety of the process, over half of the respondents do electronic transactions on familiar websites and 6.8% check the URL address.

The Public opinion survey report on the application of internet security measures done by the MKD-CIRT between May-June 2019

Cyber security domain in **Serbia** is entrusted to enforcement bodies, the **Department for curbing high-tech crime of the Ministry of Interior** and the **Special Prosecution for Hi-Tech Criminal**<sup>138</sup>. The police has recently established a **Department for curbing harmful content on the internet**.<sup>139</sup> However, these institutions do not have the corresponding roles in the process of regulation drafting. That is mainly in the hands of the Government, with consulting the relevant actors. Serbia has an effective **Strategy of the development of information security 2017 - 2020**<sup>140</sup>. The adoption of four decrees of the Law on Information Security, is of great importance for the development of the information society. The following regulations were adopted: Regulation on closer content of the Act on Security of Information and Communication Systems of Special Importance, method of verification and content of reports on security audits of ICT systems of special importance, Regulation on closer regulation of ICT security measures of particular importance, Regulation on the establishment of a list of jobs in areas where activities of general interest are performed and where ICT systems of particular importance are used, as well as the Decree on the procedure for submission of data, lists, types and significance of incidents and the procedure for notification of incidents in ICT systems of particular importance.<sup>141</sup>

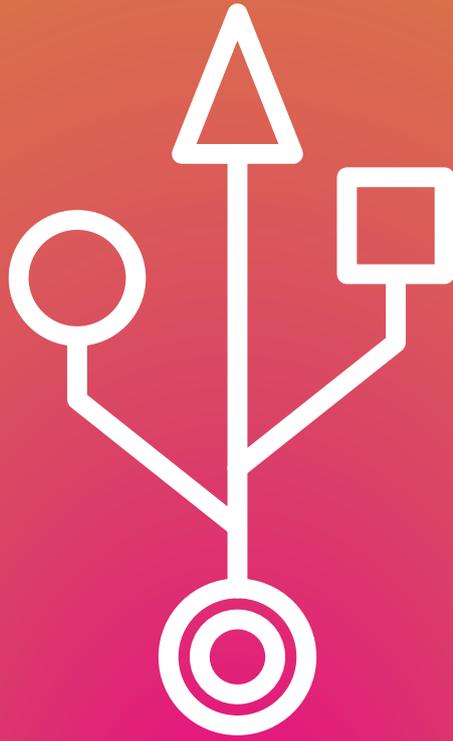
138 Special Prosecution for Hi-Tech Criminal, website, <http://www.beograd.vtk.jt.rs/> (Last accessed on 03.05.2020)

139 In August 2019 <https://cutt.ly/ufstufN> (Last accessed on 03.05.2020)

140 Available at: <https://cutt.ly/JfstilA> (Last accessed on 28.07.2020)

141 Available at: <https://cutt.ly/EfstoPM> (Last accessed on 03.05.2020)





## 3. CITIZEN PARTICIPATION IN POLICY MAKING, INCLUDING DIGITAL TOOLS

### 3.1. Free access to information and open data

All countries have effective Laws on Free Access to Information of Public Importance. While **Serbian** is considered as one of the best Laws on Free Access to Information of Public Importance in the world<sup>142</sup>, **Montenegro** is going through a Law change due to the fact that the existing one was criticized for insufficient awareness level of the institutions obliged by the Law, silence of the administration after receiving the request for the free access, high costs for requesters for copying the information, etc. Moreover, the new Law proposal also received negative critics from CSOs calling the proposal more restrictive than its legal binding predecessor. **North Macedonia** last updated its Law in 2019, however unlike the majority of the Western Balkan countries, the maximum time for responding to a FOI requests is 20 days, whereas in **Kosovo** the deadline is 7 days.

In terms of proactive publishing of data in compliance with the Law on Free Access to Information, in **Albania** each institution should draft and adopt the Program of Transparency with which the institution should define the categories of the information published on the website without an official request, and updated every three months. Similarly, in **Serbia** the institutions are obliged to publish Information Booklets also with previously regulated data sets to be published and updated monthly. **North Macedonia** additionally adopted the **Law on public sector data use**<sup>143</sup> that obliges the authorities and public sector institutions to publish the data they have created. Aligned with the efforts for proactive transparency and providing access to public sector information, the Government adopted the recommendation on the publishing of 21 document<sup>144</sup> on the websites of all the ministries. These documents are part of a unified list of public information<sup>145</sup> in possession of the specific ministries.

Transparency and access to public information in **Kosovo** is regulated by the Law on access to public information<sup>146</sup> which has been adopted in 2019, and has introduced **Open Data Chapter** as an integral part of the Law. The documents which are considered open by default need to be published in a proactive manner by the institutions on their official websites. While the data sets need to be published regularly in the official governmental **Open Data portal**.<sup>147</sup> Except the official Open Data Portal, there are three other public institutions which provide information in an open data format, which are the Agency of the Statistics of Kosovo<sup>148</sup>, Kosovo Cadastral Agency<sup>149</sup> and Municipality of Prishtina<sup>150</sup>. These four portals provide information about environment, education, health, employment, social protection, transport. However, publishing of information in real time

142 Access Info Global Right to Information Rating <https://cutt.ly/Sfstf4e> (Last accessed on 03.05.2020)

143 Available at: <https://cutt.ly/TyydfDj> (Last accessed on 22.04.2020)

144 in October 2017 <http://mioa.gov.mk/?q=mk/node/1402> (Last accessed on 22.04.2020)

145 Available at: <https://cutt.ly/SygvnNK> (Last accessed on 22.04.2020)

146 Available at: <https://cutt.ly/jfsuG2p> (Last accessed on 01.08.2020)

147 Available at: <https://cutt.ly/KfsuKO8> (Last accessed on 01.08.2020)

148 Available at: <https://cutt.ly/6fsuXUr> (Last accessed on 01.08.2020)

149 Available at: <https://cutt.ly/kfstjvg> (Last accessed on 01.08.2020)

150 Available at: <https://opendata.prishtinaonline.com/> (Last accessed on 01.08.2020)

is still missing, which would make the information more reliable and useful. The Government of **Serbia** established an **Open Data Portal**<sup>151</sup> with the following datasets presented: public security, education, energy, administration, health, environment. Data are published by 57 organizations, foundations, municipalities, agencies, independent bodies, ministries, and in total there are 270 datasets<sup>152</sup>. Citizens are provided with the possibility to request for opening of data from an institution, by the Law on Electronic Administration<sup>153</sup>, which introduced the obligation to provide machine-readable data upon request, in a similar manner in which the request for information of public importance functions. In **Montenegro**, the **Open data portal**<sup>154</sup> was created in July 2018 with 107 databases by 18 institutions published, with 15 sectors covered<sup>155</sup>. However, almost half of the datasets were published only by 2 institutions – Ministry of Education and Statistical office of Montenegro. The portal has not been promoted on the website of any other body (including the Agency for Personal Data Protection and Free Access to Information), except the Ministry of Public Administration, which also does not have a visible banner that could direct visitor to the portal. The **Open data portal**<sup>156</sup> in **North Macedonia** has 236 datasets and 27 catalogues from 52 entities in compliance with the Open Data Strategy 2018-2020. Additionally, North Macedonia adopted the Transparency Strategy and Action Plan (2019-2021)<sup>157</sup>, which makes it the first in the region to tackle this area strategically, being followed by Montenegro that is currently working on it as well.

**Table 10. Open Government Data Index (OGDI)**<sup>158</sup>

	Country	OGDI	OGDI level
1	Albania	0.8969	High OGDI
2	North Macedonia	0.8479	High OGDI
3	Serbia	0.8479	High OGDI
4	Montenegro	0.8281	High OGDI

\*score ranges from 0-1

According to the latest data from the **Openness Index**<sup>159</sup>, when it comes to usage of open data<sup>160</sup> the 1<sup>st</sup> place is taken by Serbia with 50.19% fulfilment of the criteria, followed by Montenegro with 36.54%, then Kosovo 34.27% and North Macedonia at 4<sup>th</sup> place with a score of 27.40%, followed by Albania (24.86%) at the 5<sup>th</sup> place.

151 Open Data Portal <https://data.gov.rs/sr/> (Last accessed on 03.05.2020)

152 Data from 03.05.2020. <https://data.gov.rs/sr/datasets/> (Last accessed on 03.05.2020)

153 Law on Electronic Administration <https://cutt.ly/ffstkCC> (Last accessed on 03.05.2020)

154 Available at: [www.data.gov.me](http://www.data.gov.me)

155 In December 2018, only 38 datasets published by 12 institutions were on the portal

156 Available at: [www.otvorenipodatoci.gov.mk](http://www.otvorenipodatoci.gov.mk) (Last accessed on 01.08.2020)

157 <https://cutt.ly/Oygc6dl> (Last accessed on 14.04.2020)

158 E-government survey 2020, United Nations, Department for Economic and Social Affairs <https://cutt.ly/hfsrSUU>, *Kosovo was not included in the survey* (Last accessed on 29.07.2020)

159 Available at: <https://opennessindex.actionsee.org/> (Last accessed on 23.04.2020)

160 Available at: <https://opennessindex.actionsee.org/open-data> (Last accessed on 23.04.2020)

### 3.1.1. Open Government Partnership

All of the countries, except from Kosovo, have become members of the Open Government Partnership since its establishment in 2011-2012. **Kosovo** attempted to enter the membership in 2015, however it failed due to political reasons. **Albania, North Macedonia and Serbia** are currently implementing their fourth action plan for 2018- 2020, whereas, **Montenegro** was inactive since becoming a member due to the fact that it did not submit any national action plan over the three cycles, until 2018. Evidently, the countries have slowly progressed in using this mechanism. It is only in recent years that this process gained its full potential. Serbia begun the preparation of their next action plan in May 2020<sup>161</sup>. Existing action plans have obligations that are in direct relation to the Digital Agenda implementation, like activities related to introducing of new e-services, opening of data and access to information.

### 3.2. On-line tools for citizens' participation in the policy making

Citizens participation in the policy making process is regulated and practiced in all of the countries. What is even more promising is that all of them established electronic mechanisms for citizens to provide their inputs in the policy making. In Kosovo this mechanism is even provided at local level. However, the best quality of implementation is not being fully guaranteed. The level of citizens' engagement is low and the e-participation mechanisms are not in full use.

**Albania** has a unique **Portal** for public consultations<sup>162</sup> where all the draft laws should be presented. The Albanian Parliament has designed a manual for public consultations<sup>163</sup> that is presented on-line. Despite the establishment of an on-line portal for public consultation, CSO representatives confirm that the comments and suggestions made on-line to the draft laws are not published on the platform, which makes the whole process of consultation inefficient. Citizen participation is regulated by the Law on Public Consultation<sup>164</sup>. The Law stipulates that all ministries, executive agencies and local municipalities shall publish their draft laws for public consultations. Consultations shall be held on-line and via round tables with various stakeholders, experts, media organizations and CSOs. According to the Law a minimum period of 2 weeks is mandatory for consultations. Nevertheless, the Law is considered as non-fully functional, as there are no significant sanctions for the public institutions which do not fulfil the obligations regulated by the Law.

Unlike in other countries of the region, public consultations in **Kosovo** are being implemented mostly in municipalities, which is regulated with the Law on Local Self-government<sup>165</sup>. It obliges the municipalities to hold at least two public discussions in one calendar year. However, the level of citizens' engagement is very low. Digital Platforms for Public Participation<sup>166</sup> adopted in five municipalities in Kosovo (Prishtina, Kamenica, Gjakova, Juniku and Prizren) are aiming to enable residents to share ideas about their neighborhoods, discuss, and vote on plans they

161 On-line conference of the Special Inter-Ministerial Working Group

162 Available at: <https://www.konsultimipublik.gov.al/> (Last accessed on 01.08.2020)

163 Available at: <https://cutt.ly/rfstnct> (Last accessed on 01.08.2020)

164 no.146/2014, adopted in 2014 <https://cutt.ly/mfstQiB> (Last accessed on 01.08.2020)

165 Available at: <https://cutt.ly/1fstzel> (Last accessed on 01.08.2020)

166 Available at: <https://www.platformadigitale.com/#> (Last accessed on 01.08.2020)

have for improving their city, enable municipal employees to join the discussions, introduce official opinion or policy, and start collaborating productively with city's residents, enable the municipal institutions to review submissions by residents, provide their comprehensive response on popular ideas, and engage residents in the policy-making and executing process. Furthermore, at central level the Government has adopted the Regulation for Minimal Standards of Public Consultation<sup>167</sup>. The regulation has obliged the Office of the Prime minister/Office for good governance to adopt and coordinate the **e-consultation platform**<sup>168</sup>. The platform and the corresponding regulation have obliged all ministries to publish all draft regulations, administrative Instructions, strategies and laws for public discussion in a timeframe of 14 days minimum. This gives the opportunity to citizens, CSO and businesses to comment on respective documents as prescribed in the Minimal Standards for Public Consultation. Moreover, the Office of the Prime minister has also developed the Strategy for cooperation with civil society<sup>169</sup>.

In **Montenegro, e-Participation**<sup>170</sup> was activated in March 2019. Through this service, citizens can actively participate in drafting laws and other strategic documents, and may also express opinions and views in public discussions. Citizens did not use the portal during the first year<sup>171</sup>, i.e. no comments or suggestions have been submitted to this platform. When posting an invitation for public discussion, institutions do not mention the e-Participation portal as a method of citizens' participation. Additionally, the portal is not promoted on the websites of other institutions and is not accessible via mobile phone.<sup>172</sup> In fact, when accessed via smartphone, the portal interface is outdated (without the e-Participation tab).<sup>173</sup>

In **North Macedonia**, there is a portal for public consultations called **Single National Electronic Register of Regulations of the Republic of North Macedonia - ENER**.<sup>174</sup> Citizen participation in policy making/legislative processes is regulated by various legal acts among which the Constitution of the Republic of North Macedonia<sup>175</sup>, Law on Assembly<sup>176</sup>, Rules of Procedure of the Assembly<sup>177</sup>, Law on Referendum and other forms of direct citizen expression<sup>178</sup>, Law on Government<sup>179</sup>, Rules of Procedure of the Government<sup>180</sup>, Law on organization and work of state organs<sup>181</sup>, and Law on elections<sup>182</sup>. The institutions in North Macedonia have reported

167 Available at: <https://cutt.ly/Gfstxea> (Last accessed on 01.08.2020)

168 Available at: <https://cutt.ly/DfstcMf> (Last accessed on 01.08.2020)

169 Available at: <https://cutt.ly/6fstvCc> (Last accessed on 01.08.2020)

170 Available at: [www.euprava.me/eparticipacije](http://www.euprava.me/eparticipacije) (Last accessed on 01.08.2020)

171 Monitoring report on implementation of public reform administration in 2019, Institute Alternative, <https://cutt.ly/JfstYVx> (Last accessed on 01.08.2020)

172 This feature is very important, taking into account the fact that 77% of the citizens uses smartphone as their favorite device for internet access, followed by PC/laptop (16%) and tablet (7%) Survey on the use and attitudes towards e-services among citizens and businesses in Montenegro, IPSOS, <https://cutt.ly/Ofstif5> (Last accessed on 01.08.2020)

173  
174 Available at: <https://ener.gov.mk/Default.aspx> (Last accessed on 22.04.2020)

175 Available at: <https://cutt.ly/qygzNht> (Last accessed on 23.04.2020)

176 Available at: <https://cutt.ly/vygzNX8> (Last accessed on 22.04.2020)

177 Available at: <https://cutt.ly/sygz0aS> (Last accessed on 22.04.2020)

178 Available at: <https://cutt.ly/uytoPaP> (Last accessed on 22.04.2020)

179 Available at: <https://cutt.ly/Lygz9Fb> (Last accessed on 23.04.2020)

180 Available at: <https://cutt.ly/1yyILLO> (Last accessed on 23.04.2020)

181 Available at: <https://cutt.ly/zyyTY26> (Last accessed on 23.04.2020)

182 Available at: <https://dejure.mk/zakon/izboren-zakonik> (Last accessed on 22.04.2020)

that the channels they use for public consultations and collecting comments from the public, are mostly “Face-to-face meetings” (80%), “Website of the institution” (70%) and “Government e-participation portal ENER”, as well as “Facebook groups” (40%), with 20% indicating the e-mail communication as their most used form of consultation.<sup>183</sup> Furthermore, as a form of citizen participation, a **Department for Cooperation with Non-Governmental Organizations of the General Secretariat of the Government**<sup>184</sup> was established, as a result of the efforts of the Government to institutionalize cooperation, promotion, support and promotion of partnership relations with the civil society. The Department monitors and coordinates the implementation of the Government Strategy for Cooperation with and Development of the Civil Sector, taking care of improving the Government cooperation with the civil society.

Public consultations in **Serbia** are regulated with the Rules of Procedure of the Government<sup>185</sup>. Namely, this act regulates obligatory organizing of public debates for the draft laws that regulate certain areas for the first time and for those of the utmost importance, like the Budget Law etc. However, improvement was accomplished through the Law on Planning System<sup>186</sup> that envisaged obligation of consulting all stakeholders even in the stage of drafting of all planning documents, before the draft is presented to a public debate. To the proposal of the Office for Cooperation with the Civil Society, the Government of the Republic of Serbia adopted in January 2020, Guidelines for the inclusion of civil society organizations in working groups for drafting public policy documents and drafts<sup>187</sup>. Calls for participation in public debates are published on the portal **Public Debates**,<sup>188</sup> that is interconnected to the **e-government portal**. There is also an obligation of the institutions to publish it simultaneously on their websites.

Table II. E-Participation Index (EPI)<sup>189</sup>

Rank	Country	EPI	EPI level
36	Albania	0.8452	Very High EPI
38	North Macedonia	0.8333	Very High EPI
41	Serbia	0.8214	Very High EPI
100	Montenegro	0.5476	High EPI

### 3.2.1. Petitions on-line

Submitting initiatives and petitions in the region of Western Balkans ranges from government electronic mechanism in **Montenegro** to **Albania** and **North Macedonia** where petitions are only allowed to be deposited in person. In April 2019, the Government of **Montenegro** has established an **e-Petition**<sup>190</sup> service. The main novelty introduced reduced the number of the signatories of

183 Data form an on-line survey implemented in the period April-May 2020

184 Available at: <https://www.nvosorabotka.gov.mk/?q=mk> (Last accessed on 23.04.2020)

185 Rules of Procedure of the Government <https://cutt.ly/pfstWn6> , (Last accessed on 03.05.2020)

186 Law on Planning System <https://cutt.ly/DfstE9g> , (Last accessed on 03.05.2020)

187 Available at: <https://cutt.ly/lfstTzC> , (Last accessed on 03.05.2020)

188 Available at: <http://javnerasprave.euprava.gov.rs/>, (Last accessed on 03.05.2020)

189 E-government survey 2020, United Nations, Department for Economic and Social Affairs <https://cutt.ly/hfsrSUU> , *Kosovo was not included in the survey* (Last accessed on 29.07.2020)

190 Available at: [www.epeticije.gov.me](http://www.epeticije.gov.me) (Last accessed on 01.08.2020)

the petition from 6000 to 3000<sup>191</sup>, to be taken into consideration by public institutions. Since its establishment, only seven e-Petitions were submitted. One petition surpassed 3000 signatures<sup>192</sup>, but was rejected by the Government before entering the procedure before the Parliament. The numbers of e-petitioners in **Serbia** are slightly higher on the on-line portal **Petitions on-line**<sup>193</sup> that is however, contrary to Montenegro, established by the private sector. The portal begun its operation in 2011, and the most supported petition so far, has 94.052 signatories. Furthermore, pursuant to the Law on the National Assembly, the National Assembly and/or MPs consider initiatives, petitions and proposals. Namely, as the Rules of Procedure of the National Assembly further stipulate the committees of the National Assembly, as its working bodies, within their scope, consider initiatives, petitions and proposals. Petitions can be submitted via e-mail or in provided on-line form on the website of the National Assembly.

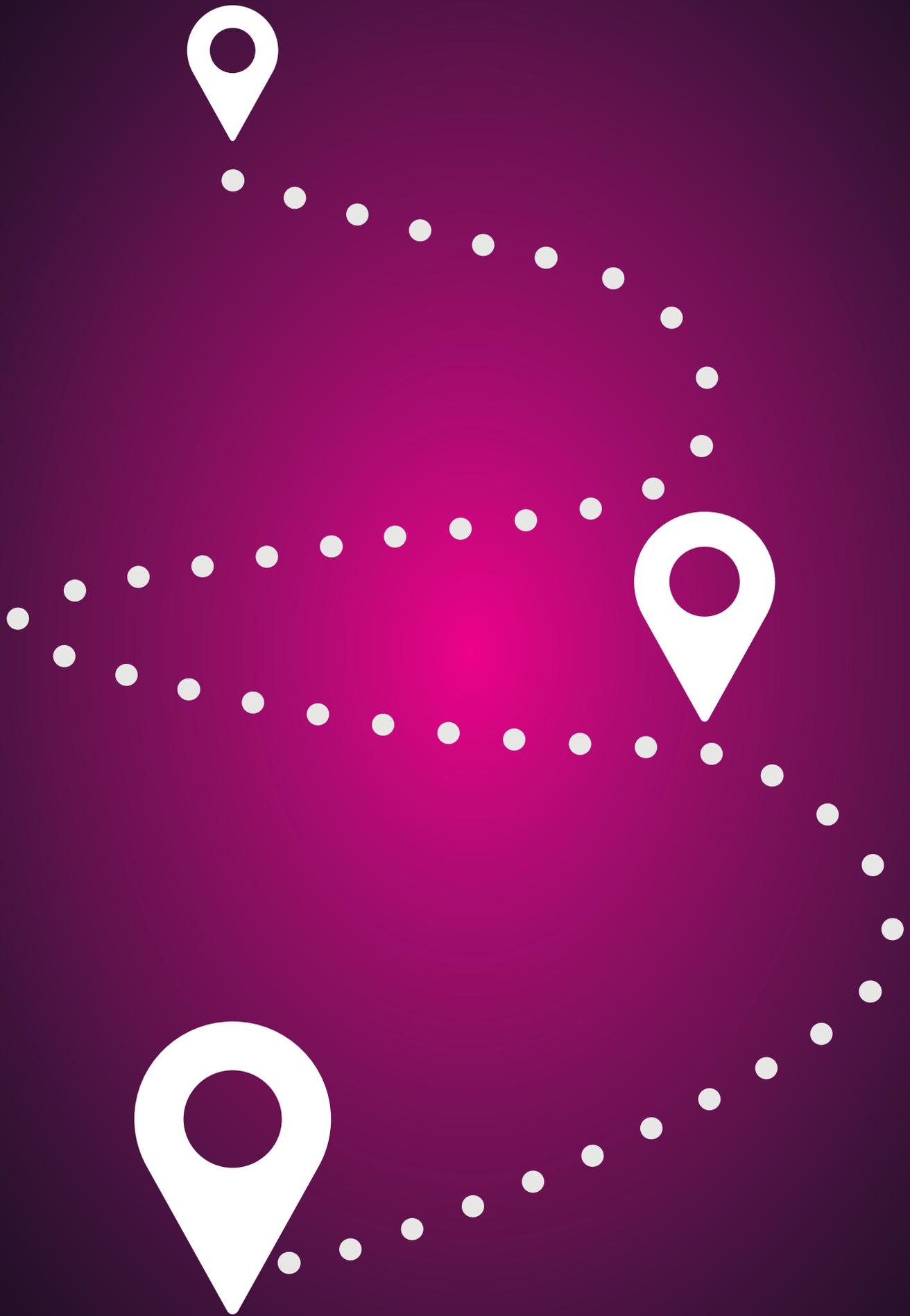
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191 Approximately 0.65% of the adult population of Montenegro.

192 Another one reached 499 signatures, while five other had less than 100 signatures.

193 Available at: <https://www.peticije.online/>. (Last accessed on 03.05.2020)





## 4. ROADMAP FOR THE DIGITAL AGENDA ADVANCEMENT IN THE WESTERN BALKANS

Pursuant to the findings of this report, the following recommendations were provided addressing all relevant stakeholders to engage in the process and contribute to advancement. The recommendations are based on the identification of the current status of the Digital Agenda implementation in the Western Balkans and will be used to measure the progress in the following years. It is also envisaged to serve as guidelines to the authorities in relevant countries on how to tailor their efforts in this area. The list includes only general recommendations that refer to the whole region, whereas more country specific recommendations are presented in the national reports.

### Strategic, legal and administrative developments

- Governments should be more diligent with the implementation of existing strategies and adoption of viable Action plans. Both strategies and accompanying action plans should be drafted after the careful consideration of the status and the needs corroborated with appropriate researches and in cooperation with all relevant stakeholders. Deadlines and activities from the Action plans should be in compliance with the sources of financing, to enable their proper implementation.
- Governments should provide conditions for engaging citizens into strategic planning. Citizens should be consulted through their representatives – CSOs, during the whole process of strategic planning, from the initial idea to the discussion about the draft. The process of strategic planning should include citizens' needs into consideration of provisions of the strategic documents.
- Authorities that implement the strategies should periodically evaluate the implementation of strategic documents. These reports should serve as a basis for drafting subsequent strategies to adjust the planning accordingly.
- Stakeholders should enhance the use of the Open Government Partnership mechanism. It should be used to strengthen the cooperation between the public administration and civil society actors. Digital agenda related topics should be introduced on a larger scale to the OGP Action plans.
- Key institutions, that tackle the Digital agenda, should have a functioning channel that would at all times be available to the interested citizens for their inputs in electronic form, and to be responsive to citizens' requests.
- Institutions should improve their systems of interoperability and internal digitalization within the institutions, for more efficient exchange of information and documents between public institutions and providing e-services that will enable the citizens with automatic collection of data from databases that are managed by various public institutions.

## Digital literacy

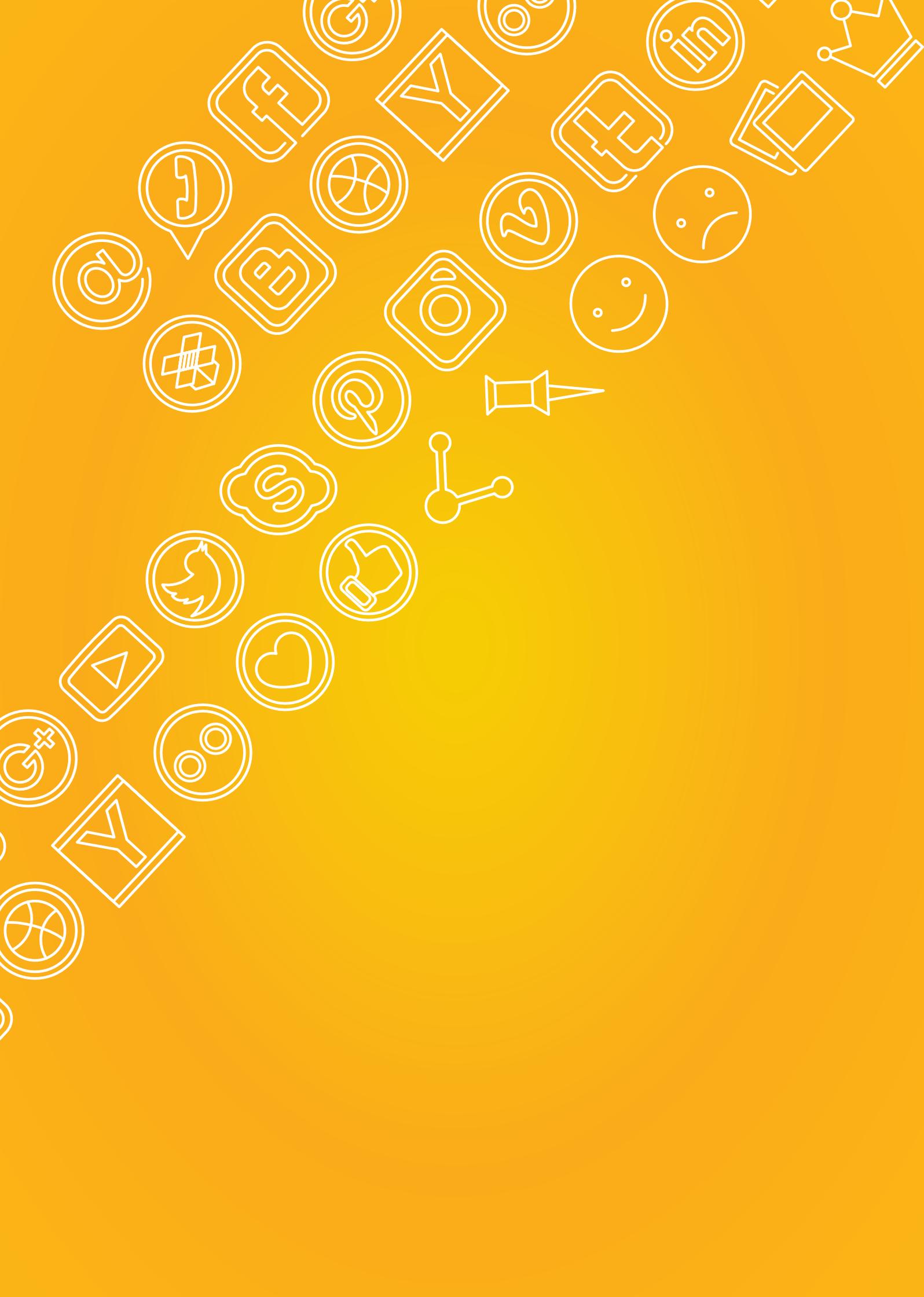
- Relevant stakeholders should organize continuous and strategic education of the citizens about the benefits of introducing e-government. This approach should include citizens of all ages and social status, with sensitivity to disabled persons and minorities. The goal is to empower citizens to request for changes, based on their needs.
- The Government and the civil sector should organize sustainable solutions to provide citizens with assistance in using e-government services, with special emphasis on their availability to all.
- Governments should adopt communication strategies that should be supported by public relations teams and appropriate budgets, dedicated to raising the collective awareness about the benefits of digitalization.
- Ministries of education should introduce digital skills learning into the education system.
- E-government portals should improve interfaces of the e-services into a more user-friendly manner.
- Governments, civil sector and media should promote e-government as a tool for empowering citizens to contribute to decision making.
- All e-services should be electronic from their initiation to the final product.
- Relevant stakeholders should educate journalists and CSOs to tackle this topic. Increasing the number of stakeholders to disseminate the knowledge about the importance of the digitalization and provide relevant inputs to the process should be included through education.
- Governments and relevant stakeholders should provide capacity building of public officials for the anonymization of personal data when disclosing the data, but also for improvement of their digital skills.

## Cyber Security

- Public institutions should improve the system of their websites' security. Privacy of data exchange and authenticity should be guaranteed by obtaining an SSL/TLS certificate for all the websites of public institutions.
- Public institutions that handle databases with personal data should increase their capacities in the area of the protection of personal data, primarily through education of public servants who process the data and by upgrading the systems for the protection of personal data.
- Relevant authorities should provide capacity building for the public officers, CSOs, citizens and the media in regards to cyber security and how they can detect and protect themselves from becoming a cyber victim. Additionally, awareness campaign on cyber security, for citizens on how and where they provide their personal data in online platforms.

For more country specific data please consult national Digital Agenda Observatory reports.

- Albania link <https://cutt.ly/2gL30Wc>
- Kosovo link <https://cutt.ly/igDrDw0>
- Montenegro <https://cutt.ly/ggPjGXS>
- North Macedonia <https://cutt.ly/ugPgHT0>
- Serbia <https://cutt.ly/agPgYa0>



### 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](http://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](http://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](http://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](http://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](http://www.metamorphosis.org.mk)

**CRTA (Center for Research, Transparency and Accountability)** is an independent, non-partisan civil society organization committed to developing democratic culture and civic activism. It is dedicated to creating public policy proposals, advocating for the principles of responsible behavior by the government and public institutions, and educating citizens on their political rights, to establishing the rule of law and developing democratic dialogue in the Republic of Serbia. [www.crtars](http://www.crtars)





