

# NORTH MACEDONIA **DIGITAL AGENDA OBSERVATORY**

Country Report and Roadmap for Digital Agenda advancement in North Macedonia

This publication was produced with the financial support of the European Union. Its contents are the sole responsibility of Metamorphosis Foundation and do not necessarily reflect the views of the European Union.



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The "Increasing Civic Engagement in the Digital Agenda – ICEDA" project is implemented by Metamorphosis Foundation (North Macedonia), Open Data Kosovo (Kosovo), e-Government Academy (Estonia), Center for Research, Transparency and Accountability – CRTA (Serbia), NGO 35 MM (Montenegro) and Lëvizja MJAFT (Albania).

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June, 2020

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#### **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, organisations 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 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 are not taught how to use them properly, which is why we are faced with hate speech, fake news and misinformation, cyber bullying, cyber crime, 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 North Macedonia 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 6 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 5 Western Balkan countries as part of the project Increasing Civic Engagement in the Digital Agenda – ICEDA cofunded 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.



## Research methodology

The quantitative data extracted and analysed 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. 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, and it is summarised in Chapter 1.

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 DA and needs for improvement. The results of these research projects are presented in all the chapters of the report.

In North Macedonia, through our activities we received 52 responses on our online survey (10 from representatives of state authorities, 4 from the media and 38 from the civil society representatives), we conducted 9 interviews with 3 media representatives of state authorities, 3 media representatives and 3 civil society representatives, and organised a focus group with 1 state authority representative and 4 civil society representative out of which one was an association of all the municipalities in the country.

The research methodology was designed by the e-Governance Academy (eGA). eGA is a non-profit think tank and consultancy organisation 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.

The research was done in the period between April – June, 2020.

# Current state in North Macedonia



### Current state in North Macedonia

The general conclusion from our research is that that there is significantly little knowledge about the Digital Agenda and its implementation in North Macedonia among the key stakeholders, including the institutions as the main implementing party. Our findings show that 52.6% of the civil society organisations (CSOs) and 50% of the media are not familiar with the Digital Agenda. The media further claims to sporadically receive partial information on this topic whereas some even claim to not have received any invitation for an event connected to it. This finding could potentially account for the low knowledge of the concept of the Digital Agenda and people not being able to connect the ongoing activities to it, because they are not familiar with the main pillars of this policy.

Our online survey showed that the vast majority of the institutions (90%) believe that the Government pays the necessary attention to the development of Digital Agenda/e-governance. Those that disagree have indicated that there is a need for public awareness campaigns, opening civic centers and creating document issuance points as mechanisms for bringing the services closer to the citizens. In line with this, the majority of the media (75%) rate the Government's commitment towards developing e-governance as "Satisfactory", while the remaining 25% rate it as Poor in a range of 5 options where "Very Good" is the highest and "Very Poor" is the lowest.

The online survey further showed that the majority of the institutions are responsible for contributing towards "Connectivity" (60%) and "Cybersecurity, trust, digitalization of industry" (60%) as the DA areas, while the least chosen areas were "Digital economy and society" (40%), "Research and innovation" (30%) and "Lowering roaming prices" (20%). The CSOs on the other hand, are most interested in "Digital economy and society" (78.9%) and "Research and innovations" (68.4%), followed by "Connectivity" (47.4%), "Cybersecurity, trust, digitalization of industry" (47.4%), and "Lowering the roaming prices" (15.8%). Conclusively, there is space for establishing a cooperation between the CSOs and institutions for bigger improvements in the areas of "Digital economy and society" and "Research and innovations" as the least worked on areas by the institutions and the ones that CSOs are most interested in.

#### 1.1. Internet penetration

In this section of the report we briefly describe the level of development of information and communication technologies (ICT) in North Macedonia, the level of the country's e-readiness to fully implement and successfully conduct e-governance activities, and we attempt to map main bilateral and multilateral cooperation initiatives related to the Digital Agenda.

Table 1 – Basic information

	Number/ percentage/ description	Source of information	Comments
Name of the country	Republic of North Macedonia	/	Formerly known as the Former Yugoslav Republic of Macedonia (FYROM).
Population	2 077 132	State Statistical Office of the Republic of	Data from 31.12.2018.

		North Macedonia	North Macedonia has not had a census since 2002. <sup>1</sup>
		https://cutt.ly/ 6yYZl1g	
Internet penetration	<ul> <li>81.8% of the households had access to the Internet.</li> <li>Their participation with broadband connection was 85.7%.</li> <li>81.4% of the total population between the ages of 15-74 used the Internet.</li> <li>82.1% of the male respondents are Internet users, and 80.8% of the female respondents are Internet users.</li> <li>16.6% have never used the Internet, out of which 17.6% female and 15.6%; 6.6% of those aged 25-54 and 46.7% of those aged 55-74.</li> <li>The most frequent Internet user are among the ages 15-24 (99.1%) and 25-54 (92.0%), while the least frequent are between the age of 55-74 (49.6%).</li> <li>72.9% used the Internet daily or almost every day, out of which 74.9% male and 70.8% female, and</li> </ul>	State Statistical Office of the Republic of North Macedonia  https https://cutt.ly/ MygirnP	The research was done for the first quarter of 2019.
	in respect to the age groups, 15–24 (96.3%), 25–54 (85.4%) and 55–74 (33.7%). Only 0.9% of the total population used the Internet less than once a week.  - 88.5% of the population uses the Internet.  - The Polog region is with the lowest	MKD-CIRT (National Center for Computer	The Public opinion survey report on the application of internet security measures <sup>2</sup> was done between May – June 2019.
	percentage of Internet usage (78.2%), while the Northeast region is with the highest percentage (95.7%).  - The most frequent Internet users (99.4%) are at the ages of 20–24 and the least frequent (35.8%) is the population above the age of 65.  - 84% of the population uses the Internet through a smartphone, 81.7% through a computer, and	Incident Response] https://cutt.ly/ YyghPFu	The survey involved 1400 respondents.

<sup>&</sup>lt;sup>1</sup> Census. State Statistical Office of the Republic of North Macedonia. Available at: <a href="http://www.stat.gov.mk/OblastOpsto.aspx?id=31">http://www.stat.gov.mk/OblastOpsto.aspx?id=31</a> (Last accessed on 28.04.2020)

<sup>&</sup>lt;sup>2</sup> Public opinion survey report on the application of internet security measures. MKD-CIRT (National Center for Computer Incident Response). July, 2019. Available at: <a href="https://cutt.ly/uygxXx7">https://cutt.ly/uygxXx7</a> (Last accessed on 28.04.2020)

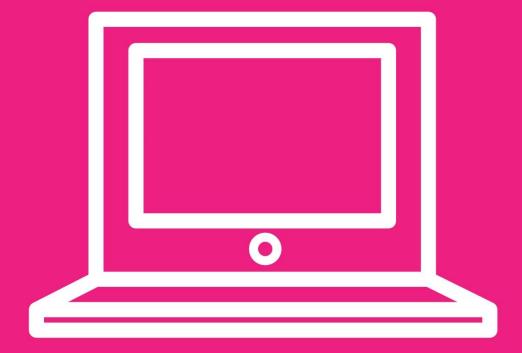
	88.3% use Internet in their homes almost daily.		
	- 19.4% of the respondents do not use the Internet at all, mainly those above 60 years of age (66.4%) and between 50–59 (28.6%).  - Around 72.7% of the respondents use the Internet, mainly those between 16–29 (95.5%) and 30–39 (90.2%).	OSCE Mission in Skopje and the Agency for audio and audiovisual media services  https://cutt.ly/Xy9DEBP	The analysis was done in September 2019.
Country e- readiness rankings	Score: 12.78 Stage: Accelerate	CISCO Global Digital Readiness Index 2019 https://cutt.ly/ uygnKPA	Basic needs (4) - 3.61 Business and Gov't Investment (3) - 1.24 Ease of Doing Business (4) - 2.59 Human Capital (4) - 2.25 Start-up Envir. (3) - 0.54 Tech Adoption (3) - 1.14 Tech Infrastructure (4) - 1.41
	Score: 0.34 / 1.0	DiGiX 2018  https://cutt.ly/ HygmDBF	This multidimensional digitization index compares which countries are the most advanced in this area, and discover their strengths and weaknesses.
	EDGI – 79 <sup>th</sup> place	UN E-Government Survey 2018  https://cutt.ly/tygm6wl	EDGI – E-Government Development Index EGDI by region – EUROPE
International structures/institutions supporting the development of DA	European Union through Delegation of the European Union / UK Government  The project 'GoDigital – Public Administration reforms assistance and strengthening the capacities of the Ministry for Information Society and Administration (MISA) – EuropeAid/137521/IH/SER/MK' aimed at facilitating 'the process of modernization of the Public Administration, implementation of PAR and e-Government activities by strengthening the transparency, accountability, accessibility and involvement of the civil society and other public stakeholders.'3	Project website  http://godigital. mk/	The National portal for e-services <sup>4</sup> was one of the products of this project.
	European Union through the IPA II Programme	Agency for Protection of the Right to Free Access to Public Information	Through the project <b>Transparency</b> and <b>Integrity</b> , component 2: Support for the Agency for Protection of the Right to Free Access to Public Information, aiming at improved transparency and accountability, the creation of a web platform is foreseen that would serve for an electronic

<sup>&</sup>lt;sup>3</sup> Available at: <a href="http://godigital.mk/#section\_01">http://godigital.mk/#section\_01</a> (Last accessed on 23.04.2020)

<sup>4</sup> Available at: <a href="https://uslugi.gov.mk/">https://uslugi.gov.mk/</a> (Last accessed on 15.04.2020)

		submission of FOIA requests and
		complaints, as a new e-service.
USAID	Video	USAID supported the promotion of
		the National portal for e-services,
	https://cutt.ly/	through a marketing campaign.
	<u>5ygh1Ya</u>	
World Bank, Korea's Ministry of	World Banks	Part of the program was a review
Strategy and Finance, Korea-		assessment under the Cybersecurity
World Bank Group Partnership	https://cutt.ly/1	Capacity Maturity Model for nations <sup>5</sup> ,
Facility	<u>ygh9r0</u>	after which a two-day training was
		held dedicated to the practical
The "Global Cyber Security Capacity		cybersecurity aspects. A workshop
Building Program" aimed at		was delivered by high-level
catalyzing the expertise and		delegation of Korean experts in April
capacity building in North		2018 in Skopje, revolving around
Macedonia, and leverages two key		topics such as e–government security,
strategic partnerships: with the		incident response, global cyber
Global Cybersecurity Center for		incident trends analysis, cyber
Development, part of Korea's		incident analysis in the finance sector,
Internet & Security Agency, and		etc.
Global Cyber Security Capacity		
Centre, from the University of		
Oxford.		
British Embassy in Skopje	National Youth	"MladiHub-Digital Youth" offers a
	Council of	unique opportunity for young people
The project "MladiHub-Digital	Macedonia	to respond to the digital
Youth" is funded by the British		transformation of the economy. The
Embassy in Skopje and	http://mladihu	project improves their employment
implemented by the National Youth	b.mk/page/zan	opportunities, promotes innovation,
council of Macedonia and the	<u>as</u>	and thus contributes to the country's
Chamber of Commerce and		economic development.
Information technology – MASIT in		
attempt to improve the digital skills		
of young people, their level of		
engagement in society and		
increasing their employability.		

<sup>&</sup>lt;sup>5</sup> Cyber security capacity review Former Yugoslav Republic of North Macedonia (FYR Macedonia). E. Nagyfejeo, C. Weisser, M. Griffin. July 2018. Available at: <a href="https://cutt.ly/3ygx0oT">https://cutt.ly/3ygx0oT</a> (Last accessed on 27.04.2020)



# 2

Strategic, legal and administrative developments regarding e-Government

# Strategic, legal and administrative developments regarding e-Government

#### 2.1. Strategic development

In North Macedonia, there are several high-level strategies and action plans guiding the development of the Digital Agenda/e-government, among which the:

- National Strategy for Sustainable Development in the Republic of Macedonia (2009–2030)<sup>6</sup>;
- National Strategy for Development of Information Society and Action Plan<sup>7</sup>;
- Strategy for the Implementation of the Right to Personal Data Protection in the Republic of Macedonia (2017–2022)<sup>8</sup>;
- Strategy for Reform of the Public Administration (2018–2022)<sup>9</sup> and Action Plan (2018–2022)<sup>10</sup>;
- Open Data Strategy of the Government of the Republic of Macedonia (2018–2020)<sup>11</sup> and Action Plan (2018–2020)<sup>12</sup>;
- National Plan for Quality Management in the Public Sector in the Republic of Macedonia (2018–2020)<sup>13</sup>;
- National Strategy for Cyber Security of the Republic of Macedonia (2018–2022)<sup>14</sup> and Action Plan (2018–2022)<sup>15</sup>;
- Transparency Strategy of the Government of the Republic of North Macedonia and Action Plan (2019–2021)<sup>16</sup>;
- Strategy for Cyber Defense and Action Plan (2019–2023)<sup>17</sup>;
- Strategy for Information–Communication Technology in Justice (2019–2024) 18;
- National Operational Broadband Plan (2019–2029)<sup>19</sup>;

<sup>&</sup>lt;sup>6</sup> National Strategy for Sustainable Development in the Republic of Macedonia (2009-2030). Available at: <a href="https://cutt.ly/ay5cZwa">https://cutt.ly/ay5cZwa</a> (Last accessed on 11.06.2020)

<sup>&</sup>lt;sup>7</sup> National Strategy for Development of Information Society and Action Plan. Available at: <a href="https://cutt.ly/kytaqli">https://cutt.ly/kytaqli</a> (Last accessed on 14.04.2020)

<sup>&</sup>lt;sup>8</sup> Strategy for the Implementation of the Right to Personal Data Protection in the Republic of Macedonia (2017-2022). Available at: <a href="https://cutt.ly/Hy5vK10">https://cutt.ly/Hy5vK10</a> (Last accessed on 11.06.2020)

<sup>&</sup>lt;sup>9</sup> Strategy for Reform of the Public Administration (2018-2022). Available at: <a href="https://cutt.ly/LyYZA1">https://cutt.ly/LyYZA1</a> (Last accessed on 06.05.2020) <sup>10</sup> Action Plan of the Strategy for Reform of the Public Administration (2018-2022). Available at: <a href="https://cutt.ly/Ky59tkB">https://cutt.ly/Ky59tkB</a> (Last accessed on 11.06.2020)

<sup>&</sup>lt;sup>11</sup> Open Data Strategy of the Government of the Republic of Macedonia (2018-2020). Available at: <a href="https://cutt.ly/myr3fee">https://cutt.ly/myr3fee</a> (Last accessed on 14.04.2020)

<sup>&</sup>lt;sup>12</sup> Action Plan of the Open Data Strategy of the Government of the Republic of Macedonia (2018-2020). Available at: <a href="http://mioa.gov.mk/?q=mk/node/1825">http://mioa.gov.mk/?q=mk/node/1825</a> (Last accessed on 14.04.2020)

<sup>&</sup>lt;sup>13</sup> National Plan for Quality Management in the Public Sector in the Republic of Macedonia (2018-2020). Available at: <a href="https://cutt.ly/ky582Si">https://cutt.ly/ky582Si</a> (Last accessed on 11.06.2020)

<sup>&</sup>lt;sup>14</sup> National Strategy for Cyber Security of the Republic of (North) Macedonia (2018-2022). Available at: <a href="https://cutt.ly/EygcQA1">https://cutt.ly/EygcQA1</a> (Last accessed on 14.04.2020)

<sup>&</sup>lt;sup>15</sup> Action Plan of the National Strategy for Cyber Security of the Republic of Macedonia (2018-2022). Available at: <a href="https://cutt.ly/dygc5BG">https://cutt.ly/dygc5BG</a> (Last accessed on 14.04.2020)

<sup>&</sup>lt;sup>16</sup> Transparency Strategy of the Government of the Republic of North Macedonia and Action Plan (2019-2021). Available at: <a href="https://cutt.ly/Oygc6dl">https://cutt.ly/Oygc6dl</a> (Last accessed on 14.04.2020)

<sup>&</sup>lt;sup>17</sup> Strategy for Cyber Defense and Action Plan (2019-2023). Available at: <a href="https://cutt.ly/iy5z6iJ">https://cutt.ly/iy5z6iJ</a> (Last accessed on 11.06.2020)

<sup>&</sup>lt;sup>18</sup> Strategy for Information-Communication Technology in Justice (2019-2024). Available at: <a href="https://cutt.ly/iy560e9">https://cutt.ly/iy560e9</a> (Last accessed on 11.06.2020)

<sup>&</sup>lt;sup>19</sup> National Operational Broadband Plan (2019-2029). Available at: https://cutt.ly/ryjSyxX (Last accessed 04.05.2020)

Strategy for Geological Research, Sustainable Usage and Exploitation of Raw Minerals<sup>20</sup>.

In September 2019 MISA with the support of the European Union, contracted a team of experts to make all the necessary analysis and prepare the **National Long-Term ICT Strategy**, aligned with the Digital Agenda for Europe 2020. North Macedonia is also part of the working group for Digital Skills coordinated by the Regional Cooperation Council, which was formed to support the Western Balkan countries in creating the Strategy. The Strategy was initially expected to be done during March 2020, however the pandemic crisis has postponed it.

When it comes to the participation of the institutions in the policy–making on e–governance, 70% of the respondents confirm that they are involved in these processes as a carriers of the policies, or through participation in meetings and working groups.

#### 2.1.1. Institutional efforts in practice

The digital transformation of North Macedonia is high on the agenda of the Government and MISA, which is why, aware that this topic is fairly new to the citizens, they have dedicatedly worked on the promotion and campaigns to bring the digitalization closer to all citizens as the end users who should feel the benefits of digitalization in everyday life, yet the efficiency of their attempts is to be debated.

MISA was the host of the first **Digital Summit for the Western Balkans** <sup>21</sup> in 2018, as part of the Berlin Process that aims at encouraging regional coordination for bring the region closer to the European Union. During the Digital Summit in Belgrade in 2019, North Macedonia also signed the **Agreement on Roaming Price Reduction**. <sup>22</sup>

Aligned with the National Strategy for Cyber Security of the Republic of Macedonia (2018–2022), in November 2019, MISA in partnership with OSCE and Metamorphosis, organised a training for cyber security for parents, students and teachers<sup>23</sup> from 2 elementary schools.

In alignment with the Open Data Strategy (2018–2020), the Government launched the **Open Data Portal** <sup>24</sup> where data sets that state institutions have opened to the public can be found. In 2020, MISA in partnership with Metamorphosis, had an attempt to organize a **Hackaton for Open Data** <sup>25</sup> with the aim to encourage young people to create innovative software and multimedia tools to bring the open data published from the institutions closer to the citizens, but due to the COVID–19 pandemics, it was canceled.

However, despite the efforts of the Government to present information in an open format, some of the institutions still do not publish their datasets on their websites in open data formats. According

<sup>&</sup>lt;sup>20</sup> Strategy for Geological Research, Sustainable Usage and Exploitation of Raw Minerals. Available at: <a href="https://cutt.ly/sy52w8V">https://cutt.ly/sy52w8V</a> (Last accessed on 11.06.2020)

<sup>&</sup>lt;sup>21</sup> Available at: <a href="https://vlada.mk/node/14436?ln=mk">https://vlada.mk/node/14436?ln=mk</a> (Last accessed on 04.05.2020)

<sup>&</sup>lt;sup>22</sup> Western Balkan Countries Signed the Regional Agreement on Roaming Price Reduction. MISA. April, 2019. Available at: <a href="http://mioa.gov.mk/?q=en/node/2489">http://mioa.gov.mk/?q=en/node/2489</a> (Last accessed on 04.05.2020)

<sup>&</sup>lt;sup>23</sup> MISA and ME organized a one-day training for cyber security for parents, students and teachers in elementary education. MISA. November, 2019. Available at: <a href="http://mioa.gov.mk/?q=mk/node/2737">http://mioa.gov.mk/?q=mk/node/2737</a> (Last accessed on 30.04.2020)

<sup>&</sup>lt;sup>24</sup> Open data portal. Available at: http://www.otvorenipodatoci.gov.mk/ (Last accessed on 23.04.2020)

<sup>&</sup>lt;sup>25</sup> Call for participants at the Hackaton. MISA. February, 2020. Available at: <a href="http://mioa.gov.mk/?q=en/node/2841">http://mioa.gov.mk/?q=en/node/2841</a> (Last accessed on 30.04.2020)

to the latest data from the **Openness Index**<sup>26</sup>, when it comes to usage of open data<sup>27</sup> North Macedonia is at the 4<sup>th</sup> place with a score of 27.40%, followed by Albania (24.86%) at the 5<sup>th</sup> place and Bosnia and Herzegovina (22.39%) at the 6<sup>th</sup> place. The 1<sup>st</sup> placed is taken by Serbia with 50.19% fulfilment of the criteria, which is almost double the fulfilment of the Macedonian institutions in this aspect. Based on the Openness Index, the situation is most alarming in the local and in the judicial institutions, and as one goes from the local to central levels or governing, the openness of institutions is higher, and thus, the usage of open data is more frequent. Such a case is with the Government of North Macedonia (55.11%) which is the leader in the region in this aspect.

In 2019, the reconstruction of a laboratory and a classroom with capacity of twenty participants was completed and the installation of the purchased equipment for the laboratory for malware analysis and digital forensics is underway. As a first step in joining the Forum on Incident Response Teams – FIRST, MKD–CIRT has applied for the FIRST fellowship program, which supports new CSIRT (Computer Support Incident Response Teams) to achieve membership status. In the area of international cooperation, MKD–CIRT has organized the second international conference on cyber security, under the topic "CSIRTs and Cyber Resilience", as well as the second national computer security incident response coordination and communication workshop. MISA conducted workshops in cooperation with International Telecommunication Union (ITU) and the UK government, with a focus on capacity building for cyber security and international cooperation.

In November 2019, the Transparency Strategy of the Government of the Republic of North Macedonia (2019–2021) was publicly promoted and discussed on the Conference e–Society: Open Institutions and Accountability<sup>28</sup> organized by Metamorphosis in Skopje, in front of more than 250 stakeholders, among which representatives of institutions, CSOs, the media, experts and the general public. Shortly after, the Strategy was made available online to the general public in three languages, Macedonian, Albanian and English.

When it comes to the e-services, the institutions recognize the Government's effort in transferring the services online, the multiple interoperability initiatives among the institutions and the existence of strategic documents for anonymization of personal data when disclosing open data, but they do admit that institutions do not have the capacity in the dealing with the latter. When talking about the normative framework, some institution representatives consider that the strategies should be created with a bigger vision and that policy makers should strive towards developing more rationally the steps for implementation of a certain service including the capacity building of the staff, but also raising awareness activities for the end users. From the aspect of **personal data protection**, they observe that part of the institutions do not have an existent infrastructure which can cover this part. Furthermore, their general perception is that apart from the existence of the normative framework, the **procurement of digital resources** should be more rational because they believe that in certain cases the procured goods or infrastructure is doubled and there is lack of trained IT staff to put it in use.

The efforts of providing e-services and promoting the National portal for e-services is described in section 3. e-services and key enables to deliver them.

<sup>&</sup>lt;sup>26</sup> Openness Index. Available at: <a href="https://opennessindex.actionsee.org/">https://opennessindex.actionsee.org/</a> (Last accessed on 23.04.2020)

<sup>&</sup>lt;sup>27</sup> Openness Index – Open Data. Available at: <a href="https://opennessindex.actionsee.org/open-data">https://opennessindex.actionsee.org/open-data</a> (Last accessed on 23.04.2020)

<sup>&</sup>lt;sup>28</sup> Final Conference e-Society: Open Institutions and Accountability. ACTION SEE. November, 2019. Available at: <a href="https://cutt.ly/iygvu8C">https://cutt.ly/iygvu8C</a> (Last accessed on 15.04.2020)

#### 2.2. Legal background

The obligation to harmonize the legislation of North Macedonia with the EU law <sup>29</sup> is incorporated in Article 68 of the **Stabilisation and Association Agreement** <sup>30</sup>. With the adoption of the **Rules of Procedure of the Assembly** <sup>31</sup> in July 2008, Article 135 stipulates that the content of each draft law harmonizing should contain data on the original acts of the European Union with full name, number and date as and Compliance Statement. Such is the case with the **Law on electronic documents**, **electronic identification and trust services** <sup>32</sup> which harmonizes with the Regulation (EU) no. 910/2014 of the European Parliament and of the Council of July 23<sup>rd</sup> 2014 on electronic identification and trust services for electronic transactions in the internal market and on the abolition of Directive 1999/93 / EC with CELEX number 32014R0910. Regarding trust services, North Macedonia has recently signed an agreement <sup>33</sup> with Serbia and Montenegro for mutual recognition of qualified trust services provided in the countries.

Regarding the Digital Agenda, the above mentioned Law regulates the creation, storage and usage of electronic documents, electronic identification and trust services, while the **Law on electronic management and electronic services**<sup>34</sup> 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>35</sup> regulates the population register in North Macedonia which is only in electronic form.

The Law on network and information systems security <sup>36</sup>, transposing the Directive 2016/1148 on NIS Directive, is in the process of preparation of the second version which would be followed by a stakeholder consultation phase. Its main aim is to effectively address the security challenges of the networks and information systems in North Macedonia in terms of joint minimum capacities for building and planning, information exchange, cooperation and common security requirements in the field of ICT. The Regulation on conditions for preparation of documents for electronic storage and qualified electronic storage and document formats suitable for storage<sup>37</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 Bylaw for standards for electronic storage and qualified electronic storage of documents, shall be published in the Official Gazette.

Regarding the access to public information, there is a Law on free access to public information <sup>38</sup> that has last been updated in 2019. This Law regulates the right of any natural or public body to

<sup>&</sup>lt;sup>29</sup> Harmonization of the legislation. Assembly of the Republic of North Macedonia. Available at: <a href="https://cutt.ly/yygvorR">https://cutt.ly/yygvorR</a> (Last accessed on 16.04.2020)

<sup>&</sup>lt;sup>30</sup> Stabilisation and Association Agreement. Official Journal of the European Union. March, 2004. Available at: <a href="https://cutt.ly/ZygypiH">https://cutt.ly/ZygypiH</a> (Last accessed on 16.04.2020)

<sup>&</sup>lt;sup>31</sup> Rules of Procedure of the Assembly of the Republic of Macedonia. Assembly of the Republic of North Macedonia. July, 2008. Available at: <a href="https://cutt.ly/2ygvpSx">https://cutt.ly/2ygvpSx</a> (Last accessed on 16.04.2020)

<sup>&</sup>lt;sup>32</sup> Law on electronic management and electronic services. May, 2019. Available at: <a href="https://cutt.ly/uygvaj4">https://cutt.ly/uygvaj4</a>; <a href="

<sup>&</sup>lt;sup>33</sup> North Macedonia and Montenegro sign an Agreement for mutual recognition of trust services. MISA. September, 2019. Available at: <a href="http://www.mioa.gov.mk/?q=en/node/2672">http://www.mioa.gov.mk/?q=en/node/2672</a> (Last accessed on 05.05.2020)

<sup>&</sup>lt;sup>34</sup> Law on electronic management and electronic services. Available at: <a href="https://cutt.ly/2ygvdRi">https://cutt.ly/2ygvdRi</a> (Last accessed on 29.04.2020)

<sup>35</sup> Law on central population register. Available at: https://cutt.ly/hyjS3rp (Last accessed on 04.05.2020)

<sup>&</sup>lt;sup>36</sup> Law on network and information systems security. Available at: <a href="https://cutt.ly/YyjDaXh">https://cutt.ly/YyjDaXh</a> (Last accessed on 04.05.2020)

<sup>&</sup>lt;sup>37</sup> Regulation on conditions for preparation of documents for electronic storage and qualified electronic storage and document formats suitable for storage. Available at: <a href="https://cutt.ly/MykSBXN">https://cutt.ly/MykSBXN</a> (Last accessed on 05.05.2020)

<sup>&</sup>lt;sup>38</sup> Law on free access to public information. Available at: https://cutt.ly/8yr2coD (Last accessed on 22.04.2020)

obtain information from the State and local institutions, but unlike the majority of the Western Balkan countries, the maximum time for responding to a FOI requests is 20 days. The **Agency for Protection of the Right to Free Access to Public Information** is responsible for overseeing the implementation of the Law.

Some of the institutions are under the impression that this Law has been unreasonably shortened and lacks certain aspects, and that those who have worked in the Agency have been passive for too long due to which unresolved issues from a decade ago still remain. Our findings show that 75% of the media rate the possibility for journalists to access public sector information as "Satisfactory", while the remaining 25% rate it as Poor in a range of 5 options where "Very Good" is the highest and "Very Poor" is the lowest.

Furthermore, the **Law on public sector data use**<sup>39</sup> obliges the authorities and public sector institutions to publish the data they have created through their responsibilities under the law. Aligned with the efforts for proactive transparency and providing access to public sector information, in October 2017, the Government adopted the recommendation from MISA on the publishing of **21 document** <sup>40</sup> on the websites of all the ministries. These documents are part of a unified list of public information <sup>41</sup> in possession of the specific ministries.

When it comes to privacy protection, in North Macedonia it is regulated by the Law on protection of personal data <sup>42</sup>, last updated in February, 2020. The Law gives the citizen the right <sup>43</sup> to know which personal data the *controllers* <sup>44</sup>, collect, process and store, and whether they work legally, as well as the right to be informed of the identity of the controller and his representative in the Republic of North Macedonia. <sup>45</sup> On June 22<sup>nd</sup>, 2005, a **Directorate for Personal Data Protection** which was established and it 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.

<sup>&</sup>lt;sup>39</sup> Law on public sector data use. February, 2014. Available at: <a href="https://cutt.ly/TyydfDJ">https://cutt.ly/TyydfDJ</a> (Last accessed on 22.04.2020)

<sup>&</sup>lt;sup>40</sup> Manchevski: List of documents which the ministries are obliged to publish on their websites. MISA. October, 2017. Available at: <a href="http://mioa.gov.mk/?q=mk/node/1402">http://mioa.gov.mk/?q=mk/node/1402</a> (Last accessed on 22.04.2020)

<sup>&</sup>lt;sup>41</sup> List of information of public importance. Available at: https://cutt.ly/SygvmNK (Last accessed on 22.04.2020)

<sup>&</sup>lt;sup>42</sup> Law on protection of personal data. February, 2020. Available at: <a href="https://cutt.ly/vygbRx5">https://cutt.ly/vygbRx5</a> (Last accessed on 15.04.2020)

<sup>&</sup>lt;sup>43</sup> Your right. Directorate for Personal Data Protection. Available at: <a href="https://dzlp.mk/en/node/2201">https://dzlp.mk/en/node/2201</a> (Last accessed on 23.04.2020)

<sup>&</sup>lt;sup>44</sup> 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."

45 Ibid.

#### 2.3. Administrative capacities

MISA<sup>46</sup> bares the responsibility for all issues pertaining to information technologies, as well as for policies and strategies in e-government.<sup>47</sup> Thus, the Minister of MISA, Damjan Manchevski <sup>48</sup> is responsible for the overall e-government development in the country.<sup>49</sup> Nevertheless, according to the Digital Government Factsheet on the Republic of North Macedonia (2019)<sup>50</sup>, both the ministries and state bodies, on national and local level, are responsible for the implementation of sectorial ICT and e-government projects. In line with this, our findings show that the media and CSOs believe that the digitalization as such should not be solely tied to certain institution but that it should be led by all institutions within their domain because they are the ones who know best their processes, services and groups they work with.

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 (MKD–CIRT) 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. In line with the new Law on Safety of Networks and Information Systems, reporting of cyber incidents would be made compulsory and MKD–CIRT would remain as a single contact point responsible for the national cyber security system, but multiple CIRTs would also be established under their coordination. MKD–CIRT see the need for the formation of sectorial CIRTs specifically, that would receive incident reports from their sector, because they believe that institutions from their sector would have more trust in them and in this way they would increase the number of incident reports. In this was they think that a better system for exchange of information can be established.

In February 2018, the Government decided to establish a National Council for Information and Communication Technologies, 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. The Council also reviews the technical specifications of procurements over EUR 20,000.00 in MKD equivalent, related to IT equipment and software. The Council consists of the Advisor to the Prime Minister of the Republic of North Macedonia for ICT Technology as President, the Minister of Information Society and Administration as Vice President, and 10 Ministers, the Director of AEC and the President of the Association of Local Self–Government Units of the Republic of North Macedonia (ZELS) as members of the Council. With the participation of ZELS in this body as a

<sup>&</sup>lt;sup>46</sup> Available at: http://mioa.gov.mk/?q=mk/node/64 (Last accessed on 13.04.2020)

<sup>&</sup>lt;sup>47</sup> Digital Government Factsheets – Republic of North Macedonia. Available at: <a href="https://cutt.ly/pygvETB">https://cutt.ly/pygvETB</a> (Last accessed on 13.04.2020)

<sup>&</sup>lt;sup>48</sup> Available at: <a href="http://mioa.gov.mk/?q=en/node/1893">http://mioa.gov.mk/?q=en/node/1893</a> (Last accessed on 13.04.2020)

<sup>&</sup>lt;sup>49</sup> Ibid.

<sup>&</sup>lt;sup>50</sup> Ibid.

national association of all 80 units of local self-government (LSGU) and the city of Skopje, harmonization of the decisions made at strategic level and at local level was ensured. 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>51</sup>, which includes the Ministers of Defense, Interior and Information Society and Administration.

In June 2018<sup>52</sup>, the Government decided to establish an expert advisory body namely the **Digital Forum for Information and Communication Technologies** with the purpose of coordinating and participating in the development of the information society of the public, private, civil society and academic community. The Digital Forum is composed of 14 representatives. In addition to the Minister of MISA, the membership within the Digital Forum consists of 14 members, of which 2 are representatives of the Government and 12 are representatives of the civil and academic sector and Chambers of Commerce related to information and communication technologies. In February 2019, at the first constitutive session, the Digital Forum appointed a President and Vice President, determined the next steps in determining the body's vision and goals, and the dynamics of meetings and ways of communicating with the National Council for Information and Communication Technologies and Cyber Security. The second session, in March 2019, was intended to adopt the Rules of Procedure of the Digital Forum and to set the first steps towards digital transformation.

In effort to digitalize the public sector, in April 2020, MISA signed an agreement for the accession of North Macedonia to the European Union's programme for **Digital Administration** – **ISA2**<sup>54</sup> with the European Commissioner for Budget and Administration, Johannes Hahn.

<sup>&</sup>lt;sup>51</sup>Official Gazette 207/2019 <a href="https://cutt.ly/TygzBZo">https://cutt.ly/TygzBZo</a> (Last accessed on 15.04.2020)

<sup>52</sup> Official Gazette 107/2018 https://cutt.ly/zygvUYF (Last accessed on 16.04.2020)

<sup>&</sup>lt;sup>53</sup> Formed Digital Forum for Information and Communication Technologies. Meta.mk. February, 2019. Available at: https://cutt.ly/iygvlyE (Last accessed on 23.04.2020)

<sup>&</sup>lt;sup>54</sup> North Macedonia part of the Digital administration of EU programme. Manchevski na Han signed an Agreement. MISA. April, 2020. Available at: http://mioa.gov.mk/?q=mk/node/2887 (Last accessed on 30.04.2020)





E-services and key enables to deliver them

# E-services and key enables to deliver them

#### 3.1. Secure digital identity and digital signature

Digital identity is used in North Macedonia. The most common digital identification methods in use in the public <sup>55</sup> and private sector <sup>56</sup> are username and password, but in banks for example, there is the option of using 'tokens' for identification. With the establishment of the National portal for eservices which is in line with the Law on services <sup>58</sup> and the Law on electronic management and electronic services <sup>59</sup>, the eID mechanism <sup>60</sup> for ensuring the citizen digital identity came into use in three levels: basic user profile, low eID level and high eID level. Furthermore, through a Memorandum <sup>61</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 the road to greater economic growth. The digital signature is also in use and is regulated by the Law on electronic documents, electronic identification and trust services.

#### 3.2. Delivery of e-services

The CSOs, institutions and media all agree on the benefits that come from a digitalized society and e-services, recognizing its ease of use as the request for and delivery of a service should be fast, cheap and more efficient.

Our Online survey findings show that 70% of the respondents from the institutions confirm to be e-service providers for the citizens, whereas 50% confirm to be e-service providers for businesses/legal entities. The respondents listed the **National portal for e-services** as the place where their e-services can be found, as well as on their website. Some of the respondents also announced that they are currently working on a full digitalization of their services and that by the end of 2020 their services would be part of the National portal for e-services, while some give as an example another platform through which citizens and legal entities can exchange information and documents in electronic form.

<sup>55</sup> Available at: https://cutt.ly/KygvOPQ; https://ener.gov.mk/Default.aspx; https://cutt.ly/oygvOuN (Last accessed on 13.04.2020)

<sup>&</sup>lt;sup>56</sup> Available at: <a href="https://grouper.mk/users/login">https://grouper.mk/users/login</a>; <a href="https://grouper.

<sup>&</sup>lt;sup>57</sup> Available at: <a href="https://cutt.ly/qyrm1wi">https://cutt.ly/qyrm1wi</a> (Last accessed on 13.04.2020)

<sup>&</sup>lt;sup>58</sup> Law on services. April, 2019. Available at: <a href="https://cutt.ly/Ey5sp6D">https://cutt.ly/Ey5sp6D</a> (Last accessed on 11.06.2020)

<sup>&</sup>lt;sup>59</sup> Law on electronic management and electronic services. May, 2019. Available at: <a href="https://cutt.ly/jfOQTJe">https://cutt.ly/jfOQTJe</a>. (Last accessed on 11.06.2020)

<sup>&</sup>lt;sup>60</sup> Available at: <a href="https://cutt.ly/XyrQQ2v">https://cutt.ly/XyrQQ2v</a> (Last accessed on 13.04.2020)

<sup>&</sup>lt;sup>61</sup> Through a Memorandum with Mastercard, the population in the Republic of North Macedonia will get the opportunity for a digital identity. MISA: Available at: https://finance.gov.mk/mk/node/8530 (Last accessed on 16.04.2020)

In relation to e-services, some of the CSOs recognize the progress and that there is a good infrastructure with part of the main registries being digitalized. They further notice that there a more and better framed e-services for the businesses/ legal entities, such as e-procurement, tax reporting, permits for import/export, etc. and that the e-services for the citizens are a bigger concern. Furthermore, part of the CSOs see the institutions' efforts for brining innovation in this area as insufficient and superficial, because they do not manage to provide enough care for the consistent functionality of those innovations and the sustainability for those solutions, giving the example of the online platform for exam registration that leads the students back to their old habits of registering their exams on the universities' counters.

Despite all the challenges, the experiences with reforms aimed to ease access of citizens to e-services in North Macedonia are promising. A positive example of a functioning online portal is **MojTermin** <sup>62</sup> run by the Ministry of Health in direct cooperation with the health care institutions and institutions from all segments of the health care, with the main aim to establish automated work processes in the coordination of all levels of health care, health administration and pharmacies. A recent addition to the healthcare services was the introduction of **ePrescription** <sup>63</sup> for chronic therapy for chronically ill people, which was mainly put in implementation due to the pandemics.

Other positive examples of digitalization of the services is the introduction of the eHighway tool system <sup>64</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 eTax system <sup>65</sup> that simplified tax reporting which was previously done only in hardcopy. As an extension of this system, the mobile application My VAT <sup>66</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.

#### 3.2.1. National portal for e-services

The **National portal for e-services** as a single point of interaction between the citizens and public authorities was designed to support and widely increase the efficiency of the public administration. The portal introduces a number of key principles to deliver better services in line with the needs and demands of citizens, which is in line with the EU e-government action plan 2016–2020. The portal has also a separate for e-services<sup>67</sup> section that has 136 e-services so far.

The portal was promoted in December, 2019<sup>68</sup> and at the time when this research was conducted,

<sup>62</sup> Available at: <a href="http://mojtermin.mk/">http://mojtermin.mk/</a> (Last accessed on 16.06.2020)

<sup>&</sup>lt;sup>63</sup> The Executive Directors of the Fund of health insurance Den Donchev and Orhan Ramadani announced the ePrescription which starts from May 1<sup>st</sup> 2020. Government of the Republic of North Macedonia. April, 2020. Available at: <a href="https://vlada.mk/node/21234">https://vlada.mk/node/21234</a> (Last accessed on 16.06.2020)

<sup>&</sup>lt;sup>64</sup> Great start for electronic tolls during July and August. Meta.mk. August, 2019. Available at: <a href="https://cutt.ly/YuvhGDc">https://cutt.ly/YuvhGDc</a> (Last accessed on 16.06.2020)

<sup>65</sup> Available at: https://etax-fl.ujp.gov.mk/ (Last accessed on 16.06.2020)

<sup>&</sup>lt;sup>66</sup> Avialable at: <a href="https://cutt.ly/0uvjzo2">https://cutt.ly/0uvjzo2</a> (Last accessed on 16.06.2020)

<sup>&</sup>lt;sup>67</sup> Available at: <a href="https://cutt.ly/2ygvASF">https://cutt.ly/2ygvASF</a> (Last accessed on 27.04.2020)

<sup>&</sup>lt;sup>68</sup> Promotion of the National portal for e-services. The citizens will have access to 127 e-services on one spot. MISA. December, 2019. Available at: http://www.mioa.gov.mk/?q=en/node/2758 (Last accessed on 15.04.2020)

there were 17.241 registered users. In the period of this research, from what could be seen on the portal, the most searched services are described in Table 2, not necessarily in that order.

**Table 2** – Most searched services

Name of e–service	Service provides	URL	Short description
Movement permit for legal entities and their employees during the validity of the Decision on prohibition of movement	MISA	https:// cutt.ly/ HygkStj	Only a person authorized by a certain legal entity (company) can submit a request. The applicant may apply for a permit only for persons employed by the company. Each request must specify the time interval for the validity of the permit, the reason for issuing the permit, and contact information of the employees. The service is free of charge and would be delivered in 1 day after the submission of the request. The delivery of the service is online.
Movement permit for natural persons providing third-party care, care for the elderly and debilitated person during the validity of the Decision on prohibition of movement	MISA	https:// cutt.ly/ ddMYL1 A	The applicant must be a natural person providing third-party care, an elderly and debilitated person (including people with autism, cerebral palsy, and other health conditions that require escort from another person). The applicant must submit documentation proving that the person needs care from another (no more than 10 attachments). The service is free and would be delivered in 1 day after the submission of the request. The delivery of the service is online.
Exercising the right to monetary compensation in case of unemployment	Agency for employment	https:// cutt.ly/ bygkM3 E	An unemployed person who has been employed for at least nine months continuously or 12 months with a break in the last 18 months, has the right to monetary compensation. An unemployed person has the right to monetary compensation for the time spent in employment, for which contributions from compulsory social insurance have been paid. The service is free and the service delivery deadline is within 30 days from the application date.
Certificate of Right to Separate Allowance	Ministry of Labour and Social Policy	https:// cutt.ly/j ygkONS	Beneficiaries of the right to separate allowance can be provided with letter of confirmation that they are beneficiaries of the right to separate allowance at their competent local social work center. The service is free and there is no lawstipulated deadline for service delivery.
Issuance of Employment Contract History	Agency for employment	https:// cutt.ly/k ygleA7	Any person who is (or has been) employed, may obtain a certificate from computer records for Start/End of Employment Contract in Social Security registered in ESARNM records. This document is known as M1/M2 and may also be obtained by any employer, solely for a person who is employed (or has been employed) therewith. The service is free and the service delivery deadline is within 30 days from the application date.

According to the most recent **Analysis of the available e–services** <sup>69</sup> done by the Center for Change Management, 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 online and without any need of physical visits to the institutions. The analysis emphasizes the necessity of the institutions to digitalize primarily the life services that citizens need most in their lifetime, at least to the degree to which the service can be digitalized.

#### 3.2.1.1. Structure of the portal

Services on the portal are easy to locate as they are structured in separate categories, alphabetically or by life events. To help the user understand how to use a service, each service contains a short and detailed description of the service, the service provider and their contacts, a list of the required documents, payment, service response and additional information among which related laws and regulations. The Support Center offers support in several forms, among which a direct number to the Contact Center, a form for suggestions for improvement, a FAQ section and a contact form. In the contact form one can ask a question, upload a document and leave your contact e-mail, and there is also the possibility to track the process on receiving an answer to your question by simply inserting the question number that you receive upon sending a question.

Although the interviewed CSOs recognize the user friendliness of the portal, they admit that it is only user friendly for a certain target group, mostly the younger population and those with better digital skills. As the most recent attempt of the institutions for increasing the level of digital skills among the population, the MISA and the Ministry for Education announced the provision of vouchers for digital skills <sup>70</sup> for youth up to 29 years of age.

Additionally, what they have noted is the need for synchronization of the services on the National e-service portal and the websites of the institutions, giving as an example the old e-service platform which had different information from the one on the website of the institution that provided that specific service.

Apart from emphasizing the need for investment into more frequent services, the CSOs notice the lack of interoperability and internal digitalization within the institutions, as they have been faced with receiving two personal documents with different personal data in the same period, or have seen a document being created in front of them, when that should have been an automatized process. A good example in this aspect it the situation in Estonia where the parent upon receiving a newborn receives a message through their portal wishing them well and requesting a transaction account for transferring them the financial compensation for a child. The CSOs notice that the same compensation is offered in the country, but due to the bureaucratic complexity not many use it.

<sup>&</sup>lt;sup>69</sup> Analysis of the available electronic services. Center for Change Management. 2020. Available at: <a href="https://cutt.ly/pdMY0an">https://cutt.ly/pdMY0an</a> (Last accessed on 09.06.2020)

<sup>&</sup>lt;sup>70</sup> Manchevski and Ademi: Ensured vouchers for digital skills of youth up to 29 years of age. MISA. June, 2020. Available at: https://cutt.ly/NuPOIPd (Last accessed on 18.06.2020)

#### 3.3. Promotion of e-services

On the question which channels does the institution they represent use to inform the public, all or most of the respondents selected "Website of the institution" (100%), "Facebook" (90%), and "Public media" (70%). The least used channels were "Private media" (30%), "Publications" (30%) and YouTube (20%).

In attempt to promote the e-services among the public, after the establishment of the National portal for e-services, there have been several governmental communication initiatives, starting with all the Ministries as service providers, putting the information about it in the form of pop-ups or banners. The portal is also promoted through a Facebook page 72 which at the time of this research had 13 388 followers, an Instagram profile 73 with 1 406 followers, a Twitter profile 74 with 105 followers, a LinkedIn profile 75 with 6 followers and a YouTube channel 76 with 416 152 views. A special hashtag is also used to promote the services, namely #UslugiGovMk, which can be found aligned with all the posts, posters and visualizations promoted on the above mentioned social media profiles. To enhance the promotion of the e-services, videos in Macedonian and Albanian language have been created, among which are also instructional videos on how to use the portal<sup>77</sup>, how to register 78, how to ask for assistance 79, and what is eID80. The promotional efforts for creating videos, promotional materials, billboards, promotion on traditional and online media, was supported by USAID. Apart from the online promotion, MISA also organized 6 public discussions on the topic of Digitalization of public services, which were held between January – February 2020, in Stip<sup>81</sup>, Tetovo<sup>82</sup>, Kumanovo<sup>83</sup>, Strumica<sup>84</sup>, Bitola<sup>85</sup> and Veles<sup>86</sup>. The public discussion in Skopje was canceled due to the pandemic crisis.

Our online survey shows that the majority of the institutions (60%) believe that the level of the citizens' knowledge about e-government/ e-services is "Satisfactory", while the remaining 40% rate it as Poor in a range of 5 options where "Very Good" is the highest and "Very Poor" is the lowest. In comparison, around 70% of the institutions believe that the business sector's/ legal entities' knowledge about e-government/ e-services is "Satisfactory", while the remaining 30% rate it as High in a range of 5 options where "Very Good" is the highest and "Very Poor" is the lowest.

<sup>&</sup>lt;sup>71</sup> Available at: <a href="http://www.mioa.gov.mk/">http://www.mioa.gov.mk/</a> (Last accessed on 22.04.2020)

<sup>&</sup>lt;sup>72</sup> Available at: <a href="https://www.facebook.com/uslugigovmk/">https://www.facebook.com/uslugigovmk/</a> (Last accessed on 30.04.2020)

<sup>&</sup>lt;sup>73</sup> Available at: <a href="https://www.instagram.com/uslugigovmk/">https://www.instagram.com/uslugigovmk/</a> (Last accessed on 30.04.2020)

<sup>&</sup>lt;sup>74</sup> Available at: <a href="https://twitter.com/uslugigovmk">https://twitter.com/uslugigovmk</a> (Last accessed on 30.04.2020)

<sup>&</sup>lt;sup>75</sup> Available at: <a href="https://cutt.ly/tygl1Df">https://cutt.ly/tygl1Df</a> (Last accessed on 30.04.2020)

<sup>&</sup>lt;sup>76</sup> Available at: <a href="https://cutt.ly/lyglVYF">https://cutt.ly/lyglVYF</a> (Last accessed on 30.04.2020)

<sup>&</sup>lt;sup>77</sup> Available at: <a href="https://cutt.ly/NyrRcpd">https://cutt.ly/NyrRcpd</a> (Last accessed on 22.04.2020)

<sup>&</sup>lt;sup>78</sup> Available at: <a href="https://cutt.ly/ZyrRnqr">https://cutt.ly/9yrRmMX</a> (Last accessed on 22.04.2020)

<sup>&</sup>lt;sup>79</sup> Available at: https://cutt.ly/0yrREPR (Last accessed on 22.04.2020)

<sup>80</sup> Available at: https://cutt.ly/2yrRfqq (Last accessed on 22.04.2020)

<sup>&</sup>lt;sup>81</sup> Public discussion in Stip on the topic: "Digitalization of public services". MISA. January, 2020. Available at: <a href="http://mioa.gov.mk/?q=mk/node/2805">http://mioa.gov.mk/?q=mk/node/2805</a> (Last accessed on 22.04.2020)

<sup>&</sup>lt;sup>82</sup> The second public discussion dedicated to digitalization was held in Tetovo. MISA. January, 2020. Available at: <a href="http://mioa.gov.mk/?q=mk/node/2811">http://mioa.gov.mk/?q=mk/node/2811</a> (Last accessed on 22.04.2020)

<sup>&</sup>lt;sup>83</sup> Manchevski in Kumanovo at the third public discussion dedicated to digitalization. MISA. February, 2020. Available at: <a href="http://mioa.gov.mk/?q=mk/node/2822">http://mioa.gov.mk/?q=mk/node/2822</a> (Last accessed on 22.04.2020)

<sup>&</sup>lt;sup>84</sup> Fourth public discussion dedicated to digitalization was organized in Strumica. MISA. February, 2020. Available at: <a href="http://mioa.gov.mk/?q=mk/node/2832">http://mioa.gov.mk/?q=mk/node/2832</a> (Last accessed on 22.04.2020)

<sup>&</sup>lt;sup>85</sup> The fifth public discussion about digitalization was held in Bitola. MISA. February, 2020. Available at: http://mioa.gov.mk/?q=mk/node/2835 (Last accessed on 22.04.2020)

<sup>&</sup>lt;sup>86</sup> Public discussion about digitalization of the public administration in Veles. MISA. February, 2020. Available at: <a href="http://mioa.gov.mk/?q=mk/node/2843/">http://mioa.gov.mk/?q=mk/node/2843/</a> (Last accessed on 22.04.2020)

Conclusively, the general observation of the institutions is that citizens are less familiar with e-government/ e-services in comparison to the business sector/ legal entities. However, some institutions believe that the citizens are aware of the e-services, but that they need to show good will for using them. They claim that all of the institutions work on the advancement of the digitalization in the country, especially during the pandemic which by its nature imposed this need even more, and that they are striving towards eliminating the need for a physical presence for the provision of a service.

Nevertheless, our findings note that promoting the service on social media and through TV advertisements is not sufficient, a broader promotion of all the digitalization aspects is needed. Around 76.3% of the CSOs do not agree that the citizens are sufficiently aware of the possibility of using public e–services, with only 10.5% of the respondents thinking otherwise. Around 79% of the CSOs have responded to be are familiar with the public e–services, not necessarily those aggregated in the National portal for e–services, some of which have noted that although this portal aggregates a variety of e–services, the majority of the e–services cannot be fully received through the portal. When it comes to the media respondents, none of them think that the citizens are sufficiently aware of how to use the e–services and they believe that the institutions as e–service providers, the Government, and the CSOs should make sure that this changes. They believe that the National portal for e–services has not been promoted enough nor through the right channels, which is exactly the reason for the low percentage of registered users. To continue, CSOs see that the population is sceptic when it comes to the usage of e–services since they think that if there is no stamp and signature on a document, that the service is invalid and that in some cases, such as executing payments, they will be faced with penalties and dealing with executors.

The CSOs see a big need for working on the collective awareness, having in mind that it takes a lot of time and efforts for such a change, but that it is imperative that the citizens are motivated to use e-services in order to make their lives better. They note the need for an individualized approach for informing and educating different groups of citizens, putting an accent on promoting the benefits from the e-services for them. For that purpose the CSOs suggest creating a direct and intensive communication strategy that is going to be supported by a strong marketing team and is going to be in line with a dedicated budget for that, and building the capacities of the CSOs so that they inform and educate the citizens. The number of e-service users tightly connected to the target group of a certain service, and what needs to be taken into consideration is their skills, knowledge, access to a digital device, access to Internet, etc., since the portal also offers services for retiring which are designed for people over 60 years of age who lack the basic digital skills. For a more coordinated approach, both CSOs and institutions agree that there should be a lot more meetings organized on these topics (weekly/monthly).

Furthermore, CSOs also recognize the need for awareness raising for the digitalization among the institutions as well, because they see that the institutions use their websites for PR purposes solely, and not so much for providing updates on their work and ongoing activities, plans for future activities, services they provided, etc.





Digital literacy of citizens

## Digital literacy of citizens

In 2020, the OSCE Mission in Skopje in partnership with the Agency for audio and audiovisual media services published an analysis called Mapping of media literacy levels in the Republic of Northern Macedonia among the population over 16 years of age<sup>87</sup> based on data from September 2019, which shows that the majority of the households in North Macedonia possess ICT equipment which provides them with access to Internet. Namely, 83.4% of the households have at least 1 smart phone, 70.6% have a personal computer (PC) or a laptop, and around 62.4% have a smart TV with Internet access. Other devices that the households have Internet access through are tablets (36.5%), video game devices (15.4%), smart watches, fitness trackers (9.6%), smart home device (5.2%) and a virtual reality device (4.5%). The analysis shows that 72.2% of respondents use their smart phones every or almost every day for Internet access, whereas 38.5% use their PCs. The analysis concludes, that since 2016, the number of smart phones is in a steady rise and that the access to Internet through smart phones has doubled since 2016.

Regarding the audiovisual content, the analysis shows that watching television is still dominant among the population, where 63.3% of the respondents watch it every or almost every day, mainly the older generation (75%). What is striking is the fact that respondents between 16–29 years of age (53.2%), watch television daily. However, some still prefer to follow the life streams of audiovisual content through their PC (14.8%) and through their smart phone (13.5%), every day or several times a week. Nevertheless, this form of following audiovisual content is not at all popular among the group above 60 years of age (0.3%).

In regards to ICT skills, the analysis shows that the respondents believe that they have the most skills in communication through the social networks (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 the respondents selected are Facebook (79.1%), YouTube (65.7%) and Instagram (47.7%). Demonstrating the clear digital gap in the country, the analysis points out that 19.4% do not use the Internet at all, mainly the age group above 60 years of age (66.4%) and the age group between 50–59 (28.6%). Around 72.7% of the respondents use the Internet, namely the age group between 16–29 (95.5%) and 30–39 (90.2%).

The most frequent online activity among the respondents is communicating through the 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 of music (26.1%), using e-mail (20.3%) and browsing for useful data necessary for their work or studies (20%).

<sup>&</sup>lt;sup>87</sup> Mapping of media literacy levels in the Republic of Northern Macedonia among the population over 16 years of age. S. Trpevska. 2020. Available at: https://cutt.ly/oyM64mM (Last accessed on 05.05.2020)

The analysis emphasizes that the advanced Internet usage is far less common, having only 6.5% of the respondents use e-banking daily of several times a week, or 5% posting or sharing content that they created themselves.

When it comes to expressing their standpoint or opinion, according to the analysis, the respondents who are willing to participate in the societal processes, usually do it through posting comments on the social networks. The least popular forms of communicating their views are commenting on websites and info portals (72.6%), writing blog posts (83.5%), turning to an institution in an online or offline form (83.5%), and contacting with media redactions (around 90%).

The Public opinion survey report on the application of internet security measures done by the MKD-CIRT between May-June 2019, confirms that the population mostly uses the Internet for social networks (82.4%), but that they least use it for selling goods and services (15.5%) because they are worried to do any purchasing online. To protect their privacy, a total of 50.3% of the respondents have installed an anti-virus software in the last few years. While over half of the respondents use HotSpots & personal WiFi for Internet connecting in public places, only one quarter connects to free and unprotected networks.

When it comes to taking certain security measures, only 75% of the respondents do it, most of them residing in the Skopje and East region (around 90%) and the least of them living in the Northeast region (49%) which also has the highest percentage of people using the Internet. Over 90% of the respondents who take certain security measures are between the ages of 15–19, 20–24, and 45–49. In regards to updating, over 50% have their devices on Auto-update, but the biggest obstacle that the respondents face is the payment requirement for that service. A total of 75% of the respondents use passwords to access their devices, out of which 63.1% use a combination of letters, numbers and symbols. The respondents most frequently save their passwords in their computer, while some remember or write it down, and over a half of them have reported to have changed their password for social networks and online games recently. Only 31% use the possibility of two-factor authentication, while 44.6% aren't familiar with that option. Only a third of the respondents backs up their information on a cloud, but only 13% of them does it daily while around 48% does it less than every 3 months.

Cyber security is familiar to only 60% of the population, while only 12.4% are familiar with the risks of cyber crime. 45.9% of the population is worried about 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.



Cyber security

# Cyber security

# 5.1. Cyber security international ratings

The **Global Cybersecurity Index (GCI) 2018**<sup>88</sup> created by the ITU to measure the commitment of countries to cybersecurity in order to raise cybersecurity awareness ranks, ranks North Macedonia on the 34<sup>th</sup> place at a global level and on the 21<sup>st</sup> place at a regional level, with a 0.800 score.

According to the **National Cyber Security Index (NCSI)**, North Macedonia<sup>89</sup> with a score of 40.26 is ranked on the 70<sup>th</sup> place, which places it in the bottom 3 countries in the Western Balkans, followed by Montenegro scoring 33.77 (80<sup>th</sup> place). <sup>90</sup> However, North Macedonia (34<sup>th</sup> place) <sup>91</sup> is the leader in the region in regards to **the Global Cyber Security Index**, followed by Serbia (58<sup>th</sup> place)<sup>92</sup>, Montenegro (61<sup>st</sup> place)<sup>93</sup>, Albania (62<sup>nd</sup> place)<sup>94</sup> and Bosnia and Herzegovina (118<sup>th</sup> place)<sup>95</sup>. However, what needs to be taken into consideration is that the dates of update of the situation in each of the countries monitored through the NCSI is different, i.e. it ranges between 2018–2019, the latest data for North Macedonia being from Sep. 11<sup>th</sup>, 2018.

The NCSI detect the lack of certain legislatives or bodies that would facilitate the implementation of the Digital Agenda in North Macedonia, such as a specialised official or unit responsible for national cyber security policy development; a committee, council, working group, etc. for national-level cyber security policy coordination. Additionally, the country fails to fulfill the NCSI indicator 'protection of digital services' as it does not have within their legal acts the obligation of the digital service providers (except micro and small enterprises) to (1) manage cyber/ICT risks or (2) implement established cyber/information security requirements; the public sector digital service providers do not implement (1) cyber/ICT security requirements (defined by legislation) or (2) a widely recognised security standard; and the government does not have a competent authority in the field of cyber/information security that has the power to supervise public and private digital service providers regarding the implementation of cyber/information security requirements. North Macedonia also does not have a legal act that allows to identify operators of essential services, and thus does not regulate the obligation of the operators of essential services to manage cyber/ICT risks nor to regularly (at least once every 3 years) provide evidence of the effective implementation of cyber/information security policies. As in the previous examples, there is no competent authority

<sup>&</sup>lt;sup>88</sup> Global Cyber Security Index (2019). International Telecommunication Union (ITU). 2019. Available at: <a href="https://cutt.ly/VykTJSn">https://cutt.ly/VykTJSn</a> (Last accessed on 05.05.2020)

<sup>&</sup>lt;sup>89</sup> Available at: <a href="https://ncsi.ega.ee/country/mk/">https://ncsi.ega.ee/country/mk/</a> (Last accessed on 15.04.2020)

<sup>90</sup> Ibid.

<sup>91</sup> Ibid.

<sup>92</sup> Ibid.

<sup>93</sup> Ibid.

<sup>94</sup> Ibid.

<sup>95</sup> Ibid.

in the field of cyber/information security that has the power to supervise operators of essential services, regarding cyber/information security requirements.

Regarding 'e-identification and trust services', what NCSI detects is missing is an authority responsible for the supervision of qualified trust service providers, and for the requirements for cryptosystems in the field of trust services and the electronic identification, as well as the electronic registered delivery service between state entities, citizens and private sector entities, to be regulated. When it comes to the 'incident and crisis management', North Macedonia does not have a legal act that regulates the obligation of the digital service providers and operators of essential services to notify appointed government authorities of cyber security incidents. According to NCSI, the country also needs to create a crisis management plan for large-scale cyber incidents, and to regulate the procedures for using volunteers in the field of cyber security. Finally, in regards to the 'military cyber operations', the Macedonian military forces need to establish a unit (cyber command, etc.) that is specialised in planning and conducting cyber operations, and to provide them with the proper training and exercise.

# 5.2. State of cyber security in North Macedonia

According to the National Strategy for Cyber Security of the Republic of Macedonia (2018–2022) and the Action Plan (2018–2022), a working group responsible for developing strategic documents in the field of cyber security was formed, which includes representatives of the three competent ministries for cyber security in the North Macedonia, namely the MISA, the Ministry of Defence and the Ministry of Interior, as well as other relevant institutions. In agreement with the Strategy and Action Plan, the competence of the working group will expand and will include the implementation of tasks which are in the domain of the Body with cyber security operational capabilities, until the establishment of the same. Aligned with the Strategy and Action Plan, and for the purpose of coordination and monitoring of the implementation of the same, as well as defining new strategic guidelines and recommendations related to cyber security, in October 2019, the National Cyber Security Council was established.

In order to establish a baseline for improved cyber security, MKD-CIRT are currently working on the preparation of a self-evaluation questionnaire for the business sector to determine whether they fulfil certain pre-conditions for working online among which e-payment and transfer of information. They have also identified the need for interactive trainings for CSOs and the citizens, and have tried to incorporate cyber security within the formal education, but are cooperating only with the faculties on that topic as they have not found any space for such a thing in the primary education curriculum.

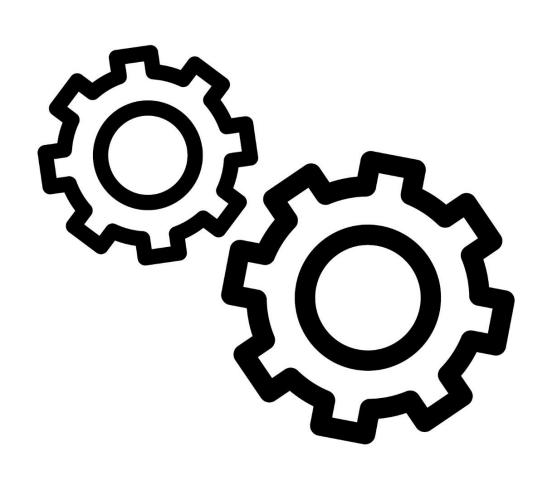
In August 2018, at the invitation of MISA and in collaboration with the World Bank, the Global Cyber Security Capacity Centre (GCSCC) undertook a review of the maturity of cybersecurity capacity in North Macedonia. The review aimed at enabling the government to become aware of its cybersecurity capacities in order to strategically prioritize further investments. According to the review, there is the need for several legal acts or actions to be done by the Government in order to

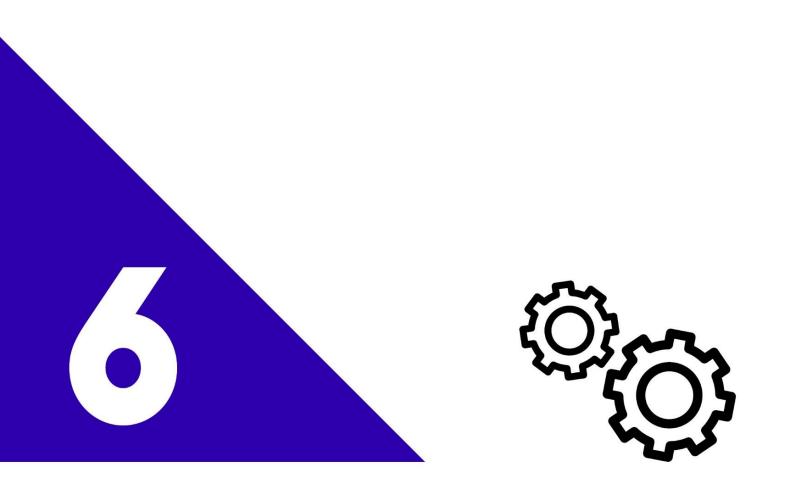
ensure a stronger legal framework as the basis for an improved digital maturity of the country. Among their recommendations are the review of the Criminal Procedural Code concerning the requirement for consent to cross-border access to stored computer data; the development of new legislative provisions on consumer protection online and human rights online; and the development of a platform for sharing electronic evidence between regional cybercrime forces. GCSCC also suggested that there is a need for a research on human rights online and ensuring proper measures for exceeding the minimal baselines specified in international agreements, and that the Government should consider implementing the EU child protection project through multistakeholder consultation processes. Their recommendations go as further as to suggest the creation of a framework to assess the effectiveness of standards for procurement and software development, and the development, implementation and enforcing of policies and processes on software updates and maintenance.

When it comes to the standpoint of the media and CSOs on cyber security, the general opinion is that the citizens are not concerned with their cyber security because they are not informed about it and very few actually understand the concept. Some believe that the institutions are also not concerned with cyber security because many of them use personal e-mails for work related purposes and keep their documentation in hard copy in a room that is freely accessible for everyone. An example was shared of the citizen being asked to put their request for a service that contains personal data, in a bucket in front of the counter that is available to anyone, in order to avoid infecting themselves or the public officer with the COVID 19. According to the CSOs, the moment when a cyber attack occurs where the personal data of citizens will be revealed and abused, is the moment where the population will pay more attention to this aspect.

Our findings show that CSOs are not confident in our institutions' capacities to deal with cyber attack, pointing out several examples of hacked systems of institutions in the past. They see that the cyber security requires a stable political climate as it is a sensitive topic and that a Center for Safer Internet should be established.

In line with the protection of the citizens, both the media and CSOs see an issue with the telecommunications service provides in the country, numbering many complaints for their services that are not in compliance with the contracts that the citizens sign. They see the service provides as intentionally turning a blind eye to this and abusing the citizens' lack of knowledge and protection mechanisms for such issues, which is why they see a strong need for a revision of the contracts that the service provides provide as well as posing certain restrictions on them in order to protect the end-users.





Citizen participation in policy making

# Citizen participation in policy making

Citizen participation in policy making/legislative processes is regulated by various legal acts among which the Constitution of the Republic of North Macedonia <sup>97</sup>, Law on Assembly <sup>98</sup>, Rules of Procedure of the Assembly <sup>99</sup>, Law on Referendum and other forms of direct citizen expression <sup>100</sup>, Law on Government <sup>101</sup>, Rules of Procedure of the Government <sup>102</sup>, Law on organization and work of state organs <sup>103</sup>, and Law on elections <sup>104</sup>. Furthermore, as a form of citizen participation, a Department for Cooperation with Non–Governmental Organizations of the General Secretariat of the Government <sup>105</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.

In North Macedonia, there is a portal for public consultations called **Single National Electronic Register of Regulations of the Republic of North Macedonia – ENNR.**<sup>106</sup> The online petition system has not yet been established.

When it comes to strategic documents, North Macedonia has several main government strategies and action plans in the area of civic participation, among which:

- Codex of Good Practices for the Participation of Civil Sector in Decision–Making Processes<sup>107</sup>
- Methodology for Regulatory Impact Assessment <sup>108</sup> accompanied by Instructions on the Execution of the Work of the Ministries in conducting Regulatory Impact Assessment<sup>109</sup>
- Plan for immediate reform priorities 3-6-9<sup>110</sup>

<sup>&</sup>lt;sup>97</sup> Constitution of the Republic of North Macedonia. Assembly of the Republic of North Macedonia. Available at: https://cutt.ly/gygzNht (Last accessed on 23.04.2020)

<sup>98</sup> Law on Assembly. Available at: https://cutt.ly/vygzNX8 (Last accessed on 22.04.2020)

<sup>99</sup> Ibid.

<sup>&</sup>lt;sup>100</sup> Law on Referendum and other forms of direct citizen expression. Available at: <a href="https://cutt.ly/uytoPaP">https://cutt.ly/uytoPaP</a> (Last accessed on 22.04.2020)

<sup>&</sup>lt;sup>101</sup> Law on Government. Available at: <a href="https://cutt.ly/Lygz9Fb">https://cutt.ly/Lygz9Fb</a> (Last accessed on 23.04.2020)

<sup>&</sup>lt;sup>102</sup> Rules of Procedure of the Government. Available at: <a href="https://cutt.ly/1yyILLQ">https://cutt.ly/1yyILLQ</a> (Last accessed on 23.04.2020)

<sup>&</sup>lt;sup>103</sup> Law on organization and work of state organs. Available at: <a href="https://cutt.ly/zyyTY26">https://cutt.ly/zyyTY26</a> (Last accessed on 23.04.2020)

<sup>&</sup>lt;sup>104</sup> Law on elections. Available at: <a href="https://dejure.mk/zakon/izboren-zakonik">https://dejure.mk/zakon/izboren-zakonik</a> (Last accessed on 22.04.2020)

<sup>&</sup>lt;sup>105</sup> Available at: <a href="https://www.nvosorabotka.gov.mk/?q=mk">https://www.nvosorabotka.gov.mk/?q=mk</a> (Last accessed on 23.04.2020)

<sup>&</sup>lt;sup>106</sup> Available at: https://ener.gov.mk/Default.aspx (Last accessed on 22.04.2020)

<sup>&</sup>lt;sup>107</sup> Codex of Good Practices for the Participation of Civil Sector in Decision-Making Processes. Available at: <a href="https://cutt.ly/Qygz866">https://cutt.ly/Qygz866</a> (Last accessed on 23.04.2020)

<sup>&</sup>lt;sup>108</sup> Methodology for Regulatory Impact Assessment. Available at: <a href="https://cutt.ly/FyyYKd7">https://cutt.ly/FyyYKd7</a> (Last accessed on 23.04.2020)

<sup>&</sup>lt;sup>109</sup> Instructions on the Execution of the Work of the Ministries in conducting Regulatory Impact Assessment. Available at: <a href="https://cutt.ly/6yyY6BD">https://cutt.ly/6yyY6BD</a> (Last accessed on 23.04.2020)

<sup>&</sup>lt;sup>110</sup> Plan for immediate reform priorities 3-6-9. Available at: <a href="https://cutt.ly/6ygz4Bj">https://cutt.ly/6ygz4Bj</a> (Last accessed on 23.04.2020)

- Government Strategy for Cooperation with and Development of the Civil Sector<sup>111</sup> and Action Plan<sup>112</sup>

Nevertheless, the openness of the state institutions is critical to meaningful citizen participation in policy making. According to the latest ACTION SEE Openness Index from 2018/2019<sup>113</sup>, the level of openness of the executive power in North Macedonia meets 53% of the openness indicators, including the Government with 78% fulfilment of the indicators, the ministries with 52% and the modest 29% met by the executive agencies. The local self-governing units (LSGUs), on the other hand, given the essence of their existence as the closest institutions to the citizens designed to serve the citizens, meet only 25% of the openness indicators. Demanding higher openness of institutions that directly affects the aforementioned data remains on the agenda of Foundation Metamorphosis which is why through the USAID's Civic Engagement Project (CEP) Metamorphosis is following the openness of the executive and local institutions, also monitoring the implementation of the Transparency Strategy of the Government of the Republic of North Macedonia (2019–2021). With the support of National Endowment for Democracy, Metamorphosis as part of the ACTION SEE network<sup>114</sup>, also continued to monitor the openness of the Assembly of North Macedonia as the biggest representative body of the citizens.

Our online survey shows that the institutions are equally divided when it comes to the matter on whether the CSOs have been part in the development of the national strategies connected to the development or certain areas of the Digital agenda. The majority of the respondents from the institutions (80%) think that the CSOs should be included in the development of e-government solutions/e-services, because they believe that they can contribute with their expertise and experience. Some of the respondents also think that the CSOs are the voice of the citizens and that together they can "push" for change, while others also list the transparency in these processes as the reason why the CSOs should be involved.

The institutions have reported that the channels that they use for public consultations and gathering comments from the public, are mostly "Face-to-face meetings" (80%), "Website of the institution" (70%) and "Government e-participation portal ENN cR", as well as "Facebook groups" (40%), with 20% indicating the e-mail communication as their most used form of consultation.

When it comes to the CSOs, according to our findings 71.1% of them have not been part of the process of developing e–governance, while only 13.2% stated that they were involved, mainly though consultative meetings, financially supporting the development of certain strategies and providing their expertise in developing researches and catalogues of services. Our findings show that both institutions and citizens agree that for the improvement of the quality of the e–services, safety should be introduced by design i.e. in the process of creation of a service, in order for the service to be efficient and effective.

Furthermore, 73.7% of the CSOs claim that they have not used any online platform for providing suggestions or feedback to the Government, while only 21.1% claim that they have, most of which

<sup>&</sup>lt;sup>111</sup> Government Strategy for Cooperation with and Development of the Civil Sector. Available at: <a href="https://cutt.ly/aygz5fP">https://cutt.ly/aygz5fP</a> (Last accessed on 23.04.2020)

<sup>&</sup>lt;sup>112</sup> Action Plan for Government Strategy for Cooperation with and Development of the Civil Sector. Available at: <a href="https://cutt.ly/oygz6sm">https://cutt.ly/oygz6sm</a> (Last accessed on 23.04.2020)

<sup>&</sup>lt;sup>113</sup> Roadmap on good governance for state institutions in the Republic of North Macedonia 2019. Based on the Regional Index of Openness of state institutions. Based on the measuring for 2018. Metamorphosis Foundation. July, 2019. Available at: <a href="https://cutt.ly/9yXDoUN">https://cutt.ly/9yXDoUN</a> (Last accessed on 06.05.2020)

<sup>&</sup>lt;sup>114</sup> Available at: <a href="https://actionsee.org/">https://actionsee.org/</a> (Last accessed on 06.05.2020)

list ENER as the platform where they have provided suggestions or feedback, but also direct e-mail communication with the institutions or personal meetings, the websites of the institutions, and the Department for Cooperation with CSOS of the General Secretariat of the Government of the Republic of North Macedonia.

Our findings indicate that the media is divided when it comes to the added value of including the CSOs in the creation of policies. While half of them see the added value in receiving a realistic input and guidelines from the CSOs, their wide network of contacts with the media, activists, citizens and informal groups, their expertise and their ability for lobbying, the rest of the media respondents see no added value in including the civil society in these processes.

According to the CSOs, in the past several years there is a regulation for their participation in policy making, but it is debatable how much the CSOs use this opportunity, and the same goes for the state. Part of the CSOs believe that there is a "marginalized usage of the CSO capacities" and that consultations on an already created legislation is insufficient because their expertise and experience can contribute much more in the process of creating the legislation. Apart from recognizing the potential and that certain steps for improvement have been made in comparison to 5 years ago, the CSOs are disturbed by the fact that there is no existing modality for CSO participation because in many cases, although there are some institutions that open calls for CSO participation in certain policy making, there is rarely the place or a contact that would lead them to the right place to express their willingness for participation. Some CSOs, however, are proud of the fact that they have a great cooperation with the institutions and that many of their products have been used as policies of the institutions or they have co-led certain policy-making processes.

# 6.1. Challenges for citizen participation in policy making

Some institutions note that it is very difficult to approach CSOs that work in this area, because they do not know who to turn to which is why they see the creation of a comprehensive register of CSOs with indicated areas of expertise, as very beneficial. However, as there are very few CSOs in the country that are familiar with the Digital Agenda, the first step would be to work on the building of their capacities in that direction, in order to form strong allies with whom they would work on its implementation.

In that direction, 80.8% of the CSOs have expressed their interest in developing capacities for contributing towards the development of the Digital Agenda/ e-governance, mainly expressing the need for trainings on how to use the e-services and how to transfer the services that they offer into e-services, capacity development for participation in developing strategic documents at national and local level, more information about the possibilities and benefits from a digital society, and networking for exchange of experiences, as well as the need for an online platform or a system for better communication with the stakeholders. Some have listed specific needs such as creation of online platforms for direct communication with parents of children with disabilities, for e-services provided by craftsmen, creation of e-tools through which the contribution of the CSOs in the public policy-making will increase, while there are also those that would like to assist in developing of promotional campaigns for the usage of e-services.

Our findings show that 50% of the media respondents cannot name a Government spokesperson on digital development and e-government issues, and that none of the media think that the journalists are trained enough to report on the impact of the digital technologies in the society. They further elaborate that the majority does not have basic knowledge in digital technologies

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which further disables them from covering the topic, which is why they need continuous capacity building for usage of digital tools and new technologies, how to make data based articles, and knowledge on the possibilities, range and importance of e-services, access to public sector information, reinforcing and respecting the privacy of the citizens through using e-services. This is why, in order to also have an effective fight against the fake news that is often present in this area, especially intensified during the pandemic, the capacity building efforts should also be directed towards the media as the channel of communication with the wider population.



Open Government Partnership (OGP)

# Open Government Partnership (OGP)

As of 2011, North Macedonia officially became part of the Open Government Partnership (OGP)<sup>115</sup>. In its fourth National Action Plan for Open Government Partnership 2018–2020<sup>116</sup>, North Macedonia is currently implementing 23 commitments in total, which focus on Open Parliament, Access to Justice and Subnational-Level Transparency. Among them, there are also commitments related to e-government/ ICT-tools, listed in Table 3.

Table 3 – Government OGP Commitments

Area	Commitments
Access to	1.1. Proactive publication, promotion of electronic access and increased awareness of
Information	citizens on their rights to free access to public information;
	1.2. Basic data for registered entities in the Central Register of the Republic of
	Macedonia (CRRM) should become publicly available and free of charge on the website
	of CRRM;
Integrity and	2.1. An advanced mechanism for monitoring the property status of the elected and
good	appointed officials;
governance	
Fiscal	3.1. Open treasury;
transparency	3.2. Possibility for publishing basic information on public procurements on institutions'
	websites (contracting authorities in public procurement);
Open Data	4.1. Cataloging data sets in state institutions;
	4.2. Regional initiatives for cooperation in the field of open data;
Transparency	5.1. Establishing new tools for financial transparency improvement and accountability
at local level	of LSGUs and social inclusion
	5.4. To resilient Skopje via data availability
Access to	6.1. Access to justice development
justice	

The fourth National Action Plan also incorporates the Action Plan of the Assembly for the OGP objectives, and their commitments related to e-government/ICT-tools are listed in Table 4.

Table 4 – 3Assembly OGP Commitments

Area	Commitment
Accountability	1.2. Increasing the financial transparency of the Assembly
Improved ICT	2.1. Better access to information
Infrastructure	

<sup>&</sup>lt;sup>115</sup> Available at: <a href="https://cutt.ly/GygQYLA">https://cutt.ly/GygQYLA</a> (Last accessed on 23.04.2020)

<sup>&</sup>lt;sup>116</sup> Open Government Partnership National Action Plan 2018-2020. MISA. July, 2018. Available at: <a href="https://cutt.ly/9ygQUQ6">https://cutt.ly/9ygQUQ6</a> (Last accessed on 23.04.2020)

# 8

Roadmap for Digital Agenda advancement in North Macedonia

# Roadmap for Digital Agenda advancement in North Macedonia

In line with our findings, we have come to a set of recommendations for improvement in the priority areas providing a Roadmap for Digital Agenda advancement in North Macedonia.

# Strategic, legal and administrative developments

- The institutions should take a proactive approach towards including the CSOs in policy making and co-management processes in the areas connected to the Digital Agenda. They should establish a more meaningful cooperation with the CSOs for bigger improvements in the areas of "Digital economy and society" and "Research and innovations". They should further establish or use more meaningfully and more frequently the existent platforms for better communication among stakeholders with the CSOs, in order to jointly discuss strategies for a better implementation of the Digital Agenda and to increase their mutual trust.
- The institutions should work on creating a Long-term Strategy for Digital Skills accompanied by an Action Plan that would also include the development of an educational programme at several levels (basic, intermediate, advanced) that would be communicated appropriately to the age, mental capacity and expertise of the citizens in all spheres.
- When creating strategies and Action plans, institutions should establish monitoring and evaluation systems for the commitments within the Action plans in order to follow and measure their level of progress. Furthermore, the Action plans should encompass a more rational and plausible approach towards the steps for implementation of a certain service, including capacity building of the public officers and the citizens as well, as well as raising awareness activities.
- When introducing innovations, institutions should strive towards ensuring their sustainability and practicality after a certain period of time, which is why providing sufficient care for consistent functionality of the innovations is needed.
- Institutions should invest in and prioritize the digitalization of the life services that citizens need most in their lifetime, at least to the degree to which the service can be digitalized.
- The National portal for e-services should be made user friendly for all groups of citizens, without exceptions. The information about the services on the National e-service portal and the website of the institutions should be synchronized.
- Institutions need to advance their system of interoperability and internal digitalization within the institutions.
- Institutions should execute the procurement of digital resources more rationally, making sure that they are efficiently and adequately put into use.

# Digital literacy

- The institutions should provide capacity building to the CSOs and media for informing and educating the citizens about the Digital Agenda and its benefits, and for taking strategic approaches for directly equipping the citizens with digital skills as the main bodies that work directly with the citizens and are already familiar with their needs.
- The institutions together with the CSOs should create a direct and intensive communication strategy that is going to be supported by a strong marketing team and budget, dedicated to raising the collective awareness about the benefits of digitalization and in that way decrease the skepticism towards e-services.
- Life-long learning programmes in the area of digital literacy are needed in order to decrease the digital gap, especially in the areas of using e-services and cyber security.
- Promotion of digital skills for advanced Internet usage is needed, in order to ensure better employment for the citizen and a better integration within a digital society.
- There is a need for a capacity building of the public officials for the anonymization of personal data when disclosing open data, but also for improvement of their digital skills.
- The establishing of e-support centers for provision of assistance and capacity building for citizens on the benefits of e-services and how to use them, is more than necessary.

# Cyber security

- Relevant authorities should enable a space for the establishment and functioning of a Center for Safer Internet, in order to create a point for support for the citizens in regards to online safety issues.
- 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.
- For the improvement of the quality of the e-services, safety should be introduced by design i.e. in the process of creation of a service, in order for the service to be efficient and effective.
- Institutions should develop new legislative provisions on consumer protection online and human rights online, in order to protect the citizens. In that direction, a revision of contracts that the telecommunication service provides provide to the citizens is needed as well as posing certain restrictions on the providers in order to protect the end-users.



**Metamorphosis Foundation for Internet and Society** is an independent, nonpartisan and nonprofit foundation based in Skopje, Republic of North Macedonia. Its mission is to contribute towards the development of democracy and towards increasing the quality of life through innovative use and sharing of knowledge. Our guiding values are openness, equality and freedom.

The program areas that Metamorphosis operates in are:

- Media for Democracy
- Education for Innovation
- Social Accountability
- Human Rights Online

www.metamorphosis.org.mk

## Project partners:

- e-Governance Academy (Estonia) <u>www.ega.ee</u>
- CRTA Center for Research, Transparency and Accountability (Serbia) www.crta.rs
- NGO 35mm (Montenegro) <u>www.nvo35mm.org</u>
- Open Data Kosovo (ODK) (Kosovo) <u>www.opendatakosovo.org</u>
- Lèvizja Mjaft! (Albania) www.mjaft.org

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