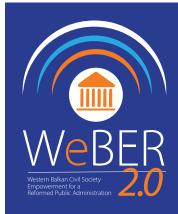
POLICY BRIEF



"DIGITAL REVOLUTION" – ASSESSING ALBANIA'S DECISION TO TRANSITION TO ONLY ONLINE SERVICE DELIVERY

JUNE 2023



Author: Alban Dafa

INTRODUCTION

Service delivery has been one of the flagship projects of the Albanian government's drive towards public administration reform. The modernisation of the service delivery infrastructure has been closely tied to the government's anti-corruption efforts, the establishment of a business-friendly environment, and ease of access to administrative services by citizens. In April 2022, Prime Minister Rama declared that Albania was at a closing stage of its "digital revolution", which has served to simultaneously fight corruption and provide services efficiently.¹

In May 2022 the Albanian government decided to close alternative channels for the delivery of administrative services, and provide access only through the e-Albania portal, the government gateway.² Shortly thereafter, the government network suffered an unprecedented cyberattack that briefly close online government services. This event highlighted the vulnerabilities of the government network and the risks associated with delivering administrative services only online.

Prompted by these developments, this policy brief examines the Albanian government's strategy to reform the delivery of administrative services. It first examines the government service delivery policy, it assesses the implementation of service delivery strategy, and evaluates the latest government decision to deliver almost all service online. It concludes with several recommendations to ensure that service delivery policy is evidence-based, effective, efficient, transparent, and accountable.

SERVICE DELIVERY POLICY

SIGMA (Support for Improvement in Governance and Management) defines service delivery "as any contact with the public administration during which customers – citizens, residents, or enterprises – seek or provide data, handle their affairs or fulfil their duties". A wide range of public services fit within this definition: from essential public services such as education, healthcare, justice, and security to administrative services such as permits, registrations, and information requests. Nevertheless, the most comprehensive service delivery reform efforts of the Albanian government have been rather focused on the delivery of administrative services.

The Long-Term Policy Document for the Delivery of Citizen Centric Services by Central Government Institutions in Albania (hereinafter LTPD) (2016-2025)⁴ – the Government's key strategic document on service delivery – focuses on the modernisation of administrative services. It favours a "citizen-centric approach" to service delivery, whereby the service delivery infrastructure is developed with having in mind ease of service for citizens and businesses. In addition to being a modernisation reform, service delivery reform through digitalisation is seen also as fundamental deterrent of corruption in the public administration.

POLICY BRIEFS

The implementation of the reform is based largely on ISDA, "Innovation against corruption: Building a Citizen Centric Service Delivery Model in Albania", a project funded by several international donors. The project intervention focuses on the following key pillars:

- 1. Re-engineering service delivery for citizens and businesses through legal, information and communication technology (ICT), and institutional reforms.
- 2. Front Office Back Office separation and service delivery integration, as well as the development of their delivery channels;
- 3. Digitization of archives and registers, interoperability among ICT systems and online services;
- 4. Obtaining citizen feedback and monitoring the performance of public administration in service delivery

The LTPD, however, seems somewhat contradictory. On the one hand, the Government of Albania seeks to restructure the country's service delivery by reforming the institutional infrastructure, establishing monitoring and evaluation frameworks, modernising service delivery through digitalisation, and providing multiple delivery channels; on the other, key government objectives include also the transition to 100% online services and the discontinuation of manual or paper-based processing of service requests.⁶

The LTPD does not specifically outline the decision-making process to determine the discontinuation of in-person services, but it foresees the use of various tools to measure the impact of the reform process. It includes the use of a citizen satisfaction index (CSI) based on four areas – (i) access to information, (ii) ease of access to services, (iii) quality of services, and (iv) deadlines of their delivery – and the United Nations Online Services Index (OSI).⁷

It is clear through international and national reports and surveys that Albania has progressed rather well in its digitalisation strategy and e-services reform. According to the UN's E-Government Survey 2022, Albania is one of the twelve upper middle-income countries that has achieved very high OSI level (above 0.75).8 The OSI, however, does not capture citizen satisfaction of public services. In 2020 the Agency for the Delivery of Integrated Services Albania (ADISA) in collaboration with the Institute for Development Research and Alternatives (IDRA) produced a comprehensive report on the access to and quality of service delivery.9 The report compared data from the baseline survey conducted in 2016, the midterm survey conducted in 2018, and the final survey conducted in 2020. Its findings show that **despite the improvements towards the access to public services, corruption had slightly increased**. In the final assessment, 9% of respondents who had contacted public institutions to request a service claimed that a bribe was either asked or implied. In the baseline and midterm surveys, the answer for the same question was 7%.10 Approximately 1/3 of those who maintained that a bribe was either implied or asked referred to their interactions with the State Cadastre Agency (SCA), while 13% referred to their interactions with the General Directorate for Road Transport Services.11 Corruption within the SCA was reiterated in the focus groups conducted to validate and explore the survey findings.12

Another important finding of the survey report is that despite an overall increase in the access to services and in citizen satisfaction, there are some differences in the access to and use of e-services (public and private) based on income, education, age, and location. While 74% of those who were richer had access to e-services, 43% of those who were poor had access to them. Similarly, 79% of those who had university education or higher had access to e-services, compared to 40% of those with elementary education or lower. A 31% difference was recorded also when comparing the access of those under 55 years-old (68%) to those over that age (37%). Meanwhile the difference on e-services access between those living in urban areas (67%) and those living in rural areas (52%) was 15%. ¹³

Accessibility issues for vulnerable groups have been emphasized also in the survey of CSOs conducted for the PAR Monitor Report for Albania (2021/2022)¹⁴ and by focus groups organised by our team to validate the survey data. Based on the data, 58.7% do not agree that the needs of vulnerable groups are considered in the provision of administrative services whilst 63% do not agree that the e-services are easily accessible by vulnerable groups. According to the findings from the focus groups organised in March 2023¹⁶, there should not have been a transition to 100% online services because the e-Albanian government portal does not always function well: it has glitches at times and in certain cases it asks repeatedly for the same basic information. This undermines the Once Only Principle, whereby the citizens or businesses submit relevant information to acquire administrative service only once, after which it is recorded in the system and the procedure does not need to be repeated¹⁷.

The 2021 SIGMA monitoring report on Albania has also emphasised two examples in which the Once Only Principle is not correctly implemented because the applicant is required to provide information that is already in a government registry or that have been previously issued as part of the same procedure. According to SIGMA, it is not sufficient only to harmonise special laws with the Code of Administrative Procedures – which outlines the general standards and actions to comply with administrative requests – and digitise administrative services as they are; it is also important to redesign the delivery of administrative services through a perspective that seeks to provide user-friendly and efficient services, and ensure that the technical design of the service, its delivery, and legal framework are well integrated.

While the Albanian government has made some important strides towards the digitalisation of administrative services and the expansion of ADISA's network of one-stop-shops²⁰, the use of quality management tools has been sporadic²¹. These issues and shortcomings suggest that the service delivery infrastructure was not mature enough for the Government of Albania to stop delivering administrative services through the integrated service delivery centres ran by ADISA, or other alternative in-person channels, before the May 2022 decision.

THE IMPORTANCE OF ALTERNATIVE SERVICE DELIVERY CHANNELS

Although the goal to deliver all administrative services online and close in-person services was part of the service delivery strategy, neither the LTPD nor the Cross-Cutting Digital Agenda 2015-2020²² do not outline the criteria and the necessary steps to fully transition to online services and close in-person service. While the LTPD merely states this goal without further elaboration, some of the key policy objectives of the Digital Agenda related to service delivery include increasing the use of e-services, establishing the needed ICT infrastructure to support their delivery, and fighting corruption through the provision of such services.

Ahead of the May 2022 decision to close in-person services, the Albanian government claimed that 95% of administrative services are delivered online, thus suggesting that the digital services infrastructure was ripe to deliver administrative services only online.²³ This percentage, however, does not include public administrative services not delivered by central government institutions.²⁴ Furthermore, the majority of online services delivered through e-Albania – approximately 63% - are either level 1 or 2 services, according to the list published on the Albanian government's Open Data Portal.²⁵ According to the UN's Web Services Index, level 1 entails basic functions such as the establishment of government websites and accessing basic government documents, whereas level 2 entails the provision of more information and downloadable databases, as well as some sort of a help feature; however, communication is primarily unidirectional.²⁶

In addition to the low level of development for most e-services, it is important to consider broadband penetration and standard of living because they affect significantly access and use of digital government services. Their access becomes particularly important if there are no alternative channels.

In 2019, almost 90% of fixed broadband connections were in the urban areas whilst only 10% in rural areas.²⁷ According to the National Plan for Sustainable Development of Digital Infrastructure, Broadband 2020-2025, there is a clear "lack of infrastructure and lack of institutional capacities, but also affordability, for both fixed and mobile broadband access, especially in rural and low-income areas".²⁸ Although the broadband penetration increased between 2019 and 2021, the urban-rural divide still remains. According to the Authority for Electronic and Postal Communications (AEPC) the average fixed broadband penetration in urban areas was 30% whilst for rural areas was 8% in 2021.²⁹

Standard of living data are concerning as well. At risk of poverty rate in 2021 was 22%. At risk of poverty rate before social transfers was 39%, whilst at risk of poverty rate after social transfers was 25.2% for the same year.³⁰ The most vulnerable citizens are the most in need of government services to get out of poverty. If access to services is impeded due to a lack of tools on their part to access services online, as well as the lack of alternative service delivery channels, the probability that they will continue to live in poverty or at risk of poverty will be greater. These data dovetail with the income divide in the ADISA/IDRA survey findings discussed in the previous section of this policy brief, and with anecdotal evidence confirming the difficulties faced by the poor and the elderly³¹.

CYBERSECURITY AND DATA PROTECTION

During 2021 and 2022 Albania suffered several major personal data leaks³² and a cyberattack against the government infrastructure³³, thus highlighting the inadequacy of the country's measures to ensure the protection of personal data and of its cyber infrastructure, and the risks and vulnerabilities associated with establishing an online platform to deliver public services.

Before the April 2021 parliamentary elections, a database with entries that included the identity, phone numbers, political party preference, and employment data on 910,000 Albanian citizens was leaked to the public.³⁴ The database belonged to the Socialist Party of Albania³⁵, who maintained that it had collected some of the basic data – such as first and last name, national identity number – through the voters' list provided through the Central Election Commission³⁶ during the country's local and parliamentary elections. The rest of the personal data, the SP claimed, was collected door-to-door by their activists. Nevertheless, there were allegations that that the data had been collected through the databases administered by the National Agency for Information Society (AKSHI), and particularly the

database with the basic information³⁷ registered on the e-Albanian portal by AKSHI to allow the user interface needed to access online services through the portal. AKSHI denied those allegations, and maintained that it had no access to third party data and did not administer personal data; it merely administered the government network and the databases.³⁸

The Information and Data Protection (IDP) Commissioner conducted administrative investigations focused on the data protection measures of the SP and AKSHI. In both cases, the IDP Commissioner provided general recommendations on training and familiarisation of staff with the data protection legislation and revise internal security protocols, but issued no administrative sanctions. Based on the findings and the recommendations published, the Commissioner accepted the SP's claim that the phone numbers, political party preference, and employment status were collected door-to-door without further investigating whether they were collected legally. Had the SP indeed collected the data legally, it should have supported the claim with the relevant documentation demonstrating that the citizens had given consent to share their personal data. Similarly, based on the published findings and recommendations of the Commissioner – the investigation on AKSHI did not examine whether the Agency had conducted the relevant audits to ensure the integrity of the databases under its administration, and whether the criteria set in place for the registration of government databases – which is one of its primary functions – are adequate for the protection of personal data.

Based on the current regulatory framework governing the work of the Agency, AKSHI is responsible for ensuring a high level of cybersecurity in collaboration with the CSIRT (Computer Security Incident Reporting Team)³⁹; reorganising and managing the ICT structures in institutions of the central administration subordinate to the Council of Ministers⁴⁰; developing, administering, and maintaining state databases⁴¹; and regulating and coordinating the registration of state databases⁴². The Agency does not passively host and administer state databases, but establishes – amongst others – the necessary criteria for the architecture of the database, data classifications, security measures, and levels of access.⁴³ Furthermore, it may audit state databases in accordance with their security level classification.⁴⁴

It was thus peculiar that after the July 2022, AKSHI argued that it had no responsibility for preventing the attack – which resulted in data exfiltration, ransomware, and a wiper attack – because the intrusion into the government network had been done through a system (administrata.al) procured through EU funds, without its involvement. AKSHI also maintained that it merely hosted its servers, and therefore was not responsible to ensure that appropriate cybersecurity measures were in place to prevent the attack.⁴⁵

Microsoft's Detection and Response Team⁴⁶ (DRT) and the Federal Bureau of Investigation's Cyber Action Team⁴⁷ were primarily involved in responding to the attack and restoring the functionality of the government systems – including the e-Albania portal. There is no evidence to suggest that the National Authority for the Electronic Certification and Cybersecurity (AKCESK) – whose main cybersecurity tasks include setting the measures for cybersecurity, administering incident reports, conducting analysis of system weaknesses, and acting as the national CSIRT⁴⁸ - was involved⁴⁹ as part of the incident response team or in any other form during the technical investigation of the attack. According to AKCESK's 2021 annual report⁵⁰, AKCESK had audited AKSHI during that year; however, it does not provide further information regarding the time of the audit, its objectives, key findings, or recommendations.

The legal basis for the involvement of Microsoft – and even more so of the FBI's Cyber Action Team – are rather unclear. The Government of Albania had renewed its Strategic Partnership Agreement (SPA) with Microsoft in February 2021. The terms of the Agreement are rather general and not clearly obligatory for the service provider. They generally refer to advisory functions that Microsoft may perform to help the Government of Albania modernise its digital infrastructure. With regards to cybersecurity, the Agreement maintains that "Microsoft supports governments that take measures to protect their information and critical ICT systems", but does not outline whether and how it will assist the Albanian government in this endeavor. On the other hand, there is no evidence to suggest that the Government of Albania and the FBI have an agreement on cybersecurity assistance or intervention in case of an incident.

These incidents indicate that the regulatory and institutional structure to ensure personal data protection and the security of government networks have not kept pace with the digitalisation of administrative services. While institutional cybersecurity capacities are not sufficient, the regulatory provisions in place to ensure the protection of personal data protection – particularly on inspections and administrative sanctions – have not been fully enforced.

SERVICE DELIVERY FOR THE DIGITAL AGE

The Government of Albania needs to rethink how it approaches the development of a service delivery infrastructure fit for the digital age. It should consider not only the benefits of digital services – such as increased efficiency, citizen satisfaction, and corruption prevention – but also its risks. If the decision-making process to shift all administrative services online were governed by this approach, the risk of infiltration and service disruption could have been better mitigated. Albania can learn extensively from other countries such as Norway, Denmark, Malta, Finland, and particularly Estonia. 54 Estonia hosts NATO's Cooperative Cyber Defence Centre of Excellence, and has developed a highly effective and sophisticated digital services system 55.

Estonia seized the opportunities offered by information technology, and exploited them to build a tech-savvy society that leverages information technology to increase the efficiency of both the public and private sectors. The country's milestones are truly impressive: e-banking services started in 1996 whilst e-government meetings and e-tax filings in 2000. But Estonian policymakers understood that a successful and technologically advanced society cannot be built without establishing the necessary governance, policy, legal, and technical infrastructure. In their efforts, they have prioritised cybersecurity – both in terms of building the necessary defences of their network infrastructure and data protection. Consequently, despite having a complex cyber infrastructure, Estonia has not suffered cyberattacks of the same gravity and proportions as those suffered by Albania recently. Although there have been data breaches and cyberattacks, they pale in comparison to the data exfiltration, ransomware, and wiper attack on Albania in July 2022 or the personal data breach that was revealed in April 2021.

Estonia's approach to government services has been the opposite of Albania's. Despite the provision of 99% of services online, some of them can still be accessed through more traditional channels. For example, vehicle registration can be accessed both online and in-person.⁵⁹ Similarly, internet voting (i-voting) is an additional channel to the more traditional in-person voting.⁶⁰ The digital divide, a key issue affecting access to government e-services in Albania, was recognised early in Estonia and was mitigated by partnering with businesses and civil society organisations to deliver digital literacy courses to those in need.⁶¹

RECOMMENDATIONS

The Albanian government should build on its achievements to further expand its provision of digital government services. Before expanding the provision of digital services, however, the government should reflect on both its achievements and shortcomings. This reflection should be guided by the principles of transparency, accountability, inclusiveness, and quality in service delivery. To this end, the Government of Albania may wish to consider the following recommendations:

- 1. To ensure **equitable and efficient delivery of government services**, the Albanian government should reconsider its decision to close in-person services. Reopening alternative in-person services would allow access for the most vulnerable groups of Albanian society.
- 2. The Albanian government should appreciate the gravity of current state of play regarding the protection of personal data protection and cybersecurity. To this end, it should conduct a thorough review to determine the required institutional, policy, legal, and technical needs to ensure that data is being diligently protected and network infrastructure is secure.
- 3. The IDP Commissioner and AKCESK should both take a more proactive approach to enforcing their legal mandates. The former has a robust legal mandate to ensure that data is not misused and is well protected. The latter has a sufficiently strong mandate to set cybersecurity standards and conduct audits to ensure that they are effectively enforced. Their mandates are not being used to the fullest extent possible.
- 4. AKSHI should conduct an internal evaluation to determine the issues with its internal accountability and control procedures (including with regards to private contractors), and revise them to ensure that data breaches and cyberattacks are mitigated and do not disrupt government services.
- 5. The Albanian government should **build domestic cybersecurity capacities and capabilities**. Relying on foreign state and non-state actors for the protection of the nation's cyber infrastructure is costly, not sustainable, and thus undesirable. To this end, it should either prepare a separate strategy or review the current National Cybersecurity Strategy 2020-2025⁶², since it does not deal with education, research and innovation, or with technical capacities.

REFERENCES

- "'S'e kemi arritur kohën kur martesat të bëhen me aplikim në e-Albania', Rama: Revolucioni digjital godet korrupsionin në shërbim", Balkan-Web, 27 April 2022.
- 2. Decision of Council of Ministers no. 252, date 29.4.2022 "On the procedures for the delivery of services online by service delivery institutions and on the methodology for monitoring and oversight of the administrative actions for their delivery".
- 3. SIGMA, "Service Delivery", accessed on 20 May 2023.
- 4. Long-Term Policy Document.
- 5. Key donors included the United Nations Development Programme, World Bank, Government of Italy, and the Government of Austria. See United Nations Development Programme, "Project Document: 'Support Innovation against corruption: Building a Citizen Centric Service Delivery Model in Albania'"; Austrian Development Agency, "ISDA Support Project Innovation against Corruption: Building a Citizen Centric Service Delivery Model in Albania'".
- 6. Long-Term Policy Document, p. 6, 17.
- 7. Long-Term Policy Document, p. 6-7.
- 8. Department of Economic and Social Affairs of the United Nations, E-Government Survey 2022: The Future of Government (United Nations: New York, 2022), p. 13.
- 9. ADISA and IDRA, Citizen-centric Service Delivery Model for Albania (Tirana: ADISA, 2020).
- 10. ADISA and IDRA, Citizen-centric Service Delivery Model for Albania, p. 10.
- 11. Ibia
- 12. ADISA and IDRA, Citizen-centric Service Delivery Model for Albania, p. 13.
- 13. ADISA and IDRA, Citizen-centric Service Delivery Model for Albania, p. 39.
- 14. The survey was conducted during March-June 2022 by IPSOS. See Alban Dafa and Ina Shënplaku, National PAR Monitor Report: Albania (2021/2022) (Tirana: Institute for Democracy and Mediation, 2023). (forthcoming)
- 15. Alban Dafa and Ina Shënplaku, National PAR Monitor Report: Albania (2021/2022)
- 16. Two focus group discussions were held in Tirana, on 09 March 2023, with CSOs operating locally and nationally, whose work focuses on the rule of law and protection of human rights, children's rights, advocacy on good governance and education reform, and youth engagement.
- 17. Directorate-General for Informatics, "The Once Only Principle System: A breakthrough for the EU's Digital Single Market", 05 November 2020. See also Timo Ligi, and Andrej Kmecl, "Implementation of laws on general administrative procedure in the Western Balkans", SIGMA Papers, No. 62 (OECD Publishing: Paris, 2021).
- 18. The report mentions the application procedure for social assistance and for building permits. OECD, Monitoring Report: Albania November 2021 (Paris: OECD Publishing, 2021), p. 123.
- 19. OECD, Monitoring Report: Albania November 2021, p. 123.
- 20. By the end of 2021, ADISA had a network of 22 integrated service delivery offices in 21 municipalities that served as one-stop-shops for citizens wishing to access administrative services. See OECD, Monitoring Report: Albania November 2021, p. 128.
- 21. OECD, Monitoring Report: Albania November 2021, p. 125-126.
- 22. Digital Agenda 2015-2020.
- 23. Media and Information Society, "Ekonomi: Nga 1 maji mbyllen sportelet dhe shërbimet publike kalojnë online", accessed on 09 June 2023.
- 24. A negligible number of services delivered through e-Albania portal are not central government services. They include, for example, filing local taxes with the Municipality of Durrës or Tirana, or filing a freedom of information request.
- 25. A comprehensive list of e-services can be accessed on the Open Data Portal: https://opendata.gov.al/e-albania-sherbime#. Although this is an official government database, there could be a slight possibility that it has not been updated, since the number of services at level 3 and 4 published in the SIGMA report on Albania based on the data provided by the Albanian institutions indicate a significantly larger number. See OECD, Monitoring Report: Albania November 2021, p. 116.
- 26. United Nations, "Web measure", accessed on 04 June 2023. See also the service level classifications on the e-Albania portal: https://e-albania.al/Pages/ServiceLevels.aspx.
- 27. National Plan for Sustainable Development of Digital Infrastructure, Broadband 2020-2025, p. 16,
- 28. National Plan for Sustainable Development of Digital Infrastructure, Broadband 2020-2025, p. 16.
- 29. Authority for Electronic and Postal Communications, Raport Vjetor 2021, p. 46.
- 30. INSTAT, "Matja e të ardhurave dhe nivelit të jetesës në Shqipëri", 30 December 2022.
- 31. See for example "E-Albania/95% e shërbimeve kaluan online, por qytetarët hasin problem" (E-Albania/95% of the services moved online, but citizens face difficulties), Faktoje.al, 25 May 2022; Entenela Ndrevataj, "E-Albania në kancelari, mbyllja e sporteleve rrit kostot dhe cenon sigurinë e grupeve në nevojë" (E-Albania through local internet cafés, the closure of service delivery offices increases costs and undermines the [data] security of vulnerable groups), Citizens Channel, 02 June 2023.

- 32. In addition, a database with the names and salaries of 600,000 citizens and another with the names, license plates, and other vehicle-related information of 530,000 citizens were leaked during the same year. Vitjon Nina, "Nuk mbaron rrjedhja e të dhënave në Shqipëri, dalin ato të targave", 24 December 2021; Sadik Bejko, "Shteti, elitat dhe 'rrjedhja e të dhënave'", 27 December 2021.
- 33. Cyber Law Toolkit, "Homeland Justice operations against Albania (2022)", accessed on 01 June 2023.
- 34. "Ekskluzive/Si na monitoron Rilindja nr e telefonit, nr ID, vendet e punës, të dhënat konfidenciale për 910 mijë votues të Tiranës", Lapsi.al, 11 April 2021; Dorian Kodra, "Zbërthehet burimi i Lapsi.al/Si e përdorin Drejtuesit Politikë të PS programin me të dhënat për 3.5 milion shqiptarë", Lapsi.al, 18 April 2021.
- 35. "Edi Rama, Premier ministre albanais: 'La corruption laisse la place à l'État de droit en Albanie,"
- 36. [Edi Rama, Albanian prime minister: 'Corruption is replaced by the rule of law in Albania'"], France 24, 18 June 2021.
- 37. IDP Commissioner's decision after the administrative investigation of the Socialist Party of Albania, https://www.idp.al/wp-content/up-loads/2021/08/rekomandimi_nr_44_pssh_2021_dmdp.pdf.
- 38. See https://e-albania.al/Register/Individual/Details.aspx?. Such information includes first and last name, national ID number, phone number, and email amongst others.
- 39. IDP Commissioner's decision after the administrative investigation of the National Agency for Information Society, https://www.idp.al/wp-content/uploads/2021/08/rekomandimi_nr_43_akshi_2021_dmdp-1.pdf.
- 40. Paragraph 5.ç) of the Decision of Council of Ministers no. 673, date 22.11.2017.
- 41. Paragraph 5.dh) of the Decision of Council of Ministers no. 673, date 22.11.2017.
- 42. Paragraph 6.k) of the Decision of Council of Ministers no. 673, date 22.11.2017.
- 43. Paragraph 6.l) of the Decision of Council of Ministers no. 673, date 22.11.2017.
- 44. See Articles 11-13 of the Regulation on the Administration of State Databases.
- 45. Articles 23-26 of the Regulation on the Administration of State Databases.
- 46. See IDP Commissioner's decision after the administrative investigation of the National Agency for Information Society.
- 47. Microsoft Threat Intelligence, "Microsoft investigates Iranian attacks against the Albanian government", 08 September 2022.
- 48. AKSHI, "Raporti i plotë i sulmit kibernetik të 15 korrikut 2022".
- 49. Law no. 2/2017 "On cybersecurity".
- 50. In its 2020 annual report, AKCESK has stated that it has prepared a detailed report on the incident, but this is the only information provided. The incident report is not published. The 2022 annual report is available at: https://cesk.gov.al/wp-content/uploads/2020/07/Raporti-vjetor-2022.pdf.
- 51. ALCESK 2021 Annual Report: https://cesk.gov.al/wp-content/uploads/2020/07/Raport-vjetor-2021-AKCESK.pdf.
- 52. https://gbz.gov.al/eli/vendim/2021/02/03/55.
- 53. For example, in the case of cloud computing infrastructure, the SPA states that Microsoft may appoint a cloud computing architect as an advisor to the Albanian government. Similarly, it also states that "Microsoft may deliver a workshop on the potential objectives and the planning of government business through Microsoft's digital solutions". https://qbz.gov.al/eli/vendim/2021/02/03/55.
- 54. Ibid.
- 55. European Commission, "e-Government Benchmark 2022", accessed on 05 June 2023.
- 56. See European Commission, "Estonia in the Digital Economy and Society Index", accessed on 05 June 2023.
- 57. e-Governance Academy Foundation, "e-Estonia: e-Governance in Practice", accessed on 30 May 2023.
- 58. In 2021, a hacker was able to obtain the identification document photos of almost 286,438 people from a state database by exploited a vulnerability in its identification and authentication system that allowed the attacker to use the personal identification codes and names of Estonian citizens to make requests to the state photo service and download the photo documents of those citizens. ERR News, "Hacker downloads close to 300,000 personal ID photos", 29 July 2021.
- 59. See for example, Information System Authority, "Cyber Security in Estonia 2021".
- 60. Anett Numa, "Discovering the most widely used e-services", 08 January 2020.
- 61. David Mac Dougall, "Estonia election: i-voting comes of age in the world's 'digital republic' with record ballots", 08 March 2023.
- 62. e-Governance Academy Foundation, "e-Estonia: e-Governance in Practice", p. 10.
- 63. National Cybersecurity Strategy 2020-2025.

This document has been produced with the financial support of the European Union. Its contents are the sole responsibility of its author and do not necessarily reflect the views of the European Union.

For more information, please visit: www.par-monitor.org















