



CORLEAP/011/2023

12th CORLEAP Annual Meeting
7 September 2023, Batumi (Georgia)

CORLEAP REPORT

E-services for citizens at the local level: what good came out from COVID-19 pandemic?

Rapporteur: **Zurab ABASHIDZE (Georgia)**

With contributions from
Nino ZURABISHVILI, Expert (GIE, Congress of Local and Regional Authorities of the CoE; National Association
of Local Authorities of Georgia (NALAG))

1. Introduction

The Eastern Partnership (EaP) is a collaborative policy initiative to strengthen relations between the European Union (EU) and its six Eastern neighboring countries: Armenia, Azerbaijan, Belarus, Georgia, the Republic of Moldova, and Ukraine. Guided by the EU's Global Strategy and the revised European Neighborhood Policy, the EU strives to prioritize the enhancement of stability and resilience in its relations with neighboring countries in the East, at the same time preparing the grounds for smoother accession to EU for EaP countries with EU aspirations. Operating within this overarching framework, a collective dedication exists to achieve concrete and meaningful outcomes that benefit the citizens residing throughout the region.

The lives of individuals are being impacted by the influence of digital technology. The digital strategy of the European Union (EU) aims to utilize this transformative power for the benefit of both people and businesses while also contributing to the EU's goal of achieving a climate-neutral Europe by 2050. The European Commission is committed to reinforcing the EU's digital sovereignty control over digital affairs, establishing common standards, and developing guidelines, focusing specifically on data, technology, and infrastructure. This commitment is evident in the European Commission Priority #2, "A Europe fit for the digital age," which underscores the significance of the digital transformation and the opportunities it brings, thereby making the start of Europe's "Digital Decade."¹

Digitalization holds immense significance in today's world, impacting various aspects of society, economy, and governance, such as:

- ***Economic growth and innovation:*** digitalization fuels economic growth by driving innovation and productivity. It enables businesses to streamline operations, automate processes, and reach new markets. It fosters entrepreneurship and creates opportunities for startups and small businesses to thrive in the digital economy;
- ***Enhances connectivity and communication:*** digitalization has revolutionized communication by enabling real-time connectivity across the globe. It has transformed how individuals and businesses interact, enabling instant communication, collaboration, and knowledge sharing. This connectivity bridges geographical barriers and promotes cultural exchange;
- ***Access to information and education:*** digitalization provides access to a vast pool of information and education resources, leveling knowledge dissemination. It enables individuals to acquire new skills, get online education, and stay updated with current affairs. This access to information fosters lifelong learning and empowers individuals to make informed decisions;
- ***Improved public services:*** digitalization is pivotal in transforming public services, making them more efficient, accessible, and citizen-centric. E-government initiatives simplify administrative processes, allowing citizens to access services online, reducing bureaucracy, and enhancing transparency. It improves the delivery of healthcare, education, and other essential public services;
- ***Empowerment and inclusion:*** digitalization can empower individuals and communities, bridging the digital divide and promoting inclusivity. It provides opportunities for marginalized groups, supports digital literacy, and enhances access to financial services, healthcare, and government benefits. Digitalization can contribute to reducing inequalities and empowering disadvantaged communities.

¹ Political Guidelines for the Commission 2019-2024, p.13-14

- ***Sustainability and environmental impact:*** digitalization can contribute to environmental sustainability by enabling smart energy management, optimizing resource usage, and reducing carbon footprints. It promotes remote working and virtual meetings, reducing the need for travel and consequent greenhouse gas emissions. It also facilitates the transition to renewable energy sources.

In summary, digitalization is vital for economic growth, improved connectivity, access to information, efficient public services, empowerment, and sustainability. Embracing digital technologies and promoting digital inclusion is essential for societies and economies to thrive in the modern era. Aligned with EU norms and practices, the European Union actively backs the digital reform agenda in Eastern Partnership (EaP) countries through a comprehensive range of initiatives, projects, and measures. For example, the EU4Digital initiative² launched in EaP countries since 2019, focuses on promoting essential domains of the digital economy and society, providing support and assistance to ensure harmonization with the EU standards, to communicate EU support across the digital agenda in the region.

The Committee of Regions (CoR) has firmly believed in the profound influence that the accessibility and utilization of technology can exert on cohesion within the European Union (EU). Digital technologies directly influence the quality of services, improving accessibility, open democracy, and inclusion, increasing transparency, ensure data compatibility and cohesion. *“For the CoR, the notion that the availability and use of technology can strongly impact cohesion in the EU is not new. Before the COVID-19 Pandemic, the Committee had highlighted digital cohesion as a key anchor in creating inclusive societies in the EU: “Digital cohesion” is an important additional dimension of the traditional concept of economic, social, and territorial cohesion defined in the EU Treaty.”*³ (2021 EU Regional and Local Barometer)

The present report aims to assess the progress and analyze the challenges of digitalization of services at the local and regional levels in four EaP countries (Armenia, Azerbaijan, Georgia, Moldova) and provide comparative examples of two EU member states (Estonia, Poland) and one candidate state (Montenegro) for better orienteering through the process. The report highlights the impact of Covid -19 on accelerating the pace of digital transformation. It seeks to provide a comprehensive understanding of the benefits, opportunities, and risks associated with digitalization, improving service delivery and enhancing overall societal outcomes. Additionally, the report aims to contribute to identifying and sharing best practices and developing recommendations that can support local self-government representatives in effectively navigating and maximizing the potential of digitalization. Ultimately, the goal is to contribute to informed decision-making, policy formulation, and advancement of digitalization efforts in the context of service provision at the local level.

2. Analysis of the positive changes in the provision of e-services in Europe

Digital transformation of services is a complex process led by the central governments. It requires the development of digital infrastructure, improving internet coverage, and cyber security. Of utmost importance is developing a shared vision, a strategy encompassing various sectors, and action plans, adapting legislation, and setting unified regulations on data collection/protection and e-service provision, as well as creating respective databases and authorized access to these databases. It is worth noting that the

² <https://eufordigital.eu/discover-eu/eastern-partnership/>

³ <https://cor.europa.eu/en/our-work/Documents/barometer-fullreport%20web.pdf>
EU Annual Regional and Local Barometer (2021), p. 63

digitalization of central and municipal services started before the Pandemic. However, COVID-19 accelerated the pace of digital transformation worldwide, including the EaP countries.

The urgency for digital transformation has intensified, particularly in response to the COVID-19 pandemic. Technology has emerged as a critical asset, aiding us in adapting to the unprecedented challenges that have impacted every aspect of society during this global health crisis. The significance of digitizing municipal services was further underscored during the lockdowns imposed in response to the Pandemic. With restrictions on movement and face-to-face interactions, the local population heavily relied on local authorities and municipal staff as primary facilitators of support, local services, and assistance. Being the closest to citizens, local authorities played a pivotal role in providing essential services and aiding community members in enrolling for centralized government services.

The significant role played by digital technology in addressing and strengthening resilience against the COVID-19 pandemic has brought to the forefront the existing deficiencies in digital infrastructure and literacy. Moreover, it has further accentuated the already pronounced disparity in access and utilization of internet-based digital services, commonly referred to as the "digital divide." This divide is characterized by variations in geographical location, gender, age, and skill level, and the vulnerability of different social groups, all of which contribute to discrepancies in accessing and effectively utilizing information and communication technologies.⁴

The assessment of the impact of the COVID-19 Pandemic on the digitalization of municipal services in EaP countries will be incomplete without the careful analysis and comparison of the scope of powers and responsibilities granted to local authorities and the level of decentralization in respective countries, as well as research and analysis on the provision of e-services at the national, regional and local levels, identifying the share of local authorities in the provision of digital services for citizens. In this regard, this report greatly relies on the study prepared by *the Center for Social and Economic Research (CASE)* in the framework of a project on "***E-services for citizens at local and regional level in EaP countries***", commissioned by the European Committee of the Regions (CoR). The study's objective was to present fundamental data, contextual information, and an initial analysis of the electronic administrative and information services offered by the local and regional authorities in Eastern Partnership (EaP) countries compared with similar services provided in selected EU Member States and Western Balkan countries. In accordance with the agreement with the CoR, the study encompasses Armenia, Azerbaijan, Georgia, and the Republic of Moldova from the EaP states, and Poland and Estonia from the EU, along with Montenegro as a state granted the EU candidate status in 2010. Due to the ongoing war resulting from the brutal Russian invasion of Ukraine and the country being in a state of war during the study period, only specific and noteworthy examples from Ukraine were included in the report. The study covers the years 2019–2022, turning attention to the temporal dimension of the provision of services, identifying where a particular kind of e-service was introduced or significantly expanded or improved following the outbreak of the COVID-19 pandemic.⁵, leading to the improvement of e-governance in the region. While mapping the use of different types of e-services, this study focuses on the G2C type of government provision of e-services to citizens.

⁴ EU Annual Regional and Local Barometer (2021), p.63

⁵ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.2

The CASE study overviews the UN's "E-Government Survey 2022: The Future of Digital Government", based on which Europe continues to lead in developing e-government. Europe offers the highest average number of E-services among the five regions (Asia, the Americas, Oceania, and Africa). More than two-thirds of European countries provide at least 19 services online, with half offering all 22 services and a third offering 14-18 services. Across all European countries, two e-services are universally available: applying for a birth certificate and filing company/business tax returns online. However, there are variations in the availability of certain e-services, with applying for a visa and registering a motor vehicle being the least offered.⁶

The number of e-services targeting individuals in vulnerable situations, such as those living in poverty, persons with disabilities, older people, immigrants, women, and youth, has increased in Europe since 2020. However, immigrants and individuals living in poverty seem to have access to relatively fewer e-government services compared to other vulnerable populations.⁷

Since 2020, European governments have been addressing the challenges posed by the COVID-19 pandemic. Online information and platforms for distance learning, telehealth services, COVID-19 vaccines, and medical tests are provided by 98% of European countries. These services are also available at the regional level in 90% of European countries. Governments in Europe have prioritized health, education, and social protection as the critical areas for e-service provision, with the most significant increase observed in the number of e-services in the social protection category.⁸

The E-Government Benchmark 2022 reveals that in Europe, 84% of services provided by central government organizations are available online, while only 71% of regional and 60% of local services can be accessed digitally. Studies suggest that the highest adaptation of public e-services at the local level in Europe is observed in medium to large cities, characterized by well-educated human capital and a vibrant industrial environment that facilitates a diverse range of production and service activities.⁹

3. Analysis of the Provision of e-services in EaP Countries

3.1. General overview

Each of the four EaP countries analyzed, namely Armenia, Azerbaijan, Georgia, and Moldova, has implemented electronic platforms that facilitate access to existing government services for their citizens. However, variations exist among these countries regarding the extent to which e-services are provided and their level of advancement.¹⁰

According to the aforementioned study, when evaluating e-services at the regional and local level in EaP countries, there are five essential points to consider:

⁶ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.6

⁷ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.6

⁸ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.6

⁹ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.6

¹⁰ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.7

- (a) **Common challenges:** all countries face the challenge of transforming existing e-services into impactful digital solutions. The accessibility, user-friendly design, promotion, and adherence to governmental guidelines all play a crucial role in the successful implementation of e-services. In Armenia, Azerbaijan, and Moldova, the predominant device for internet access among citizens is mobile phones, so there is a need for an adequate user-friendly mobile application for accessing basic public services online. In this regard, the study highlights the successful example of Ukraine, with 52% of the population using either the Diia mobile application or its website. The number of users of the e-services provider Diia increased to 52% in 2022. This can be attributed to the user-friendly design of the applications, as 79% of Diia e-service users consider their experience with Diia to be entirely or very positive.¹¹
- (b) **Surveys and statistics:** the limited availability of statistics and surveys pertaining to the provision and utilization of e-services makes it challenging to evaluate the design and quality of the services provided. The study showed a significant disparity in statistical results among countries, underlining the necessity of each country to be considered separately (for instance, the survey revealed that in Armenia, only 5% of citizens and businesses utilize government-provided e-services, in comparison to 63% of users in Ukraine)¹²
- (c) **Internet access, digital literacy, and unequal access to e-services** remain key challenges in almost all EaP member states. Despite high internet penetration rates, reaching around 76% of the population in EaP countries, a "digital divide" persists based on socioeconomic factors, rural-urban disparities, and age groups. Rural areas experience a significant gap of up to 15-20% in internet access compared to urban areas, worsening the availability of e-services. Lower digital literacy levels in rural regions further hinder access. Older individuals and vulnerable groups also face accessibility barriers due to low e-literacy, with only about half of those over 65 using e-services in some EaP countries. Furthermore, lower-income individuals display lower adoption rates of e-services, despite generally affordable internet access.¹³
- (d) **Impact of the COVID-19 Pandemic:** the COVID-19 pandemic has triggered the implementation and expansion of e-services in some EaP states, serving as a crucial solution for delivering public services during lockdowns. The usage of e-services has also witnessed a significant rise. However, the intensity of this trend varies among the EaP countries examined in the study. According to the study, states that had already been promoting digital solutions for public service delivery before the Pandemic experienced a significant increase in e-service usage, with the number of available e-services and users nearly doubling. In **Georgia**, for instance, certain e-services that were previously limited to citizens living abroad, such as passport or ID issuance, became accessible to the general population. In **Ukraine**, promoting e-services through social networks, radio, and TV resulted in a significant increase in users, as 76% of users of e-services indicated these communication channels as a leading source for receiving information. **Moldova** witnessed minimal changes in e-service development during and after the COVID-19 pandemic, apart from a few newly introduced services like vaccine registration. However, since 2022, the Moldovan government has shifted its focus and increased efforts toward developing e-services. During lockdowns, **Azerbaijan** observed a considerable increase in demand for electronic services, prompting the government to enhance public awareness and improve accessibility to e-

¹¹ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.7

¹² E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.7-8

¹³ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.8

services. Conversely, **Armenia** experienced limited progress in the development of e-services during the Pandemic.¹⁴

- (e) **Data privacy and personal information protection** pose significant challenges for EaP states advancing in e-service provisions, like **Georgia** and **Ukraine**. It is evident that cybersecurity is crucial in the development of e-services. For example, cyberattacks on the Diia e-services app in Ukraine have persisted since the Russian invasion in February 2022. Safeguarding the passport registry from potential deletion by hostile actors, such as Russia, has been crucial to preventing irreparable consequences. The Diia app minimizes risks by not storing data but retrieving information from secure public registers.¹⁵

3.2. EaP member states specific overview

Armenia

The provision of e-services is mostly centralized.¹⁶ The vast majority of e-services are provided at the national level in Armenian and English languages. As specified in the study, Datareportal (2022) reports the internet penetration rate in Armenia at 66.5% (1.9 m users). A survey found that only 5% of citizens and businesses use e-services provided by the government.¹⁷ The development of e-services hardly advanced at all during the Pandemic.¹⁸ According to the table of government e-services by kind and sub-kind provided in the EaP countries, 14 administrative and 20 information e-services are available in Armenia at the national level.¹⁹

Azerbaijan

According to the study, the provision of e-services is de-centralized.²⁰ Along with the national-level services, local-level e-services are provided by the capital city and other municipalities. As specified in the study, the internet penetration rate in Azerbaijan – 81% (8.3 m users). During the lockdown, Azerbaijan experienced a significant wave in demand for electronic services. In response, the government intensified efforts to raise public awareness about using e-services and took measures to enhance the accessibility and development of these services.²¹ According to the table of government e-services by kind and sub-kind provided in the EaP countries, 21 administrative and 9 information e-services are available in Azerbaijan at the national and local levels.²²

Georgia

According to the study, the provision of e-services is de-centralized.²³ Along with the national-level services, local-level e-services are provided by the capital city and other self-governing units. However, The Decentralisation Strategy 2020-2025 envisages identifying and delegating additional responsibilities to local self-government and the gradual digitalization of these services. The Public Administration Reform Action Plan also supports the digitalization of municipal services. COVID-19 Pandemic pushed the need

¹⁴ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.9

¹⁵ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.9-10

¹⁶ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.16

¹⁷ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.8

¹⁸ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.9

¹⁹ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.16-17

²⁰ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.16

²¹ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.9

²² E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.16-17

²³ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.16

for decentralization and digitalization forward in the agenda. As specified in the study, the internet penetration rate in Georgia is 72,5% (2.88 m users). According to World Bank, the level of digital skills in the population (44% in 2019) is relatively low but has not prevented the development of e-services. Municipal Service Development Agency (non-commercial legal entity) operates to develop and implement e-service modules and a unified geospatial portal. The Agency provides technical support to Georgian local self-government units in digitalizing municipal services. There are 17 e-modules developed and operational for municipalities with the capacity (proper infrastructure, internet coverage, technical equipment, qualified staff, etc.) for the digital provision of services. According to the Agency, the interest of municipalities in implementing e-services has drastically increased after the Pandemic. Still, the challenges linked to the insufficient internet infrastructure, lack of technical equipment in municipalities, lack of staff experience, and low e-literacy of the local population affect the pace of innovative transformations in service provision. The urban-rural disparities in this regard are apparent when comparing the implementation of e-services in self-governing cities and rural municipalities with many remoted and high-land settlements. According to the table of government e-services by kind and sub-kind provided in the EaP countries, 27 administrative and 9 information e-services are available in Georgia at the national and local levels, but their usage greatly depends on the digital skills of the residents and internet coverage, and e-services differ by municipality²⁴

An example of changes in municipal service provision in Georgia caused by the COVID-19 Pandemic: Most municipalities shifted to electronic registration of beneficiaries for various municipal social programs (financial aid, social services for vulnerable groups, free meals, and house care for the elderly). Municipal Councils made corresponding changes to the municipal acts and regulations, allowing the beneficiaries to submit required documentation electronically. This practice remains in place after the Pandemic.

Republic of Moldova

According to the study, the provision of e-services is centralized.²⁵ As specified in the study, Datareportal (2022) reports the internet penetration rate in Moldova at 76.1% (3 m users), while World Bank rates the level of digital skills of the local population at 57%.²⁶ Despite sufficient internet coverage and the existence of Public Service Agencies and relevant electronic platforms, the demand for e-service is not very high, as e-services are described as user-unfriendly and costly. Low awareness of citizens, as well as urban-rural disparities, remains a challenge.²⁷ According to the table of government e-services by kind and sub-kind provided in the EaP countries, 18 administrative and 1 information e-services are available in Moldova at the national level.²⁸

4. Experience of the EU member states and Western Balkan countries - Estonia, Poland, and Montenegro

Estonia is one of the most prosperous states in the digital transformation of services, with its digital government being the most user-centric, transparent, technologically enabled, and open to users (the level of e-government maturity is 90% of performance)²⁹. Services are digitalized at the national as well as at the

²⁴ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.17-18

²⁵ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.16

²⁶ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.10

²⁷ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.10-11

²⁸ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.18

²⁹ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.13

local level. The digital skills of the local population are around 56.4%³⁰ Estonia provides 35 administrative and 4 information e-services³¹.

Poland's success with regard to e-service provision is also evident, with 60% performance in the digitalization of public services at all levels and 42.9% of the population with digital skills. Services are digitalized at the national and local level, accordingly providing 55 administrative and 8 information e-services to citizens.³² (note: the services may differ by municipality).

Montenegro's digital services are relevantly less advanced compared to Estonia and Poland, with 20 administrative and 10 information e-services provided at the national and local levels³³. The population with digital skills is 47.2%, and the average level of maturity of e-services is around 50-60%.

5. Conclusions

COVID-19 Pandemic accelerated the digital transformation of services. The Pandemic has not only shown the importance of innovations and modern technologies, but it has also exposed the vulnerabilities of the digital space – cyber security, data protection, the need for unified data systems, the need for advancing digital infrastructure, appropriate legal framework and regulations, for raising awareness and improving the digital skills of citizens. The study *"E-services for citizens at local and regional level in EaP countries"* concludes the following:

1. Europe leads in e-government development, offering a wide range of e-services, with birth certificate applications and online business tax filing being the most common services. Visa applications and vehicle registration are less frequently available.
2. European governments have responded to the COVID-19 pandemic by providing online information, distance learning platforms, telehealth services, and COVID-19 vaccination and testing. Health, education, and social protection sectors have significantly increased in e-services.
3. According to the eGovernment Benchmark 2022, the majority of central government services (84%) and a substantial portion of regional (71%) and local (60%) services in Europe are available online.
4. EaP countries (Armenia, Azerbaijan, Georgia, and Moldova) have established electronic platforms for citizens to access e-services, but the level of e-service provision varies among them.
5. Common challenges for EaP countries include transforming existing e-services into impactful digital solutions and improving user-friendly design. Limited surveys and statistics hinder the assessment of e-service quality.
6. Internet access is generally high in EaP countries, but there are digital disparities based on socioeconomic factors, rural-urban divides, and age groups.

³⁰ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.15

³¹ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.23-24

Table 5. Kinds of G2C e-services provided in Poland, Estonia, and Montenegro

³² E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.21-23

Table 5. Kinds of G2C e-services provided in Poland, Estonia, and Montenegro

³³ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.24-25

Table 5. Kinds of G2C e-services provided in Poland, Estonia, and Montenegro

7. The COVID-19 pandemic has accelerated the implementation of e-services in EaP countries. Data privacy and cybersecurity are significant concerns, especially given recent events like the Russian invasion of Ukraine.
8. The underdevelopment of e-services in EaP countries can be attributed to factors such as digital illiteracy, lack of funds for advanced technologies, poor user-friendliness, limited awareness, and mistrust of the government. Additionally, de-centralized governance and citizen trust play a role.
9. The most common administrative services in EaP countries include birth certificate applications, electronic tax filing, and e-signature. Poland and Estonia offer a broader range of e-services in the social sphere.

6. Recommendations

General recommendations:³⁴

- In order to increase the utilization of e-services, EaP states should improve digital literacy and digital skills among citizens, especially targeting those over 40 years old and those living in rural areas. The use of e-services should also be incentivized by making them more accessible (also in terms of internet coverage in a given country and consolidating e-services under "one roof" to make them easier to find and use), user-friendly, and cost-effective. EaP states should also concentrate their efforts on building trust between citizens and the central government.
- EaP states should also increase awareness of the availability of e-services by providing information on their use and benefits through various media outlets. In this context, EU experience at the local level, for example, in promoting the <https://warszawa19115.pl/> platform in Warsaw, Poland, might be valuable to partners from EaP states.
- Due to the increase in the number of users of mobile devices globally, e-services should be offered through multiple channels (including mobile phones and tablets). At the same time, EaP governments should increase access to the technologies necessary for using e-services, especially in rural areas.
- Whenever possible, the funds available for e-services at the local level should be increased, along with governmental procurement of advanced technologies and the digitalization of back-office processes.
- Generally, the trust between governance levels must be enhanced to create a supportive environment for e-government services to thrive.
- There is room for European partners to exchange experience with their EaP counterparts in delivering e-services at regional and local levels. This applies in particular to kinds of e-services that are not yet offered in EaP countries, such as applying for family and children's allowances, unemployment allowance and insurance benefits, applying for social assistance to the local government, kindergarten application to local government, unemployment registration, and others.
- Quality of information provided via information e-services: information provided should be accurate and complete, and government at all levels should ensure adequate efforts and resources to this end.
- E-services design. Governments and technology solutions providers must cooperate in designing digital services. This is not only to ensure the accuracy and completeness of online information but also to design the services carefully in order for users (citizens) to be able to use them without having to interact with desk service and concerns such components as menu design, screen layout, and interaction methods, etc.

³⁴ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.28-29

- In order to alleviate citizens' privacy and security concerns related to using e-services, governments can implement policies on the usage of information as well as security protection measures. E-service security is also one of the areas for sharing experience – not only from EU MS, but also from Ukrainian experience with Diia.
- In light of the above, there is broad room for cooperation at CORLEAP, encompassing the following: 1) increasing usage of existing e-services (enhancing internet penetration, especially in rural and remote areas; increasing the basic digital skills of the population); 2) e-service security; 3) improvement in the quality of information e-services (including improvement in e-services' design and means of provision, e.g., via mobile apps); 4) introducing new administrative e-services (e.g., introducing new e-services for social affairs at the local level). Such cooperation might include exchanging experience and ideas, showcasing good practices, organizing study visits, etc. Last but not least, exchanging of experience might also encompass cooperation and trust building between different levels of government and between citizens and government in general.

Country-specific recommendations for improving G2C e-services:³⁵

- **Armenia.** Increasing internet penetration in the country is essential, especially in rural and remote areas and among low-income citizens. It is vital to enhance the core digital skills of the population, with a particular emphasis on older adults, vulnerable groups, and people living in rural areas. To increase the popularity of e-services, it would be beneficial to increase the availability of public e-services, e.g., by expanding the number of government agencies that deliver user-friendly e-services, which would preferably be accessible via mobile phone as a mobile application.
- **Azerbaijan.** It is essential to enhance internet penetration in rural and remote areas while also increasing the digital skills of the population, in particular in rural communities. Raising awareness of the availability of e-services and improving mobile applications in order not only to provide essential information but also to provide basic e-services is crucial.
- **Moldova.** Increasing the basic digital skills of the population is paramount, especially among older adults, vulnerable groups, and those living in rural areas. Increasing access to the internet in remote areas is essential. User-friendly and cost-effective e-services targeting the population's needs must be developed and clustered under a "single roof" as an alternative to comprehensive public administration centers. Private sector experience in Moldova could be a great example to explore since its performance in e-services is impressive compared to public e-services. The procurement of advanced technologies by the government and the digitalization of both front-office and back-office would contribute significantly to improving e-services. To increase the usage of e-services, especially among the poorer part of the population, it is crucial to have e-services available on mobile phones as applications. In addition, enhancing public awareness of the availability of existing e-services is critical. To develop e-services at the local level, it is essential to allocate funds to local authorities and improve engagement between the central government and the local authorities.
- **Georgia.** Increasing the population's basic digital skills, especially among older adults and vulnerable groups, is crucial. It is important to improve internet access in remote and particularly mountainous areas. To reach a more significant number of users, it is important to have e-services as mobile or tablet

³⁵ E-services for citizens at local and regional level in EaP countries, CASE, (2023), p.29-30

applications. The critical issue with the expansion and development of e-services is cybersecurity, which should withstand any threats or leaks.