

István Hoffman<sup>\*</sup>  
Mirośław Karpiuk<sup>\*\*</sup>

# The local self-government's place in the cybersecurity domain. Examples of Poland and Hungary

## Abstract

Local self-government, as a structure within which civil society can thrive, where the digital competencies of the local and regional community come to life, must have the right tools to ensure adequate cybersecurity. These days, e-government, also at the local self-government level, is a common form of performing public tasks, and as a result, its activities in cyberspace must be properly secured. Many tasks are performed using ICT systems that are exposed to external attacks, and therefore, they should meet the appropriate security standards.

The article refers to the legal solutions in the field of cybersecurity operating within local self-government in Poland and Hungary.

**Key words:** local self-government, cybersecurity, information systems

\* Prof. István Hoffman, PhD, Loránd University (Budapest, Hungary), Faculty of Law, Department of Administrative Law (hoffman.istvan@ajk.elte.hu) and Senior Research Fellow, Centre for Social Sciences, Legal Studies Institutes (Budapest, Hungary), e-mail: hoffman.istvan@tk.mta.hu.

\*\* Prof. Mirośław Karpiuk, PhD, Chair of Administrative Law and Security Studies, Faculty of Law and Administration, University of Warmia and Mazury in Olsztyn, e-mail: miroslaw.karpiuk@uwm.edu.pl, ORCID: 0000-0001-7012-8999.

## Introduction

According to Art. 16 of the Constitution of the Republic of Poland,<sup>1</sup> all inhabitants of the units of the basic territorial division constitute by law a self-governing community. Local self-government participates in the exercise of public authority. The local self-government performs a significant part of the public tasks entrusted to it by law in its own name and on its own responsibility. It is the structure most engaged with local and regional communities<sup>2</sup>. The tasks that fall to local self-government cannot be marginal. The fact that they must constitute a significant part of public tasks means that they are to be sufficiently important from the point of view of the needs of local communities, and their scope must be sufficiently broad<sup>3</sup>.

Local government is a form of citizen participation in government<sup>4</sup>. In its framework, the grassroots initiative of residents, as those most interested in the efficient fulfillment of public needs in their area, is most fully realized. It is a forum for engaging members of the local community in public affairs, and what is directly related to this, also a place where a sense of responsibility for these matters is created.

The international legislator states that local self-government means the right and capacity of local communities, within the limits of the law, to direct and manage an essential part of public affairs under their own responsibility and in the interests of their citizens<sup>5</sup>.

Local government as an entity that has been obliged to carry out public tasks of local or regional range plays an important role in public life. It has the best knowledge about the area and can react fastest to a threat occurring in

1 Constitution of Poland dated April 2, 1997 (Journal of Laws of 1997, no. 78, item 483, as amended).

2 M. Karpiuk, J. Kostrubiec, *Rechtsstatus der territorialen Selbstverwaltung in Polen*, Olsztyn 2017, p. 9. See also M. Czuryk, *Legal status of the local self-government in the time of COVID-19 pandemic*, „Cybersecurity and Law” 2020, no. 1, p. 84–85.

3 W. Skrzydło, *Komentarz do Konstytucji Rzeczypospolitej Polskiej z dnia 2 kwietnia 1997 roku*, Warszawa 2008, p. 51.

4 B. Banaszak, *Konstytucja Rzeczypospolitej Polskiej. Komentarz*, Warszawa 2009, p. 110.

5 Art. 3 sec. 1 of the European Charter of Local Self-Government, drawn up in Strasbourg on October 15, 1985 (Journal of Laws of 1994, no. 124, item 607). See also J. Kostrubiec, *The Role of Public Order Regulations as Acts of Local Law in the Performance of Tasks in the Field of Public Security by Local Self-government in Poland*, „Lex Localis – Journal of Local Self-Government” 2021, no. 1, p. 115.

its area of operation, although it does not always have the sufficient resources (material, technical, personnel, or financial) to adequately respond.

One of the public tasks that have been delegated to local government is to protect the security of information systems. Therefore, ensuring cybersecurity is one of its areas of expertise. This is an extremely dynamic area with much work remaining, which is why the evolution of local government's cybersecurity responsibilities has not ended. The development of new technologies will require local governments to seek new solutions to ensure the security of their cyber activities.

### **The legal status of local government in the domain of cybersecurity in Poland**

The local government in Poland performs several public tasks, including those related to security, within which cybersecurity can also be distinguished. In the era of the information society, where communication tools determine its development, ICT systems must meet the appropriate quality standards, not only in terms of the range and speed of information transmission through them but also in terms of the protection of this information, and what is directly related – resistance to cyber threats. Therefore, cybersecurity has a momentous role in the case of the information society. The state must take care of both society's digital competence and support the development of new technologies and counteract digital exclusion, while at the same time creating appropriate and safe conditions for the public administration to operate in cyberspace.

The place where the digital society (in the local and regional aspect) can develop is the local government, but it must be equipped with appropriate legal, financial, and ICT instruments to communicate and provide services using cyberspace. This sets a serious task before the state and local government in the field of computerization of the implementation of public tasks, which also allows remote contact with the administrative agency.

The digital revolution means that e-services of public administration are beginning to play an increasingly important role, both for the state and society, therefore, the development of computerization is necessary<sup>6</sup>.

Local government as a basic form of decentralization of public administration, equipped with the attribute of authority, is an institution that has the potential to be used in the sphere of cybersecurity. This potential, however, must be backed up by professional staff, the granting of adequate authority to local government agencies, and sufficient funding for tasks pertaining to cybersecurity.

Cybersecurity means the resilience of information systems to actions that compromise the confidentiality, integrity, availability, and authenticity of the data being processed or the related services offered by those systems<sup>7</sup>. Cybersecurity is very important for the normal functioning of the state as well as the information society<sup>8</sup>.

The European Union legislator defines cybersecurity as the resilience of networks and information systems, with a given level of trust, to any action that compromises the availability, authenticity, integrity, or confidentiality of stored, transmitted, or processed data, or the related services offered by or accessible via these networks and information systems<sup>9</sup>. Cyberspace should be properly secured, not only because it is of strategic importance for the functioning of public institutions but also because of the information society, widely using various forms of communication<sup>10</sup>. Local government

6 P. Romaniuk, *Tradycje i przyszłość administracji publicznej w zakresie rozwoju e-usług*, „Journal of Modern Science” 2020, no. 1, p. 282.

7 Art. 2 item 4 of the Act dated July 5, 2018 on the National Cybersecurity System (consolidated text Journal of Laws of 2020, item 1369, as amended). Ensuring digital security is one of the basic tasks of public authorities. The functioning of the information society relies on information and communication networks and systems, but these are susceptible to disruptions. Threats to the information technology side of society's functioning are increasingly dangerous, and cyberattacks can be used as a means of economic and political pressure, K. Kaczmarek, *Zapobieganie zagrożeniom cyfrowym na przykładzie Republiki Estońskiej i Republiki Finlandii*, „Cybersecurity and Law” 2019, no. 1, p. 145.

8 M. Czuryk, *Cybersecurity as a premise to introduce a state of exception*, *ibidem* 2021, no. 1, p. 87.

9 Art. 4 item 2 of Directive (EU) 2016/1148 of the European Parliament and of the Council of July 6, 2016 concerning measures for a high common level of security of network and information systems across the Union (OJ EU of 2016, L 194, p. 1).

10 M. Karpiuk, *The Organisation of the National System of Cybersecurity*, „Studia Iuridica Lublinensia” 2021, no. 2, p. 241.

telecommunications activities are also related to cyberspace<sup>11</sup>. Its jurisdiction in the field of telecommunications is quite broad, enabling it to support the development of telecommunications services and networks, to ensure security in cyberspace<sup>12</sup>.

Local government units, as units of the public finance sector, are part of the national cybersecurity system, the purpose of which is indicated in Art. 3 of the Act on the National Cybersecurity System, which is to ensure cybersecurity at the national level, including the uninterrupted provision of key services and digital services, by achieving an adequate level of security of information systems used to provide these services and ensuring incident handling. The development of the national cybersecurity system, including improving the efficiency of its operation, is a strategic goal<sup>13</sup>. National cybersecurity system entities have been required to protect against cybersecurity threats, that is, against potential as well as actual causes of an incident<sup>14</sup>.

Thus, local government is to ensure cybersecurity in the local area (municipal and county government) and in the region (provincial government), including securing information systems so that they can serve the uninterrupted provision of key services and digital services; it is also to ensure incident handling, i.e. to undertake activities that enable the detection, recording, analysis, classification of incidents, as well as corrective actions related to the occurrence of the effects of events that adversely affect information systems.

The national cybersecurity system has been singled out for the effective (efficient, uninterrupted) performance of public tasks, critical services, and digital services through strategy setting and implementation, in which covered entities fulfill the statutory responsibilities assigned to them to protect the public interest<sup>15</sup>.

A local government unit, under Art. 21 sec. 3 of the Act on the National Cybersecurity System, may designate one person responsible for maintaining

11 For more information on local government telecommunications activities, see M. Karpiuk, *Activities of the local government units in the scope of telecommunication*, „Cybersecurity and Law” 2019, no. 1, p. 39–45.

12 M. Czuryk, *Supporting the development of telecommunications services and networks through local and regional government bodies, and cybersecurity*, *ibidem*, no. 2, p. 43.

13 M. Karpiuk, *Cybersecurity as an element in the planning activities of public administration*, *ibidem* 2021, no. 2, p. 47.

14 K. Chałubińska-Jentkiewicz, M. Karpiuk, J. Kostrubiec, *The legal status of public entities in the field of cybersecurity in Poland*, Maribor 2021, p. 1.

15 G. Szpor, *Komentarz do art. 3 [in:] Ustawa o krajowym systemie cyberbezpieczeństwa. Komentarz*, eds. K. Czaplicki, A. Gryszczyńska, G. Szpor, Warszawa 2019.

contact with entities of the national cybersecurity system concerning public tasks dependent on information systems performed by its organizational units. This is a power of the local government, so the legislator does not impose an obligation on the local government in this regard; therefore, the appointment of a contact person for the entities of the national cybersecurity system may depend on factors other than the cybersecurity threat. It should also be emphasized that local government personnel and financial resources are limited, and the problem of cybersecurity is sometimes underestimated.

Local government, as a public entity, under Art. 22 of the Act on the National Cybersecurity System: 1) ensures incident management in the public entity; 2) reports the incident in the public entity to the relevant CSIRT MON, CSIRT NASK, or CSIRT GOV team; 3) ensures incident handling in the public entity and the critical incident in cooperation with the relevant CSIRT MON, CSIRT NASK or CSIRT GOV team; 4) ensures that the persons for whom the public task is performed have access to knowledge allowing them to understand cybersecurity threats and to apply effective ways of securing themselves against these threats, in particular by publishing information in this respect on its website; 5) provides the relevant CSIRT MON, CSIRT NASK or CSIRT GOV team with the details of the person responsible for maintaining contact with the national cybersecurity system entities if such person has been appointed.

The local government provides incident management, so the legislator uses a categorical phrase. Therefore, if such an incident has already occurred in the local government, as a public entity, the local government is obliged, with its forces and resources, to ensure incident handling, search for links between incidents, eliminate the causes of these incidents, and develop conclusions resulting from incident handling<sup>16</sup>. A similar obligation was placed on the local government to handle a public entity incident as well as a critical incident. Except that in the latter case in cooperation with the competent CSIRT team, which is related to the status of such an incident that leads to significant damage to security or public order, international interests, economic interests, the operation of public institutions, civil rights, and freedoms or human life and

16 M. Karpiuk, *The obligations of public entities within the national cybersecurity system*, „Cybersecurity and Law” 2020, no. 2, p. 63.

health. Handling a critical incident is therefore related to the need to protect important values, which include security<sup>17</sup> and public order<sup>18</sup>.

## The legal status of local government in the domain of cybersecurity in Hungary

The Hungarian public administrative system was a highly decentralised one before the reforms of 2011/2013. After the Democratic Transition a very fragmented and very autonomous municipal system evolved (see Table and Figure 1). The municipal legislation was based on the liberal democratic approach during the 1990s.

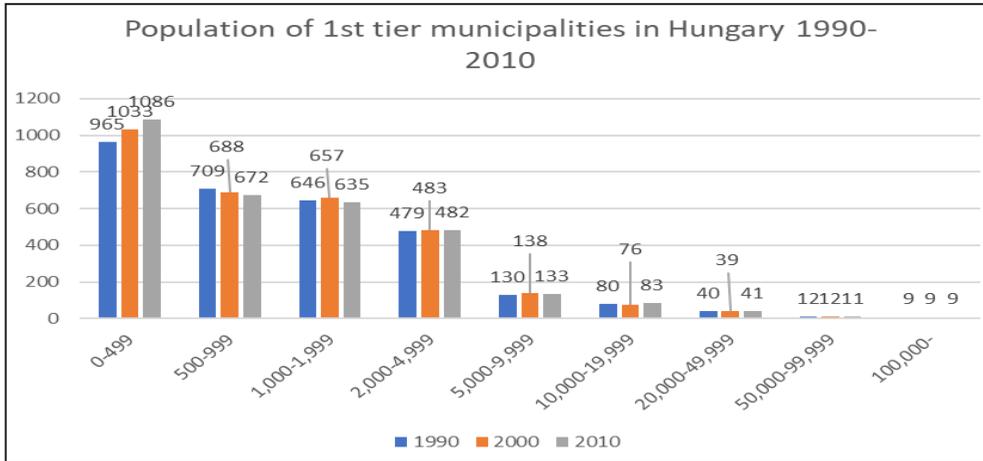
Table 1. Population of the Hungarian municipalities (1990–2010)

Year	0-499	500-999	1,000-1,999	2,000-4,999	5,000-9,999	10,000-19,999	20,000-49,999	50,000-99,999	100,000-	All
	Inhabitants									
1990	965	709	646	479	130	80	40	12	9	3,070
2000	1,033	688	657	483	138	76	39	12	9	3,135
2010	1,086	672	635	482	133	83	41	11	9	3,152

Source: E. Szigeti, *A közigazgatás területi változásai* [in:] *Kilengések. Közzszolgáltatási változások*, ed. T.M. Horváth, Budapest–Pécs 2013, p. 282.

17 Security means minimizing threats, anticipating them, protecting against them as much as possible, preventing them and taking measures to remove their consequences, M. Karpiuk, *Ograniczenie wolności uzewnętrzniania wyznania ze względu na bezpieczeństwo państwa i porządek publiczny*, „Przegląd Prawa Wyznaniowego” 2017, no. 9, p. 11. For more information on security, see: D. Tyrawa, *Gwarancje bezpieczeństwa osobistego w polskim administracyjnym prawie drogowym*, Lublin 2018, p. 40–46; M. Karpiuk, *Ubezpieczenie społeczne rolników jako element bezpieczeństwa społecznego. Aspekty prawne*, „Międzynarodowe Studia Społeczno-Humanistyczne. Humanum” 2018, no. 2, p. 67–70; K. Bojarski, *Współdziałanie administracji publicznej z organizacjami pozarządowymi w sferze bezpieczeństwa wewnętrznego w ujęciu administracyjno-prawnym*, Warszawa–Nisko 2017, p. 19–72; M. Karpiuk, *Prezydent Rzeczypospolitej Polskiej jako organ stojący na straży bezpieczeństwa państwa*, „Zeszyty Naukowe AON” 2009, no. 3, p. 389–390.

18 Public order is an orderly system of agencies and institutions, as well as duties ensuring stabilization, harmonization and coordination of activities aimed at neutralization of threats, M. Karpiuk, *Ograniczenie...*, p. 11. For more information on public order, see also: M. Karpiuk, *The legal grounds for revoking weapons licences*, „Cybersecurity and Law” 2019, no. 2, p. 168–169; K. Chałubińska-Jentkiewicz, *Moralność publiczna w polskim prawie gospodarczym i w prawie mediów* [in:] *Klauzule porządku publicznego i moralności publicznej*, eds. G. Blicharz, M. Delijewski, Warszawa 2019, p. 244–245; M. Karpiuk, *Position of the Local Government of Commune Level in the Space of Security and Public Order*, „Studia Iuridica Lublinensia” 2019, no. 2, p. 32.



Source: E. Szigeti, op. cit., p. 282.

Figure 1. Population of the Hungarian municipalities (1990–2010)

The new system – which evolved after the new Hungarian constitution, the Fundamental Law between 2012/2013 – has been a centralized one, which has been based on the tools of the public law and public power. This approach was mirrored by the preamble of the Act CLXXXIX on Local Self-governments of Hungary (hereinafter: MötV) where it states that the local governments are „part of the state system”, and their main task is to „contribute the realization of the targets of the state defined by the Fundamental Law”.

These policy objectives have been implemented by the rules of the MötV. Although the MötV has similar rules on the right to local governance as the former Constitution, it is regulated in an Act of the Parliament thus the guarantees of the defense of this right are lower than earlier: this right is no more constitutionally defined one. Although the MötV contains a list of the main local government tasks, the local service performance role of the municipalities has been weakened, and the scope of the tasks has become narrower. The legislator is allowed to reduce the local government tasks by the new regulation. Due to this remodelling, the concentration of the municipal local services has partially lost its significance. The regulation on voluntary tasks has been changed, as well. New criteria – mainly economic ones – have been defined and a stronger supervision has been introduced. A new model has been chosen by the central government to reduce the fragmentation of the public service system: the most problematic service provisions were centralized and now they are performed by the local agencies of the central governments. The main tasks of the education, inpatient care, residential

social care and residential child protection are performed by these agencies. The local government tasks have been significantly reduced. Although the officers of the municipalities are responsible for a significant number of tasks delegated by the central government, the number of them is radically reduced by the establishment of the district offices (*járási hivatalok*) of the county government offices. The freedom of formation of municipal bodies has been reduced by the institutionalization of the joined municipal administrations. The Fundamental Law allowed the legislator to establish compulsory inter-municipal associations by an Act (of Parliament). Thus, the MötV established a new, compulsory form of the inter-municipal cooperation: the joint municipal office<sup>19</sup>. Villages of the same district (*járás*) having less than 2,000 inhabitants are obliged to take part in these associations. Villages having more than 2,000 inhabitants and towns can take part in such an association, if they become the headquarter municipality of these offices.

Table 2. Joint municipal offices and independent municipal offices in Hungary (2019)

Number of municipalities in Hungary	Independent municipal offices	Joint municipal offices	Number of participant municipalities
3 153	521	749	2632

Source: Hungarian Central Statistical office, [www.ksh.hu](http://www.ksh.hu) [access: 15.03.2022].

The greatest losers of the Hungarian municipal reforms were the county governments, because they lost their service provider role and a major part of their assets and revenues. Even the legal supervision has been strengthened: the county government offices – which are similar to the Polish Voivodship Offices – have broader competences than before 2012<sup>20</sup>.

During the last few years, considerable measures have been taken by the Hungarian government to reform the public administration of the country. The most important results of these reforms include the reduction of administrative burdens and the simplification of administrative procedures.

From October of 2009 (with Act CXI of 2008) the general administrative procedure rules were amended. Electronic communication between clients and authority became available through the use of an online citizen portal

19 I. Balázs, *L'intercommunalité en Hongrie* [in:] *Regards croisés sur les mutations de l'intercommunalité*, ed. M.C. Steckel-Assouère, Paris 2014, p. 426.

20 I. Balázs, I. Hoffman, *Can (Re)Centralization Be a Modern Governance in Rural Areas?*, „Transylvanian Review of Administrative Sciences” 2017, no. 50E, p. 12–18.

dedicated to this end, called Client Gateway. In April 2012, with the amendment of the Act CXL of 2004 on the General Rules of Administrative Procedures and Services by the Act CLXXIV of 2011, and the introduction of the so-called regulated electronic administration services, the legal preconditions for e-government services were established<sup>21</sup>. In addition to this, in July 2015 a new law on the Hungarian eID card has been adopted.

As the scope of the Hungarian e-government developments continuously grew, the need for a separate e-government law appeared. Act CCXXII of 2015 on the General Rules for Trust Services and Electronic Transactions (hereinafter referred to as ET Act) kept the achievements of the 2012 reform and further extended the possibilities of electronization of processes. As of January 2018, a new act regulating administrative procedure entered into force (Act CL of 2016 on the Code of General Administrative Procedure). In sec. 26, the new act also regulates the communication of the authorities with clients and utilise the electronic communication means provided by the ET Act as a form of written communication. (It is also allowing electronic communication not in accordance with the ET Act, but that is regarded as oral communication.) The new Procedure Act, according to its general concept, is not containing detailed rules of this form of communication but rely entirely on the ET Act. There is also an option to deliver the decision by the ET Act, in place of an official document, regulated in Subsection 3 of sec. 85<sup>22</sup>.

According to the ET Act, it is mandatory for municipal governments to provide the option for electronic communication for clients. To be precise, it is mandatory for almost all governmental bodies to provide this option. There are only few exceptions to this rule: when an act or government decree adopted in a vested legislative capacity creates an obligation for the physical presence of the client, or for the submission of documents that may not be obtained in any other way; where it is not applicable; when it contains classified information or when it is excluded by an international treaty or a directly applicable Community legislation that is binding in its entirety.

Clients shall have the option to make statements, take procedural steps and fulfil other obligations either through a single, personalized communication interface or through e-governance services platform if it is provided.

21 B. Baranyi, *A kapcsolattartás általános szabályai* [in:] *Nagykommentár a közigazgatási eljárási törvényhez*, eds. G. Barabás, B. Baranyi, A.G. Kovács, Budapest 2013, p. 222–225.

22 B. Baranyi, *Az elektronikus ügyintézés szabályai* [in:] *Közigazgatási jog. Általános rész III*, ed. M. Fazekas, Budapest 2020, p. 323–325.

The ET Act contains the general rules of the electronic connection between the body providing e-governance services and the client, as well as the provisions on the IT cooperation between the body providing e-governance services and other bodies. An important provision for local authorities is provided in ET Act. According to sec. 17. b), local authorities are bodies providing e-governance services which are obliged to ensure electronic administration services as specified in the ET Act from 1 January 2018. ET Act sec. 9 (1) paragraph a) and b) also states that electronic communication is mandatory for economic operators acting as clients and for the legal counsels of clients from 1 January 2018. There is an obligation to maintain electronic communication, then any statement not in compliance with this regulation shall be deemed invalid. The only exception under this regulation is when the client can't maintain electronic communication due to a failure of the system on behalf of the authority, when the electronic administration service cannot be accessed or when the required forms can't be reached because of it wasn't provided. For clients, ET Act does not make electronic communication mandatory, but it gives them the opportunity to use this form of communication. Authorities provide the electronic administration services for their clients via electronic form services on their websites or in other cases through e-Paper services. E-Paper is a general-purpose electronic application form, a free, authenticated messaging application that connects clients electronically with the institutions and bodies connected to the service via the Internet. The purpose of the e-Paper service is to enable the client to submit a complaint to the authority electronically for those procedures or simple matters which are not supported by a system of expertise for their frequency or other reasons.

Another important field of e-administration is the provision of public services. First of all, they have been widely centralised in Hungary during the 2010s. Formerly municipally managed public education, health care, residential social and childcare and several cultural services are now provided by institutions which are mainly maintained by the central administration and by its territorial agencies<sup>23</sup>. Therefore, new platforms have been evolved, which provide information and data for the service provision, as well for financing these services. Such an e-platform for the public education is the KRÉTA system, for the health care services the EESZT (Elektronikus Egészségügyi

23 I. Hoffman, J. Fazekas, K. Rozsnyai, *Concentrating or Centralising Public Services? The Changing Roles of the Hungarian Inter-municipal Associations in the Last Decades*, „Lex localis – Journal of Local Self-governments” 2020, no. 3, p. 462–467.

Szolgáltató Tér – Electronic Health Care Provision Space) and the unified social register. The providers – which are maintained mainly by the agencies of the central administration, however there are municipal maintainers, and the churches and NGOs have maintainer tasks, as well – have direct connection to these systems. The major elements of these platforms are regulated by Act of Parliaments and the executive decrees issued by the Government of Hungary.

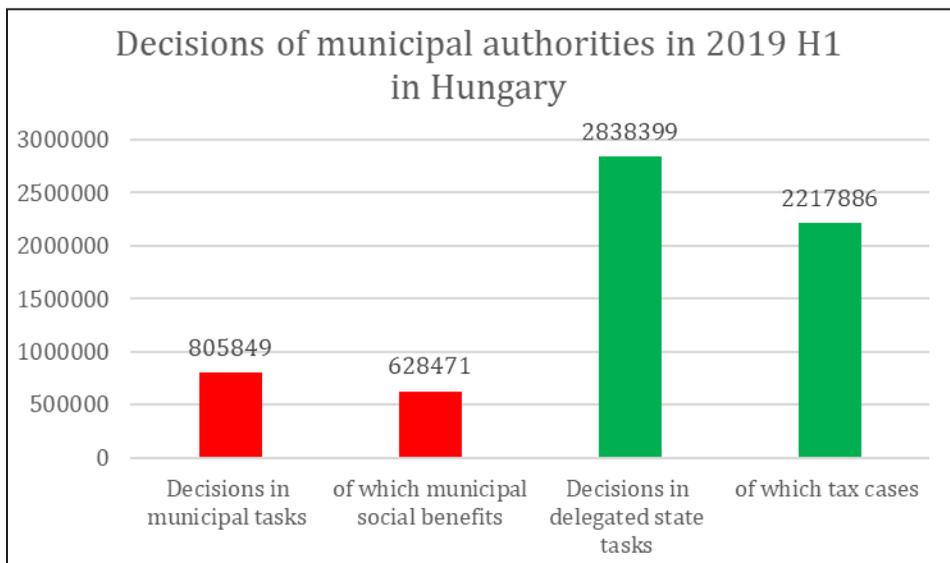
The digitalisation and the e-government investments and reforms in Hungary – as an element of the economic and regional development – is co-funded by the European Union. The support of the digital and e-administration is an important objective of the operational programme supporting the development of the Hungarian public administration and public services (Közigazgatás-és Közszolgáltatás-fejlesztési Operatív Program – KÖFOP). The municipal e-administration projects are funded by this programme, as well.

As we have mentioned in the point 4.1, the municipal bodies – especially the municipal clerks (jegyző) – were the major 1<sup>st</sup> instance authorities in the Hungarian public administration system before 2011/2012. Therefore, the e-government issue of the Hungarian local government system became a significant element of the Hungarian strategies and service provision. and it focused on the individual decisions of the municipal bodies as authorities. Because of the performance of the central administration tasks, the development of the municipal e-administration was primarily „top-bottom” initiative, however „from bottom to top” approach could be observed in large Hungarian municipalities.

The evolvement of the municipal e-government system begun at the end of the 20<sup>th</sup> century. Several problems have been occurred: firstly, the general administrative knowledge of the citizens and the accessibility to the e-tools were limited. Therefore – and because of the limited form a bottom to the top approach – the online presence of the larger municipalities was provided in the early 21<sup>st</sup> century. As it will be reviewed later, the Act XC of 2005 on the freedom of electronic information was a turning point. New platforms were developed in this time, firstly in several sectors (for example in the municipal finances, later in the field of construction administration). An integrated national system has been developed after the Millennium, the [www.magyarorszag.hu](http://www.magyarorszag.hu) site and the Government Portal and its Client Gate. Originally the municipalities were not fully integrated, but the tendency of integration has been strengthened. After the reforms of 2010 the integration of the local and central systems was

an important reforms issue<sup>24</sup>. A new model of the municipal e-administration was evolved after the amendment of the administrative and tax procedural acts because the municipalities should provide fully electronic administrative platform in the field of local taxes.

After 2010 the recentralisation and the concentration of the public administration can be observed in Hungary. Till 2013 the municipal clerks were the major 1<sup>st</sup> tier authorities in the Hungarian system of the public authorities, but it changed by the establishment of the district offices of the county government offices and by the transfer of the competences to the district and county offices from these municipal officers (who performed state administration). However, the municipal clerks perform significant competences, but it should be highlighted, that the majority of the municipal decisions belongs to the delegated state-tasks (which are actually central tasks, but because of the grassroot administration they are performed by local – municipal – bodies).



Source: Hatósági statisztika – OSAP adatgyűjtés alapján.

Figure 2. Decisions of municipal bodies in Hungary

24 I. Balázs, *A közigazgatás változásairól Magyarországon és Európában a rendszerváltástól napjainkig*, Debrecen 2020.

Therefore, the fragmented local administrative structure has been a challenge to the Hungarian e-administration system. The e-administration of the municipal bodies of local authorities in individual decisions is regulated by the ET Act.

Another important part of the municipal e-administration is the provision and management of local public services. First of all, it should be emphasised, that the municipalities formerly developed different municipal financial systems. However, as part of the centralisation of the e-administration, a centralised online system has been developed, called The Local Government Office Portal (hereafter referred to as Portal) which is the location of the e-government administration in the local financial Application Service Provider (ASP) system. The Portal provides municipalities with a local government ASP system for both natural persons and legal entities, providing the opportunity to use electronically available services for specialist applications.

Through the Portal, not only the agencies of the central government, the municipal bodies, but even the citizens as clients have access to important information and data. For example, the clients can query for a local tax balance, the status of local government affairs electronically initiated by the Portal. They can also initiate an administrative action using it.

The most important result of the development and introduction of the ASP service is, that the local government's tax, industrial, commercial, estate inventory, estate protection, birth and social affairs are supported by system development through that system. Even their whole financial and management issues can be supervised, because it offers real-time data even for the supervision authorities.

Another important field of the municipal e-administration are the Smart City programs. Although the welfare and cultural services are significant element of the Smart City services in the majority of the developed countries<sup>25</sup>, the Hungarian regimes do not follow the international patterns. The main reason of the different Hungarian pattern is that the majority of the welfare and educational services were nationalised and centralised between 2011 and 2016 therefore, the role of the municipal administration is limited in these sectors. Secondly, the „customers” of these services have interest in smart solutions. This attitude has been amended during the COVID-19 pandemic and

25 M.D. Lytras, A. Visvizi, *Who Uses Smart City Services and What to Make of It: Toward Interdisciplinary Smart Cities Research*, „Sustainability” 2018, no. 6, p. 1198–2013.

the regular use of the health platforms have been increased<sup>26</sup>. The approach of smart city is based on the role of the ICT technologies as a platform of the more efficient local service provision. One of the major fields of the smart city solutions is the local transportation. First of all, new platforms for the provision of public transport services were introduced by the larger Hungarian municipalities. Such a unified public transport platform is the BKK FUTÁR in Budapest, which allows to control and to observe the public transport services of the Budapest Transport Company. Secondly, the street parking has been reformed by digital service and by new local platforms. However, these street parking platforms were developed by the municipalities, but they have direct link to the centralised Hungarian national mobile payment system, therefore, it is partially centralised.

Cybersecurity became an important issue of the municipal administration after the Millennials, especially after 2010, when the eGovernment and the municipal e-services began to evolve rapidly. Thus, cybersecurity became part of the public order and safety policies of the Hungarian administrative system<sup>27</sup>.

After the challenges of the new era, especially to ensure a better defence of the administrative cyberspace, a new regulatory approach has been evolved after 2010. A general act on the cybersecurity of the central and local government bodies was passed in 2013. This framework act, the Act L of 2013 on the cybersecurity of state and municipal bodies (hereinafter: CSA) follows the major principle of cybersecurity regulations. It is based on the „CIA” principle; thus confidentiality, integrity and availability shall be secured by the cybersecurity activities. Security classes and measures are defined by the Act; however, the detailed regulation can be found in an implementing ministerial decree. Following the general approach, the tiers of cybersecurity defence are defined and regulated by the CSA. The Act follows the general regulation, and especially, because its scope is a very wide one, and even the Hungarian military forces are affected, it follows the NATO regulations as well, not only the EU rules (because of the Hungarian NATO-membership).

A centrally supervised system has been regulated: the major body responsible for cybersecurity issues is in Hungary the Ministry of Interior,

26 I. Hoffman, *Cybersecurity and public administration in the time of corona(virus) - in the light of the recent Hungarian challenges*, „Cybersecurity and Law” 2021, no. 1, p. 152-153.

27 M. Czuryk, J. Kostrubiec, *The legal status of local self-government in the field of public security*, „Studia nad Autorytaryzmem i Totalitaryzmem” 2019, no. 1, p. 34-36.

because cybersecurity is interpreted in Hungary as mainly a public order and security issue, the military elements are important, but a general regulation has been established. The central body of the cybersecurity issues is one of the national security agencies (which are supervised by the Minister of Interior), by the Special Service for National Security<sup>28</sup>.

The Hungarian regulation – including the CSA – fit the strict and detailed European and NATO requirements. Thus, the major challenges of the municipal cybersecurity are linked to these requirements. As we have mentioned earlier, in Hungary there are more than 3000 municipalities (for a population which is less than 10 million inhabitants) and there are 1270 independent municipal offices, whose majority are relatively small offices (typically they have less than 20 civil servants). These offices have often lack of resources and lack of human capacities, especially in the field of cybersecurity. Because of the existence of delegated state tasks, these municipalities have links to the central systems, especially to the registrations of the population and their addresses. Therefore, these small offices can be an Achilles heel of the Hungarian system, because they are more vulnerable than the national(ised) systems.

Poland and Hungary have similar social, economic and administrative system. The two countries belong to the group of the Eastern Central European states, which have similar patterns. The Hungarian and Polish municipal systems are similar, and the role of the central government and its regional agencies can be interpreted as similar<sup>29</sup>. If we look at on the regulation on digitalisation and e-government, it is clear, that the two analysed countries followed a similar way. Digitalisation and computerisation of the government activities have focused originally on providing access to public information and on increasing the effectiveness of the administrative operations. Similarly, the e-administration activities have been based originally on the digitalisation of the individual decision of the authorities, especially those cases – especially tax cases, financial cases, later administrative permission etc. – which partly required significant resources, or which has had significant economic impact. Therefore, the administrative bodies as authorities and the citizens and the organisations as clients have been in the focus of the regulation. Similarly, the e-administration in Poland and Hungary has been related to the simplification

28 Z. Juhász, G. Virányi, T. Hegedüs, T. Viztra, *A Nemzetbiztonsági Szakszolgálat hatósági feladatai*. „Nemzetbiztonsági Szemle” 2020, no. 1, p. 136–138.

29 K. Rozsnyai, *The Procedural Autonomy of Hungarian Administrative Justice as a Precondition of Effective Judicial Protection*, „Studia Iuridica Lublinensia” 2021, no. 4, p. 491–492.

and to speeding up the administrative procedures<sup>30</sup>. Another similarity, that the provision of public services has become an even more important field of the e-government in Poland and Hungary during the 21<sup>st</sup> century. Similarly, new platforms have been evolved for local activities. Similarly, these platforms have been significantly centralised in the last ten years, therefore, the digital platforms for individual decisions and for provision of public services are organised and operated centrally. Like in another developed countries, in Hungary and Poland a new wave of centralisation can be observed. As we have mentioned earlier, these platforms – which are managed by national operators – can be interpreted as a tool for the „soft” or „latent” centralisation. These local systems are mainly based on data provided by the centralised databank and platforms. Therefore, the access to these central systems is a crucial element of the operation of these local systems. Because the access to these data are managed by the central systems therefore, the operation of the local systems are partially determined by the central system and by the access to them. Thus, the central government can influence and impact the local service provision. This impact can be interpreted as a soft one, because the impact is not direct, it is based on the use of the centralised databanks and on the architecture of these central regimes.

Poland and Hungary are Member States of the European Union and both countries joined to the NATO, therefore, the regulation on cybersecurity issues of the municipalities are harmonised and follows the NATO and EU regulations.

The similar administrative systems and challenges and the similar traditions and socio-economic situation resulted similar patterns in the local e-administration, but there are even significant differences, as well. First of all, the size of the given countries is different, Poland is a larger country than Hungary. And Poland has a relatively concentrated municipal system, the number of the 1<sup>st</sup> tier municipalities is around 2500. In Hungary a very fragmented local system evolved – in a smaller country there are more than 3200 1<sup>st</sup> tier municipalities. Therefore, the majority of Hungarian municipalities have very limited resources, and the tools of the e-administration and e-governments are mainly used by the larger municipalities. Similarly, the limited e-local government activities have been resulted by the nationalisation

30 L. Potěšil, K. Rozsnyai, J. Olszanowski, M. Horvat, *Simplification of Administrative Procedure on the Example of the Czech Republic, Poland, Slovakia, and Hungary (V4 Countries)*, „Administrative Sciences” 2021, no. 1, p. 8–10.

of the public tasks in Hungary since 2011. Because of the larger size and the wider competences of the Polish municipal units, the local government system can have better possibilities to develop the e-government.

## Conclusions

The digitalisation and the e-administration are important issues of the public administration reforms of the last decades. The challenges of the new, digital ages resulted the transformation of the traditional administration. As we reviewed, the Polish and Hungarian regulation on e-government and on the digitalisation of the public administration transformed significantly. The regulation was focused on the development a horizontally integrated e-administration. The municipal e-administration systems have been built by the municipalities (especially by the larger municipalities), but their operation could be developed. The regulation and the supervision activities of e-government are detailed regulated and have evolved quickly during the last years, and its focus have been partly transformed. Not only the individual decisions, but even the provision of public services have become digitalised. The new, centrally operated platforms can be even interpreted as a ne, „soft” tool of the centralisation. However, the Polish and Hungarian systems are similar, but there are differences which are related to the different competences and spatial structure of the municipal systems of the two countries.

## Bibliography

- Balázs I., *A közigazgatás változásairól Magyarországon és Európában a rendszerváltástól napjainkig*, Debrecen 2020.
- Balázs I., *L'intercommunalité en Hongrie* [in:] *Regards croisés sur les mutations de l'intercommunalité*, ed. M.C. Steckel-Assouère, Paris 2014.
- Balázs I., Hoffman I., *Can (Re)Centralization Be a Modern Governance in Rural Areas?*, „Transylvanian Review of Administrative Sciences” 2017, no. 50E.
- Banaszak B., *Konstytucja Rzeczypospolitej Polskiej. Komentarz*, Warszawa 2009.
- Baranyi B., *A kapcsolattartás általános szabályai* [in:] *Nagykommentár a közigazgatási eljárási törvényhez*, eds. G. Barabás, B. Baranyi, A.G. Kovács, Budapest 2013.
- Baranyi B., *Az elektronikus ügyintézés szabályai* [in:] *Közigazgatási jog. Általános rész III*, ed. M. Fazekas, Budapest 2020.
- Bojarski K., *Współdziałanie administracji publicznej z organizacjami pozarządowymi w sferze bezpieczeństwa wewnętrznego w ujęciu administracyjno-prawnym*, Warszawa–Nisko 2017.
- Chałubińska-Jentkiewicz K., *Moralność publiczna w polskim prawie gospodarczym i w prawie mediów* [in:] *Klauzule porządku publicznego i moralności publicznej*, eds. G. Blicharz, M. Delijewski, Warszawa 2019.

- Chałubińska-Jentkiewicz K., Karpiuk M., Kostrubiec J., *The legal status of public entities in the field of cybersecurity in Poland*, Maribor 2021.
- Czuryk M., *Cybersecurity as a premise to introduce a state of exception*, „Cybersecurity and Law” 2021, no. 1.
- Czuryk M., *Legal status of the local self-government in the time of COVID-19 pandemic*, „Cybersecurity and Law” 2020, no. 1.
- Czuryk M., *Supporting the development of telecommunications services and networks through local and regional government bodies, and cybersecurity*, „Cybersecurity and Law” 2019, no. 2.
- Czuryk M., Kostrubiec J., *The legal status of local self-government in the field of public security*, „Studia nad Autorytaryzmem i Totalitaryzmem” 2019, no. 1.
- Hoffman I., *Cybersecurity and public administration in the time of corona(virus) – in the light of the recent Hungarian challenges*, „Cybersecurity and Law” 2021, no. 1.
- Hoffman I., Fazekas J., Rozsnyai K., *Concentrating or Centralising Public Services? The Changing Roles of the Hungarian Inter-municipal Associations in the Last Decades*, „Lex localis – Journal of Local Self-governments” 2020, no. 3.
- Juhász Z., Virányi G., Hegedüs T., Visztra T., *A Nemzetbiztonsági Szakszolgálat hatósági feladatai*, „Nemzetbiztonsági Szemle” 2020, no. 1.
- Kaczmarek K., *Zapobieganie zagrożeniom cyfrowym na przykładzie Republiki Estońskiej i Republiki Finlandii*, „Cybersecurity and Law” 2019, no. 1.
- Karpiuk M., *Activities of the local government units in the scope of telecommunication*, „Cybersecurity and Law” 2019, no. 1.
- Karpiuk M., *Cybersecurity as an element in the planning activities of public administration*, „Cybersecurity and Law” 2021, no. 2.
- Karpiuk M., *Position of the Local Government of Commune Level in the Space of Security and Public Order*, „Studia Iuridica Lublinensia” 2019, no. 2.
- Karpiuk M., *Prezydent Rzeczypospolitej Polskiej jako organ stojący na straży bezpieczeństwa państwa*, „Zeszyty Naukowe AON” 2009, no. 3.
- Karpiuk M., *The legal grounds for revoking weapons licences*, „Cybersecurity and Law” 2019, no. 2.
- Karpiuk M., *The obligations of public entities within the national cybersecurity system*, „Cybersecurity and Law” 2020, no. 2.
- Karpiuk M., *The Organisation of the National System of Cybersecurity*, „Studia Iuridica Lublinensia” 2021, no. 2.
- Karpiuk M., *Ubezpieczenie społeczne rolników jako element bezpieczeństwa społecznego. Aspekty prawne*, „Międzynarodowe Studia Społeczno-Humanistyczne. Humanum” 2018, no. 2.
- Karpiuk M., Kostrubiec J., *Rechtsstatus der territorialen Selbstverwaltung in Polen*, Olsztyn 2017.
- Kostrubiec J., *The Role of Public Order Regulations as Acts of Local Law in the Performance of Tasks in the Field of Public Security by Local Self-government in Poland*, „Lex Localis – Journal of Local Self-government” 2021, no. 1.
- Lytras M.D., Visvizi A., *Who Uses Smart City Services and What to Make of It: Toward Interdisciplinary Smart Cities Research*, „Sustainability” 2018, no. 6.
- Potěšil L., Rozsnyai K., Olszanowski J., Horvat M., *Simplification of Administrative Procedure on the Example of the Czech Republic, Poland, Slovakia, and Hungary (V4 Countries)*, „Administrative Sciences” 2021, no. 1.
- Romaniuk P., *Tradycje i przyszłość administracji publicznej w zakresie rozwoju e-usług*, „Journal of Modern Science” 2020, no. 1.
- Rozsnyai K., *The Procedural Autonomy of Hungarian Administrative Justice as a Precondition of Effective Judicial Protection*, „Studia Iuridica Lublinensia” 2021, no. 4.
- Skrzydło W., *Komentarz do Konstytucji Rzeczypospolitej Polskiej z dnia 2 kwietnia 1997 roku*, Warszawa 2008.
- Szigeti E., *A közigazgatás területi változásai [in:] Kilengések. Köszolgáltatási változások*, ed. T.M. Horváth, Budapest–Pécs 2013.

Szpor G., *Komentarz do art. 3 [in:] Ustawa o krajowym systemie cyberbezpieczeństwa. Komentarz*, eds. K. Czaplicki, A. Gryszczyńska, G. Szpor, Warszawa 2019.

Tyrawa D., *Gwarancje bezpieczeństwa osobistego w polskim administracyjnym prawie drogowym*, Lublin 2018.

## Miejsce samorządu terytorialnego w sferze cyberbezpieczeństwa. Przykład Polski i Węgier

### Streszczenie

Samorząd terytorialny jako struktura, w której może rozwijać się społeczeństwo obywatelskie, gdzie dochodzą do głosu kompetencje cyfrowe lokalnej i regionalnej wspólnoty, musi mieć odpowiednie narzędzia pozwalające na zapewnienie odpowiedniej ochrony cyberbezpieczeństwa. E-administracja, w tym na poziomie samorządu terytorialnego, jest dzisiaj powszechną formą wykonywania zadań publicznych, w związku z czym prowadzone w jej ramach działania w cyberprzestrzeni muszą być odpowiednio zabezpieczone. Ponieważ wiele zadań jest wykonywanych z wykorzystaniem systemów teleinformatycznych, które są narażone na ataki z zewnątrz, więc powinny one spełniać odpowiednie standardy bezpieczeństwa.

Artykuł odnosi się do rozwiązań prawnych w zakresie cyberbezpieczeństwa funkcjonujących w ramach samorządu terytorialnego w Polsce i na Węgrzech.

**Słowa kluczowe:** samorząd terytorialny, cyberbezpieczeństwo, systemy informacyjne