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## PUBLIC ADMINISTRATION IN CYBERSPACE

### Introduction

**I**nformation and Communication Technologies (hereinafter referred to as: ICT) are now a factor in promoting social inclusion and enhancing the quality of citizens' lives, which is expressed through improvements in addressing individual and collective needs in the social, economic and information fields through the technologies and services of the ICT sector<sup>3</sup>. Many countries are making significant investments to expand their digital infrastructure. Government institutions are increasingly using digital media to communicate with their citizens<sup>4</sup>.

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<sup>3</sup> Kasprzyk B, *Aspekty funkcjonowania e-administracji dla jakości życia obywateli. Nierówności Społeczne a Wzrost Gospodarczy*, 2011, No. 23, p. 343.

<sup>4</sup> Dębowski T (Ed.), *Cyberbezpieczeństwo. Wyzwaniem XXI wieku*. Łódź-Wrocław, 2018, p. 34.

Technological developments have opened new horizons and created diverse forms of human interaction, while important social changes continue to influence political processes and the management of the knowledge-based community. Public administration is understood as a set of organisational and executive activities and undertakings, carried out for the benefit of public interest by various entities, bodies and institutions, on the basis of the law and in the forms specified by law<sup>5</sup>.

The authors define public administration both as an executive apparatus of the state, i.e. appropriate structures established to carry out the tasks of the state or its functions, as well as activities aimed at organising the conditions and principles of shaping social relations, implemented by means of legal procedures.

Thus, public administration is made up of administrative bodies and the offices that serve thereof, whose activities cover almost all areas of life, such as: trade, education, culture, housing, economic investment, transport of goods, personal communication, environmental protection, health care, etc. In addition, public administration is divided into government (state) and local administration<sup>6</sup>.

The term e-government is the English term for electronic, interactive administration, and is the equivalent of the Polish term 'e-administracja'.

Contrary to appearances, e-government is an ambiguous notion, and its definition arouses a lot of controversy and causes a lot of stormy discussions in the specialist community. According to Dorota Grodzka, avoiding the need to quote different definitions, 'it can be assumed that there are two basic concepts of e-government – the narrow and broad one. The United States and Asian countries (Japan, Korea) focus on the issue of ensuring access to public services provided by electronic means. A much wider e-government is defined in studies by the Organisation for Economic Cooperation and Development (OECD), the United Nations (UN) and the European Union (EU)<sup>7</sup>.

According to the definition of the European Commission (hereinafter: EC), 'e-government is the use of ICT in public administration, combined with organisational changes, and the acquisition of new skills in order to improve the quality of public services, strengthen citizens' involvement in democratic processes and support state policy<sup>8</sup>.

Public information is directed to specific groups of recipients. Most often, the system of information flow moves in three directions:

- to citizens (government to citizens),
- to representatives of the business world (government to business),
- to other public administration units (government to government)<sup>9</sup>.

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<sup>5</sup> Izdebski H, Kulesza M, *Administracja publiczna — zagadnienia ogólne*. Warsaw, 2004, p. 67.

<sup>6</sup> Smutek Z, Malewska Z, Surmacz B, *Wiedza o społeczeństwie*. Gdynia, 2006, p. 65.

<sup>7</sup> Grodzka D, *E-administracja w Polsce*, *Studia BAS*, 2009, No. 3, p. 58.

<sup>8</sup> Komisja Europejska. *Electronic source*: <http://ec.europa.eu>, accessed: 21.06.2019.

<sup>9</sup> Szewczyk A (Ed.), *Spółeczeństwo informacyjne — problemy rozwoju*. Warsaw, 2007, pp. 50–53.

The concept of electronic administration assumes enabling citizens and entrepreneurs to use a wide range of public services via the Internet. The purpose of changes within e-administration is to enable applicants to handle virtually all matters over the network without having to visit the office in person. Electronic administration also means automating and computerising the existing document-based procedures in traditional paper form and changing the approach in the style of governance, strategic planning, information exchange, and debating communication with the society as a whole, with groups and individual units<sup>10</sup>.

Citizens' needs can be divided into three basic categories:

- social - met by specific institutions (e-health, e-work),
- economic - satisfied by economic activity (e-services, e-work, e-commerce),
- information - concerning the acquisition of official knowledge and social communication (e-education, e-government, e-economy)<sup>11</sup>.

The aim of creating e-government is to increase the effectiveness of the public administration in providing services. E-government is supposed to simplify official matters and ensure availability of relevant information. The adopted form makes it possible to collect in one place matters falling within the competence of various public administration units, and make their procedures available on the Internet<sup>12</sup>. The main difference between traditional administration and e-administration is the change of the role of administration from a body exercising power over a citizen, to an institution providing services to a citizen<sup>13</sup>.

Numerous studies and publications on e-government issues distinguish different levels of development of its services, which, depending on the level of communication between the office and citizens, and the type and complexity of electronic services provided, are divided into four levels:

- Level 1 (one-way interaction) - the possibility to search for information and download official forms from the office's website,
- Level 2 (two-way interaction) - the possibility to search for information, download and return completed forms via the Internet,
- Level 3 (transactions) - full service of the process, i.e. the possibility to perform all activities necessary to deal with a given official matter by electronic means, i.e. from obtaining information by downloading appropriate forms, sending them back after filling in and affixing an electronic signature, to paying the required fees and receiving an official permit, certificate or other document requested by the person/company,

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<sup>10</sup> Sienkiewicz P (Ed.), *Bezpieczeństwo obywateli RP jako czynnik jakości życia*. Warsaw, 2009, p. 43.

<sup>11</sup> Ganczar M, *Informatyzacja administracji publicznej — nowa jakość usług publicznych dla obywateli i przedsiębiorców*. Warsaw, 2009, pp. 53–55.

<sup>12</sup> Wikipedia, E-government. *Electronic source*: <http://wikipedia.org/wiki/e-government>, accessed: 16.07.2019.

<sup>13</sup> Sienkiewicz P (Ed.), *Bezpieczeństwo...*, *op. cit.*, p. 56.

— Level 4 (personalisation, which has been in place since 2007) - includes pro-activity, i.e. activities that increase quality and are user-friendly, and automatic services, i.e. the automatic provision of specific customized services (not initiated by the user)<sup>14</sup>.

The classification and naming of the different levels of e-services development can be found on Wikipedia. The authors of the portal have included the following classification:

- information level - offices publish information on websites, and residents, by browsing the offices' websites on computers or in special information kiosks, get the information they need,
- interaction level - the user can communicate electronically with individual offices, but the offices do not always communicate online with the user,
- transactional level - the user can communicate electronically with individual offices and the office applications electronically correspond with them,
- integration level - specific-purpose portals provide information from different offices, and enable transactions to be executed. Internal systems have been integrated based on algorithmic administrative processes.

The level of integration makes it possible to do everything necessary to process a given official matter electronically, i.e. from obtaining information by downloading the relevant forms and returning them online (sometimes filling in the forms online on the website) to paying the required fees and receiving the official document the person has applied for<sup>15</sup>.

Administrative services and public information resources are available from any computer located anywhere and from any Internet-enabled device, e.g. a mobile phone, regardless of the day of the week and time of the day, i.e. 7 days a week and 24 hours a day.

In the more technologically advanced countries of the European Union (hereinafter: EU), the introduction of services to serve citizens and legal entities in matters of public administration, e.g. in the form of services concerning tax and customs fees, and obtaining information for business activity, has brought financial savings and a clear improvement in the quality of service provided to citizens and entrepreneurs. Most Member States offer administrative services which citizens can use via the Internet. 'E-government is moving towards knowledge-based administration in the sense that technology is becoming available and widespread, and administration should provide smart e-services, meaning that administration is available whenever and wherever the user can tailor the service to their needs'<sup>16</sup>. In the era of the Internet and the development of communication

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<sup>14</sup> Jezińska A, System informatyczny w urzędzie. *Gazeta Prawna*, 2006, No. 82, p. A12.

<sup>15</sup> Wikipedia, E-government..., *op. cit.*

<sup>16</sup> Kasprzyk B, Aspekty..., *op. cit.*, p. 347.

and information technology, 'paper' administration is being transformed into a system of convenient, electronic administrative services.

Public e-services can be found on many government platforms and portals, however, the most well-known and recognisable are: the Electronic Platform of Public Administration Services (hereinafter: ePUAP), the Electronic Services Platform of the Social Insurance Institution (ZUS), and the citizen.gov.pl and biznes.gov.pl portals.

Due to several factors responsible for the differences in the construction and functioning of e-government in Poland and other EU countries, including technological delays, financial limitations and legislative shortcomings, the list of Polish e-government services has been modified and looks as follows:

- tax settlements by both natural persons and business entities,
- searching job offers and help in finding a job,
- obtaining the right to unemployment benefit,
- obtaining the right to a pension,
- obtaining the right to other payments from the Social Insurance Institution (benefits),
- obtaining the right to a student scholarship,
- obtaining an ID card,
- obtaining a driving licence,
- obtaining a passport,
- obtaining a building permit,
- making a report to the police, e.g. reporting things stolen,
- access to and search of public library catalogs,
- notifying the Civil Registry Office of facts subject to registration and obtaining copies of files,
- submitting documents for admission to studies,
- change of the registered address,
- booking a doctor's appointment.

The state of development of public e-services places Poland on the losing end of the European ranking. Practical use of the opportunities offered by e-government more often concerns companies and business entities than average citizens.

The most commonly used by citizens is the information published in the Public Information Bulletin (hereinafter: BIP) as well as the resources of public libraries or online reporting of changes of residence and matters related to filling in tax forms.

### **E-government in creating the information society**

The information and technology revolution and the huge changes taking place in society are causing electronic services (also in the sphere of administration) to play an increasingly important role for both the state and citizens. The Internet is one of the main tools of work and a fast and convenient, i.e. effective, method of searching, accessing and exchanging

information between ordinary people. Since it has worked well for private individuals, it should also fully serve to deal with official matters. 'On the other hand, with the spread of IT education, society is becoming more and more educated, and calls for an improvement in the quality of public services and a change in traditional bureaucratic structures and procedures. Effective and successive implementation of the system of information and documentation workflow in administrative units, and thus the transfer of public services to the electronic level, increases citizens' satisfaction with the service'<sup>17</sup>.

The use of all kinds of e-services is dictated by several universal reasons, such as:

- saving time,
- wide range of possibilities and diverse range of services,
- convenience,
- breaking down geographical and time barriers,
- saving money'<sup>18</sup>.

The benefits of e-government for citizens and businesses include:

- accessibility in one place (Internet),
- the possibility of dealing with and checking the state of affairs at any time and place,
- time saving and speeding up the process,
- enabling people with disabilities to settle official matters without having to leave home or appear in person,
- unlimited office hours,
- use of a single database of documents which are necessary to use public administration services,
- limiting the need to notify all offices of changes to e.g. personal data,
- material savings in the company'<sup>19</sup>.

E-government benefits not only citizens and businesses, but also the administration itself. The introduction of information and telecommunication technology in offices has made it possible to increase the effectiveness of activities undertaken within the framework of the state administration and local government, expressed mainly in time savings, smaller financial outlays, and lessened burdening of officials with additional activities, e.g. transferring data from paper documents to electronic applications (in e-administration, officials receive completed forms in electronic form).

According to Beata Kasprzyk, among the benefits for a public administration office there are :

- streamlining and popularisation of the electronic method of accessing public administration services,

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<sup>17</sup> *Ibid.*, p. 346.

<sup>18</sup> Dąbrowska A, Janoř-Kresło M, Wódkowski A, E-usługi a społeczeństwo informacyjne. Warsaw, 2009, p. 138.

<sup>19</sup> Kasprzyk B, Aspekty..., *op. cit.*, p. 347.

- improving the image of the office as a modern institution, acting in accordance with modern trends, keeping up with the progress of civilization,
- implementing the idea of a more citizen-friendly office, open to social needs and expectations,
- expansion of the catalogue of electronically available services as an improvement in citizens' quality of life and their greater satisfaction,
- the possibility of using an infrastructure that facilitates data exchange between public administrations,
- standardising data exchange,
- reducing duplication,
- reducing administration costs (sending paper documents with traditional stamps and signatures can be replaced by electronic circulation),
- securing communication with branches of administration units, employees located outside of the office (those working in the field using mobile technologies can connect to the office's IT system at any time),
- possibility of archiving documents in electronic form, speed and ease of finding archived documents,
- saving the time needed to handle the customer,
- reducing the risk of errors in sending, addressing, and physical transfer of the document to the addressee<sup>20</sup>.

Consequently, the use of information technology in the office should lead to:

- saving time (citizen, entrepreneur, official),
- capital savings,
- increasing the functionality of provided services,
- increasing the information available,
- increasing the transparency of administrative procedures,
- eliminating errors, inaccuracies and fraud,
- improving accessibility (non-stop e-activity),
- integrating Internet resources,
- a subjective, customer-oriented approach (it is important what is done, not who it is done with).

Tangible benefits associated with the use of the IT network were first noticed by banks, which offered their clients access to services via the network. Thanks to computerisation, financial institutions gained a number of new clients and increased their profits, and thus reduced operating costs.

In Europe, e-government was first mentioned in 1994, when the EC published a report 'Europe and the global information society. Recommendations to the Council of Europe'<sup>21</sup> — commonly referred to as the Bangemann

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<sup>20</sup> *Ibid.*, p. 347.

<sup>21</sup> Community Research and Development Information Service. *Electronic source*: [http://cordis.europa.eu/news/rcn/2730\\_pl.html](http://cordis.europa.eu/news/rcn/2730_pl.html), accessed: 22.01.2016. [in:] Demczuk A, *Od raportu Bangemann do Strategii Europa 2020. Rozwój społeczeństwa informacyjnego w polityce Unii Europejskiej — bilans 15 lat. ANNALES UNIVERSITATIS MARIAE CURIE-SKŁODOWSKA LUBLIN — POLONIA*, 2016, Vol. XXIII, No. 2, SECTIO K, p. 30.

report. The document was an analysis of the then current situation in the field of using the Internet and electronic technologies in citizens' lives, and indicated the directions of development of the information society<sup>22</sup>. In 2000, the so-called Lisbon Strategy was developed, and then revised in 2005, which set out the principles of the Community policy referring to the development of the information society and knowledge-based economy. From the EU perspective, actions aimed at creating a cheaper and more effective administration will improve the governance of states, improve the processes of democratisation of social life, and the influence of ordinary citizens on the way their rights are respected, i.e. they will simply contribute to a better life for the people. Efficient public administration that is closer to the citizens and free from unnecessary bureaucracy is of great importance. The integration of service provision via Internet connections is expected to increase Europe's competitiveness in the global market and is an expression of the civilizational progress of both the EU as a whole and its individual Member States.

The EU Action Plan for e-government, which sets out the directions for the development of e-government in the countries of the Community and defines specific objectives to be implemented in the coming years, contains five priorities, which were listed by D. Grodzka:

- the problem of combating the so-called digital divide and counteracting social marginalisation in connection with electronic access to public services,
- increasing user satisfaction with public services by modernising the administration,
- improving the efficiency of the public sector,
- implementing an electronic public procurement system,
- strengthening participation in, and democratising decision-making<sup>23</sup>.

The year 2000 was a breakthrough in e-government. At that time, the Scientific Research Committee issued a publication entitled 'Society of Global Information in the Conditions of Poland's Accession to the European Union'<sup>24</sup>. Poland was not a member of the European community at that time, but discussions were already taking place on the necessity of building an e-government in its territory in the near future. Work was carried out on the possibilities and limitations of our country in the implementation of the information society development strategy. The aforementioned Scientific Research Committee and the Ministry of Communications issued a document entitled 'Objectives and Directions for the Development of the Information Society in Poland'<sup>25</sup>, which contained guidelines for the creation of a public e-administration system.

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<sup>22</sup> Ministry of Internal Affairs and Administration. *Electronic source*: <http://mswia.gov.pl>, accessed: 2.08.2019.

<sup>23</sup> Grodzka D, *E-administracja...*, *op. cit.*, p. 59.

<sup>24</sup> Filipiak J, *Spółeczeństwo globalnej informacji w warunkach przystąpienia Polski do Unii Europejskiej*. *Electronic source*: <http://yadda.icm.edu.pl/yadda/element/bwmeta1.element.baztech-article-AGH5-0009-0074>, accessed: 2.08.2019.

<sup>25</sup> Komitet Badań Naukowych, Ministerstwo Łączności, *Cele i kierunki rozwoju społeczeństwa informacyjnego*. Warszawa, 2000.



Poland's accession to the EU has brought many changes in the organisation of the state policy, but also in public awareness. Accessibility to e-government services should be implemented in two ways. The first stage of computerisation of the Polish public administration assumed the creation of a nationwide IT system connecting both individual administrative institutions and bodies, as well as administration offices with citizens and entrepreneurs. The second stage of the development of e-government was to consist in the adaptation of the Polish public administration at various levels to the pan-European system<sup>26</sup>. As part of the EU project called 'Digital Agenda for Europe 2011-2015', which aimed to implement actions on the use of information and communication technologies in public services, initial work on new solutions to facilitate access to public services across the EU was undertaken<sup>27</sup>.

The Digital Agenda for Europe includes actions in four categories:

- empowerment of the user (services offered tailored to the current needs of users, increased transparency of administrative procedures, possibility to check the progress of a case),
- strengthening the EU internal market (continuity of business services, improvement of existing e-services and extension of the offer of new services, ensuring personal mobility without restrictions on access to e-services, EU-wide deployment of transgenic services),
- efficient and effective public administration (improving organisational processes, e.g. electronic procurement, faster processing of applications, reduction of administrative burden, green public administration, e.g. electronic archiving, use of videoconferencing instead of physical travel),
- meeting the preconditions for the development of EU e-government (open specifications and interoperability through the use of EU-wide standards and uniform IT systems, ensuring mutual recognition of electronic identification and authentication solutions).

Mariusz Madejczyk gives examples of actions that foster the development of pan-European e-government:

- implementation of a one-time secure data registration mechanism in public administration bodies in order to avoid the need to repeatedly provide the same information to different public administration units,
- promotion of the EU-wide use of national electronic identities, the so-called e-ID, to simplify cross-border procedures for setting up a company abroad, moving abroad or working outside of one's own country, completing pension formalities online when retiring in another country or enrolling in a foreign school or university,

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<sup>26</sup> Szewczyk A (Ed.), *Spółeczeństwo...*, *op. cit.*, pp. 77-78.

<sup>27</sup> *Wizje i priorytety w zakresie administracji elektronicznej w Europie. Wytoczne dla 'Planu działań w zakresie administracji elektronicznej po 2010 r.'*, Biblioteka eRozwoju SMWI, 2009, No. 47.

- enabling citizens and businesses to monitor in real-time the progress of public administration handling of their affairs through greater transparency and openness,
- adapting services to better meet the real needs of users who expect fast and secure digital delivery of documents and information,
- making data available for reuse by third parties to enable the development of new public services and applications such as maps for navigation systems or applications providing travel information<sup>28</sup>.

“An important step in the development of e-government in Poland was the development of the document entitled ‘e-Poland IT Strategy for the Republic of Poland’, containing an action plan for the development of the information society in Poland, which was modelled on the European e-Europe plan”<sup>29</sup>. Updated in 2006, the plan became the basis for the initial concept of the Gate of Poland project – ‘a central IT system whose task was to provide administrative services to citizens and business entities by electronic means. [...] The basic task of the central system to be built is to place on the network, and give on-line access to all state administration services having IT facilities. The functions implemented by the system include the following tasks:

- improving the flow of information to the citizens,
  - ensuring that matters can be handled electronically between the citizens and businesses, and the government,
  - the possibility of submitting applications for documents over the Internet,
  - facilitating access to medical and insurance data,
  - exchanging information between offices on-line<sup>30</sup>.
- In practical terms, these assumptions and concepts were expressed in the enactment of several important legal acts by the Sejm:
- Act of 6 September 2001 on access to public information<sup>31</sup>,
  - Act of 18 September 2001 on Electronic Signatures<sup>32</sup>,
  - Act of 17 February 2005 on computerisation<sup>33</sup>.

In particular, the Act on Access to Public Information was the key in building e-government in Poland. It introduced the BIP, to which all Internet users had access. The Public Information Bulletin is a system of websites for universal and free access to public information. The act thus confirmed the constitutional right of citizens to obtain information on the activities of public authorities, including access to documents. Since many of them are in electronic form, everyone has the right

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<sup>28</sup> Madejczyk M, Portalowa szansa na interoperacyjnoř. *Elektroniczna Administracja*, 2008, No. 5, pp. 23–25.

<sup>29</sup> Wikipedia, E-government..., *op. cit.*

<sup>30</sup> *Ibid.*

<sup>31</sup> Tekst jedn. DzU z 2019 r., poz. 1429; dalej jako: ustawa o dostępie do informacji publicznej.

<sup>32</sup> Akt uchylony 7 kwietnia 2016 r.; dalej jako: ustawa o podpisie elektronicznym.

<sup>33</sup> Tekst jedn. DzU z 2019 r., poz. 700.

to access them by electronic device. The act also specifies which central and local government bodies are obliged to publish information and documents, how and to what extent.

- On the main page of the BIP, we read that ‘all pages of the Public Information Bulletin must be made in accordance with the executive act, i.e. the Ordinance of the Council of Ministers of October 11, 2005, defining the minimum requirements for ICT systems. [...] The Ordinance imposes an obligation on public administration bodies to execute their websites in such a way as to facilitate access to the BIP by means of various electronic devices (personal computer, portable computer, mobile phone, etc.)<sup>34</sup>.
- The requirements for electronic documents introduced to e-government were issued by way of regulations implementing the Acts. These acts relate to the principles of creating electronic forms, the method of carrying out the Official Certificate of Acceptance (hereinafter referred to as: UPO), the conditions for delivering electronic documents (electronic letterbox), the binding formats of e-documents, and formats of electronic signatures<sup>35</sup>.

The possibility of finding information on how to deal with a particular case, and downloading the necessary documents and forms thanks to the BIP is a half-way solution, and is only an introduction to more advanced procedures in public administration. The next milestone on the way to building a modern, convenient, and most importantly secure e-administration in Poland was the appearance of the Electronic Mailbox (hereinafter: ESP) on the basis of the Ordinance of the Prime Minister of 29 September 2005 on the organisational and technical conditions for the delivery of electronic documents to public entities<sup>36</sup>. The Electronic Mailbox has been defined as ‘a publicly available electronic means of communication for the transmission of information in electronic form to a public entity using a publicly available electronic communications network’<sup>37</sup>. The idea of the ESP was simple - a citizen sends a completed form via the Internet to the office, and then receives from the office a confirmation of its receipt, i.e. the UPO.

The printing and filling out of the form that the customer has to bring to the office was a convenience, but it was only the Act on Electronic Signature that created the chance for a really quick and convenient handling of matters. A document with an electronic signature could be sent online and had the same legal value as a handwritten signature.

An example of computerisation of public administration is ePUAP, which was launched in 2008. Its task was to ‘provide public services

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<sup>34</sup> Biuletyn Informacji Publicznej, Czym jest Biuletyn Informacji Publicznej? *Electronic source:* [www.bip.gov.pl/articles/view/51](http://www.bip.gov.pl/articles/view/51), accessed: 21.08.2019.

<sup>35</sup> Grodzka D, E-administracja..., *op. cit.*, pp. 59–60.

<sup>36</sup> The act was revoked on 7.04.2016.

<sup>37</sup> Ganczar M, Informatyzacja..., *op. cit.*, p. 73.

based on electronic IT channels through a single Internet destination<sup>38</sup>. This means that certain official matters that need to be dealt with in different offices, subordinate to different public ministries and acting on the basis of different laws, can be carried out via the Internet - precisely thanks to the ePUAP platform. From the point of view of the user, all services available as part of the interoperable electronic public administration services should be available by logging onto one website<sup>39</sup>.

### Conditions for the development of e-government

As the European experience and domestic research show, the demand for and number of online services is growing rapidly. The society is becoming more and more educated, and the awareness of the existence of e-services in other countries is deepening the willingness to transfer and use proven solutions in Poland. Migration and contacts with other nations are making Poles want to feel like real members of Europe. Since it is easier and more pleasant to live in other countries thanks to services available via the Internet, it may also be real in Poland.

There are, however, barriers that limit the dissemination of electronic services in contacts with public administration offices. Poland occupies one of the last positions in the rankings of e-government implementation among EU Member States. While the distance between our country and more developed countries, such as Germany, Great Britain, France, and the Scandinavian countries can be explained by many years of 'civilisation' delays, it is difficult to find an explanation for the differences in the development of e-government compared to countries that joined the EU at the same time as Poland, or later.

Dorota Grodzka believes that 'the main barriers hindering or preventing effective implementation of projects that make up e-government include: — funding arrangements, — the level of legislative and technical administration preparation, — factors related to the phenomenon of digital exclusion'<sup>40</sup>.

Beata Kasprzyk adds: 'You cannot forget the psychological barrier. The society is still convinced that the Internet is not a safe place to communicate. Not without significance is also the unwillingness of office employees to accept technological changes, and the habituation to the hitherto outdated procedures and the paper documentation workflow'<sup>41</sup>. The author also stresses that, 'undoubtedly, the idea of e-government is an indispensable

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<sup>38</sup> Walesiak P, e-PUAP — w czym problem? *Elektroniczna Administracja*, 2008, No.3, p. 12.

<sup>39</sup> *Electronic source*: <https://www.gov.pl/web/cyfryzacja/e-uslugi>, accessed: 2.08.2019.

<sup>40</sup> Grodzka D, *E-administracja...*, *op. cit.*, p. 71.

<sup>41</sup> Kasprzyk B, *Aspekty...*, *op. cit.*, p. 347.

determinant of effective state structures, providing citizens and companies with an opportunity to act in the contemporary civilizational realities. The universality of the use of online public services depends to a large extent on informing the interested parties about their existence, and the benefits that are associated with their use. The lack of knowledge on this subject will not increase the demand for electronic public services; on the contrary, what is new and unknown does not inspire trust<sup>42</sup>.

The most important task facing e-government today is to improve the way public services are delivered electronically. Their implementation does not consist in creating an appropriate portal through which services will be provided. Nor can it be limited to providing an appropriate technical infrastructure. According to D. Grodzka, 'It is necessary to redesign internal administrative procedures, as well as to reconstruct the facilities supporting decision-making and the performance of tasks. The administration is to act as a modern company with a separate front office, i.e. customer service department, accepting orders, and its implementation is the responsibility of the back office, which deals with the internal administrative procedures of the office, implemented invisibly for the client. The performance of the service is improved by electronic exchange of information between entities on different administrative levels. The condition for this is high integration and interoperability, understood as the ability to cooperate between different IT systems<sup>43</sup> in such a way that it is secure and does not cause disruption, distortion or blocking of the operation of individual systems.

E-government services in Poland have an upward trend, but this growth is much slower compared to other European countries. According to surveys and statistical data of the Central Statistical Office, in 2004 only 10% of public services in Poland were provided electronically. Two years later, 20% of basic administrative services could already be handled via the Internet. In the same period on a European scale, on average 48% of official matters were handled online<sup>44</sup>.

The implementation of ICT systems in the administration presents the Polish state with numerous challenges, including.:

- the need to invest in IT and telecommunications infrastructure,
- changes in working conditions, forms, rules and principles towards being provided through the network,
- ensuring all conditions for equal on-line access to the authority,
- ensuring the privacy of information and personal data protection<sup>45</sup>.

Figure 1 shows the challenges facing e-government, which are divided into technical, economic, and social ones.

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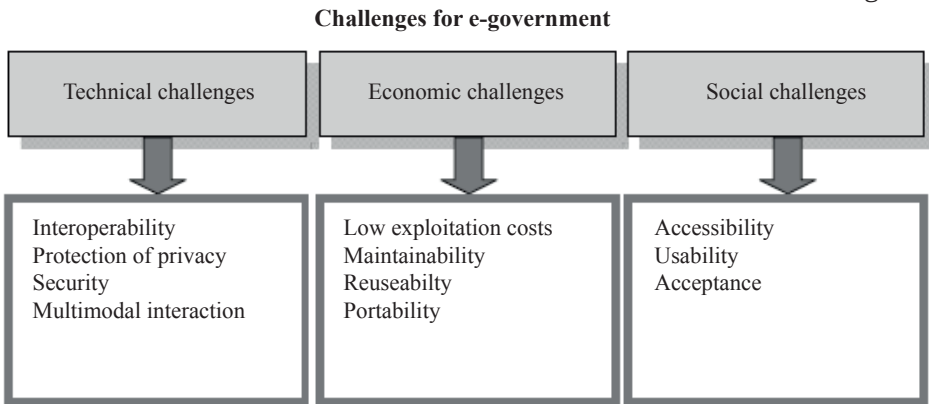
<sup>42</sup> Ganczar M, *Informatyzacja...*, *op. cit.*, p. 40.

<sup>43</sup> Grodzka D, *E-administracja...*, *op. cit.*, p. 59.

<sup>44</sup> Zwierzchowski Z, *Mają być sposoby na nadrobienie opóźnień. Rzeczpospolita*, 28.02.2007.

<sup>45</sup> Madejczyk M, *Portalowa...*, *op. cit.*

Figure 1



Source: Wilk A.M, II Konferencja Okręęego Stołu 'Polska w drodze do społeczeństwa informacyjnego'. *Przegląd Telekomunikacyjny*, 2001, No. 8–9, p. 37

The full informatisation of offices entails the fulfilment of several basic conditions:

- 'technical ones – i.e. providing an appropriate environment for performing tasks both on the part of the office (necessary applications, equipment, network architecture) and on the part of the client (client applications enabling cooperation with office applications, implementation of electronic signature, electronic payments),
- organisational ones - involving changes in the functioning of the office's structures and its employees, for whom the client should be a partner, not a claimer,
- legal ones – i.e. the need to enact new regulations or change the existing legal acts, regulating and enabling the performance of tasks through this communication channel,
- mental ones – i.e. a change of attitude primarily on the part of the office's client; dealing with matters through e-government is also an appropriate form of performing civic or legal duties<sup>46</sup>.

The ICT network infrastructure in Poland is still underdeveloped. Poland faces a great challenge in terms of increasing the availability of broadband Internet access. Only an appropriate level of access to thereof guarantees the appropriate development of public services provided by electronic means, including e-government applications.

## Conclusion

The development of the information society is currently a condition that stimulates the growth of economic competitiveness, the implementation

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<sup>46</sup> Wilk A.M, II Konferencja Okręęego Stołu 'Polska w drodze do społeczeństwa informacyjnego'. *Przegląd Telekomunikacyjny*, 2001, No.8–9, p. 37.

of a coherent regional policy, the management of the growing unused workforce and the development of many other areas of social life. There are already many social and economic problems which cannot be solved without the wide use of information technologies.

One should accept the view that by enabling cooperation between authorities, businesses and citizens, public services provided by electronic means are faster and more tailored to individual needs. These services have an impact on improving two-way communication between citizens and administration. For the client, the most important thing in their relationship with the office is to have their cases handled quickly, efficiently and competently.

In Poland, many solutions in the field of building an e-administration system have already been implemented. The society appreciates the value of such platforms as BIP, e-Declarations, and Electronic Verification of Beneficiary Eligibility. Polish people are more and more willing to use the Internet to deal with official matters, although they still stop at downloading the form, with which they later run from office to office. Electronic administration cannot completely replace the human factor as it is people who make the decisions, but it will certainly make life easier for the ordinary citizen.

The development of public administration in the EU requires cooperation between member states, joint actions to create new technologies, the use of best practices, and the creation of a coherent approach. The development of e-government, as the EC emphasises, is needed to strengthen the position of European citizens and enterprises in order to improve their mobility on the 21st century internal market, and ensure the development of the e-economy based on the 'future network'. It is also an element of sustainable development.

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**DOI: 10.5604/01.3001.0014.1130**

**<http://dx.doi.org/10.5604/01.3001.0014.1130>**

**Keywords:** administration, cyberspace, entities, society, technologies

**Summary:** The turn of the twenty-first century is the time of a global revolution consisting in an avalanche of modern technologies. The achievements of science and technology are used in every field of human existence. The basis of functioning of modern society is the use of cyberspace. Access to mobile phones, computers and the global ICT network is a determinant of societal development. The idea of universal automation and computerisation is a fact. The possibility of using high-speed ICT connections is not only the domain of scientific institutions, military agents and large business entities. A global computer network connects individuals. The intensive development of modern technologies, the Internet and telecommunication networks has enabled the emergence of a new approach in communication between citizens and the state (with central and local government offices). It has also enabled the introduction of new solutions, models and services at this level, resulting directly from specific social needs and expectations. According to the assumptions of the idea of e-government, the basic premise for creating e-government is to improve contact with the authorities at all levels, and to speed up procedures for dealing with official matters. Investing in modern administration may bring tangible benefits to citizens and entrepreneurs as well as to the administration itself.