

Aleksandra Kuczyńska-Zonik¹

The Influence of New Technologies on the Election Process in Lithuania

Keywords: Lithuania, electoral process, new technologies, ICT, electronic voting

Słowa kluczowe: Litwa, proces wyborczy, nowe technologie, ICT, głosowanie elektroniczne

Abstract

This article aims to analyze the use of new technologies (ICT) in the election process in Lithuania, understood as election procedures and electronic voting. While ICT is widely used in the registration of voters, calculating voting results, or announcing election results, so far, the concept of electronic voting in Lithuania raises many concerns. However, it is anticipated that due to the COVID-19 pandemic, new regulations may be adopted, and electronic voting will contribute to the modernization of election procedures and help maintain sanitary requirements in the current crisis. Based on the analysis of legal acts, reports of international organizations, and the results of academic research, the author proves that new technologies significantly affect the operation of the broadly understood electoral apparatus. They can also increase electoral accessibility and participation, improve electoral processes in the context of new challenges, and stimulate the international visibility of the state.

¹ ORCID ID: 0000-0002-5672-9613, Ph.D., Department of Political Systems and International Communication, Institute of Political Sciences and Administration, Faculty of Social Sciences, John Paul II Catholic University of Lublin. E-mail: aleksandra.kuczynska-zonik@kul.pl.

Streszczenie

Wpływ nowych technologii na proces wyborczy na Litwie

Celem artykułu jest analiza zastosowania nowych technologii (ICT) w procesie wyborczym Litwy rozumianym jako procedury wyborcze, jak i głosowanie elektroniczne. Podczas gdy ICT stosowane są szeroko podczas rejestrowania wyborców, obliczania wyników głosowania czy ogłaszania wyników wyborów, do tej pory koncepcja głosowania elektronicznego na Litwie wywołuje wiele obaw. Przewiduje się jednak, że ze względu na pandemię Covid-19 przyjęte mogą być nowe regulacje, a głosowanie elektroniczne przyczyni się do modernizacji procedur wyborczych i pomoże zachować wymogi sanitarne w obecnej sytuacji kryzysowej. Wykorzystując analizę aktów prawnych, raporty organizacji międzynarodowych i rezultaty badań naukowych, autorka dowodzi, że nowe technologie znacząco wpływają na działalność szeroko rozumianego aparatu wyborczego, mogą zwiększać dostępność i uczestnictwo wyborcze, usprawniać procesy wyborcze w kontekście nowych wyzwań, a także stymulować międzynarodową widoczność państwa.

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I. Introduction

Undoubtedly, the use of new technologies in the election process has increased significantly in recent years. Electronic support of the election process is becoming more and more common, and nowadays, new technologies are used at various stages almost all over the world. While some actions are welcomed and approved by the public, other decisions cause concern and undermine citizens' confidence in state institutions. A particular example is Estonia, whose recognizable qualities are innovation and the development of infrastructure, technology, and digitization. Estonia is also the first country in the world to introduce electronic voting (in 2005, at the local level, in 2007, for parliamentary elections, and now – at all – local, national, and European levels)².

² K. Jaruga, *E-voting: nadzieje i rozczarowania współczesnego wyborcy*, "Człowiek zalogowany" 2014, No. 3, pp. 131–140; M. Musiał-Karg, *Challenges of i-voting – practices, rules and perspectives. Examples from Estonia and Switzerland*, "Przeгляд Politologiczny" 2017, No. 4, pp. 61–72.

Since 2005, when electronic votes accounted for almost 2% of the vote total, in the 2019 elections to the European Parliament, this percentage increased to over 46%. It seems that this solution may be particularly attractive in the case of geopolitical units of small size and population³. However, in none of the countries that have experimented with this voting method, apart from Estonia, has electronic voting become a universal platform, or it did not meet its expectations. Despite many years of attempts to conduct electronic voting in Lithuania, it has not been achieved. It seems, however, that the COVID-19 pandemic may be a significant impulse for changes in this area. Due to the prolonging restrictions, Lithuania has started debates on increasing access to public services in the electronic system. The discussions focused on organizing electronic elections, which could be a part of the modernization of election procedures and would help maintain sanitary requirements during voting, which are particularly important in the current crisis.

The author assumes that new technologies are an effective tool used at every stage of the election process. They help reduce the uncertainty associated with the counting of votes and the announcement of preliminary results and increase the certainty and transparency of the election process. They make it possible to participate in voting for people who are otherwise, for various reasons, unable to do so. They help overcome the limitations related to disabilities or place of residence. These arguments are in line with the principle of free elections, assuming, among others, ensuring that each voter has equal and effective access to the polling station, including through other, non-traditional techniques of casting a vote⁴. New technologies can thus increase social participation and the participation of citizens in political life and thus make the ideas of democracy a reality. Technologies must be integrated into the legal and organizational framework of the electoral process and take social expectations into account.

New technologies do not solve all the existing problems (political, social, financial) that turn into obstacles in the election process. They can jeopard-

³ K. Szwed, *Głosowanie elektroniczne na Wyspach Alandzkich – idea bez pokrycia czy realny scenariusz?*, "Przegląd Prawa Konstytucyjnego" 2019, No. 4 (50), p. 15.

⁴ J. Szymanek, *Bezpieczeństwo procesów wyborczych (uwagi de lege lata i de lege ferenda na tle rozwiązań stosowanych w państwach demokratycznych)*, "Zeszyty Prawnicze BAS" 2017, No. 1 (53), pp. 9–40.

ize the secrecy of the vote and the integrity of the elections as a whole. Moreover, they can raise doubts about the transparency and accountability of the authorities for the conduct of the elections. So far, new technologies used in the counting process have, in some cases, raised concerns as to whether the available digital tools are in line with the OSCE liabilities and international principles of democratic elections. In addition, electronic tools were assigned a role in increasing voter turnout and increasing citizens' interest in the election process in general. Skeptics argued, however, that the extension of voting methods to electronic voting does not translate easily into voter turnout, which is additionally influenced, among others, by access to the Internet, trust in election procedures, or social habits. It is confirmed by research carried out in Estonia – D. Bochsler⁵, K. Vassil, and T. Weber⁶ stated that while the percentage of users voting electronically is growing, electronic voting does not affect the overall turnout. Consequently, the research results bring into question whether electronic voting is a remedy for the insufficient level of democracy in the state.

Considering the need for research in this area, the purpose of this article will be to analyze the use of ICT in electoral practices in Lithuania in two areas: 1. election procedures including voter registration, calculation of voting results, and announcement of election results, and 2. electronic voting. The research will also pay attention to other aspects of applying new technologies, such as integrity and accountability of the information system, education and public trust, communication of electoral bodies with voters, etc. Drawing on legal acts, reports of international organizations, and scientific works, the author will try to prove the hypothesis that new technologies significantly, though in different ways, influence 1) the activity of electoral apparatus in a broad sense (Central Electoral Commission – CEC, lower-level electoral bodies) and election administration); 2) accessibility and electoral participation; and 3) improvement of electoral processes in the context of new challenges.

⁵ D. Bochsler, *Can the internet increase political participation? An analysis of remote electronic voting's effect on turnout*, "DISC Working Paper Series 08", Budapest 2009.

⁶ K. Vassil, T. Weber, *A bottleneck model of e-voting: Why technology fails to boost turnout*, "New Media & Society" 2011, No. 13 (8), pp. 1336–1354.

II. New Technologies in Election Procedures in Lithuania

The Lithuanian electoral system uses a ballot paper to express the independent will of the voter. Internationally, this voting method is referred to as Australian because it was first used in Australia in 1856. Due to its lack of long distances and large constituencies, Lithuania did not need voting devices. However, with the increase in the number of electronic devices, mobile devices, applications, and services that permeate everyday life, Lithuania, too, has begun to consider the use of touch-screen voting terminals installed at polling stations⁷.

So far, the issue of new technologies has been, first of all, the aspect of their application in the work of election authorities – their support in entering the voter register, in the efficient and correct determination of the voting results, and in making all the election documents available to interested institutions and people⁸. In particular, such activities could include: 1. registering voters, 2. calculating voting results and election results based on numerical data from voting protocols, 3. providing data on the course and results of elections and referendums, 4. publishing election results, 5. keeping an election data archive and database.

In Lithuania, CEC (*Vyriausioji rinkimų Komisja, VVRK*) has an integrated information system (VRK IS) accessible only to authorized users through electronic identification⁹. An important part of the system is the ABRIS system (electronic voter identification system), which is used to check voters' eligibility, register their arrival at the polling station, and the fact of casting a ballot. This system is linked and synchronized with citizens' data to vote in any precinct, despite the rule that the voter must vote in the precinct in which he or she lives.

⁷ V. Stancelis, *Balsavimo ir balsų skaičiavimo įranga: nuo popierinio biuletenio iki balsavimo internetu. Istorija galimybės, problemos ir sprendimai*, "Parlamento Studijos" 2016, No. 20, <http://www.parlamentostudijos.lt/Nr20/files/88-111.pdf> (13.08.2020).

⁸ R. Drapiński, *Zastosowanie techniki elektronicznej w procedurach wyborczych i referendalnych*, [in:] *Demokratyczne standardy prawa wyborczego Rzeczypospolitej Polskiej. Teoria i praktyka*, eds. M. Lisiak, K.W. Czaplicki, F. Rymarz, Warsaw 2005, pp. 97–108.

⁹ OSCE, *Republic of Lithuania Parliamentary Elections 11 and 25 October 2020*, ODIHR Election Expert Team Report, Warsaw, February 8, 2021, https://www.osce.org/files/f/documents/e/a/477730_0.pdf (12.02.2021).

If a voter lives abroad or will be staying outside Lithuania on the election day, he/she has the right to join voters voting abroad and register to vote abroad through the election portal. In the application for registration, voters must indicate how he/she wishes to participate in elections and referendums. In addition to registration, since 2016, the system also simplifies the counting of preferential votes at polling stations¹⁰. However, according to the OSCE, the method of recounting these votes in the system is not fully transparent. Therefore, legislative changes would need to be made to specify detailed rules for recounting regardless of the software used¹¹.

It should be remembered that the VRK IS system is not the mechanism for vote counting – the role of electoral commissions is the most important. During each poll, votes are counted manually, and the score lines are entered into the system. Based on that, the electronic system generates protocols. The protocol is printed and then signed by committee members and observers. Then, the data is sent to CEC in both paper and electronic versions, which approves and publishes the final results on its website. If it is suspected that the online data may be incorrect, it is compared with the paper protocols (printed and signed by individual committees). They are the primary source and take precedence over the results in the electronic system.

New technologies are also utilized in many other activities of CEC. For example, the commission publishes a map of election advertisements on its website vrk.lt. Those who want to inform CEC about possible violations of the electoral law can also do it through the website.

The security of the VRK IS is guarded by the National Cyber Security Center (lit. *Nacionalinis kibernetinio saugumo centras*) subordinated by the Ministry of Defense. It is liable for monitoring cyber incidents, controlling the implementation of cybersecurity requirements, cybersecurity of critical IT infrastructure, and building state IT capabilities and resources¹². It looks

¹⁰ Under Lithuania's open list proportional representation, a voter can vote for five candidates from among those proposed by the parties, who are assigned so-called preferential votes, D. Sześciło, *Mieszany system wyborczy w państwach Europy Środkowej i Wschodniej*, Warsaw 2016.

¹¹ OSCE, *Republic of Lithuania Parliamentary Elections 11 and 25 October 2020...*, p. 11.

¹² Nacionalinis kibernetinio saugumo centras, <https://www.nksc.lt> (19.02.2021).

after protection against system failure, backup, and archiving of data, acting under national regulations and international standards. No cyber-attacks on the VRK IS system have been reported in recent years.

The dynamics of ICT implementation in electoral procedures resulted from public expectations for speed, professionalism, and transparency of certain activities. In 2015 Lithuania purchased a new IT system prepared by iTree, a Lithuanian IT company. During the first round of the 2016 parliamentary elections to the Seimas, at least three major disruptions were recorded due to significant load on the system, resulting in elements of the system being temporarily shut down. At the same time, it was also reported that the data of those voters who had previously logged into the CEC system had been leaked. It also turned out that the data in the system differed from the results from the traditional counting, and thus the announcement of the final election results by the CEC was significantly delayed, which triggered a wave of indignation from both local election commissions and citizens¹³. Eventually, the errors in the system were fixed, but the case was reviewed by the Public Procurement Office regarding the transparency of the procurement made by the CEC and the State Inspectorate of Personal Data regarding the leakage of voters' data. The problem largely turned out to be insufficient testing of technical solutions before the system was used in parliamentary elections. Although tests and risk assessments were carried out early on according to international law and standards, the results were not made public, reducing the transparency of the whole process¹⁴.

III. New Voting Technologies

In this analysis, the author will rely on the OSCE definition from the Handbook for the Observation of New Voting Technologies, in which “new voting

¹³ G. Degutis, M. Tarcijonaitė, *IT įmonės: VRK sistemos klaidoms atskleisti neprireikė netikėtumų*, “Verslo žinios”, October 11, 2016, <https://www.vz.lt/sektoariai/informacines-technologijos-telekomunikacijos/2016/10/11/it-imonos-vrk-sistemos-klaidoms-atskleistine-prireike-netiketumu> (18.02.2021).

¹⁴ OSCE/ODIHR, *Republic of Lithuania Parliamentary Election 9 October 2016 Election Assessment Mission Final Report*, January 31, 2017, <https://www.osce.org/files/f/documents/6/8/296446.pdf> (18.02.2021), p. 7.

technologies” (NVT) is defined as information and communication technologies (ICT) used for voting and vote counting (“electronic voting”). These include ballot-scanning technologies, direct voting systems at polling stations, electronic voting, and hybrid instruments¹⁵.

Electronic voting in Lithuania has been both parts of academic discourse and public debate since the 2000s. The concept of online voting in elections and referendums, in which the objectives and principles of voting were formulated, by the resolution of The Seimas of the Republic of Lithuania, No. X-912 was approved in 2006¹⁶. The draft law has been submitted to the Seimas several times, but none of them has been approved. For example, in 2017, there were suggestions that electronic voting could be introduced during the 2020 parliamentary elections. To this end, a draft law was prepared¹⁷ and submitted to the Seimas for deliberation in 2018 (the draft was eventually rejected due to many ambiguities). Its initiators argued that over half of the Lithuanian population supports the idea of online voting, and extending voting methods to include electronic voting would increase voter turnout, especially among young people and Lithuanians living abroad¹⁸. On this basis, it has been suggested that electronic voting will be attractive precisely to this group of voters¹⁹ in the future. Data on electoral participation in Lithuania confirm the downward trend. In the 2020 parliamentary elections, turnout was three percentage points lower than four years earlier and 5 points lower than in 2012. In contrast, turnout during the 2009 European Parliament elections was only 21%, undoubtedly explained by cit-

¹⁵ OSCE/ODIHR, *Handbook for the Observation of New Voting Technologies*, Warsaw 2013, p. 4.

¹⁶ *Balsavimo internetu rinkimuose ir referendumuose koncepcija*, <https://e-seimas.lrs.lt/portal/legalActPrint/lt?jfwid=wny8rn4cu&documentId=TAIS.280219&category=TAP> (16.03.2021).

¹⁷ *Lietuvos Respublikos balsavimo internetu sistemos sukūrimo ir įgyvendinimo įstatymo projektas nr 17–4180 (2)*, <https://e-seimas.lrs.lt/portal/legalAct/lt/TAP/bffd9c00ec7f11e7a5cea258c39305f6?positionInSearchResults=1&searchModelUUID=c2d53420-a86f-43a4-8e19-3b5e-fbdf8443> (16.03.2021).

¹⁸ More broadly, on the lack of interest of Lithuanian youth in politics: A. Diržinskaitė, *Apolitiška karta: kodėl jauniems Lietuvos žmonėms neįdomi politika*, “Politologija” 2018, No. 4 (92), pp. 3–28.

¹⁹ K.W. Czaplicki, *Głosowanie elektroniczne (e-voting) – wybrane zagadnienia*, [in:] *Demokratyczne standardy prawa...*, pp. 35–66.

izens' lower interest in issues far beyond the country²⁰. Electronic voting was thus intended as a response to declining public involvement in elections²¹. However, fear of cyber threats, systems failure, vote manipulation, and the need to protect personal data have deterred the Lithuanian government from implementing this voting method²².

In June 2020, The Seimas passed a law allowing people who vote abroad when “traditional voting in a foreign country is not possible” and people who remain isolated in Lithuania to vote electronically²³. According to the envisaged procedure, these voters were to receive an individual electronic voting code by post, which would enable them to cast their vote via the CEC web-

²⁰ European Parliament elections are treated as secondary by voters in Lithuania. The European election campaign remains on the margins of media and public attention, M. Kluonis, *2009 metų Europos Parlamento rinkimų Lietuvoje rezultatai: aplinkybės ir prognozė*, “Parlamento Studijos” 2009, No. 8, http://www.parlamentostudijos.lt/Nr8/8_politika_1.htm (2.07.2020); A. Šuminas, *2019 m. Europos Parlamento rinkimų kampanija Lietuvoje ir kitose Europos sąjungos valstybės*, “Parlamento Studijos” 2019, No. 27, <http://www.parlamentostudijos.lt/Nr27/files/144-156.pdf> (12.08.2020).

²¹ M. Kucharczyk, *Litwa rezygnuje z głosowania przez Internet*, Euractiv, 30 September 2019, <https://www.euractiv.pl/section/gospodarka/news/litwa-rezygnuje-z-glosowania-przez-internet> (12.08.2020).

²² Doubts about the security of electronic voting have also been raised in countries already using this method. In the Netherlands, this method has been criticized due to the issue of source code secrecy and evaluation reports, as well as lack of verifiability. In fact, it led the Netherlands to revert to paper voting with a manual count. Similarly, Norway implemented a limited online voting system for municipal elections, but abandoned the project due to security concerns and lack of improvement in voter turnout. Finally, Åland had planned to introduce an electronic voting system for the first time in October 2019 parliamentary elections, but unexpectedly the project was canceled due to problems implementing technological innovation, B. Jacobs, W. Pieters, *Electronic Voting in the Netherlands: from early Adoption to early Abolishment*, [in:] *Foundations of Security Analysis and Design V*, ed. A. Aldini, Springer Science & Business Media 2009, pp. 121–144; A. Trechsel, *Potential and challenges of e-voting in the European Union*, Policy Department C: Citizens' Rights and Constitutional Affairs European Parliament, 2016, [https://www.europarl.europa.eu/RegData/etudes/STUD/2016/556948/IPOL_STU\(2016\)556948_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2016/556948/IPOL_STU(2016)556948_EN.pdf) (10.02.2021); K. Szwed, *Głosowanie elektroniczne na Wyspach Alandzkich...*, pp. 13–31.

²³ *Lietuvos Respublikos Seimo rinkimų įstatymo Nr. I-2721 62, 67–1 ir 70 straipsnių pakeitimo įstatymas*, <https://e-seimas.lrs.lt/portal/legalAct/lt/TAD/0cf20320badc11ea9a12d0dada3ca61b> (12.02.2021).

site²⁴. At the same time, electoral commissions drawing up and verifying voter lists were to be granted the right to access data about persons who cannot vote traditionally (due to quarantine, illness, or the inability to vote in diplomatic missions abroad). The purpose of the adopted regulations was to prevent a situation in which the conditions of the pandemic and certain restrictions imposed on citizens would hinder their participation in elections. Ultimately, this method was not used for technical reasons in the parliamentary elections scheduled for 11 and 25 October 2020. The Seimas adopted the amendment in a hurry and without proper consultations. Although the provision entered into force immediately, *de facto*, it has not yet been implemented in practice.

IV. Conclusions

The current monitoring of the observation of the election process in Lithuania proves the professionalism of the electoral apparatus responsible for the organization of the elections²⁵. The purpose of using new technologies is to improve the organization of the entire election process. In recent years, successive improvements have led to significant changes in candidate registration, electoral list building, complaints, and appeal procedures. Lithuania is, therefore, an example in which new technologies increase the security and certainty of the election process and consolidate the innovative direction of changes in the country. They make it possible to speed up the operation of counting voting results, eliminate the risk of irregularities at further stages of the election procedure, and thus optimize the entire procedure for organizing elections²⁶.

The evolution of legal institutions under the influence of technological development is a slow process and usually carried out with a significant delay in

²⁴ Vyriausioji rinkimų komisija, *Balsavimo elektroniniu būdu tvarkos aprašas*, <https://www.vrk.lt/documents/10180/719400/Balsavimo+elektroniniu+b%C5%ABdu+tvarkos+apra%C5%A1o+projektas+%28002%29.pdf/2a40d9e5-153b-4693-93f5-e0f374a8a5e5> (12.02.2021); Vyriausioji rinkimų komisija, *Veiksmų planas dėl elektroninio balsavimo įgyvendinimo*, <https://www.vrk.lt/documents/10180/714176/Seimo+rinkimu+istatymo+del+elektroninio+balsavimo+igyvendinimo+planas.pdf/00cefacd-2a92-41f9-b2da-dc1220e0ccab> (16.03.2021).

²⁵ OSCE, *Republic of Lithuania Parliamentary Elections 11 and 25 October 2020...*, pp. 16–17.

²⁶ J. Szymanek, *Bezpieczeństwo procesów wyborczych...*, p. 29.

relation to changes taking place in social life²⁷. Additionally, implementing innovations can pose challenges, especially when it concerns the electoral process, which is the essence of democracy²⁸. The changes must be introduced gradually, then tested and verified. Moreover, appropriate legislation should guarantee certainty and social trust towards institutions in the state, and the implementation process itself should consider the principles of electoral honesty, security, certainty, credibility, transparency, and efficiency of the election process²⁹.

The introduction of significant changes in the election process with new technologies should be preceded by an information campaign and voters' education at an early stage. The example from Lithuania proves that delays in providing specific information about the voting results may increase social discontent after the elections and, as a result, expose the lack of trust in the election results³⁰. Therefore, providing reliable information on voting results without delay contributes to social stability and strengthens the credibility of state institutions. Additionally, it should be remembered that in electronic voting, every citizen should have access to the Internet. Otherwise, voting via the Internet would be exclusive and thus – would violate the principles of equality and freedom of elections³¹.

In the author's opinion, new technologies make it possible to judge the formation of modern forms of democracy, which are open to innovation and de-

²⁷ W. Brzostowski, *Prawo wyborcze w III RP (wyzwania, osiągnięcia, dylematy)*, [in:] *XVlat obowiązywania Konstytucji z 1997 r. Księga jubileuszowa dedykowana Zdzisławowi Jaroszewi*, ed. M. Zubik, Warsaw 2012, pp. 1–30.

²⁸ D. Flisak, *Wpływ rozwoju nowoczesnych technologii na proces stanowienia prawa w Polsce i wybranych państwach Unii Europejskiej*, "Zeszyty Prawnicze" 2019, No. 3 (63), pp. 194–211; K. Chałubińska–Jentkiewicz, *Rozwój nowoczesnych technologii w kontekście stanowienia prawa na przykładzie strategii AI*, "Teki Komisji Prawniczej PAN Oddział w Lublinie" 2019, vol. XII, No. 2, pp. 53–71; N. Cheeseman, G. Lynch, J. Willis, *Digital dilemmas: the unintended consequences of election technology*, "Democratization" 2018, No. 25 (8), pp. 1397–1418.

²⁹ OSCE, *Republic of Lithuania Parliamentary Elections 9 October 2016 Needs Assessment Mission Report*, <https://aceproject.org/ero-en/regions/europe/LT/lithuania-needs-assessment-mission-report-3> (19.02.2021).

³⁰ This postulate was also raised by the GKW in Lithuania, but in practice the actions turned out to be insufficient, Lietuvos Respublikos vyriausioji rinkimų komisija, July 16, 2020, <https://www.vrk.lt/documents/10180/714176/Seimo+rinkimu+istatymo+del+elektroninio+balsavimo+igyvendinimo+planas.pdf/00cefacd-2a92-41f9-b2da-dc1220e0ccb> (16.02.2021).

³¹ J. Szymanek, *Bezpieczeństwo procesów wyborczych...*, p. 33.

velopment. Thus, it is suggested that it is in the new technologies that the future of the electoral process and democracy in general will lie. They can act as a catalyst and stimulate novel policies. In this context, it is worth recalling the concept of “democratization of technology”³², which assumes the dissemination and use of ICT by society to increase stability and security. According to the concept, new technologies meet specific social needs and serve the development of the idea of democracy. Appropriate legislation, testing, and increasing social competences in the use of technology can strengthen the mechanisms of protection against the negative effects of these tools in democratic systems. Thus, they can indirectly contribute to the growth of social trust in political systems.

Moreover, the author believes that new technologies can stimulate international visibility and e-identity. In Estonia, new technologies have become part of the national brand. In the future, Lithuania also has an excellent chance to strengthen its recognition as an innovative and digitally developed country. According to the Digital Economy and Society Index (DESI) 2020³³ report analyzing digital productivity, Estonia and Lithuania were above the EU average, the highest position in the ranking among Central European countries. The premises are similar to the Government Benchmark 2020³⁴ on the availability of electronic public administration services, where Lithuania ranks sixth and is gradually strengthening its position in the group of the most innovative countries in the Central European region. However, it will require appropriate strategies and consistent government actions, as well as social commitment. Last but not least, the importance of new technologies may be related to the potential of institutions responsible for the organization of the election process in crises. Optimizing strategies and directions of activities using ICT will be very important in the protracted state of the pandemic.

³² J. Piątek, *Technology “democratization”. Peacetech – new quality of security management, “Reality of Politics. Estimates – Comments – Forecasts”* 2018, No. 9, pp. 59–70.

³³ European Commission, *Digital Economy and Society Index (DESI) 2020*, <https://ec.europa.eu/digital-single-market/en/digital-economy-and-society-index-desi> (18.02.2021).

³⁴ European Commission, *eGovernment Benchmark 2020*, <https://ec.europa.eu/digital-single-market/en/news/egovernment-benchmark-2020-egovernment-works-people> (18.02.2021).

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