Electronic voting in modern Russia: discussions, technologies, am experiments

Voto electrónico en la Rusia moderna: debates, tecnologías, experimentos

Irina Akimova[1]
Altai State University - Russia
il-akimova@mail.ru
Siyabshakh Shapiev[2]
Altai State University - Russia
criminology.atiso@gmail.com
Olga Blinova[3]
Altai State University - Russia
il-akimova@mail.ru
Vera Mankovskaya[4]
Altai State University - Russia
il-akimova@mail.ru
Olga Kitnovskaia[5]
Altai State University - Russia
o.kitnovskaya@gmail.com

ABSTRACT

We discussed the increasing interest in the use of technical means for voting in elections and referendums with a gradual transition to electronic voting. Our article deals with the peculiarities of the experiment on the organization and conduct of remote electronic voting in the elections of deputies of the Moscow City Duma of the seventh convocation, scheduled for September 8, 2019. In addition, the article analyzes the advantages and disadvantages of electronic voting, offers recommendations on eliminating some risks associated with the use of this type of electronic voting. The received results of the experiment will allow to define directions of the further work on perfection of legal regulation of introduction in selective process of modern digital technologies. In case of positive results, practical and technological solutions can be developed, which will ensure further development of the remote electronic voting system in Russia.

Keywords: Elections, remote electronic voting, electronic voting systems

RESUMEN

Discutimos el creciente interés en el uso de medios técnicos para votar en elecciones y referéndums con una transición gradual al voto electrónico. Nuestro artículo aborda las peculiaridades del experimento sobre la organización y la realización de la votación electrónica remota en las elecciones de diputados de la Duma de la ciudad de Moscú de la séptima convocatoria, prevista para el 8 de septiembre de 2019. Además, el artículo analiza las ventajas y desventajas de votación electrónica, ofrece recomendaciones para eliminar algunos riesgos asociados con el uso de este tipo de votación electrónica. Los resultados recibidos del experimento permitirán definir las direcciones del trabajo posterior sobre la perfección de la regulación legal de la introducción en el proceso selectivo de las tecnologías digitales modernas. En caso de resultados positivos, se pueden desarrollar soluciones prácticas y tecnológicas que garanticen un mayor desarrollo del sistema de votación electrónica remota en Rusia.

Palabras clave: Elecciones, votación electrónica remota, sistemas de votación electrónica.

1 PhD, Associate Professor of Constitutional and International Law Department, Altai State University, Russian Federation
2 Doctor in Laws, Professor, Department of Criminal Law and Criminology, Dagestan State University, Russian Federation
3 PhD, Associate Professor of Constitutional and International Law Department, Altai State University, Russian Federation
4 PhD, Associate Professor of Constitutional and International Law, Department Altai State University, Russian Federation
5 LLM, Head of the Legal, Personnel, Control and Administrative Work Department of the Altai Krai Election Commission, Russian Federation

Recibido: 10/06/2019 Aceptado: 22/08/2019

INTRODUCTION

Active introduction of information and communication technologies in democratic processes and institutions has caused a public inquiry and serious scientific discussion on the modernization of the electoral process and introduction of electronic voting (Cybervote Project, 2000; Auer, Trechsel, 2001; McGaley, McCarthy, 2004; Agarwala et al., 2006; Emerson, 2012; Digital, 2018). It should be noted that in modern scientific literature the concept of electronic voting is considered in two senses. In a broad, as a means to implement (legal form of implementation) democracy in electronic form, or in a narrow, as a way to conduct voting at elections (Antonov, 2016a). Thus, in V.Y. Antonov's works electronic voting is defined as a set of information and communication technologies that ensure the process of citizens' expression of will, based on the principles of electronic governance (Antonov, 2016b). This provision predetermined the need to develop the conceptual framework, organizational and technical specifics of the use of electronic voting in elections.

For the first time the term "electronic voting" was introduced by the Federal Law of July 21, 2005 N 93-FZ "On Amendments to Legislative Acts of the Russian Federation on Elections and Referenda and Other Legislative Acts" (Rossiyskaya gazeta, 2005). Electronic voting means voting without using a paper ballot and using technical means in accordance with Article 2, paragraph 62 of Federal Act No. 67 of 12 June 2002 "On basic guarantees of electoral rights and the right to participate in referendums for citizens of the Russian Federation" (hereinafter referred to as Federal Law No. 67-FZ), (On basic guarantees, 2002).

In addition, the term "electronic ballot" is provided in paragraph 63 of this article. This is a ballot paper prepared by software and hardware in electronic form, used in electronic voting (Collection, 2002).

Federal Law No. 67-FZ lays down the general legal basis for organizing and conducting electronic voting in the premises for voting. During elections and referendums, instead of voting with paper ballots, electronic voting can be conducted. The decision to conduct electronic voting is taken by the Central Election Commission of the Russian Federation or, on its behalf, by the relevant election commission of a constituent entity of the Russian Federation (Article 64, paragraph 15, of Federal Law No. 67-FZ). When conducting electronic voting, electronic voting systems are used. When conducting elections or referendums using an electronic voting system, an electronic ballot is used.

At the same time, in the professional literature, depending on the place of voting, there are two types of electronic voting: remote (remote) electronic voting, as well as uninstalled (stationary) electronic voting (Matrenina, 2016). The latter type of e-voting is characterized by the fact that elections are held at the polling station, as in traditional voting, but with the use of modern technologies, for example, voting by means of electronic voting systems (hereinafter - EVM). This type of voting has long been familiar with Russian election practices. For the first time, the procedure for using electronic voting systems for voting at elections and referendums held on the territory of the Russian Federation was approved by Resolution of the Central Election Commission of the Russian Federation No. 181/1152-4 dated July 14, 2006 (On the procedure, 2016).

Ten years later, in the presidential election of 18 March 2018 (On the use, 2018), 762 polling stations were equipped with electronic voting (EVM) in 106 locations in 14 constituent entities of the Russian Federation (Election, 2018).

Thus, the issue of developing a legal and organizational framework for remote electronic voting, which allows voters to exercise their active voting rights regardless of their place of residence, actual location or other circumstances affecting their participation in the elections, is of particular relevance today.

Methods

The object of research in this article is a set of public relations arising in connection with the discussion, consolidation and implementation of the mechanism of remote electronic voting in elections in the Russian Federation. The subject of the research is the legal norms that fix and regulate the experiment on the use of remote electronic voting in the elections of deputies of the Moscow City Duma of the seventh convocation.

The basis for the study were the provisions of the Federal Law of May 29, 2019 N 103-FZ "On the experiment to organize and implement remote electronic voting in the elections of deputies of the Moscow City Duma of the seventh convocation (hereinafter - the Federal Law) (Rossiyskaya Gazeta, 2019) developed and adopted "for the purpose of testing the use of modern technologies in the voting process, which will create additional conditions and guarantees for the exercise of citizens' suffrage rights" (Explanatory note, 2018). The relevant law of the city of Moscow, acts and other documents of the Central Election Commission of the Russian Federation and the Moscow City Election Commission have been adopted to develop the norms of the said Federal Law.

Thus, the main method of research is an experiment, the results of which will determine the direction of further work on improving the legal regulation of the electoral process and the introduction of modern technologies in this process. In the event of positive results, technological solutions may be developed that will allow citizens to vote electronically without visiting the polling station.

DEVELOPMENT

Results

The analysis of legal and organizational bases of experiment on the organization and carrying out of remote electronic voting at elections of deputies of the Moscow city Duma of the seventh convocation, appointed on September 8, 2019, allows formulating the following conclusions.

Firstly, the federal legislator attempted to define remote electronic voting, which in Article 2 of the Federal Law is understood as "voting without using a paper ballot, using special software of the regional portal of state and municipal services of the city of Moscow".

Secondly, such experiment is carried out for the first time in the conditions of voting at real elections. According to Article 3 of the Federal Law, the experiment is conducted in one (or several) single-mandate constituencies of the city of Moscow, determined by the Moscow City Election Commission. The decision of the Moscow City Election Commission on June 13, 2019 determined that "at the elections of deputies of the Moscow City Duma of the seventh convocation on September 8, 2019, at the same time as voting, conducted in the manner prescribed by Chapter 10 of the Election Code of the city of Moscow, in single-mandate constituencies N 1, N 10 and N 30 remote electronic voting of voters" (On remote, 2019).

Thirdly, remote electronic voting is considered as an additional and alternative way for voters to exercise their right to vote. In accordance with article 3, paragraph 3, of the Federal Law on Remote Electronic Voting, remote electronic voting is conducted simultaneously with traditional voting in the manner prescribed by Chapter IX of the Federal Law "On Basic Guarantees of Electoral Rights and the Right to Participate in Referendums of Citizens of the Russian Federation". In order to participate in remote electronic voting, a voter shall submit a corresponding application in accordance with the procedure established by the Moscow City Election Commission. The deadline for submitting an application is established by the law of the city of Moscow on the conduct of an experiment. The submission of such an application by a voter shall not deprive the voter of the right to vote in accordance with the requirements of the current election legislation, if the application is withdrawn in accordance with the procedure established by the Moscow City Election Commission (On the requirements, 2019).

Fourth, for the first time, the legislator determines the method of carrying out certain election activities when conducting remote electronic voting. In accordance with part 5 of article 3 of the Federal Law, the voter's participation in remote electronic voting, including the submission of an application is carried out using special software of the regional portal of state and municipal services of Moscow City.

Fifth, the legal basis for the experiment in a significant part of the special legislative acts of the regional level. The Federal Law enshrines the need to adopt the law of the city of Moscow on the conduct of the experiment, giving priority to such acts. Based on part 2 of the article of the Federal Law "Election Code of the City of Moscow is applied in the course of the experiment in the part that does not contradict the legislation regulating the procedure of the experiment".

On May 22, 2019, the Mayor of Moscow S. Sobyanin signed the Law of the City of Moscow "On conducting an experiment on the organization and implementation of remote electronic voting at the elections of deputies of the Moscow City Duma of the seventh convocation" (hereinafter - the law of the city of Moscow) (On conducting, 2019).

What is the experimental model of remote electronic voting enshrined in the law of the city of Moscow? The following stages of the implementation of active suffrage by citizens when using e-voting can be conventionally singled out. The first stage is the determination by the voter of the method of exercising active suffrage by means of electronic voting. At this stage, it is envisaged that the voter should submit an application for its inclusion in the voter list of the polling station for remote electronic voting.

In accordance with part 2 of article 6 of the Moscow City Law, an application is submitted by a voter using the "Personal Cabinet" subsystem of the state information system "Portal of State and Municipal Services (Functions) of the City of Moscow" (hereinafter referred to as the "Portal"), provided that the voter has full access to the specified subsystem.

The application can be submitted by the voter not earlier than 45 days and not later than three days before the voting day. A voter has the right to withdraw his or her application within this time limit. Withdrawal of an application by a voter does not deprive the voter of the right to reapply within the general deadline.

The voter, who submitted or withdrew the application, is sent a corresponding notification in the subsystem "Personal account" of the Portal.

The form and procedure of submission and withdrawal of the application shall be established by the Moscow City Election Commission (hereinafter - the City Commission). The City Commission may establish additional ways to confirm the identity of the voter who submitted the application.

The second step is to compile a voter list by polling station for remote electronic voting.

According to part 1 of article 6 of the Law of the City of Moscow, the list of voters in the polling station for remote electronic voting may include voters with active voting rights on the day of voting in the single-mandate constituency of the city of Moscow, where remote electronic voting is conducted, and who have applied for inclusion in the list of voters in the polling station for remote electronic voting.

The third stage is the implementation of remote electronic voting by the voter. In accordance with Article 8 of the Law of the City of Moscow, the voter using special software in the subsystem "Personal Account" of the Portal carries out remote electronic voting. Access to the special software in the "Personal Account" subsystem of the Portal is carried out by the voter using a personal computer or other electronic device that has access to the information and telecommunication network "Internet" and is compatible with the special software in the subsystem "Personal Account" of the Portal, including that installed in the premises of the district commission.

The procedure of remote electronic voting is regulated as follows. On the election day, during the voting period, the voter included in the voter list of the polling station for remote electronic voting gets access to the ballot in the subsystem "Personal Account" of the Portal with the use of special software in the specified subsystem, provided that the voter enters the confirmation code sent by SMS message to the voter's phone number specified in the subsystem "Personal Account" of the Portal.

Information about the voter's access to the ballot in the subsystem "Personal account" of the Portal immediately after the voter confirms the voter's access to the ballot is reflected in the electronic version of the voter list and is printed by the software and hardware complex of remote electronic voting on paper in the manner and form established by the City Commission (On approval, 2019).

The voter carries out remote electronic voting by putting a mark in the ballot box, which refers to the candidate in favor of whom the choice was made, and confirming the implementation of the vote. Vote of the voter is accepted by special software in the subsystem "Personal account" of the Portal. Encrypted information on the voter's will expressed in the "Personal Account" subsystem of the Portal, after the acceptance of the voter's vote is printed on paper according to the form established by the City Commission, and is displayed electronically on the display panel of the software and hardware complex of remote electronic voting. The City Commission may establish additional ways to confirm the voter's identity, which is carried out before the acceptance of the voter's vote by special software in the subsystem "Personal account" of the Portal. Special software in the subsystem "My Account" of the Portal ensures the secrecy of the voter's vote by encrypting the data. It is not allowed to link the personal data of the voter with the result of his or her expression of will for the purpose of further identification of the voter.

Discussion

The legislative introduction of the new method of voting caused active practical and scientific discussion among the scientific community, political scientists and electoral lawyers, election organizers (Antonov, Ovchinnikov, 2015, 2016; Fedotova, 2016; Antonov, 2016b, 2017a, 2017b). In general, a positive assessment of the new mechanism should be noted. In modern conditions, there are advantages of remote electronic voting.

First, the choice of such form of voting is the right of the voter and is considered as an alternative to the traditional voting procedure. Second, the legislator proposes a worthy replacement of the institutions of early voting and absentee voting, which traditionally cause many complaints from the participants of the electoral process. Third, it greatly enhances the ability to vote outside of the voting room, not just to vote at home for health or disability reasons. This innovative method of voting becomes relevant for voters with disabilities, who can cast their vote without assistance because of a simple and secret procedure. Fourth, it creates the most comfortable voting environment for the voter, regardless of their location, at any convenient time during the voting period, using a variety of mobile devices. Potentially, e-voting attracts more voters to vote remotely, and thus increases the likelihood of an increase in mobile voter turnout. According to S.G. Gontar (2019), this method of voting is the most convenient for young voters and in the near future will conquer the electoral space; it meets the concept and strategy of development of modern Russian society. The experience of other countries shows a constant increase in remote voting through the Internet. In addition, according to supporters of the introduction of this type of voting, the development of remote electronic voting over time will help to reduce the overall costs of organizing and conducting the electoral process.

However, there are also potential difficulties associated with the introduction of electronic voting. First, there is a need for serious protection against unauthorized interference with the electoral process by third parties. Given the current level of development of information technology, additional safeguards should be put in place to protect the software. It is also possible that, in the event of a failure of a fully automated system and the absence of a paper copy of the data backed up, recounting would be extremely problematic or not possible at all. At the same time, the source of malfunctions and equipment failures is more difficult to calculate and identify than when using paper procedures.

In the context of remote electronic voting, special attention should be paid to the procedure to ensure the secrecy of the vote. Access to the voting system should be restricted to citizens with the right to vote, which means that every voter should be identified and their right to vote should be confirmed. In order to prevent duplication of votes and other violations, a voter record should be maintained to allow for verification of the voter's vote or not. When

using remote electronic voting, it should be ensured that there is no link between the vote cast and the individual voter (Electronic voting, 2006; Goldsmith, Ruthrauff, 2013; Implementing and overseeing, 2005).

One cannot but agree with Antonov's opinion that "in any case, fundamental constitutional changes are necessary to implement the system of remote electronic voting at the national level in order to clarify the content of the basic constitutional principles of elections, perhaps even up to their radical revision and subsequent adoption of fundamentally new legal acts" (Antonov, 2017c).

CONCLUSIONS.

M.M. Kuryachiy (2017) rightly notes, "The development of electronic electoral technologies is a global electoral trend". At the same time, general legal, organizational and technical standards of electronic voting have not been formed in international practice so far. According to the Committee of Ministers of the Council of Europe, the system of electronic voting should respect the principles of democratic elections and referendums ensure reliability and security in the same way as in the traditional voting system. It is noteworthy that this fundamental idea covers all electoral issues related to the electronic voting system. Transparency, accountability and verifiability of the electronic voting system should also be required, and international standards and recommendations should be respected (Ovchinnikov, Antonov, 2015). Experience of legal regulation of remote electronic voting in foreign countries also shows the use of an experimental approach (Das Potenzial, 2005; Electoral pilot, 2010; Xenakis, Macintosh, 2005).

M.M. Kuryachiy (2017) summarizes the practice of using electronic voting in some foreign countries (USA, Great Britain, France, the Netherlands, Switzerland and Estonia). As the author notes, "initially electronic voting was used as the main form of voting in the U.S. However, failures of the technical nature of internet voting significantly reduced the image of electronic voting in America".

In 1999 European Parliament elections in Germany, electronic voting was used. However, the German Constitutional Court has recognized that this method of voting does not ensure transparency of elections, as there is no control over voting, which led to the return of traditional forms of voting. In 2002, Ireland launched an electronic voting experiment, but a year later, the government decided to cancel the experiment because the feedback was negative. The researcher cites as a positive experience of the use of electronic voting system the practice of electronic voting in Brazil, also used since 2005 in elections of different levels of internet voting in Estonia. In particular, in Estonia, the e-voting process is based on the use of an identification card (ID card), which stores all the information of its holder. In addition to the possibility of electronic voting, the card generally provides access to public electronic services and acts as an identity document (Kuryachiy, 2017).

According to the majority of researchers, the experiment being conducted in Moscow today will make it possible to assess the prospects of introducing remote electronic voting in the electoral process of modern Russia. This will create additional opportunities to ensure the constitutional right of voters to participate in elections, ensure further development of the "mobile voter" system, identify problematic issues in the organization and conduct of remote electronic voting, and establish the level of interest of voters in this form of voting.

BIBLIOGRAPHIC REFERENCES

Agarwala, A.K., Shahani, D.T., Indiresan, P.V. (2006). Report of the expert committee for evaluation of the upgraded electronic voting machine (EVM). Available from: http://ru.scribd.com/doc/6794194/Expert-Committee-Report-on-EVM

Antonov, Ya.V. (2016a). Constitutional and legal perspectives of e-democracy development in modern Russia. Constitutional and municipal law, 9

Antonov, Ya.V. (2016b). Electronic voting and electronic democracy: legal bases of development and interaction. Russian Justice, 12.

Antonov, Ya.V. (2016c). Electronic Democracy and Electronic Voting: Constitutional and Legal Dimension. Russian Law Journal, 5.

Antonov, Ya.V. (2017a). Problems of the content of the universal democratic rights in the system of electronic democracy. Russian Justice, 3.

Antonov, Ya.V. (2017b). Electronic democracy as a political-legal mechanism of coordination of private and public interests. Russian Justice, 12.

Antonov, Y.V. (2017c). To the question of the need to improve the legal regulation of e-democracy in Russia. State Power and Local Self-Government, 7.

Auer, A., Trechsel, A. (2001). Voter par Internet? Le projet e-voting dans le canton de Geneve dans une perspective socio-politique et juridique de l'introduction du e-voting dans le canton de Geneve. Helbing et Lichtenhahn.

Collection of the legislation of the Russian Federation. (2002). 24, Art. 2253; 22. Art. 2660.

Cybervote Project. (2000). Report on electronic democracy projects, legal issues of Internet voting and users requirements analysis, European Commission, 1ST Programme.

Das Potenzial der elektronischen Stimmabgabe. (2005). Berne. Available from: http://www.gfsbern.ch/pub/vote-electronique.

pdf

Digital Voting Group (Harvard University). (2018). Legal issues. Available from: http://www.ksg.harvard.edu/stp-307/group8/legal.htm;

Election of the President of the Russian Federation. (2018). Electrostatistics/Central Election Commission of the Russian Federation.

Electoral pilot scheme evaluation. Swidon Borough Council. (2010). Available from: http://www.electoralcommission.org.uk/_data/assets/electoral_commission_pdf_file/0007/13210/Gates-headstatutoryevaluationreport_27183-20103_E_N_S__W__.pdf/

Electronic voting - challenges and opportunities: report. (2006). Norway: Ministry of Local Government and Regional Development.

Emerson, P. (2012). Defining Democracy: Voting Procedures in Decision-Making, Elections and Governance. Berlin; Heidelberg.

Explanatory note to the draft federal law "On the experiment on the organization and implementation of remote electronic voting at the elections of deputies of the Moscow City Duma of the seventh convocation. (2018). Official website of the State Duma of the Federal Assembly of the Russian Federation

Fedotova, Yu.G. (2016). Electronic democracy as a means of ensuring information security of the stat. Information Law, 3.

Goldsmith, B., Ruthrauff, H. (2013). Implementing and overseeing Electronic voting and counting technologies. USA: The National Democratic Institute.

Gontar, S.G. (2019). Electronic voting - a new opportunity for citizens to participate in the formation of government bodies. State power and local self-government, 4.

Kuryachiy, M.M. (2017). Electronic voting as a stage of development of direct democracy. Constitutional and Municipal Law, 11.

Matrenina, K.Yu. (2016). Problems of electronic voting support: Russian and foreign experience. Constitutional and municipal law, 1.

McGaley, M., McCarthy, J. (2004). Transparency and e-voting – Democratic vs. commercial interests. (pp. 153-163). In Electronic Voting in Europe – Technology, Law, Politics and Society. A. Prosser, R. Krimmer (Eds.).

On approval of requirements to the Software and Hardware Complex of Remote Electronic Voting and to the equipment of the premises for placing the precinct election commission on remote electronic voting at the elections of deputies of the Moscow City Duma of the seventh convocation. (2019). Decision of the Moscow City Election Commission N 102/4. Bulletin of the Moscow City Election Commission (electronic periodical).

On basic guarantees of electoral rights and the right to participate in a referendum of citizens of the Russian Federation. (2002). Federal Law 67-FZ. Collection of Legislation of the Russian Federation, 24, Art. 2253; 2019, 22. Art. 2660.

On conducting an experiment on the organization and implementation of remote electronic voting at the elections of deputies of the Moscow City Duma of the seventh convocation. (2019). Official portal of the Mayor and the Government of Moscow. Availble from: www.mos.ru

On remote electronic voting at the elections of deputies of the Moscow City Duma of the seventh convocation. (2019). Decision of the Moscow City Election Commission N 95/5. Bulletin of the Moscow City Election Commission (electronic periodical)

On the Procedure for the Use of Electronic Voting Complexes for Voting at Elections and Referenda held on the Territory of the Russian Federation. (2006). Vestnik of the Central Election Commission of the Russian Federation, 7.

On the requirements for special software for the regional portal of state and municipal services in Moscow. (2019). Decision of the Moscow City Election Commission N96/1. Bulletin of the Moscow City Election Commission (electronic periodical)

On the use of electronic voting complexes during the presidential elections in the Russian Federation. (2018). Resolution of the Central Election Commission of the Russian Federation No. 129/1073-7. Official website of the Central Election Commission of the Russian Federation

Ovchinnikov, V.A., Antonov, Y.V. (2015a). Influence of international legal mechanisms of e-democracy on the development of civil society. Legal World, 11.

Ovchinnikov, V.A., Antonov, Y.V. (2015b). Legal problems of electronic voting and e-democracy development in Russia. Russian Justice, 8.

Ovchinnikov, V.A., Antonov, Ya.V. (2016). Legal structure of electronic voting in the system of electronic democracy. Russian Justice, 5.

Reut, D.A. (2019). Information society and the right to power. Citizen. Elections. Power, 2, 24.

Rossiyskaya Gazeta. (2019). 29 May.

Russian newspaper. (2005). July 26.

Xenakis, A., Macintosh, A. (2005). Trust Analysis of the U.K. e-voting Pilots. Social Science Computer Review, 23, 312-325.