

Creating the E-Voting System for Shareholder Meetings in Russia

Authors: Maria Krasnova, Deputy Chairman of the Executive Board, National Settlement Depository, Andrey Denisov, Head of Corporate Actions development, National Settlement Depository.

1. Introduction

This article explores the E-voting system being developed by the Russian CSD for investors and issuers. The system should enable securities holders, i.e., shareholders, bondholders, holders of UIT units, etc. to review documents related to the relevant meetings and vote remotely via a dedicated website. Issuers will be provided with an easy-to-access, reliable and transparent mechanism for collecting and tallying votes which ensures the voting data consistency and legal protection of the issuer's interests.

Readers not hugely familiar with the details of how today's securities market works may find it useful to get a brief introduction to the subject in order to better understand the specifics of the E-voting service being created. In today's world, securities primarily exist in the dematerialised or immobilised form, i.e. as electronic entries in securities accounts. In many respects, the handling of securities is similar to the handling of non-cash money: the services are provided by specialised entities which open accounts, hold assets, confirm the title to such assets and settle payments. While money is handled by banks, securities are handled by specialised recordkeeping institutions, as a rule, by securities depositories/custodians and registrars.¹ Apart from securities safekeeping and settlement, such infrastructures perform another very important function – that of asset servicing, i.e., assisting securities holders in exercising their rights attached to securities, such as the right to vote at meetings, the right to receive dividends and other entitlements, the right to demand the purchase of securities (the squeeze-out right), etc. The importance of this function cannot be overstated. The quality of corporate governance in companies and the investment attractiveness of the market largely depend on how efficient such market is in supporting the exercise of investors' rights attached to securities.

Voting in shareholder meetings is one of the most telling examples of the exercise of rights attached to shares. By voting at a meeting, the shareholder takes part in managing the company. The simpler and easier it is for the shareholder to vote, the more shareholders will participate in the voting process, and the more satisfied the investors will be with the quality of corporate governance. The OECD Principles of Corporate Governance clearly state that:

- Shareholders should have the opportunity to participate effectively and vote in general shareholder meetings and should be informed of the rules, including voting procedures, that govern general shareholder meetings;
- Processes and procedures for general shareholder meetings should allow for equitable treatment of all shareholders. Company procedures should not make it unduly difficult or expensive to cast votes;

¹ As a rule, the safekeeping institutions are linked by the correspondent relations into a single system with the national CSD as the hub.

- Shareholders should be able to vote in person or in absentia, and equal effect should be given to votes whether cast in person or in absentia;
- The objective of facilitating shareholder participation suggests that jurisdictions and/or companies promote the enlarged use of information technology in voting, including secure electronic voting in all listed companies;
- Impediments to cross border voting should be eliminated.

The corporate actions reform launched in Russia in 2013 sets the improvement of processes related to the exercise of investors' rights as one of its main goals. It was decided to implement cutting-edge electronic solutions on the Russian financial market to provide investors with simple, reliable and efficient methods of exercising the rights attached to securities. Efforts to further improve the technologies for voting at shareholder meetings are among the key elements of the corporate actions reform.

Before the reform, the shareholders had two options for voting in a meeting: either (1) attend and vote in person; or (2) send in their ballot papers by mail; under the new rules, the shareholders may also (3) send in an ISO 20022 or ISO 15022-compliant e-ballot through its securities depository/custodian (the e-proxy voting service), or (4) use the E-voting system (available free of charge for investors) and vote remotely via a dedicated website. Fig.1.

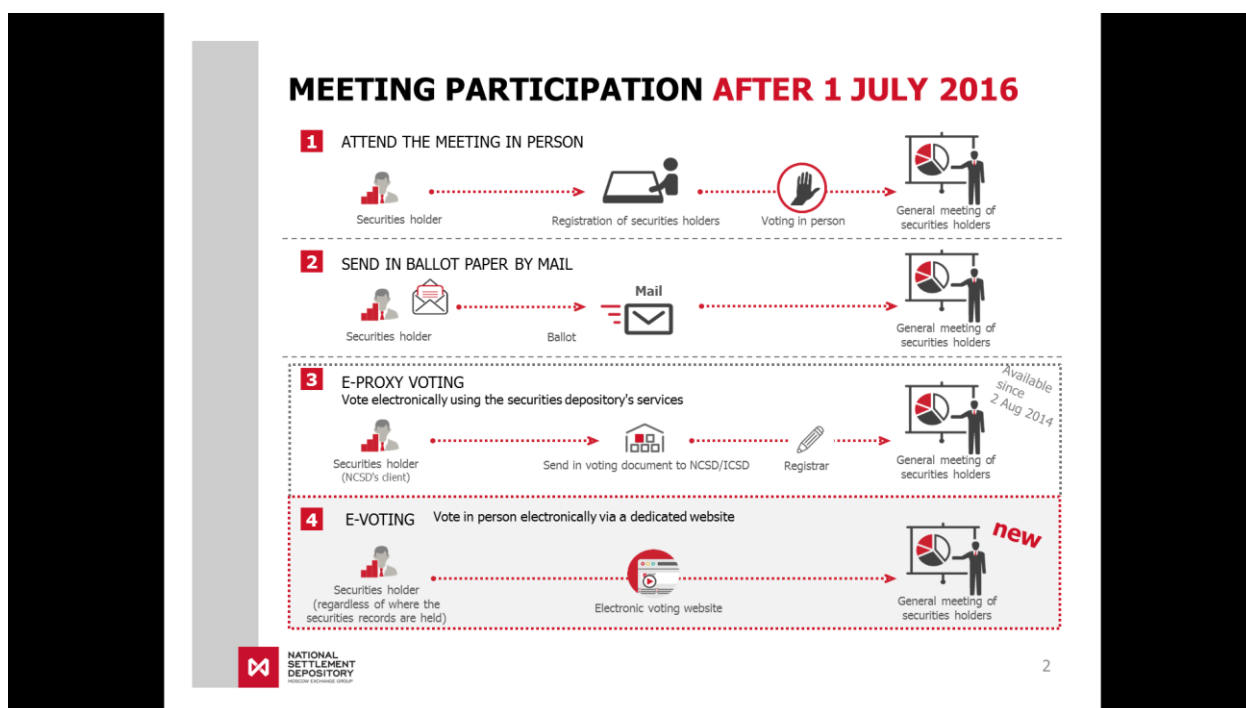


Fig.1

Russia has several thousand issuers and about one million retail investors. The new e-voting solutions being developed should generally improve the quality of the Russian market infrastructure and should be available to investors owning securities of various issuers, both large public companies and smaller joint-stock companies.

In this context, it is difficult to overestimate the importance of the universal E-voting solution. Because of the scope and relevance of e-voting for the Russian financial market, there are special requirements imposed on the future E-voting system in relation to providing a simple, reliable and transparent solution that would be universally accessible for retail investors, both Russian and foreign ones, and for all Russian issuers, regardless of the scope of their activities.

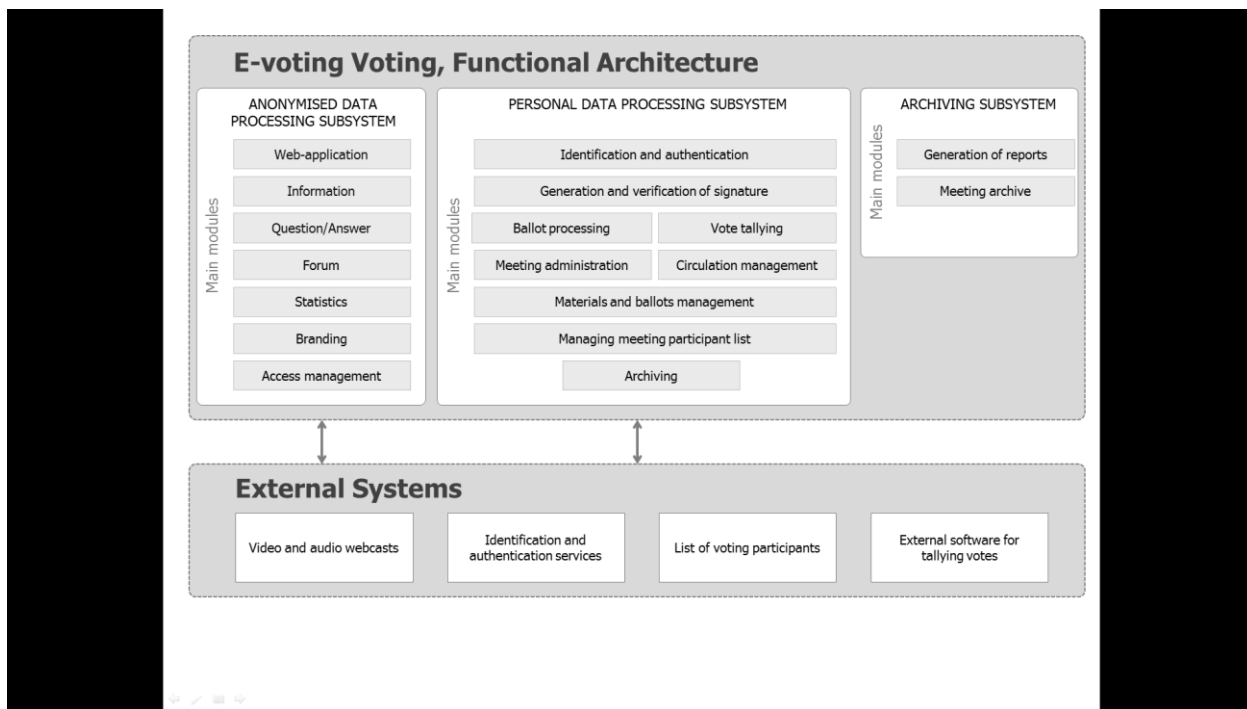


Fig.2

2. Architectural scheme

The E-voting system is primarily intended to enable securities holders to vote on the items of business on the meeting's agenda and to enable the issuer to promptly receive the tally of the votes cast. Fig.2. However, the functionality of the E-voting system is not limited to the features mentioned above and gives users additional possibilities. The general meeting may be viewed via a live video webcast by logging in through the participant's personal profile on the E-voting website.

The voting during the meeting, i.e., while watching the video webcast, will greatly increase interactivity of remote participation in the meeting and further encourage many shareholders to vote. Fig.3.

E-VOTING SERVICES FOR SECURITIES HOLDERS

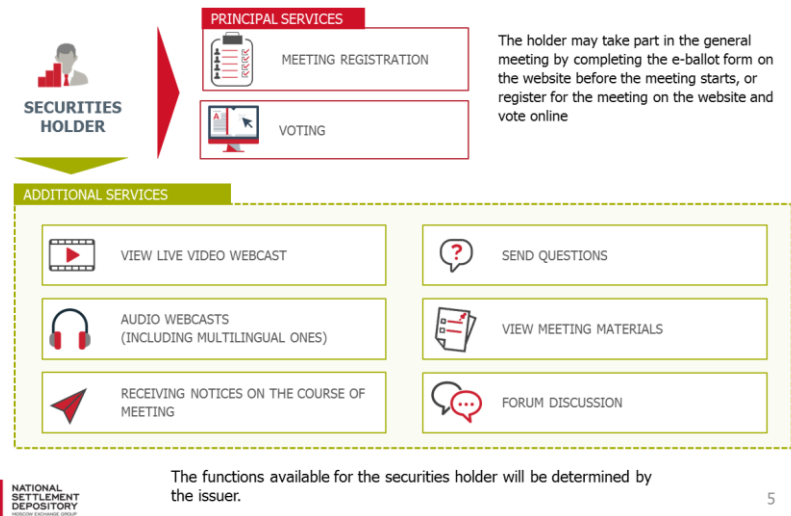


Fig.3

The E-voting system may also be used for publishing meeting materials and making them available for review by the shareholders wishing to vote. Such materials may include documents directly related to the items put to vote and any additional materials which the issuer wishes to make available to the meeting participants.

In addition to the basic function of voting at the meeting and the ability to view the video webcast and meeting materials, the shareholder can ask the issuer a question or communicate with the other meeting participants in the forum. It is up to the issuer to determine the ultimate set of functions to be available for each meeting. Fig.4.

E-VOTING ISSUER SERVICES

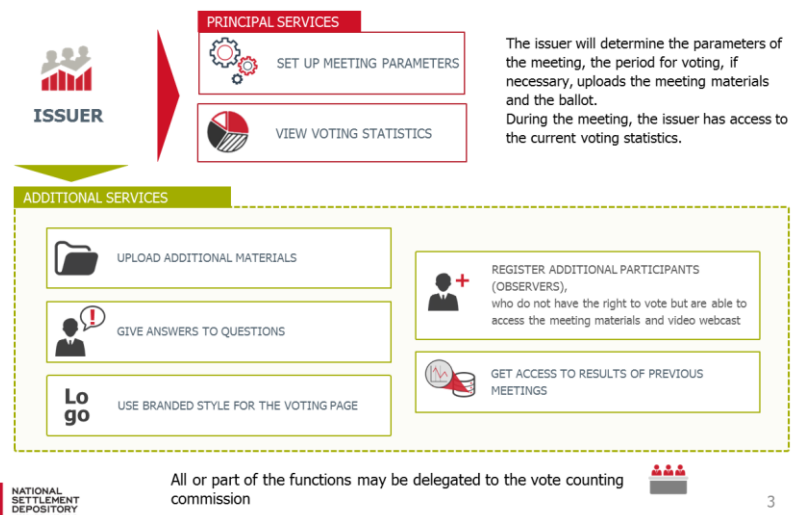


Fig. 4

The issuer or the vote counting agent will also have access to the functions of vote tally, registration of additional participants, viewing the voting statistics, and generating various reports. Furthermore, the E-voting system has an API to interact with the existing vote counting applications. Fig.5

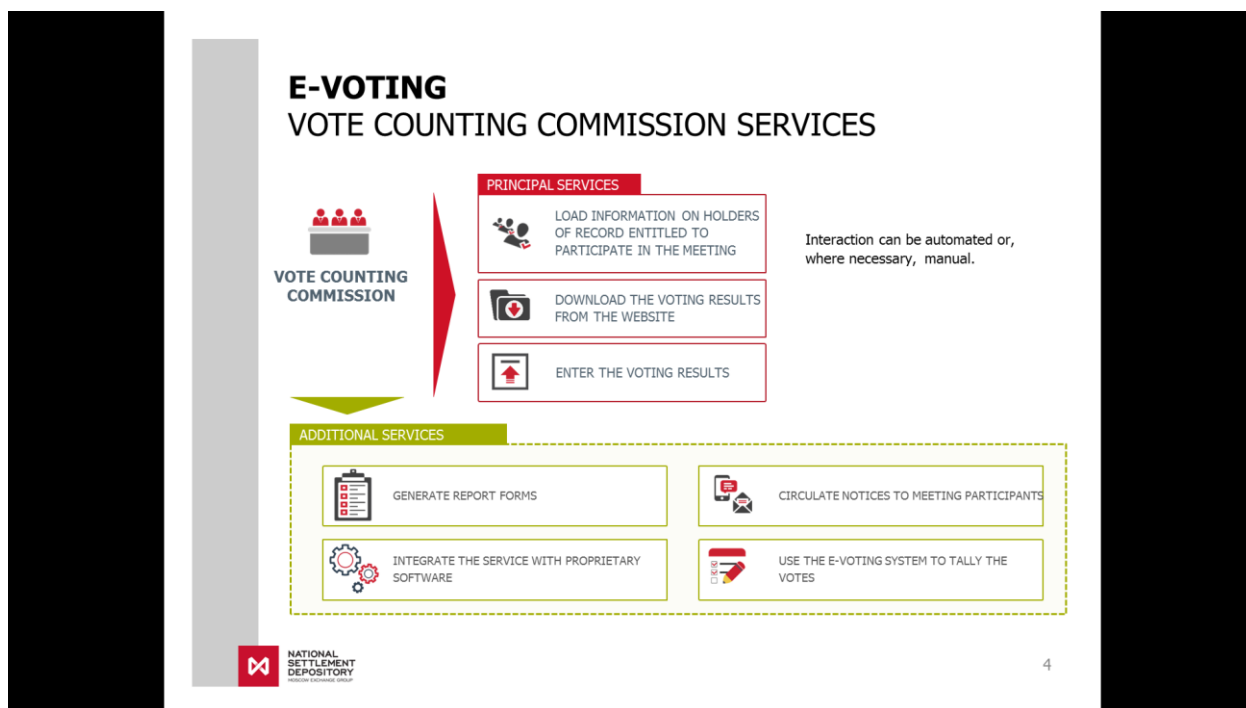


Fig.5

Electronic voting platforms on the global securities market have been used for a long time and are well known. In Korea, Taiwan, India, Turkey and other countries, the CSDs provide investors with an opportunity to vote remotely in shareholder meetings. In different countries, the e-voting solutions differ in terms of the scope of services, the time available to vote, and the issuers being required to use the solution. However, one thing remains universal: the investor is able to vote at the meeting remotely via a simple and easily accessible website. In most cases, it is noted that with the advent of e-voting, the number of shareholders taking part in meetings has increased significantly, sometimes many-fold. Therefore, we have every reason to expect that the e-voting solution will contribute to a better quality of corporate governance in Russian companies and improve investor satisfaction.

3. Functional specifications

It would have been impossible to create the new E-voting system without determining the fundamental principles that the system should meet. Such principles were selected according to the project's objectives; the selection helped understand the trends driving the development of functions and identify the priorities that need to be addressed and require extra attention.

The lack of insight into the needs of potential system users might have caused the new product to be unneeded and a waste of resources. Furthermore, the very idea of

electronic voting would have been compromised and the chance to achieve dramatic improvements on the Russian financial market would have been missed.

In the light of these considerations, the E-voting project initiators identified the five basic principles to be followed in the course of the design and development of an electronic voting system, viz. simplicity, ease of access, reliability, transparency and flexibility.

3.1. Simplicity

Most securities holders in the Russian Federation are private individuals and do not have a professional relationship with the securities market. Despite the fact that a traditional ballot paper contains an instruction on how to complete the ballot, a lot of ballots are completed incorrectly and, as a consequence, are determined to be invalid. This is most often the case when ballots contain many items put to vote. Sometimes the number of such items on the ballot is in excess of one hundred.

Quite often, even the requirements for completing ballot papers tend to differ in practice. For instance, in some cases, to select the desired option, you need to strike it out, and in other cases you need to strike out any unwanted options and leave the selected option undeleted. There are also some other peculiarities. The developers of the E-voting system were given the task to simplify the voting procedure for the end user and create an intuitive and user-friendly interface using prompts to assist the user through the voting process starting with the system login and ending with the voting proper. As a result, the user who is not very computer literate should be able to perform all the steps quickly without anyone else's help.

The user does not need to install any applications, it is enough for the user to access the website from a PC or a mobile device, sign in, select the desired voting options and submit the document generated in the E-voting system to the issuer. The system will check whether the document is completed correctly and prompt the user if there are any errors in the ballot. For example, before the ballot is submitted the system will warn that the user has not voted on all items or will not permit to submit the ballot if the user has voted for a greater number of candidates than he was entitled to vote.

As the voting must occur within a limited time window, the securities holders will have access to information notices and warnings which will help them not to miss the time for such important things as viewing the meeting materials, voting, watching the video webcast, etc. Where there is a live video webcast from the meeting venue, shareholders may decide on their vote after they have heard the speakers at the meeting.

The simplicity principle extends further to the other parties to the voting process, i.e., issuers and vote counters. The emphasis is that each party should be able to perform the functions that are typical of them. For instance, the issuer will have a convenient GUI showing the voting statistics on the website and will be able to get feedback from and interact with investors in the form of questions and answers, etc.

3.2. Ease of Access

Under Russian laws, the shareholder has the right, but not the obligation, to vote. Therefore, in order to get as many people as possible to use the E-voting system, the service should be as accessible as possible.

The very possibility of voting via the Internet extends the reach of the securities holders' right to vote by making them independent of intermediaries, postal services, does not require them to be physically present at the meeting venue, which may be located thousands of kilometres away from where the shareholder is based.

Furthermore, voting through the E-voting website is free of charge for the owner, unlike postal services, where postal charges are to be paid in order to send traditional paper-based ballots, or the services of transportation companies which the shareholder uses to get to the meeting venue.

But all these benefits may be compromised if the E-voting system does not provide simple and easy to understand access.

Shareholders entitled to vote are determined based on the list prepared on the record date set by the issuer. Such list contains the details of holders of record and the quantities of securities held by them as of the record date. Therefore, only shareholders of record included on the list should be permitted to vote via the E-voting system. How can this be achieved?

It is necessary to identify the person accessing the E-voting platform to ascertain that it is indeed the person included on the list of holders of record that wishes to use the E-voting system. One needs to have protections in place against potential fraud while keeping the system accessible for a great number of persons.

To address this issue, the key method of identification chosen was the existing identification resource used in the electronic interaction of individuals with government authorities, the so-called Unified Identification and Authentication System (the UIA System).² This system currently has more than 22 million users and is broadly used to receive services provided by the government authorities.

The details of the potential user of government services are checked by the UIA System against the official data contained in the authorities' databases; furthermore, for the purpose of connection to government services, the potential user's identity is verified during his visit to a postal office. After that, the individual is able to interact with the government authorities electronically.

Considering the ubiquity and accessibility of the UIA System, and the fact that it is available free of charge, it was decided to use the UIA System as the primary

² <https://www.gosuslugi.ru/foreign/?userLang=en>
<http://www.minsvyaz.ru/en/events/34308/>

instrument to identify users of the E-voting platform, both individuals and corporates. Thus, to get access to the E-voting system, it will be enough for the shareholder to use the login and password of the government services website to go through the identification process and be admitted to the voting available to it.

The identification via the UIA System is not the only option available. The system permits the use of other methods of identification, including those based on the confirmed electronic signature, obtaining access by personal identification with one of the authorised representatives, etc. Other methods are also being contemplated to be used in the longer term. Importantly, the E-voting technology platform will support the use of different identification instruments through a system of adapters not requiring a dramatic change of the main platform's software code as the number or makeup of the identification methods used increases or changes.

3.3. Reliability

The next important principle underlying the development of the E-voting platform is its reliability. If a shareholder cannot vote due to technical issues, insufficient system performance or for any other reasons, the meeting results may be declared invalid. This will lead to significant losses, both direct ones and those caused by the issuer not being able to engage in its day-to-day operations.

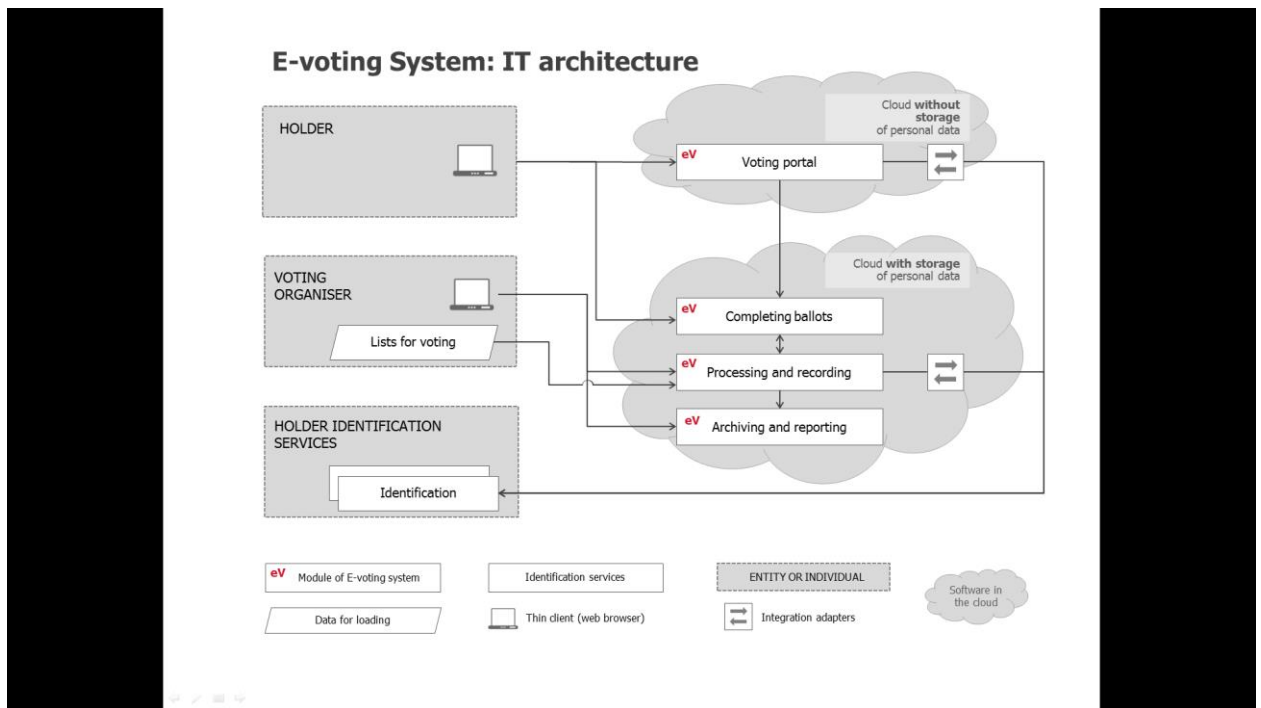
In this connection, one should bear in mind the following:

- the seasonal nature of demand for E-voting;³
- the quantity of issuers holding meetings simultaneously;
- the peak of voting occurs during the last days of the voting period.

In light of these circumstances, when planning the software and hardware to support the system performance, we take it into consideration that constant availability of server capacity reserved for peak loads is unviable, as outside the "meeting season" the number of meetings and, therefore, the load are much lower.

To optimise the costs to secure the required system performance, when developing the architecture solution for the E-voting system, we opted for a modular architecture which helps achieve system scalability promptly, including by using cloud computing services. Fig.6.

³ Under Russian laws, the annual general meeting of shareholders shall be held between 1 January and 30 June of each year.



The use of cloud computing to handle the most resource-hungry components will reduce the cost of maintaining the system and ensure that the E-voting system is independent in terms of resources from the Company's other operations. Russian laws do not permit to store individuals' personal data abroad. In order to comply with the legislative requirements and ensure the system security, the modules were divided into those using personal data and those using anonymised data on the holder, which in turn made it possible to use a multi-level protection of the infrastructure featuring separation into security areas and segregated data processing depending on the categories of confidentiality.

The system also has a two-factor authentication, protection from external attacks, including DDoS attacks, transmission of information through protected channels and encryption of all relevant data.

3.4. Transparency

Confidence in the voting system depends, among other things, on the understanding of its principles of operation by the key players, especially when the system is used to perform 'legally significant acts'. Transparency of the underlying mechanisms is primarily important for shareholders and issuers. The shareholder has to be assured that its ballot will be accepted and processed and the votes will be tallied. The issuer has to be assured that the system does not allow access for improper participants, that the shareholder votes will not be lost, and that the votes will be tallied correctly. The regulator's awareness is also paramount to ensure control and prevent all sorts of manipulations of voting results.

To that end, the E-voting system relies on ISO 20022 messaging which is also used on the Russian market to exchange voting documents among securities market professionals. The common formats of electronic documents permit uniform processing of such documents. Securities holders voting via a user-friendly interface on the website will be able to save the e-ballot and, if necessary, ascertain that it is completed properly. The system transparency is also supported by the securities holder's ability to receive ISO 20022 compliant messages on the processing status of their ballots.

Another important element contributing to the transparency of the E-voting system is the readily available and open mechanism enabling new participants to join the system. The existence of a simple and understandable identification procedure within the framework of the above-mentioned government programme for electronic interaction with individuals and legal entities makes it possible for any interested person to get access to the e-voting system.

3.5. Universality

One of the primary objectives in developing the E-voting system is to create a universal resource permitting investors to vote at any meetings of holders of Russian securities using a single interface and a common identification procedure. Therefore, if the investor's portfolio includes securities of both large public companies and smaller non-public ones, the investor will be able to vote at all meetings via the single E-voting platform. The only requirement is that the issuer concerned elects to use such voting system.

This is extremely important both for issuers and investors, as it will make the service more attractive and relevant and thus increase shareholders' engagement in corporate governance. Apart from that, it is much cheaper for issuers to use a single platform than develop and maintain a similar in-house solution. With this approach, the investor does not need to use different methods of identification on different resources and have to adapt to different interfaces and system algorithms.

4. Conclusions and perspectives

The approaches to the implementation of the E-Voting system discussed in this article are intended to cater to the needs of Russian investors and issuers. However, this does not at all mean that this system cannot be used in any other markets or for any other purposes.

In our opinion, there are no unsurpassable geographic, legal or sectoral limitations that would make it impossible to use this system on the financial markets in other countries. Differences in the securities recordkeeping systems may have an effect on the technology used to identify the system users and on the relevant system components. For instance, in the countries where all investors are participants of the CSD, there is no

need to create sophisticated identification systems. The countries where electronic signatures are widely used will most likely prefer them for identification purposes. However, the core set of functions will remain unchanged in all cases, as one would need to post the meeting materials, generate ballots, collect them and tally the votes. The E-voting system is fairly flexible and adaptable and can be easily customised to suit the particular market and be used successfully in other countries.

Furthermore, voting at investor meetings is not the only area where the E-voting system may be applied. Any task decided by voting may be processed with this system – be it a vote to elect the student council at university or the residents of a municipality selecting a scenario to develop their area – the E-voting system may be used to receive the desired result. Simplicity, ease of access, reliability, transparency and flexibility are the core principles underlying the E-voting system that make it possible to use it where one needs to be able to vote in a trusted environment and get the result that can be trusted.