Application of Information Technologies in the Electoral Process

Dear Conference Participants, Ladies and Gentlemen, Colleagues:

For 10 years – since December 1995, Russia has been successfully applying the State Automated System "Vybory" (GAS "Vybory") and technical facilities for vote counting in federal, regional and local election campaigns and referendums. During this time, 7 federal, 2.5 thousand regional and 5.5 thousand municipal elections have been held with the use of GAS "Vybory."

In accordance with Russia's approach, mentioned by A.A. Veshnyakov in his presentation, GAS "Vybory" is intended not only for rapid and reliable determination of voting returns: it provides informational support for ensuring the openness and transparency of the electoral process as well as technical possibilities for effective public control over the electoral process, which strengthens trust in the election system. Apart from this, the system is used to deal with the tasks of the preparatory stage (registration of voters and candidates; collection and publication of the information about political parties, candidates, election funds; document processing, etc.).

The analysis of the experience gained during 10 years of the use of electronic voting systems (in the broad sense of the term) has shown that the creation, development and application of the system and the technical vote counting facilities must take into account the interconnected nature of the legal, organizational and technical aspects of introduction of information technologies in the electoral process.

1. The legal standards of GAS "Vybory" are established by the election laws of the Russian Federation, particularly by the special 2003 law "On the State Automated System of the Russian Federation "Vybory." Separate aspects of the application of information technologies in elections are regulated by the federal laws "On Basic Guarantees of Electoral Rights and the Right of Citizens of the Russian Federation to Participate in a Referendum," "On the Referendum of the Russian Federation," "On the Election of the President of the Russian Federation," "On the State Duma of the Federal Assembly of the Russian Federation."

The Committee of Ministers of the Council of Europe adopted recommendations on electronic voting standards 1.5 years after the federal law on GAS "Vybory" was adopted in Russia. With regard to several parameters the Russian lawmakers set more stringent requirements to electronic voting standards than those recommended by the Committee of Ministers of the Council of Europe.

Relying on the positive experience of the system gained in the course of ten years the Russian law states that its use in elections is "one of the guarantees of the realization of the rights of Russian Federation citizens based on the assurance of the openness, authenticity, promptness and fullness of the information about elections and a referendum."

Thus, in order to ensure much quicker determination of the results the election commissions are now required to publish in the Internet the final protocols of all election precincts, without any exceptions, within 24 hours of the end of voting.

One can imagine how monumental this task is considering the fact that about 95,000 election precincts are formed during the federal elections in the Russian Federation and these precincts span 11 time zones.

From the standpoint of organizational and technical aspects of the use of information technologies in the electoral process we have accumulated large experience in the certification and auditing of software products and technical facilities of the system, training of the operating personnel and protection of the information. These standards are likewise regulated in detail by the applicable laws of the Russian Federation. In GAS "Vybory" the condition of the software and hardware is monitored by the built-in auditing facilities. At the same time, the system is open to technical control on the part of representatives of candidates and political parties.

As a result, the preliminary results of federal elections are made public already 3 to 5 hours after the closure of the polling stations. Time is a serious factor of trust in the election system and here, too, GAS "Vybory" operates within the limits of the established standard.

Owing to the information technologies the voters can now access the data bases of GAS "Vybory" through the Internet to receive all information about the parties and candidates, which is allowed by law, and make a conscious choice. After the end of voting the observers and each voter can calculate the voting results by themselves on the basis of the protocols of precinct election commissions published in the Internet and compare these results with the published data.

Based on our technical and organizational experience, including the experience in countering hackers' attacks against the system, we believe it risky to change over to the technologies for direct voting through the Internet, voting though mobile communication or digital television systems. In the course of the presidential elections in Russia and elections to the State Duma 1800 computer attacks against GAS "Vybory" were recorded, 20% of them from abroad. It is only the physical separation of the data base from the Internet and powerful protection means of the Internet complex that made it possible to prevent any distortion of the information.

2. A very important aspect of the problem, which, we believe, have not been studied well enough, is the set of questions connected with the psychology of perception of electronic voting. The experience of the work with GAS "Vybory" shows that some voters, and some candidates, too, do not trust electronic systems. And it is for this reason that we call for caution in the introduction of inadequately protected

information technologies: any malfunction or intentional malicious interference will easily cast doubt not only on the election results but on the whole electoral process.

We have chosen for ourselves a strategy of gradual (evolutionary) introduction of electronic election standards. Under the law "On Basic Guarantees of Electoral Rights and the Right of Citizens of the Russian Federation to Participate in a Referendum" electronic voting devices may presently be used at not more than 1% of precinct polling stations. This is reasonable. For federal elections this requirement means that almost 1000 polling stations may be automated.

In order to maintain the public trust we think that in the coming years it is necessary to keep the principle of parallel vote counting: our ballot processing and electronic voting complexes make it also possible to record votes on paper. Thus, electronic voting is accompanied by, and verified with the aid of, conventional manual ballot counting.

These complexes have already been used in elections for several years. They can simultaneously support up to 7 kinds of elections with seven different ballots, reduce to a minimum manual work of election commission members and allow the preliminary voting returns to be presented with a high degree of reliability a few minutes after the polling station is closed.

The transition to fully electronic voting by means of electronic (including sensory) devices is the next step, which needs serious informational and educational work. The public responses obtained in the course of testing of experimental samples show the mandatory need for confirmation of the vote on paper.

The practical experience of the work with voters and political parties has convinced us that a coordinated system of measures is needed, which would include the training of election commission members, public observers, other election participants. Such measures must also include preparation of special motion pictures, short demonstration films and other informational products for the public at large. To explain the principles of electronic voting a particularly wide use must be made of the Internet.

The most important components of the work are the maximum accuracy of the presentation of the results, its speed and clearness.

3. The perception of electronic election standards differs with the cultural and political milieu. Therefore we believe it highly important to suggest to the Council of Europe on behalf of the Association of the Central and Eastern European Election Officials that the Council of Europe set up a permanent international body at the level of a working group of experts to analyze and exchange the experience of member countries in the development and introduction of electronic voting technologies.

The tasks of this group will be to collect and process the reports of the national structures and to organize the exchange of experience.

A separate task of this body might be to form an international (interstate) Center or Commission for certification of the electronic voting facilities. This would contribute to the creation of an atmosphere of trust and to the establishment of higher quality standards for such technical facilities.

It would be also useful to discuss the question of organizing international expert examination of the functioning of electronic voting during real elections. At his stage it seems reasonable to form such groups of experts between member countries of the organization on a bilateral basis.

4. Dear Ladies and Gentlemen:

In conclusion, I would like to stress once again our high opinion of the recommendations of the Committee of Ministers on electronic voting standards and invite you to see for yourselves how our Russian standards are being realized in the practical work. Cooperation contributes to mutual progress!

Thank you.