

Towards European Standards on Electronic Voting

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Abstract: Michael Remmert is project manager of the project "Making democratic institutions work" in the Council of Europe. The Council of Europe has been working since 2002 on a set of European standards on the legal, operational and technical aspects of electronic voting. This keynote gives insights on the progress and the work done so far.

The Council of Europe is a pan-European inter-governmental organisation with 45 member states, covering virtually the entire continent of Europe, thus representing 800 million Europeans. It seeks to develop common democratic and legal principles through standard setting and a culture of co-operation. With regard to new information and communication technologies, the Council of Europe has developed minimum standards in areas that are of concern to all member states, from cybercrime to data protection. It constantly highlights the importance of the human and democratic dimension of communication and promotes e-inclusion and the empowerment of citizens in a democratic information society in such a way as to take advantage of opportunities and prevent risks which may result from the new information and communication technologies.

Against this background, the Council of Europe has set up a committee, which is currently preparing a set of European standards on the legal, operational and technical aspects of electronic voting (e-voting). After some exploratory work in 2002, the first meeting of the Multidisciplinary Ad Hoc Group of Specialists on legal, operational and technical aspects of e-voting (IP1-S-EE) was held in February 2003. The Ad Hoc Group has been supported by two subgroups, one dealing with legal and operational aspects of e-voting, the other with technical aspects.

Common standards on e-voting, reflecting and applying the principles of democratic elections and referendums to the specificities of e-voting, are key to guaranteeing the respect of all the principles of democratic elections and referendums when using e-voting, and thus building trust and confidence in domestic e-voting schemes.

The standards on e-voting are being prepared in such a way as to be accepted and applied by governments and industry alike. The Council of Europe is preparing standards at three levels:

Legal standards, reflecting the fundamental principles of elections enshrined in international legal instruments.

Operational standards, regarding basic matters of organisation and procedure with regard to e-elections which ensure the respect of the fundamental legal standards.

Core technical requirements, which are required to deliver operational standards in a secure and cost-effective manner while ensuring interoperability across devices and enabling control at any stage of the election process.

The Ad Hoc Group uses the following definition of the term ‘e-voting’: “An election or referendum that involves the use of electronic means in at least the casting of the vote”. The term ‘remote e-voting’ refers to “e-voting where the casting of the vote is done by a device not controlled by an election official”.

The key assumption adopted by IP1-S-EE is that e-voting should be at least as reliable and secure as democratic elections and referendums which do not involve the use of electronic means, and that it should be in compliance with the fundamental principles of democratic elections and referendums (universal, free, equal, secret and direct elections).

The standards will cover all the elements of an e-enabled election, i.e. the notification of an election, voter registration, candidate nomination, voting, calculation of results and audit.

The reasons for introducing or considering the introduction of e-voting in one or more stages of a political election or referendum can differ from country to country. Depending on the specific domestic context in each country, these reasons include:

- enabling voters to cast their vote from a place other than the polling station in their voting district;
- facilitating the casting of the vote by the voter;
- facilitating the participation in elections and referendums of all those who are entitled to vote, and particularly of citizens residing or staying abroad;
- widening access to the voting process for voters with disabilities or those having other difficulties in being physically present at a polling station and using the devices available there;
- increasing voter turnout by providing additional voting channels;
- bringing voting in line with new developments in society and the increasing use of new technologies as a medium for communication and civic engagement in pursuit of democracy;
- reducing, over time, the overall cost to the electoral authorities of conducting an election or referendum;
- delivering voting results reliably and more quickly; and
- providing the electorate with a better service in pursuit of democracy, by offering a variety of voting channels.

Despite the above-mentioned potential benefits of the introduction of e-voting, it should be noted that modernising how people vote will not, per se, improve democratic participation. Failure to do so, however, is likely to weaken the credibility and legitimacy of democratic institutions.

As long as e-voting is not universally available, it should not replace the traditional way of casting a paper ballot in a polling station, it should remain an optional and additional channel. It should be considered to provide the electorate with opportunities for multi-channel voting, i.e. a combination of traditional paper ballot, kiosk/poll site e-voting and remote e-voting, in order to maximise benefits for citizens who have access to, and are confident in using new technologies without penalising those unfamiliar with such systems.

Only e-enabled voting systems which are efficient, secure, technically robust and readily accessible to all voters will build the public trust to such an extent as to make it feasible to hold large-scale e-enabled elections.

In order to ensure the privacy and equality of suffrage, it must be ensured that only persons who are entitled to do so vote at an e-enabled election, no voter casts his/her vote more than once, and each vote validly cast is only counted once when election results are calculated.

The compliance of e-voting systems with secrecy requirements should be ensured according to the following principles:

- Any authentication procedure should be such as to prevent the identity of the voter being disclosed to others;
- Voters should be given access to particular electronic ballot boxes in a number sufficient to protect the identity of any individual voter using the ballot box;
- No ballot should be disclosed in any manner during the administration of the election, or afterwards, that permits the voter who cast the ballot to be identified.

Finally, specific and satisfactory solutions must be put into place in countries where the electoral system allows voters to change a previously cast postal vote on election day (e.g. Sweden), or where a judicial authority is authorised by law under specific circumstances to ascertain by whom, where and by what means any ballot was cast (e.g. United Kingdom).

Once adopted, the Council of Europe standards for e-voting will be applicable to e-enabled voting systems in supervised environments (polling stations, mobile kiosks etc.), but also to remote e-voting (internet, telephone, etc.). The standards could be used by member states as benchmarks for the setting-up of e-voting systems and the evaluation of pilot projects. They should be valid in a long-term perspective and irrespective of changes in technology.

It is expected that the Committee of Ministers of the Council of Europe will be able to adopt a Recommendation to member states on e-voting in the autumn of 2004.

With regard to possible follow-up at the Council of Europe to the Recommendation on e-voting, the following is presently being considered: As e-voting is a new and rapidly developing area of policy and technology, standards and requirements need to keep abreast of, and where possible anticipate new developments. In recognition of this, the e-voting Committee is likely to suggest to the Committee of Ministers to recommend to member states to keep their own position on e-voting under review and report back to the Council of Europe the results of any review that they have conducted. It is anticipated that the Council may look again at this issue within the two years following the adoption of the Recommendation and member states may bear this timing in mind when deciding whether, and if so when, a review is appropriate in their particular circumstances. The compliance of e-voting systems with secrecy requirements should be ensured.