

LEGALITY, SEPARATION OF POWERS, STABILITY OF ELECTORAL LAW : THE IMPACT OF NEW VOTING TECHNOLOGIES

Ardita DRIZA MAURER

Jurist LL.M., Independent Consultant

info[at]electoralpractice.ch

Abstract: Legality, separation of powers and stability of electoral law are some of the principles of the European constitutional heritage. They should be respected and implemented throughout the electoral process, including when new voting technologies are used. This paper discusses e-voting specific implementations of the principles or challenges to it. Ongoing and proposed improvements in legislation or practice are pinpointed.

Keywords: New technologies, e-voting, legality, separation of powers, stability of electoral law, Council of Europe, Venice Commission

I. INTRODUCTION

The question suggested by the title is how legality, separation of powers and stability of electoral law - three among many constitutional principles to be respected during elections - can be affected when new voting technologies are used in the electoral process. Formulated this way, the question is too large. "Legality, separation of powers and stability of electoral law" are broad concepts with numerous facets, the "electoral process" encompasses a great number of procedures and "new voting technologies" may refer to different uses of electronically-backed solutions, from voter registration, to administration of voter lists, e-voting, vote tallying, publication of results, etc. The question should be narrowed.

New voting technologies are understood here as a synonym of e-voting - the use of electronics to cast a vote in political elections and referendums. Reference is made to e-voting both from controlled and uncontrolled environments.¹ The electoral process considered is vote casting. Legality, separation of powers and stability of electoral law are elements of the "rule of law" and "democracy" which, together with "human rights", constitute the three pillars of a democratic State or the basis of all genuine democracy as mentioned in the Preambles to the Statute of the Council of Europe and to the European Convention on Human Rights. They are

¹ We think of e-voting as of the tip of an iceberg: it the most visible and representative part of a larger picture, which is that of the extensive use of computers and telecommunication networks in electoral procedures.

part of the European constitutional heritage. The three pillars contain other elements as well², which are related to the three ones discussed here; however they will not be examined here. Finally, we refer to the definition of the three principles according to the European constitutional heritage, which means to a consensual definition common to Council of Europe member states.³ Such definition has been identified by Venice Commission in the following documents to which we refer: the 2011 "Report on the Rule of Law", the 2016 "Rule of Law Checklist", the 2002 "Code of good practice in electoral matters - Guidelines and explanatory report" and the 2005 "Interpretative Declaration of the Stability of the electoral Law".

We discuss legal provisions and practical measures that ensure that legality, separation of powers and stability of electoral law are respected in an e-voting context. An alternative approach would have been to consider the legal suits of potential problems that may be detected (before the voting, through certification and other controls, or during/after the voting period via complaints, audits, alleged/proved hacking, etc.). An example of such a question would be: is legality respected if internet voting, an optional voting channel, suffers a distributed-denial-of-service attack and is switched off for some time? However, legal discussion of such problems falls outside the scope of this paper.

With respect to e-voting legal provisions, reference is made to provisions found in international soft law, namely the following documents adopted by the Committee of Ministers of the Council of Europe: The "Recommendation of the Committee of Ministers to member States on legal, operational and technical standards for e-voting", also known as Rec(2004)11; the "Certification of e-voting systems, Guidelines for developing processes that confirm compliance with prescribed requirements and standards" approved in 2011 (we refer to it as Guidelines on Certification); the "Guidelines on transparency of e-enabled elections" approved in 2011 (we refer to it as Guidelines on Transparency). Furthermore, Venice Commission's 2004 report on e-voting will be mentioned.⁴

The paper highlights some challenges to ensuring compliance with the principles in an e-voting context. There are close links between the three principles and several of their elements overlap. We will discuss in some detail the legality principle (II) and present an

² For example, in addition to *legality* (legality and separation of powers) and *legal certainty* (stability of electoral law), the pillar "rule of law" also encompasses *prohibition of arbitrariness*, *access to justice*, *respect for human rights*, *non-discrimination and equality* before the law.

³ To be noted, the consensual definition may not entirely coincide with the national definition of the same concept. National concepts are often more developed and detailed.

⁴ European Commission for Democracy through Law (Venice Commission)/Grabenwarter, Ch. (2004) "Report on the compatibility of remote voting and electronic voting with the standards of the Council of Europe"

overview of separation of powers (III) and stability of electoral law (IV) as implemented in an e-voting context, followed by conclusions (V).

II. LEGALITY AND E-VOTING

The law must be respected, not only by individuals but also by authorities, public or private. Lower level e-voting regulations must respect higher level instruments and decisions must be based on law. Legality also refers to a transparent, accountable and democratic process for enacting the law. Another aspect, the fact that public officials require authorisation to act, and act within the powers that have been conferred upon them, will be examined under separation of powers (chapter III.). The main elements of legality as defined in the above-mentioned "Rule of Law Report" and the "Rule of Law Checklist" of Venice Commission and their meaning to e-voting will be sketched in section A, followed by some examples of e-voting's specific aspects and their conformity with the principles (section B).

A. ELEMENTS

1. Supremacy of the Law

Supremacy of the law requires constitutional and legal conformity of an e-voting regulatory framework and practice. The e-voting regulatory framework for example should respect constitutional principles, in particular the principles of universal, equal, free, secret and direct suffrage, election-related fundamental rights and procedural guarantees. Its quality (or clarity) and level of detail are important. Clarity of provisions influences their implementation.

What does clarity mean? Does it mean technical regulations should be as clear as to be understood by the laymen without technical knowledge? Or clear to the competent specialist? The question was asked in Germany, Austria and, indirectly, in Switzerland⁵ and opinions differ (we will come back to this later).

In the European heritage, clarity is linked to implementation. Regulations for instance should be clear to make implementation possible. But, implementation by whom? The civil servant without specific technical knowledge or the mandated e-voting expert?

⁵ For a detailed discussion, see the respective chapters in Driza Maurer, A., Barrat J. (eds) E-Voting Case Law. A Comparative Analysis, Routledge (Ashgate) Publishing Ltd., Surrey, England 2015

The normative level of e-voting provisions is important. If the Constitution forbids or limits uncontrolled remote voting, as is the case in Austria, e-voting from an uncontrolled environment (internet) can only be introduced after amending the Constitution.

To ascertain the constitutional conformity of an e-voting regulatory framework and practice, judicial review or other appropriate forms of review (e.g. by a specialised committee) are foreseen. In an e-voting context, the constitutional conformity of the technical solution is also ascertained through certification and other controls. Such controls (should) also apply to acts and decisions of private actors that perform e-voting related tasks.

2. Relationship between International Law and Domestic Law

The principle *pacta sunt servanda* is the way in which international law expresses the principle of legality. To comply with this principle, the domestic regulatory framework and practice of e-voting must respect treaty provisions such as art. 25 ICCPR and art. 3 of Protocol 1 to ECHR on the right to free elections. The same principles are however found also in national constitutions and laws. In such case, supremacy of the law and *pacta sunt servanda* coincide.

Pacta sunt servanda further means that countries comply with binding decisions of international courts, such as the European Court of Human Rights (ECtHR). The interpretation of principles, including of the right to free elections, by international courts, has evolved over time. ECtHR has not yet had the occasion to interpret the right to free elections in an e-voting context. Possible future case law may impact the way e-voting is regulated at the national level.

Soft law instruments such as Venice Commission's Code of Good Practice in Electoral Matters or Rec(2004)11 are not binding per se and *pacta sunt servanda* does not apply. However, to the extent that they set out a European standard they influence the interpretation of treaty based rights (e.g. by ECtHR). So they need to be taken into account.

3. Duty to Implement the Law

State bodies must effectively implement laws. An e-voting regulatory framework of poor quality (clarity) hinders the effective implementation of the law. Assessing the quality of regulations and their implementability before adopting them, as well as checking *a posteriori* whether they are applied (*ex ante* and *ex post* legislative evaluations) is particularly important when introducing new technologies in traditional, established procedures.

Implementation of legislation may be obstructed by the absence of sufficient sanctions, or by the insufficient or selective enforcement of the relevant sanctions.

4. Private Actors in Charge of Public Tasks

Private entities are involved to different degrees in providing high-technology solutions to e-voting. The regulatory framework and practice should guarantee that non-State entities are subject to the requirements of the rule of law and accountable in a manner comparable to those of public authorities.

5. Law-Making Procedures

Rule of law and democracy require that the process for enacting the law is transparent, accountable, inclusive and democratic. The e-voting regulatory framework would benefit from being debated publicly by parliament and adequately justified (e.g. by explanatory reports). The public should have access to draft legislation on e-voting and the possibility to provide input.

Furthermore, it is necessary to assess the impact of e-voting before introducing it. Questions like e-voting's impact on electoral risks (risk assessments) or on human and financial resources required need to be clarified before.

B. DISCUSSION

E-voting regulations should clarify how the higher-level principles are implemented. So, before introducing an e-voting system, the necessary regulatory changes should be planned and conducted.

Detailed and clear regulations are important for certification.⁶ But deriving e-voting requirements from broad constitutional principles is not an easy task. Combined legal and technical knowledge is needed. Research has developed interdisciplinary interfaces that enable a gradual technical implementation of legal provisions. The use of such interfaces in the e-voting area is of particular interest.⁷

⁶ OSCE/ODIHR recommends that the e-voting legal framework should be delineated to include formalized procedures for the conduct of electronic voting from set-up and operation to counting. Further this could include standards for cryptographic methods, testing requirements, operational duties and responsibilities, certification requirements.

⁷ The method KORA (**K**onkretisierung **r**echtlicher **A**nforderungen = Concretisation of Legal Requirements) invented in 1993 proposes a four-tier method for acquiring technical proposals from legal provisions. Researcher has proposed and tested its use in an e-voting context; see in particular research from Melanie Volkamer and her team https://www.secuso.informatik.tu-darmstadt.de/en/secuso-home/research/publications/?no_cache=1

The interpretation of the same constitutional principles may yield different results in different countries. When considering the constitutionality of e-voting in its much commented 2009 judgement,⁸ the German Constitutional Court derived a principle of the public nature of elections from other constitutional rights. Such principle introduces a presumption for public inspection in all electoral matters as a way to guarantee public trust in the result of elections. This (deduced) principle does not exist in Austria, Estonia or Switzerland for example, despite the fact that they share similar constitutional values with Germany.⁹

By applying the principle of the public nature of elections to e-voting¹⁰ the German Court concluded that the layman must be able to comprehend the central steps of the election and verify reliably that his/her vote has been recorded truthfully, without any special prior technical knowledge. The Austrian Court¹¹ arrived at a similar conclusion based on the principle of legal determination. However, Estonia and Switzerland do accept the fact that such elements cannot be understood by the laymen but only by (democratically appointed) specialists.

When assessing the constitutional conformity of e-voting, principles related to the automatic processing of personal data and use of databases (e.g. data protection, right to informational self-determination, telecommunication secrecy) need to be considered.

In its 2004 report on e-voting, Venice Commission concluded that electronic voting is neither generally permitted by human rights nor ruled out a priori. Instead, its acceptability depends on the legal, operational and technical standards implemented in the procedure.¹² The quality of the regulatory framework has a pivotal role in ensuring its conformity with the Constitution.

Ensuring quality is a challenge for the legislator. Reasoning by analogy with similar channels (e.g. consider that internet and postal voting - both distant voting methods - can be

The applicability of KORA to internet voting was researched by Philipp Richter in his 2012 doctoral thesis (see Further Reading). One of the latest contributions on this is from Stephan Neumann and Melanie Volkamer "A Holistic Framework for the Evaluation of Internet Voting Systems" in Zissis, D. and Lekkas, D. (editors) (2014) Design, Development and Use of Secure Electronic Voting Systems, IGI Global

⁸ Bundesverfassungsgericht (2009), Decision 2 BvC 3/07, 2 BvC 4/07, of 3 March 2009, Available: <http://www.bundesverfassungsgericht.de>. For a detailed discussion, see the chapter on Germany by Sebastian Seedorf in E-Voting Case Law (fn.5)

⁹ For a detailed discussion, see the respective chapters in E-Voting Case Law (fn.5)

¹⁰ The requirement is formulated in broad terms covering voting machines as well as to internet voting.

¹¹ Verfassungsgerichtshof (2011), Decision V 85-96/11-15, 13 December 2011, Available: <http://www.vfgh.gv.at> For a detailed discussion, see the chapter on Austria by Melina Oswald in E-Voting Case Law (fn.5)

¹² Based on the analysis of non supervised postal voting, the report proposes similar standards for e-voting

regulated in a similar way) has shown its limits.¹³ The regulatory framework conceived for low-tech (mechanical) voting machines is not suited to regulate e-voting¹⁴ and neither is the regulatory framework of traditional voting channels: they are all insufficient or unsuitable to regulate e-voting.

Courts have sanctioned lack of quality of the regulatory framework. The German and Austrian decisions mentioned above declared unlawful the e-voting regulations because insufficiently detailed. Sufficiently detailed regulations are necessary. But what is a sufficiently detailed regulation? For the Austrian court, provisions must be understood by the members of the electoral commission without the assistance of technical specialists. For the German court, provisions must be understandable by the layman (see above).

Rules on technical matters and detail *may* go into regulations of the executive according to the Code of Good Practice in Electoral Matters (II.2.a). They actually *should*, in the e-voting context. The Austrian judge in the above mentioned decision said that including detailed technical measures in the (higher-level) law could be problematic in the light of the rapid development of technical standards. Modifications in the e-voting regulatory framework in Estonia and Switzerland also saw the introduction of multiple layers (three in Switzerland) with technical details regulated by lower layers - which are in the competence of the executive.¹⁵

Some fear that giving the administration the competence to regulate the technical details may weaken the content of the principles. Such fear is to be taken seriously. It supports another conclusion which is that of increasing in-house expertise of administrations on e-voting.¹⁶ However this risk must not become an obstacle to needed updates. Detailed regulations are actually necessary to ensure correct implementation of the principles, as the German and Austrian courts said.

Judicial review of e-voting is important to control its constitutional conformity. However, with respect to of e-voting regulations, it has not been straightforward. In principle,

¹³ The principle of analogy is developed by Venice Commission in its 2004 opinion (fn.4) (see in particular §66). The mechanical application of the principle has been criticized. See for e.g. Driza Maurer, A., 2014 "Ten Years Council of Europe Rec(2004)11 - Lessons learned and Outlook" in in Krimmer, R., Volkamer, M. (Eds) Proceedings of Electronic Voting 2014 (EVOTE2014), TUT Press, Tallinn, p. 111–117.

See also Driza Maurer, A. (2013) "Report on the possible update of the Council of Europe Recommendation Rec(2004)11 on legal, operational and technical standards for e-voting, 29 November 2013" available at http://www.coe.int/t/DEMOCRACY/ELECTORAL-ASSISTANCE/themes/evoting/default_en.asp

¹⁴ See for example the discussion on France by Jordi Barrat in E-Voting Case Law (fn.5)

¹⁵ For a detailed discussion see Driza Maurer, A. "Update of the Council of Europe Recommendation on Legal, Operational and Technical Standards for E-Voting – A Legal Perspective" in Tagungsband IRIS 2016

¹⁶ See Conclusions in E-Voting Case Law (fn.5)

judicial review of administrative acts (e-voting regulations or decisions) is possible. In practice, not all courts have been prone to proceed to such a review, especially when no irregularities in the voting itself were alleged (or could be proved). (The difficulty or even impossibility to obtain evidence is yet another challenge in an e-voting context.)¹⁷

Constitutional courts in Germany and Austria did examine the constitutional conformity of administrative level regulations (and found them unlawful) even in the absence of alleged irregularities. The Swiss federal Court did not proceed to such examination of a cantonal regulation on e-voting. The court relied on the authorization procedure (and related controls of conformity) that had been conducted by the federal government. Debate however continues in Switzerland on this issue.¹⁸

States must ascertain that e-voting technical requirements fully reflect the relevant legal and democratic principles, mainly through certification of the system by an independent and competent body as foreseen in Rec(2004)11 and Guidelines on Certification. Certification is however a difficult task. It requires detailed legislation¹⁹ and, furthermore, a competent and independent body. Identifying such competent bodies is not easy, especially in smaller countries. The Guidelines on Certification talk about perusing a certification obtained in another country. This may prove difficult to implement. Given national electoral specificities, it seems virtually impossible to use exactly the same system (and associated certification) in more than one country.

To ensure that implementability and implementation of e-voting regulations are assessed, one can refer to the good practice of a step-by-step gradual introduction of e-voting.^{20 21} Parliaments could play a greater role as well. In addition to their traditional means

¹⁷ See the detailed discussion by Ülle Madise and Priit Vinkel in E-Voting Case Law (fn.5)

¹⁸ See the recent Parliamentary initiative 15.412, Reimann Lukas, "Les modalités du vote électronique doivent pouvoir faire l'objet d'un examen juridique". Prompted by the court's decision, the intervention proposes to change the federal law on political rights to require cantons to set-up specific bodies for considering the constitutional conformity of e-voting modalities, independently from its use in a specific vote or election. Such abstract control of legality was so far rejected by the competent commission of the lower chamber of Parliament which refused a solution unique to e-voting. Instead the commission proposes to reinforce existing checks: the conditions for issuing the authorization to use e-voting in a federal vote and for controlling its respect.

¹⁹ For a detailed discussion see Driza Maurer, A., 2014 "Ten Years Council of Europe Rec(2004)11 - Lessons learned and Outlook" in Krimmer, R., Volkamer, M. (eds) Proceedings of Electronic Voting 2014 (EVOTE2014), TUT Press, Tallinn, p. 111–117.

²⁰ OSCE/ODIHR recommends that e-voting technologies are introduced in a gradual, step-by-step, manner and tested under realistic conditions.

²¹ For example Switzerland, which started e-voting binding trials in 2002, continues to do so today. The number of cantons doing some e-voting has gradually increased from 3 up to 14 (out of 26) and the electorate authorized to do e-voting has gradually increased as the regulatory framework for a secure and reliable e-voting has been clarified and completed.

of intervention, it is recommended to apply to e-voting parliamentary procedures of oversight such as hearings, ad-hoc committees, etc.²²

Foreseeing sufficient sanctions for non-respect of higher-level principles and effectively implementing them is important. The e-voting authorisation process (where it exists) and the sanction of "non-authorisation" as well as the legal import of proofs of irregularities produced by verifiability techniques can be assessed in the light of this requirement.

The authorization process exists in several countries where e-voting is introduced gradually. Authorizations are issued upon control of fulfilment of requirements.²³ Conditions for obtaining the authorization (e.g. successful audits and certification) and the sanction of non-authorization in case of non-fulfilment of the conditions need to be clearly stated in the regulation and effectively implemented.

The link between proofs of irregularity produced by verifiability and sanctions is a more recent question which should be clarified in legislation. This is still work in progress in the countries concerned.²⁴

Implication of non-state actors (providers of software and hardware, providers of e-voting services, controlling bodies, etc.) is inevitable in an e-voting context and is even required, for instance in the case of certification.²⁵ Member states should devise a clear framework for the institutional responsibilities, criteria and procedures for ascertaining the competence and independence of certification bodies. States are invited to take appropriate steps to avoid circumstances where the election is dependent on a few major vendors.

Certification and transparency are relevant when discussing private actors accountability. Certification controls the conformity of an e-voting system with legal requirements. Transparency applies to many aspects, among which the procurement processes, the publication of information on the software used, the observation of the e-vote. Earlier recommendations on transparency admitted restrictions based on security or intellectual property grounds. For instance, recommendation 105 in Rec(2004)11 prevents

²² See Recommendation 1 in the concluding chapter in E-Voting Case Law (fn.5)

²³ Switzerland has experienced extensively, since 2002, the system of authorizations.

²⁴ The Council of Europe Guidelines on Transparency (guideline 15) requires member states to *develop rules dealing with discrepancies between the mandatory count of the second medium and the official electronic*. See also the discussion of this requirement in the chapter on Estonia in E-Voting Case Law (fn.5)

²⁵ Good practice requires that the electoral authority delegates formal certification of the voting technology to an independent third party in order to increase accountability and transparency.

disclosure of the audit information to unauthorised persons. Today, by contrast, publication of all audit results and of source code is considered to be the good practice.

It is accepted that even the best-designed and certified system cannot resist to a number e-voting specific threats. So, a new layer of control was added more recently: VVPAT (Voter Verified Paper Audit Trail) for e-voting machines and individual and universal verifiability for internet voting.²⁶ An internet voter in particular has the possibility to check that his/her own vote was correctly registered and counted, a possibility that does not exist in other voting methods.

With respect to law-making procedures, a specific aspect of e-voting is its multidisciplinary nature. E-voting requires the involvement of different professionals: legal, computer science and security, social science, among others.

Rec(2004)11 foresees that users shall be involved in the design of e-voting systems, particularly to identify constraints and test ease of use at each main stage of the development process (provision 62).

III. SEPARATION OF POWERS AND E-VOTING

Separation of powers is based on the assumption that distribution of powers between the legislative, the executive and the judiciary creates a healthy system of checks and balances. The accent below will be put on *delegation* of powers in an e-voting context. However this principle can be problematic also in case of *concentration* of legislative, organisational and judiciary powers in the hands of one authority.²⁷

Separation of powers is closely linked to legality and several elements were already discussed above. A regulation or a decision that is not based on a law violates the separation of powers.

When discussing law-making powers of the executive the underlying principle is the supremacy of the legislature. General and abstract rules, in our case main conditions for e-voting, should be included in an Act of Parliament or a regulation based on that Act. Venice

²⁶ For a description of these methods see Gharadaghy, R. and Volkamer, M. (2010) "Verifiability in Electronic Voting - Explanations for Non Security Experts" in Krimmer, R. and Grimm, R. (Eds) (2010) Electronic Voting 2010 (EVOTE10), Lecture Notes in Informatics (LNI) - Proceedings Series of the Gesellschaft für Informatik (GI), Volume P-167

²⁷ This may be the case with some Electoral Courts in Latin America. For an illustration of such problems in relation to e-voting, see Brunazo Filho, A. and Rosa Marcacini, A.T. "Legal Aspects of E-Voting in Brazil" in E-Voting Case Law (fn.5)

Commissions 2004 report on distant voting and e-voting, for example, notes that it's for the Parliament to take measures to ensure that the principle of secret suffrage is protected.

Delegation of legislative power on e-voting to the executive requires that the objectives, contents and scope of the delegation of power are explicitly defined in a legislative act (of the Parliament). In a federal state the issue should be furthermore clarified between federal and sub-federal levels.²⁸

The exercise of legislative and executive powers by the executive should be reviewable by an independent and impartial judiciary. Equivalent guarantees should be established by law whenever public powers are delegated to private actors. Authorities however should be in command of the electoral process and not outsource essential parts of it to vendors. They should build in-house expertise and capabilities to implement e-voting.

A clear division of responsibilities between vendors, certification agencies and electoral administration is required to ensure full accountability. Furthermore, within the electoral management body itself, a strict separation of duties should be maintained and documented to ensure that no one person is involved in the entire process (considered to be a security threat).

Vital public and private interests may lead to a temporary derogation from certain rights and to an extraordinary division of powers. Are such exceptions in emergency situations possible / foreseen in an e-voting context? In which circumstances? Under which conditions? Is there parliamentary control and judicial review? The issue of emergency situations is a reminder of the importance of preparing contingency plans for when e-voting process faces turbulences (see also provision 70 of Rec(2004)11).

IV. STABILITY OF ELECTORAL LAW AND E-VOTING

Stability of the law is an element of the principle of legal certainty (together with accessibility of legislation, accessibility of court decisions, foreseeability of the law, legitimate expectations, non retroactivity, no crime without law, no penalty without a law and *res judicata*). Stability implies that instability and inconsistency of legislation or of executive action may affect a person's ability to plan his/her actions.

Stability of the electoral law is part of the European electoral heritage. According to Venice Commission the fundamental elements of electoral law should not be open to

²⁸ See Driza Maurer, A. " Internet voting and federalism: the Swiss case" in Barrat, J. (ed.) (2016) El Voto Electrónico y Sus Dimensiones Jurídicas: Entre la Ingenua Complacencia y el Rechazo Precipitado

amendment less than one year before an election, or should be written in the constitution or at a level higher than ordinary law. The principle has been interpreted by Venice Commission as meaning, among others, that any reform of electoral legislation to be applied during an election should occur early enough for it to be really applicable to the election. In the e-voting area, practical experiences and research suggest that, when envisaging introduction of e-voting, one should think of the over-next election.

Distinguishing stable requirements from more frequently changing ones is crucial. Main requirements include provisions on what an e-voting system is supposed to do. They are broad and applicable to all voting methods. This makes them rather stable. They are approved by Parliament. When exercising their executive or even legislative powers, the executive authorities should respect those requirements.

Frequently changing elements are closer to technology. They include provisions that indicate how a system should do what it is required to do and how to check that a system does correctly what it is supposed to do. They are often adopted by the executive.

Stability is not an end in itself. Laws must be capable to adapt to changing circumstances. This is particularly true for e-voting given its technological dimension and the importance of security. It is necessary for this to have established procedures and deadlines. Public debate and notice should be respected, and all this without adversely affecting legitimate expectations. Expectations may come from the public/end users, the authorities in charge of organising elections, etc.

V. CONCLUSION

Venice Commission considers that implementing the three principles is an ongoing task, even in established democracies. Constitutional conformity is not given once and for all. It depends on the context. In the field of electronically-backed voting solutions, the constitutional conformity of regulations and systems depends, among others, on related technological and social developments. Technology development for instance constantly presents new challenges to e-voting. And it may also present new and better solutions.

In general, technology may be not only a threat but also an opportunity. According to Bill Gates, the first rule of any technology used in a business is that automation applied to an efficient operation will magnify the efficiency. The second is that automation applied to an inefficient operation will magnify the inefficiency. Those involved in e-voting implementation have certainly experienced the following situation: when introducing high-

tech to mimic a traditional voting procedure one finds that the procedure, as foreseen in the law, does not efficiently implement the constitutional goal. At the same time it also becomes clear that it is possible to achieve a better constitutional compliance by using the power of ICT. Technology may enable electoral processes that better achieve constitutional objectives. But, to introduce such "optimal" processes, it is necessary to amend the law.

Constitutional conformity has so far been examined more strictly when dealing with bits (e-vote) than with paper. This is right. Let's not forget however that high-tech, wisely implemented to an efficient electoral procedure, may achieve better constitutional conformity than the "traditional" way of doing.

FURTHER READING

Barrat, J. (ed.) (2016), *El Voto Electrónico y Sus Dimensiones Jurídicas: Entre la Ingenua Complacencia y el Rechazo Precipitado*

Driza Maurer, A., Barrat J. (eds) *E-Voting Case Law. A Comparative Analysis*, Routledge (former Ashgate) Publishing Ltd., Surrey, England 2015

Krimmer, R. (2012), *The Evolution of E-voting: Why Voting Technology is Used and How it Affects Democracy*, Tallinn University of Technology Doctoral Theses Series I: Social Sciences, No. 19

Richter, P. (2012), *Wahlen im Internet rechtsgemäss gestalten*, Baden-Baden, Nomos.

Vinkel, P. (2015), *Remote Electronic Voting in Estonia: Legality, Impact and Confidence*, Tallinn University of Technology Doctoral Theses, Series I: Social Sciences, No. 24

Volkamer, M. (2009), *Evaluation of electronic voting: Requirements and evaluation procedures to support responsible election authorities*, Series Lecture notes in business information processing, Vol. 30, Springer, New York.

Zissis, D. and Lekkas, D. (Editors) (2014) *Design, Development, and Use of Secure Electronic Voting Systems*, IGI Global, Hershey, PA.