

# ELECTIONS TO THE EUROPEAN PARLIAMENT AS A CHALLENGE FOR DEMOCRACY

European Integration  
and Democracy Series  
Vol 2

Edited by  
Elżbieta Kuźelewska and Dariusz Kloza

Warszawa–Białystok 2013

#### Editors

Elżbieta Kuzelewska  
Centre for Direct  
Democracy Studies (CDDS)  
University of Białystok  
Mickiewicza 1  
15-213 Białystok  
Poland  
ekuzelewska@gmail.com

Dariusz Kloza  
Research Group on Law, Science,  
Technology & Society (LSTS)  
and Institute for European Studies (IES)  
Vrije Universiteit Brussel  
Pleinlaan 2  
1050 Brussels  
Belgium  
dariusz.kloza@vub.ac.be

#### Review

CATERINA CARTA, Vesalius College, Vrije Universiteit Brussel, Belgium  
STEFANO BRAGHIROLI, Institute of Government and Politics, University of Tartu, Estonia  
TANEL KERIKMÄE, Tallinn Law School, Tallinn University of Technology, Estonia

#### Cover design

BARBARA KUROPIEJSKA-PRZYBYSZEWSKA

#### Cover illustration

*General Illustration of the Hemicycle Of the EP*: © European Union 2010  
*Paul-Henri SPAAK Building and Brussels' Empty Hemicycle*: © Association  
des Architectes du CIC: Vanden Bossche sprl, CRV s.A., CDG sprl, Studiegroep  
D. Bontinck

#### Layout

OFI

© Copyright for the content by the University of Białystok, 2013

© Copyright for the layout by Oficyna Wydawnicza ASPRA-JR, Warszawa 2013

No part of this work may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, microfilming, recording or otherwise, without written permission from the Publisher, with the exception of any material supplied specifically for the purpose of being entered and executed on a computer system, for exclusive use by the purchaser of the work.



Oficyna Wydawnicza ASPRA-JR  
03-982 Warszawa, ul. Dedala 8/44  
tel. 0-602-247-367. tel./fax 870-03-60  
e-mail: oficyna@aspra.pl  
www.aspra.pl

ISBN 978-83-7545-489-5

# Contents

Foreword by Prof. Jerzy Buzek MEP .....	5
Preface: Eighteen Views on the Legitimacy Crisis and the Elections to the European Parliament .....	15
Abbreviations .....	23

## **PART ONE – THE INSTITUTION**

<b>1 How European are the European Elections? The European Parliament’s Long Struggle for a Direct and Universal Suffrage Conducted According to a Uniform Electoral Procedure .....</b>	<b>27</b>
<i>Rafał Trzaskowski MEP and Joanna Popielawska</i>	
1.1 The European Parliament’s struggle for a direct universal suffrage .....	28
1.2 Towards a more uniform electoral system .....	31
1.3 How much uniform are European elections today? .....	33
1.4 The European Parliament’s latest struggle for a more uniform electoral system .....	36
1.5 What next? .....	38
1.6 Conclusion .....	40
Bibliography .....	41
<b>2 Do the Groups in the European Parliament Really Form a Party System? .....</b>	<b>43</b>
<i>Davide Denti</i>	
2.1 Introduction .....	43
2.2 European Party Groups: are they parties? .....	44
2.2.1 Party organisation .....	45
2.2.2 Party cohesion .....	46
2.2.3 Party stability and structure .....	48
2.3 The party system of the European Parliament .....	49
2.3.1 Alignment .....	49
2.3.2 Competition .....	50
2.3.3 Linkage and congruence .....	51

2.3.4	The party system of the European Parliament: prospects and challenges .....	52
2.4	Conclusions .....	53
	Bibliography .....	55
<b>3</b>	<b>Can “Electoral Engineering” Bring Europe Closer to its Citizens?</b> .....	<b>57</b>
	<i>Elena Cîncea</i>	
3.1	Introduction .....	57
3.2	Direct elections - a first step towards a European polity .....	58
3.3	The role of European parties and electoral engineering in reducing the “democratic deficit” .....	61
3.4	The effects of the electoral reform on the Romanian electorate ..	68
3.5	Conclusions .....	70
	Bibliography .....	72
<b>4</b>	<b>Gender Quotas in the Elections to the European Parliament</b> ....	<b>75</b>
	<i>Magdalena Póltorak</i>	
4.1	Introduction .....	75
4.2	Definition, concept and types of quotas .....	76
4.3	Belgium .....	78
4.4	France .....	79
4.5	Spain .....	80
4.6	Portugal .....	81
4.7	Slovenia .....	82
4.8	Italy .....	83
4.9	Poland .....	83
4.10	Conclusions .....	85
	Bibliography .....	87
<b>5</b>	<b>Citizen – European Parliament – External Action of the European Union: Selected Issues</b> .....	<b>89</b>
	<i>Tomasz Dubowski</i>	
5.1	Introduction .....	89
5.2	Citizen – European Parliament. The concept of representation ..	90
5.3	Citizen – EU external action. Selected issues .....	93
5.4	European Parliament – EU external actions. Selected issues ....	98
5.5	Conclusions .....	101
	Bibliography .....	103

<b>6 The Empowerment of the European Parliament in Political and Constitutional Discourse</b> . . . . .	105
<i>Franciszek Strzyczkowski</i>	
6.1 Introduction . . . . .	105
6.2 Historical account . . . . .	106
6.3 Discourse . . . . .	109
6.4 Rational choice theory . . . . .	110
6.5 Sociological institutionalism . . . . .	115
6.6 Conclusion . . . . .	117
Bibliography . . . . .	118

**PART TWO**

**VOTING SYSTEMS TO THE EUROPEAN PARLIAMENT  
IN SELECTED MEMBER STATES OF THE EUROPEAN UNION**

<b>7 European Parliamentary Elections in Belgium</b> . . . . .	123
<i>Maaike Geuens</i>	
7.1. Introduction . . . . .	123
7.2. European context . . . . .	124
7.2.1 European electoral legislation . . . . .	124
7.2.2 Voter turnout on the EU level . . . . .	125
7.2.2.1 General assessment . . . . .	125
7.2.2.2 Why a decline in voter turnout? . . . . .	127
7.2.3 Possible recommendations on the European level . . . . .	130
7.3 Belgium . . . . .	136
7.3.1 National electoral legislation applicable to European Parliamentary elections . . . . .	136
7.3.2 Belgian turnout in European elections . . . . .	137
7.3.2.1 Coinciding regional and European elections. . . . .	138
7.3.2.2 Compulsory voting . . . . .	140
7.3.2.3 Second-order elections . . . . .	140
7.3.2.4 Recent developments. . . . .	141
7.3.3 Possible recommendations for Belgium. . . . .	141
7.4 Conclusion . . . . .	142
Bibliography . . . . .	145
<b>8 Voting to the European Parliament in the Czech Republic: the Second-Order Elections</b> . . . . .	149
<i>Helena Bončková</i>	
8.1 Introduction . . . . .	149
8.2 Theory of second-order elections . . . . .	150

8.3	Methodology . . . . .	151
8.4	Elections, electoral systems and party landscape . . . . .	152
8.5	Voter participation in European Parliament elections . . . . .	154
8.6	Surprising results of the first European Parliament elections . . .	157
8.7	Winners and losers of the second European Parliament elections . . . . .	159
8.8	Conclusion . . . . .	163
	Bibliography . . . . .	165
<b>9</b>	<b>The Spanish Electoral System for the European Parliament: Proportional Representation vs. Territorial Identity . . . . .</b>	<b>167</b>
	<i>Francisco J. Vanaclocha and Rubén Sánchez Medero</i>	
9.1	A new electoral system for Europe . . . . .	167
9.2	The configuration of the Spanish electoral system for the EP. . .	168
9.3	Political consequences of the electoral system applied . . . . .	172
9.3.1	Results of effective proportionality . . . . .	172
9.3.2	Limited fragmentation and small effective number of parties . . . . .	173
9.3.3	Institutionalization and diminished representation of the nationalist offer . . . . .	176
9.3.4	Scarce presence of small parties in a situation of electoral opportunity . . . . .	178
9.4	The situation of political competition in the elections for the EP: a limited model for second order elections . . . . .	180
9.5	Efficiency and functionality of the electoral system applied. Conclusions . . . . .	185
	Bibliography . . . . .	188
<b>10</b>	<b>European Parliament Elections in Spain: on the Proportionality and Representation of Nationalist and Regionalist Parties . . . . .</b>	<b>191</b>
	<i>Guillermo Cordero and José Ramón Montero</i>	
10.1	The electoral system for the European Parliament in Spain . . .	192
10.2	Proportionality, (regional) representation, and nationalist parties. . . . .	197
10.3	Electoral simulations: The real system and three alternative models . . . . .	199
10.4	Disproportionality and number of parties . . . . .	208
10.5	Concluding remarks . . . . .	211
	Bibliography . . . . .	213

<b>11 The Transposition of the Common Electoral Rules for the European Parliament into National Legislation in Greece</b> . . . . .	215
<i>Georgia Christina Kosmidou</i>	
11.1 Introduction . . . . .	215
11.2 The electoral process and the system of allocation of seats . . .	216
11.3 The exercise of the electoral rights of Greek nationals living in the EU and EU nationals living in Greece . . . . .	219
11.4 The financing of political parties running in the EP elections. .	220
11.5 The insufficient transposition of the EU legislation on the matter at hand . . . . .	222
11.6 Prospects . . . . .	224
Bibliography . . . . .	226
<b>12 The Fatal Republic: how France is Going Full Speed Towards its Multi-Layer Electoral Walls which Create Incoherency and Uncertainty for the Future</b> . . . . .	227
<i>Bernhard Kitous</i>	
12.1 Introduction . . . . .	227
12.2 Figuring out reality from maps: republican France from 1789 on . . . . .	229
12.2.1 European project for France imposed administrative reforms . . . . .	234
12.3 Figuring out the contradictions inherent in the electors (from electoral data) . . . . .	240
12.4 Diagnosis of the perception of the European Parliament in France . . . . .	243
12.4.1 Monarchy versus the republic benchmark . . . . .	246
12.5 Questions raised by the notion of legitimacy for the European Parliament . . . . .	251
12.6 How to create and later improve Legitimacy for the European Parliament? . . . . .	256
Bibliography . . . . .	262
<b>13 The Electoral Law for the European Parliament in Malta. Effects for Europe of a Single Transferable Vote System in a Polarised Society</b> . . . . .	263
<i>Davide Denti</i>	
13.1 Introduction. . . . .	263
13.2 The context of Maltese politics. . . . .	264

13.2.1	Polarisation of society along party lines and high turnout levels. . . . .	264
13.2.2	The Single Transferable Vote system for the domestic elections in Malta . . . . .	266
13.3	The electoral law for the European Parliament election in Malta . . . . .	269
13.4	European Parliament elections in Malta in 2004 and 2009. . . . .	271
13.4.1	The 2004 European election: reversing the result of the accession referendum . . . . .	271
13.4.2	The 2009 European election: the consolidation of “normal” elections. . . . .	274
13.5	Conclusions . . . . .	276
	Bibliography . . . . .	278
<b>14</b>	<b>Polish European Parliament Election Law in the Context of Universality of Elections and Civic Participation . . . . .</b>	<b>279</b>
	<i>Andrzej Jackiewicz</i>	
14.1	Introductory remarks about the problem of low voter turnout. . . . .	279
14.1.1	European elections as a second order elections . . . . .	279
14.1.2	Polish perspective of low voter turnout . . . . .	281
14.1.3	The Electoral Code – new Polish act containing electoral regulations . . . . .	282
14.2	Provisions of the Electoral Code . . . . .	283
14.2.1	Sources of electoral law in Polish legal system . . . . .	283
14.2.2	Principle of universal elections . . . . .	283
14.2.3	Location of the voting stations . . . . .	284
14.2.4	Voter registers and lists of voters . . . . .	285
14.2.5	Time of voting and the issue of the two-day vote . . . . .	286
14.2.6	Voting by proxy . . . . .	287
14.2.7	Voting by mail . . . . .	290
14.2.8	Meaning of the information on the new solutions . . . . .	293
14.3	Conclusion. . . . .	293
	Bibliography . . . . .	295
<b>15</b>	<b>Low Turnout in European Elections: the Swedish Electoral System and Prospects for a Single Voting System in the European Union . . . . .</b>	<b>297</b>
	<i>Davide Carrino</i>	
15.1	Introduction . . . . .	297



15.2. European Elections in Sweden: a short story, many highlights . . .	298
15.2.1 Riksdag and EP elections compared: same electorate, different outcomes . . . . .	298
15.2.2 The electoral system for the Riksdag and European elections . . . . .	301
15.2.3 Between protest voting and national politics: an analysis of the low turn-out in EP elections in Sweden . . . . .	302
15.3 Twenty-eight countries, one electoral system? A long way to go and the ‘Italian option’ . . . . .	304
15.3.1 Participation in EP elections: the factors underlying a constant decline . . . . .	304
15.3.2 An attempt to make EP elections ‘European’: the Duff report . . . . .	306
15.3.3 Towards a single voting system: the ‘Italian option’ . . .	307
15.4 Conclusions . . . . .	308
Bibliography . . . . .	310
<b>16 Europeanising European Elections: A view from the United Kingdom . . . . .</b>	<b>313</b>
<i>Bogusia Puchalska</i>	
16.1 Introduction . . . . .	313
16.2 The UK – the most Eurosceptic member of the EU . . . . .	314
16.2.1 Origins and nature of British Euroscepticism . . . . .	314
16.2.2 Historic background and national identity . . . . .	315
16.2.3 Impact of the accession and political Euroscepticism . .	316
16.2.4 The latest developments . . . . .	319
16.3 British Euroscepticism and Europe’s democratic failings . . . .	320
16.3.1 Lack of European public space and the British media . .	320
16.3.2 The absence of European political parties . . . . .	323
16.3.3 The EU’s place in schools syllabi . . . . .	325
16.4 Some other procedural reforms . . . . .	325
16.5 The Eurozone crisis . . . . .	326
16.6 Conclusions . . . . .	327
Bibliography . . . . .	329

**PART THREE**

**VOTING SYSTEMS IN A COMPARATIVE PERSPECTIVE**

**17 E-voting to the European Parliament and United States**

**Congress. An Attempt of Comparison** . . . . . 335  
*Elżbieta Kuźewska and Izabela Kraśnicka*

17.1 Introduction. . . . . 335

17.2 Electronic voting (e-voting) to the European Parliament. . . . . 337

    17.2.1 Background . . . . . 337

    17.2.2 Legal issues . . . . . 337

    17.2.3 The challenges of electronic voting in the EU. . . . . 338

        17.2.3.1 E-voting vs. one vote only . . . . . 339

        17.2.3.2 E-voting vs. equal voting . . . . . 339

        17.2.3.3 E-voting vs. secret ballot . . . . . 340

17.3 Electronic voting to the US Congress . . . . . 342

    17.3.1 Background. . . . . 342

    17.3.2 Participation . . . . . 342

    17.3.3 Congressional Elections of 2010 . . . . . 344

    17.3.4 Architecture of American e-voting . . . . . 345

    17.3.5 Further attempts of 2012 . . . . . 346

17.4 The Estonian e-voting system . . . . . 348

    17.4.1 Background . . . . . 348

    17.4.2 Legal issues . . . . . 349

    17.4.3 Architecture of Estonian e-voting . . . . . 349

    17.4.4 Participation in Estonian elections to the European  
 Parliament . . . . . 350

    17.4.5 How the Estonians ensure the principle of one  
 vote only? . . . . . 351

    17.4.6 How the Estonians ensure the anonymity of e-voting? . . . . . 352

17.5 Conclusions. . . . . 353

Bibliography . . . . . 356

**18 The Impact of the European Union on Party Systems. The case  
 of Serbia and Montenegro** . . . . . 359  
*Marko Babić*

18.1 Political Parties and integration processes . . . . . 360

18.2 The case of Serbia and Montenegro . . . . . 365

    18.2.1 Serbia . . . . . 366

    18.2.2 Montenegro . . . . . 368

18.3 Conclusions . . . . . 369

Bibilography . . . . . 371

# E-voting to the European Parliament and United States Congress. An Attempt of Comparison

ELŻBIETA KUŹELEWSKA\* AND IZABELA KRAŚNICKA\*\*

## 17.1 Introduction

The European Parliament's (EP) role and powers reflect its status as a supra-national body. The European Union (EU) legislation prevails over national law of the Member States (MS) and a lot of EU rules directly affect everyday lives of the EU citizens. Thus it is desirable that elections to the EP meet the same standards as those to any national parliament.

Currently twenty-eight distinct political environments, cultures and traditions characterize elections to the EP.<sup>1</sup> We have a hypothesis that the electronic voting (e-voting), and in particular its Internet-mediated variation (I-voting), seems to be the easiest way to unify various voting systems to the EP. Internet voting has intrigued people's interest as being a modern and contemporary alternative to traditional methods of elections. The introduction of Internet voting also serves the goal to encourage people to vote by enlarging accessibility, which is especially important for disabled or ill citizens.<sup>2</sup> The youngest electorate should also accept electronic voting, un-

---

\* PhD, researcher and lecturer, Centre for Direct Democracy Studies, Faculty of Law, University of Białystok, [ekuzelewska@gmail.com](mailto:ekuzelewska@gmail.com)

\*\* PhD, researcher and lecturer, Centre for Direct Democracy Studies, Faculty of Law, University of Białystok, Visiting Scholar at the Michigan State University College of Law where research for the article was conducted, [izakrasnicka@onet.pl](mailto:izakrasnicka@onet.pl)

<sup>1</sup> *Elections to the European Parliament 4-7 June 2009*, OSCE/ODIHR Expert Group Report 11-30 May 2009, Warsaw 2009, p. 5.

<sup>2</sup> Ü. Lepp, E. Loide, *E-voting – a Key to Independence for All*, <http://ceur-ws.org/Vol-415/paper10.pdf>, p. 1.

derstood as a possibility to vote in elections without a need of going to the polling station.<sup>3</sup>

E-voting, according to Kang, is defined as voting through any computer-mediated device (e.g. desktop computer, cellular telephone, personal digital assistant, Internet appliance) from any geographical location that the voter chooses, through a communications network such as Internet.<sup>4</sup> However, the development of technology allowed distinguishing the Internet voting method (so called I-voting) as a separate category of e-voting. While e-voting refers to voting by way of an electronic system which records a voter's secret ballot (the votes are eventually sent to a centralized location), the I-voting is performed only via the Internet and as such is considered "remote" – vote may be cast from anywhere.<sup>5</sup> In other words, Internet voting may be referring to actions that are used by voters to obtain and potentially return marked ballots using the Internet.<sup>6</sup>

The aim of this article is to analyse and compare laws on electronic voting to the EP, using the example of Estonia, and to the United States (US) Congress. Since more and more European constitutionalists declare the need for modification of election law in order to encourage voters to participate in EP elections<sup>7</sup> and since these elections are characterised by low turnout,<sup>8</sup> a new method of voting might remedy this situation. Considerable experience has been gained in the recent year in Europe (Estonia), and in America (United States). This has inspired us to ask what EP elections can learn from these experiences in order, predominantly, to remedy the low turnout. This paper is divided into three parts. The first part focuses on e-voting to the EP. We demonstrate legal issues, challenges of I-voting to the EP and also to participation. The second part is devoted to the voting system to the US Congress. In this part we talk about legal issues, participation and architecture of e-voting. The

<sup>3</sup> K.-H. Lauder, *e-Voting: a new political institution for the network society? New life for an old democratic procedure*, [in:] A.H. Trechsel, F. Mendez (eds.), *The European Union and e-Voting. Addressing the European Parliament's internet voting challenge*, Routledge 2005, p. 203.

<sup>4</sup> J. Kang, *E-racing, E-lections*, 34 Loy. L.A. L. Rev. 1155 2000-2001, p. 1158.

<sup>5</sup> J.F. Clowers, *I E-vote, U I-vote, Why Can't We All Just Vote?!: A Survey of the Changing Face of the American Election*, 42 Gonz. L. Rev. 61 2006-2007, p. 69.

<sup>6</sup> J. Epstein, *Internet voting, security and privacy*, 19 Wm. & Mary Bill Rts. J. 885 2010-2011, p. 886.

<sup>7</sup> See: J. Mayoral, *Democratic improvement in the European Union under the Lisbon Treaty*, Robert Schuman Centre for Advanced Studies, 2011, [www.eui.eu/Projects/EUDO-Institutions/Documents/EUDOREport922011.pdf](http://www.eui.eu/Projects/EUDO-Institutions/Documents/EUDOREport922011.pdf); C. Stratulat, J.A. Emmanouilidis, *The European Parliament Elections 2014. Watershed or, again, washed out?*, 2013, European Policy Centre, [www.epc.eu/documents/uploads/pub\\_3699\\_ep\\_elections\\_2014.pdf](http://www.epc.eu/documents/uploads/pub_3699_ep_elections_2014.pdf)

<sup>8</sup> D. Stockemer, *Citizens' support for the European Union and participation in European Parliament elections*, "European Union Politics" March 2012, vol 3, no. 1, pp. 26-46.

last part offers Estonian experience in I-voting to the EP since this country is a pioneer and the only state conducting e-voting to the EP. We would like to conclude by asking what the EU could learn from both the Estonian and American experience and how can it change the results of European elections.

## 17.2 Electronic voting (e-voting) to the European Parliament

### 17.2.1 Background

Electoral rights regard not only voting issues but also procedural matters, such as the establishment of polling stations, time and manner of voting, procedures for legal review, etc. As Auer and Mendez state, the existence of a detailed body of rules relating to the electoral process taken as a whole is both a condition and consequence of the rule of law, upon which the EU as well as the Member States are founded. It means that e-voting is a process that would need to be strictly defined, organized and put into operation by law.<sup>9</sup> The question is: Of which law? The EU law? The law of the Member States? Or maybe a combination of both?

### 17.2.2 Legal issues

Article 223(1) of the Treaty on the functioning of the European Union<sup>10</sup> provides: “the European Parliament shall draw up a proposal to lay down the provisions necessary for the elections of its Members by direct universal suffrage in accordance with a uniform procedure in all Member States or in accordance with principles common to all Member States”. E-voting could certainly fall under the “principles common to all Member States”, however Estonia is, as of now, the only Member State using this voting method in the EP elections.

It is worth to mention why the Estonians decided to introduce I-voting. Their decision resulted from low turnout and fight against political alienation.<sup>11</sup> In May 2005 the Estonian parliament passed legislation to introduce

---

<sup>9</sup> A. Auer, M. Mendez, *Introducing e-voting for the European Parliament elections. The constitutional problems*, [in:] A.H. Trechsel, F. Mendez (eds.), *The European Union and e-Voting. Addressing the European Parliament's internet voting challenge*, Routledge 2005, p. 125.

<sup>10</sup> Treaty on the functioning of the European Union, OJ C 326, 26.10.2012.

<sup>11</sup> Ü. Madise, T. Martens, *E-voting in Estonia 2005. The first practice of the country-wide binding Internet voting in the world*, [http://neu.e-voting.cc/wp-content/uploads/Proceedings%202006/1.1.madise\\_martens\\_e-voting\\_in\\_estonia.pdf](http://neu.e-voting.cc/wp-content/uploads/Proceedings%202006/1.1.madise_martens_e-voting_in_estonia.pdf), p. 16.

online voting possibility for the country's local elections coming in October. In February 2007 Estonia extended I-voting to its national parliamentary elections<sup>12</sup> and eventually it used it further during the 2009 EP election.

A more optimistic evaluation could be offered by the first option under Article 223(1). Drawing up a proposal for a uniform electoral procedure is a difficult task. The requirement of the Council unanimity, combined with the assent of the EP by an absolute majority, an adoption by the Member States in accordance with their respective constitutional requirements is an imposing standard. A great deal of political energy would need to be expected to generate support for anything resembling a uniform electoral procedure. That is why the Treaty on the Functioning of the EU introduced the alternative option based on principles common to all Member States. The first option prescribed in Article 223(1) might provide a suitable opening on which to hang the e-voting agenda.<sup>13</sup>

A convincing argument, in order to have a truly uniform electoral procedure, is the idea to make different modalities of voting in EP elections of a uniform one. The EU citizens should have the same available voting methods, including e-voting. We should remember that since polling stations, ballot boxes and some other practicalities of voting are run and managed by regional or local Member States agents, e-voting would also have to be administrated in a decentralized style.<sup>14</sup> It means that every Member State is likely to have its own particular e-voting scheme tested, implemented and worked out at the national level.<sup>15</sup>

### 17.2.3 The challenges of electronic voting in the EU

The five cardinal principles of European electoral heritage and electoral law include: 1) universal suffrage, 2) equal suffrage, 3) free suffrage, 4) secrecy of ballot, 5) direct suffrage. To the extent that e-voting is offered as a supplementary voting pose the problems that arise from the introduction of it for each of the fundamental principles (also from legal perspective).

---

<sup>12</sup> A Charles, *The Electronic State: Estonia's New Media Revolution*, „Journal of Contemporary European Research” 2009, vol. 5, no. 1, p. 107.

<sup>13</sup> A. Auer, M. Mendez, *Introducing e-voting for the European Parliament elections. The constitutional problems*, [in:] A.H. Trechsel, F. Mendez (eds.), *The European Union and e-Voting. Addressing the European Parliament's internet voting challenge*, Routledge 2005, p. 128.

<sup>14</sup> *Ibidem*, p. 127.

<sup>15</sup> *Ibidem*, p. 128.

### 17.2.3.1 E-voting vs. one vote only

Article 8 of the 1976 European Parliament Act<sup>16</sup> provides for the “one man, one vote” rule, i.e. no one may vote more than once in any election of representatives to the European Parliament. As remote e-voting can take place everywhere, even outside the EU, there is a risk that the violations of the “one vote only” rule could go unnoticed and unsanctioned. The problem is more complex as e-voting schemes will almost certainly rely on different and possibly incompatible programs, standards and authentication procedures in every single Member State. It is required to establish e-voting legislation to limit the right to vote on-line to Member State nationals. On the other hand, we cannot reject the idea of electronic voting because of lack of satisfied security guarantee. As we know, even in traditional voting system some mistakes happen.

### 17.2.3.2 E-voting vs. equal voting

Electronic voting is a challenge for voting equality. Introducing e-voting is seen as a negative consequence for equality of voter influence, understood as unequal access to the information. If e-voting was the only way of voting in the EP elections, it would be contrary to universal electoral rights, because no citizen is required to have the access to the Internet or the abilities to use it.<sup>17</sup>

Online voting may be conducted via regulated computer at conventional polling stations, but its most ambitious use is as a means of remote voting, allowing voters to participate in elections wherever they have access to an Internet connection.<sup>18</sup> That is why e-voting was never considered as an exclusive technique, rather as a mechanism additionally complementing the traditional voting methods. As such, voters have possibility, not obligation to use electronic voting.

Some Member States argue for introduction of electronic voting, some prefer to stick to traditional methods. Is it then possible to accept the situation where some states implement the e-voting while other do not? The European law is quite rigid in this respect. It states that what is not subject to the amended Act of 1976, stays within the powers of Member States and their internal

---

<sup>16</sup> Act concerning the election of the representatives of the Assembly by direct universal suffrage, OJ, L 278, 8.10.1976.

<sup>17</sup> Figures on the Internet usage around the world show that, even in the more advanced industrialized democracies, it is generally only a minority of the population that have access to, and are using the new medium regularly, R.K. Gibson, *op.cit.*, p. 38.

<sup>18</sup> A Charles, *The Electronic State: Estonia's New Media Revolution*, „Journal of Contemporary European Research” 2009, vol. 5, no. 1, p. 99.

legal orders.<sup>19</sup> In other words, differences in the EP election laws are and will be common even if the e-voting is introduced.

The equality problem seems to arise depending whether the elections are to be carried out on the Union or national level. It may be framed as dual standard, under scenario where a Member State introduces e-voting in the elections to the EP based on own initiative or European law, but it does not extend such possibility to the national parliamentary elections. Such differentiation would be insignificant from the EU perspective. The voters however could feel frustrated and not necessarily understand why a new method is used in the European elections and not in the national ones. This problem would evolve if the elections to the EP and to national parliament would be held on the same day but with different voting methods to be used.

### 17.2.3.3 E-voting vs. secret ballot

Secrecy of voting is secured by a number of international regulations, including Article 1(3) of the 1976 Act (amended by the Council Decision of 25 June 2002 and 23 September 2002)<sup>20</sup> stating: “Elections shall be by direct universal suffrage and shall be free and secret.” Article 39 of the Charter of Fundamental Rights of the European Union<sup>21</sup> confirms that the Members of the European Parliament are to be elected by direct universal suffrage in a free and secret ballot.

Some authors believe that the I-voting (distance voting) will not comply with the principle of secret voting as guaranteed by Article 1 of the 1976 Act.<sup>22</sup> Those beliefs are based on the fact that identification requirements are stricter for I-voting. The use of PIN and e-signature allow officials to track the electronic path linking the casted vote with the voter. This is not possible in case of regular paper ballot voting. It does not seem very probable as the limits of the complete loyalty toward the secret voting principle were removed somehow with the acceptance of voting by mail or voting through a proxy.

Let us try to follow the problems. It is necessary to quote the table presented by Garrone.<sup>23</sup> The table below illustrates the problems connected with the electronic voting and its impact on the principal electoral law.

---

<sup>19</sup> Council Decision of 25 June 2002 and 23 September 2002 amending the Act concerning the election of the representatives of the European Parliament by direct universal suffrage, Decision 76/787 ECSC, EEC, Euratom, Official Journal L 283, 21/10/2002.

<sup>20</sup> Decision 76/787 ECSC, EEC, Euratom, Official Journal L 283, 21/10/2002.

<sup>21</sup> Charter of Fundamental Rights of the European Union 2000/C 364/01.

<sup>22</sup> See: R.K. Gibson, *op.cit.*, p. 39.

<sup>23</sup> P. Garrone, *Electoral Disputes – Substantive Aspects*, [http://www.venice.coe.int/web-forms/documents/?pdf=CDL-UD\(2009\)006-e](http://www.venice.coe.int/web-forms/documents/?pdf=CDL-UD(2009)006-e)



**Table 1. E-voting vs. principal electoral law**

Principle	Specific problem	Legal novelty
Direct suffrage	None	
Universal suffrage	e-voting as the only modality of voting: would exclude voters	Mainly new
	Lack of reliability, security	Not really new
Equal suffrage; equal voting rights	Risk of multiply voting and similar problems	Not new – settled by prohibition of anonymous voting
Equal suffrage; accessibility of voting procedure	Making a computer available to every voter	New
	Access barred to non-initiated voter	Mainly new, but the extension of postal voting could avoid legal inequalities
Equal suffrage; no discrimination on the basis of age, race, or ethnic origin	Access barred to non-initiated voter	Mainly new, but the extension of postal voting could avoid legal inequalities
Equal suffrage; equal opportunity	See next item	
Free suffrage; freedom of voter to form their own opinion	Neutrality of official information provided to the voter via the Internet	Not new
	Neutrality of the links to other (political) web sites	New
Free suffrage; freedom of voter to express their opinion	Family voting and other types of “collective” voting	Not new
Free suffrage; accurate recording of the outcome of the ballot	Lack of security or reliability	Partially new (risk of automated fraud increased)
Secret voting	Lack of security or reliability	Partially new
	Undue intervention of election officials during the voting process	

Source: A.H. Trechsel, F. Mendez, R. Kies, *The European Parliament and the Challenge of Internet Voting*, EUI The Robert Schuman Centre for Advanced Studies, Policy Paper 03/3, [http://www.eui.eu/RSCAS/WP-Texts/03\\_03p.pdf](http://www.eui.eu/RSCAS/WP-Texts/03_03p.pdf) p.10-11.

## 17.3 Electronic voting to the US Congress

With the world's fastest developing technology and everyday use of Internet for all kinds of transactions, the US would seem like a place where e-voting becomes a natural way of the citizens' participation in the elections. Yet, as a fact, even though e-voting in the US constitutes one of the voting electronic methods possible to be used, its actual use is limited and varies throughout the states.

### 17.3.1 Background

American democracy has of course witnessed an evolution of voting systems and use of voting machines and methods. Lever machines and punch cards in 1970s replaced the paper ballots originally used throughout the states. The new era of direct recording electronic (DRE) systems came next at the beginning of the new millennium.<sup>24</sup> DRE systems include possibility of voting via computers and voting over Internet but some terms' explanation is necessary to comprehend it.

The I-voting itself may be divided into two models: Internet Voting at the Polling Place (where votes are cast at the officially established polling stations and then transmitted to the election officials) and the Remote Internet Voting (RIV) which applies to voting from any place and/or location and casts the vote directly to the elections officials. The latter one is the most sophisticated and most risky method as the voter ID is checked only through a digital signal.<sup>25</sup>

### 17.3.2 Participation

In March 2000, the Arizona Democratic Party held the first binding political election in the US in which the voters were allowed to cast a binding vote over the Internet (RIV method). The Democratic Party offered Internet voting as one of four ways to select delegates to the Democratic National Convention. 41.16% of votes were cast over the Internet comparing to 37.68% by mail, 16.36% by polling paper and 4.80% by electronic but not Internet voting. It seemed clear that this type of voting would become popular.<sup>26</sup> There

---

<sup>24</sup> More on the history of voting methods and instruments in the American elections see: Daniel P. Tokaji, *The Paperless Chase: Electronic Voting and Democratic Values*, 73 *Fordham L. Rev.* 1711 (2005), pp. 1711 and next.

<sup>25</sup> R. Gibson, *Elections Online: Assessing Internet Voting in the Light of the Arizona Democratic Party*, *Political Science Quarterly*, Vol. 116, No 4, (Winter 2001-2002), pp. 565-566.

<sup>26</sup> Detailed analysis and statistics of these historical elections are described in: R.M. Alvarez, J. Nagler, *The Likely Consequences of Internet Voting for Political Representation*, 34 *Loy. L.A. L. Rev.* 1115 2000-2001, pp. 1135-118.

were hopes to improve turnout especially among young voters who would hopefully use this method and get involved in the democratic processes of presidential and congressional elections in the future. The statistics revealed that only 16.6% of young voters (18-24 years old) participated in the 1998 congressional elections.<sup>27</sup> In the Arizona primary elections in 2000 the turnout among young voter was still very low but 75% of those who actually voted reported they had done it on-line.<sup>28</sup>

The idea of on-line voting methods was significantly supported by a federal law passed in 2002 after the controversies occurring in the 2000 Presidential elections in Florida.<sup>29</sup> In the Help America Vote Act of 2002 (HAVA)<sup>30</sup> special funds were provided for states to replace the old voting systems with new technologies so that more Americans (especially disabled citizens) would have possibility to participate in the democratic life of the country.<sup>31</sup>

Other federal laws were introduced or amended so that voting over the Internet would improve voter turnout in the elections held in foreign countries (through the Uniformed and Overseas Citizen Absentee Voting Act of 1986 – UOCAVA), as well as in the elections in military bases [through the Military and Overseas Voter Empowerment Act of 2009 (MOVE)].<sup>32</sup> In addition, the American Uniform Law Commission worked out a model uniform state law that would standardize and improve the voting options available to military and overseas voters. The Uniform Military and Overseas Voters Act (UMOVA) is currently enacted in 12 states.<sup>33</sup>

---

<sup>27</sup> *Voting and Registration in the Election of November 1998. Population characteristics*, United States Census Bureau 2000, p. 5.

<sup>28</sup> See: R. Gibson, *op. cit.*, p. 576.

<sup>29</sup> Voters in Florida were confused by the butterfly ballots used in some counties and the vote count got complicated and recount was conducted due to the punch card ballots with difficult to operate chads. It led to the situation where both candidates (George W. Bush and Al Gore) challenged the results in Florida and the case made it to the US Supreme Court. In its decision the Supreme Court severely criticized the voting methods which clearly made the right to vote difficult or impossible to execute in Florida. See: *Bush v. Gore*, 531 U.S. 98 (2000)

<sup>30</sup> Pub. L. No. 107-252, 116 Stat. 166 (codified at 42 U.S.C.A. §§ 15301–15545).

<sup>31</sup> For more on the act and the outcomes of the new law see: S. Ramirez, A. Organick, *Taking Voting Rights Seriously: Race and the Integrity of Democracy in America*, 27 N. Ill. U. L. Rev. 427 2006-2007, pp. 435-440.

<sup>32</sup> Uniformed and Overseas Citizen Absentee Voting Act (UOCAVA), 42 U.S.C. §§ 1973 ff –ff6 (2006), Military and Overseas Voter Empowerment Act (MOVE), Pub. L. No. 111-84, 123 Stat. 2190, 2321-22 (2009) passed as part of the National Defense Authorization Act for the 2010 Fiscal Year.

<sup>33</sup> See information on the website of the Uniform Law Commission available at: <http://www.uniformlaws.org/Act.aspx?title=Military+and+Overseas+Voters+Act>. More on the military and overseas voting issues see: S.F. Huefner, *Lessons from Improvements in Military and Overseas Voting*, 47 U. Rich. L. Rev. 833 2012-2013, pp. 833 and next.

As a result, every overseas citizen (i.e. an US citizen residing outside the US who is unable to vote in-person, including a US citizen born overseas who has reached voting age without having resided in the United States) and every member of any military base located outside the US territory may receive their blank ballots electronically. Depending on the state regulation the return of votes can be done via e-mail, fax or Internet download.<sup>34</sup> Special federal agency runs the Federal Voting Assistance Program which assists those absentee voters.<sup>35</sup> The UOCAVA voters are therefore the only American voters entitled to use the Internet voting methods in both state and federal elections.

In 2005 the US Government Accountability Office (GAO) prepared a report to the Congress on the examination of the electronic voting systems. The GAO's findings sent a clear message: „While electronic voting systems hold promise for a more accurate and efficient election process, numerous entities have raised concerns about their security and reliability, citing instances of weak security controls, system design flaws, inadequate system version control, inadequate security testing, incorrect system configuration, poor security management, and vague or incomplete voting system standards, among other issues”. A recommendation was also made by GAO that the federal Election Assistance Commission should define specific tasks, processes, and schedules to improve national electronic voting systems, standards, testing, and support for state and local election officials.<sup>36</sup> The modern voting methods were not used in the 2006 elections and the specifications were not completed for the 2008 elections.<sup>37</sup>

### 17.3.3 Congressional Elections of 2010

The 2010 congressional elections marked an important step in the development and evaluation of the I-voting possibilities as Americans witnessed a variety of privacy, fraud and technical problems while testing this convenient method.

The symbolic problem of the on-line voting occurred in Washington, DC. The Internet system – “Digital Vote by Mail” was planned to be used for the absentee, military and overseas voters. It was composed of two elements: an

---

<sup>34</sup> Department of State information available at: [http://travel.state.gov/travel/living/overseas\\_voting/overseas\\_voting\\_4754.html](http://travel.state.gov/travel/living/overseas_voting/overseas_voting_4754.html)

<sup>35</sup> Federal Voting Assistance Program: <http://www.fvap.gov/>

<sup>36</sup> U.S. Government Accountability Office, *Elections: Federal Efforts to Improve Security and Reliability of Electronic Voting Systems are Under Way but Key Activities Need to be Completed*, GAO-05-956 (Sept. 2005), p. 2 and 53.

<sup>37</sup> G. B. Delta, J. H. Matsuura, *Law of the Internet*, Aspen Publishers, §§ 17.05, LOTIN s. 17.05

on-line blank ballot distribution system and a system designed to allow for the return of voted ballots. While the hopes were high, the system was hacked in the test just one month before the actual Election Day. A group of students was able to find a number of vulnerabilities including possibility to collect the data such as usernames and passwords as well as to take control over the system. As a result, District of Columbia did not allow its voters to cast ballots digitally and further developments on the security increase of mechanisms of the method were ordered by the District of Columbia Board of Elections & Ethics.<sup>38</sup>

Other US states became more sensitive about privacy issues but some still proceed with I-voting methods. Once again, Arizona seemed to be the most advantageous of the US states and allowed a voting system in which authorized voters were e-mailed a ballot (as one of the voting possibilities), which they were able to print, fill out and then upload and return.<sup>39</sup>

### 17.3.4 Architecture of American e-voting

Successful programs and systems have been tested also in some other US states in 2010. West Virginia enacted the Uniform Services and Overseas Voter Pilot Program and tested it in eight of the counties. The West Virginia's Pilot Program allowed for the use of e-mail, fax, and web-based Internet voting. In the process of casting a ballot using the web-based system the voter:

1. Submitted a Federal Post Card Application (FPCA) or the West Virginia Electronic Voting Absentee Ballot Application.
2. Received an e-mail from either the county clerk or a voting system vendor which contained a username and URL for a website to access the ballot.
3. Logged into the website using the supplied credentials.
4. Made ballot selections on the computer screen.
5. Selected the "Cast Ballot" button.
6. Received a receipt code.

The system worked without any problems. Moreover, 100% of the respondents rated the system's ease of use as "simple" or "somewhat simple". Still, the state authorities (Secretary of State) did not decide to use it in the actual elections. The recommendation was made to convene a study committee

---

<sup>38</sup> More information: <http://www.dcboee.us/>

<sup>39</sup> A. Altman, *Will Online Voting Turn Into an Election Day Debacle?* Time, Oct. 15, 2010 available at: <http://www.time.com/time/politics/article/0,8599,2025696,00.html#ixzz2cbCdv1yY>. On Arizona and DC elections see also: A Survey of Internet Voting, US Election Assistance Commission, September 2011, p. 16 and p. 19.

to consider number of factors including the estimations of costs and security issues.<sup>40</sup>

As a result, the use of the Internet in the 2010 elections was very minimal. According to the statistics, the 2010 election saw a substantial increase in the number of US states that received voter registration applications directly over the Internet. Eight states reported such registration in 2008, compared to 17 states in 2010. The census estimation of the number of Americans eligible to vote in 2010 was 237,3 million of which 78.7% registered. Among those who registered, total of 768,211 sent or filled their applications using Internet that is only 0.32%.<sup>41</sup>

90.810.679 American voters participated in the 2010 congressional elections. As reported, however, nearly 63% of them voted in the traditional way of casting their ballots in person at their local polling place on the Election Day. Domestic absentee accounted for 15.6% where mail voting reached 4.5%. Only 0.2% voter were UOCAVA but no data is available on the use of the Internet among those voters.<sup>42</sup>

The 2010 survey collected data on over 350,000 voting machines used throughout the country. Optical or digital scan booths were found to be mostly used in the elections. 212,506 of them were used in 20 states. In 44 states the optical or digital scan counters in the amount of 67,990 were used in at least some jurisdictions within the state and as such it constituted the most common type of technology used for voting within the country.<sup>43</sup>

### 17.3.5 Further attempts of 2012

Congressional and presidential elections of 2012 once again raised questions and concerns about new technologies used and meant to be used to improve American voting system. As many commentators noted, American can presently buy, sell, book, invest, meet, talk and message using the Internet. Using the World Wide Web as a platform for voting should make it more simplified, more convenient and thus increase the turnout in the elections.<sup>44</sup> Most of the US states, however, backed out from the Internet voting development options. West Virginia did not follow up with the success of the Pilot Program

---

<sup>40</sup> N.E. Tennant, *Legislative Report, West Virginia Uniformed Services and Overseas Citizen Online Voting Pilot Project*, January 2011, available at: <http://www.sos.wv.gov/news/topics/elections-candidates/Documents/Report%20Final%202010%20General%20Election.pdf>

<sup>41</sup> *2010 Election Administration and Voting Survey. A summary of key findings*, US Election Assistance Commission, December 2011, p. 6.

<sup>42</sup> *Ibid*, pp. 7-8.

<sup>43</sup> *Ibid*, pp. 13-14.

<sup>44</sup> See J. Epstein, *op. cit.*, p. 885.

and the threat of the District of Columbia hacking is still present and shadows over the enthusiasm of many Internet users.<sup>45</sup> It is worth to mention that in the Netherlands the idea of e-voting was withdrawn after the security system had been broken.<sup>46</sup> In 2006 a group of citizens named “We don’t trust voting computers” started a campaign against voting via computers carrying out technical tests of the machines and computers that were used. From a comparative perspective, in 2007 the Dutch government decided to ban the existing electronic voting machines. In Austria constitutional law does not allow for the use of Internet voting in parliamentary elections, yet Austria used an Internet voting system for the 2009 Federation of Student’s Union election.<sup>47</sup> There are also some pilot projects related to local elections in the United Kingdom.<sup>48</sup>

At the moment there no complete data is available on the statistics of the 2012 elections. The report of the US Election Assistance Commission is to be released at the end of 2013. The report on the Uniformed and Overseas Citizens Absentee Voting Act shows that states transmitted 876,362 ballots to UOCAVA-covered voters for the 2012 election (comparing to 611,058 in 2010 taking into account that in 2012 more jurisdictions participated in the survey).<sup>49</sup>

It is to be emphasized that the total of 32 US states and District of Columbia allows military and overseas voters return ballots electronically. Among those, only New Jersey requires the UOCAVA voters to return paper ballot in addition to the electronic form. 18 states allow the return by fax and e-mail, 9 states allow return fax or e-mail (restricted), 5 states allow fax only and 1 state allows the use of an Internet portal. No state allows transmission of voted ballots for stateside voters. Arizona is the one state which allows its UOCAVA voters to return their completed ballots by regular mail, facsimile or Arizona’s secure ballot upload system (an Internet portal). The last one was used in three counties in 2010 and 2012 elections and the available data shows it was used 5 to 12 people only.<sup>50</sup>

---

<sup>45</sup> See interview with West Virginia Secretary of State Natalie Tennant aired February 16, 2012 on PBS, available at: [http://www.pbs.org/newshour/bb/politics/jan-june12/internetvoting\\_02-16.html](http://www.pbs.org/newshour/bb/politics/jan-june12/internetvoting_02-16.html)

<sup>46</sup> M. Musiał-Karg, *Elektroniczne głosowanie. Wybrane dylematy dotyczące e-votingu*, [in:] M. Marczewska-Rytko (ed.), *Demokracja elektroniczna. Kontrowersje i dylematy*, Lublin 2012, p. 93.

<sup>47</sup> R. Krimmer, A. Ehringfeld, M. Traxl, *The Use of E-Voting in the Federation of Students’ Elections 2009*, (paper presented at the EVOTE 2010 conference, Lochau/Bregenz, Austria, July 22, 2010).

<sup>48</sup> U.S. Election Assistance Commission. *Testing and Certification Technical Paper # 2, A Survey of Internet Voting*, September 2011, <http://www.eac.gov/assets/1/Documents/SIV-FINAL.pdf>, pp. 68-79.

<sup>49</sup> *Uniformed and Overseas Citizens Absentee Voting Act. Survey findings*, US Election Assistance Commission, July 2013, p. 1.

<sup>50</sup> Verified Voting, <https://www.verifiedvoting.org/resources/internet-voting/>

One further step was taken to enact new federal legislation supporting the use of the Internet for voting as a result of the lines of voters waiting to cast their votes in the cold. Just one month after the Election Day, the Congress worked on the new law. The proposed Voting Line Reduction and Online Registration Act aimed to, as the full title had it, “modernize State voting systems by allowing for increased use of the internet in voter registration, and for other purposes”. The present status of the proposal indicates: “Died (Referred to Committee)”.<sup>51</sup>

## 17.4 The Estonian e-voting system

The developments of the Estonian information society were influenced by three significant regulations: the Principle of Estonian Information Policy (PEIP) of 1998, the Public Information Act (PIA) of 2000 and Estonian Information Society Strategy (EISS) of 2013.<sup>52</sup> One of the strategic goals set by the PEIP was the use of information and communications technologies (ICTs) for prompting and strengthening democracy. The EISS aimed at ensuring public sector websites’ accessibility for all, including people with special needs.

### 17.4.1 Background

According to Morshed Chowdhury nearly half of Estonians have a computer at home and more than 4/5 of them are connected to the Internet. Estonia is one of the first few countries in the world where an ID card with remote identification and binding digital signature functions is compulsory for personal authentication. Almost all Estonian inhabitants are already electronic ID cardholders. Therefore introducing I-voting was a logical step to take.<sup>53</sup> From 2011 Estonia has introduced mobile e-voting, a kind of authentication system by a mobile phone.

Estonia recognizes different ways to identify a person and to give digital signature while I-voting: by means of ID card, by means of digital ID and by means of mobile ID.<sup>54</sup>

---

<sup>51</sup> H.R. 6632 (112th): Voting Line Reduction and Online Registration Act, Status available at: <http://www.govtrack.us/congress/bills/112/hr6632>

<sup>52</sup> [unpan1.un.org/intradoc/groups/public/documents/unpan/unpan033997.pdf](http://unpan1.un.org/intradoc/groups/public/documents/unpan/unpan033997.pdf)

<sup>53</sup> M.J. Morshed Chowdhury, *Comparison of e-voting schemes: Estonian and Norwegian solutions*, <http://courses.cs.ut.ee/2010/security-seminar-fall/uploads/Main/chowdhury-final.pdf>

<sup>54</sup> Estonian National Electoral Committee, <http://www.vvk.ee/voting-methods-in-estonia/engindex/>



### 17.4.2. Legal issues

The Estonian European Parliament Election Act (2002)<sup>55</sup> regulates electronic voting. Paragraph 20 states that electronic lists of electors are delivered to the National Electoral Committee by the eleventh day before the election day. The person who prepares a polling list signs it no later than on the seventh day after the close of voting. The chairman of the National Electoral Committee (NEC) signs the list of voters who voted electronically after the close of voting. Voting election day opens at 9 AM and closes at 8 PM. Advance poll are to be held: from the tenth day to the fourth day before election day by electronic means. Voting opens on the sixth day before the day of election at 9 AM and lasts on 24-hours basis until voting closes on the fourth day before the election day at 8 PM [Paragraph 37(3)].

The procedure of electronic voting is prescribed in Paragraph 43. A voter may vote electronically on the webpage of NEC on days prescribed by Paragraph 37(2)(3). A voter votes herself. She identifies herself on the basis of a certificate on identity documents permitting digital authentication. After identification of the voter, the consolidated list of candidates is displayed to the voter on the webpage. The voter may change her electronically given vote by either voting again electronically at the time prescribed by Paragraph 37(2)(3) or voting with a ballot paper from the sixth to the fourth day before election day pursuant to the procedure provided for in that Act.

As far as counting of electorally given votes is concerned, the NEC verifies the results of electronic voting after 8 PM on the election day. At least one-half of the members of the NEC, including the chairman or deputy chairman of the Committee, shall be present at the counting of votes. Voting results shall be verified in the NEC in public.

### 17.4.3 Architecture of Estonian e-voting

The main principle of e-voting should be as similar as regular voting. Electronic voting should ensure free will and anonymity of the voter. The voting procedure is as follows:

1. For the voter identification ID-cards or Mobile ID is used,
2. E-Voter can vote any number of votes during the advance voting time. Only the final vote will be counted. Thus if voter is under any kind of pressure to vote, she/he can vote later and the last vote will be counted. It will ensure coercion-free voting,
3. Traditional voting is prioritized. If the voter cast her vote in the polling

---

<sup>55</sup> [http://www.vvk.ee/public/dok/EPestonia\\_eng.pdf](http://www.vvk.ee/public/dok/EPestonia_eng.pdf)

- station than all her e-votes will be cancelled,
4. All the servers in the voting system are secure and always under monitoring during the voting period,
  5. Vote storage server is behind the firewall. Nobody can access the vote storage server from open Internet,
  6. Vote counting server is offline and secure with shared private key,
  7. All communications in Internet use Secure Sockets Layer (SSL) encryption,
  8. Encryption and digital signature use RSA encryption mechanism.<sup>56</sup>

#### 17.4.4 Participation in Estonian elections to the European Parliament

Estonians elected their MEPs twice: in 2004 and 2009. In 2004, after Estonia's accession to the European Union, the turnout was low (26,8%).<sup>57</sup>

**Table 2. Internet voting in Estonian elections 2005-2009**

	Local 2005	National 2007	<b>European 2009</b>	Local 2009	National 2011
Total votes	1 059 292	897 243	<b>909 628</b>	1 094 317	913 346
Internet votes	9 317	30 275	<b>58 669</b>	104 413	140 846
Internet votes...					
... as % of all votes	0,9	3,4	<b>6,5</b>	9,5	15,4
... as % of advance votes	7,2	17,6	<b>45,4</b>	44	56,4

Source: A. Sikk, *European Parliament Election Briefing No. 41. The 2009 European Elections in Estonia*, EPERN, p. 7; <http://www.vvk.ee/voting-methods-in-estonia/engindex/statistics> (24.05.2013).

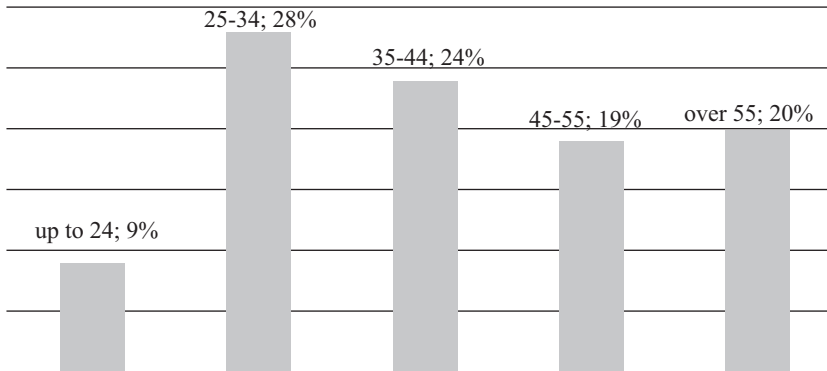
As Table 2 shows, the number of Internet votes was not particularly high, however their share almost doubled in comparison to 2007 national elections and Internet votes constituted nearly half of advance votes. The results show that e-voting did not have a strong influence on the increase of turnout.

Let us try to analyse the age of electoral voters. Graph 1 shows interesting data.

<sup>56</sup> M.J. Morshed Chowdhury, *Comparison of e-voting schemes: Estonian and Norwegian solutions*, <http://courses.cs.ut.ee/2010/security-seminar-fall/uploads/Main/chowdhury-final.pdf>

<sup>57</sup> J. Kivirähk, *Estonia: the European Debate and Politics at a Time of Economic Crisis*, EuPI Policy Brief, June 2009, p. 1.

**Graph 1. e-Voters by age in European Parliament elections 2009**



Source: <http://www.vvk.ee/varasemad/?v=ep09?lang=eng>

Surprisingly, there were twice as many people over 55 who chose electronic voting (20%) in comparison to the youngest voters up to 24 (only 9%). Looking for the reasons of low percentage among the youngest e-voters, we cannot agree with the opinion of Czakowski<sup>58</sup> who notes that elderly people follow new technologies while the youngest voters not necessarily do so. In our opinion, the fact that only 9% voters were up to 24 years of age results from the low turnout in general. It is worth to note that the youngest group of voters (not only in Estonia, but generally in Europe) is the most reluctant as regards participating in elections.<sup>59</sup>

#### 17.4.5 How the Estonians ensure the principle of one vote only?

Estonia introduced quite interesting solution concerning single vote rule. Firstly, for voter identification an ID-card is used. The ID-card is the only independent means of electronic communication which enables electronic personal authentication at a maximum security level and digital signature. Secondly, another e-voting is permissible when e-voter can electronically vote second time and his previous e-vote is deleted. Despite the fact that multiple voting is generally recognized as an offence, in this case electronic re-voting cannot be recognized as “multiple”, because the system will account only

<sup>58</sup> M. Czakowski, *E-voting na przykładzie Estonii i Brazylii*, „Studia BAS” 2011, no. 3(27), p. 125.

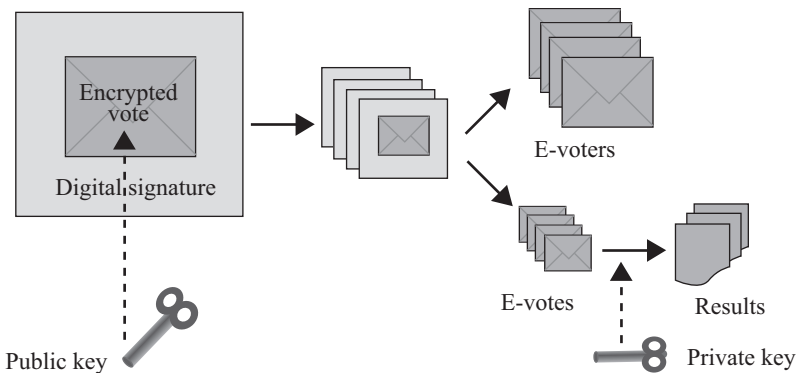
<sup>59</sup> A. Torline, *Civic Education and Youth Voter Turnout: The Federal States of Germany during Elections for European Parliament*, <http://polisci.indiana.edu/undergraduate/theses/Torline.pdf>, p. 1.

one e-vote (the last one submitted). Thirdly, traditional voting is preferential. E-vote is deleted when the voter goes to the polling station where she votes in traditional way.<sup>60</sup>

#### 17.4.6 How the Estonians ensure the anonymity of e-voting?

It is worth to take a look at the Estonian solutions. Paragraph 60 of the 1992 Estonian Constitution reads that members of the national parliament are elected in free elections on the principle of proportionality. Elections are general, uniform and direct. Voting is secret.<sup>61</sup> There are no provisions concerning the e-voting included in the Constitution. For Madise and Martins it is absolutely clear that remote voting with the use of Internet does not guarantee privacy protection.<sup>62</sup> Principle of secret voting relates to anonymous voting, conducted in some seclusion. Estonians decided that voting in seclusion should not constitute as goal as such. Confidentiality of voting is most important at the moment of casting the vote. Its function is to protect the voter from political pressures of third persons and/or not to give in to them. Since it was not possible to apply, while e-voting, obligatory seclusion to guarantee the freedom of vote, Estonians found a different solution.

**Figure 1. The envelope-in-envelope-principle transferred to e-voting**



Source: The Estonian National Electoral Committee, [http://www.vvk.ee/public/Verification\\_of\\_I-Votes.pdf](http://www.vvk.ee/public/Verification_of_I-Votes.pdf)

<sup>60</sup> More: M. Musiał-Karg, *op.cit.*, p. 106.

<sup>61</sup> Constitution of the Republic of Estonia, text available at: <http://www.president.ee/en/republic-of-estonia/the-constitution/>

<sup>62</sup> Ü. Madise, T. Martens, *E-voting in Estonia 2005. The first practice of the country-wide binding Internet voting in the world*, [http://neu.e-voting.cc/wp-content/uploads/Proceedings%202006/1.1.madise\\_martens\\_e-voting\\_in\\_estonia.pdf](http://neu.e-voting.cc/wp-content/uploads/Proceedings%202006/1.1.madise_martens_e-voting_in_estonia.pdf), p. 18.

Digital signatures consist of private and public key. The private key is secret and stored on a smart card. The public key is assigned to the identity of the holder of the identity card. After inserting the smart card into the card reader, the voter has to open the voting homepage of the National Electoral Committee in order to download and initiate the voter application. After that, the private key is activated with the submission of a secret PIN. The cast vote is encrypted with a public key and can only be decrypted with a corresponding private key, which is officially known by the NEC.

Should the voter go to the polling station in advance on election day and cast a vote, her electronically cast vote shall be deleted. According to Madise and Martens, „virtual cabin election” is created: e-voter is entitled to choose the moment of voting, when she is alone, free and independent from any pressures. She can change his/her e-vote for unlimited times during elections (only her last vote is valid).<sup>63</sup> In other words, voting is secret, but changing decision means that it is possible to identify both voting and e-voter. Electronic votes go to the National Electoral Committee, where personal data is decrypted.<sup>64</sup> How does that stand against confidentiality of voting? No unauthorized person has access to personal data of e-voters and no such person may have a possibility to identify them. Only authorized officials can do that and it can be done *post factum*, not at the moment of casting the vote.

## 17.5 Conclusions

The Washington Post noted the success of Estonian I-voting system and tried to find a comparative answer to why is it not working in the US. In short, two major problems make the difference. First, Estonians (as most Europeans) are assigned with a unique government ID number, which makes the system workable (the US citizens do not have such numbers). Second, the proportional representation voting system adopted in Estonia, in contrary to the American “winner takes it all” system, makes it less attractive to fraud as the candidates have more at stake in the US model. In addition, the studies show that most electoral reform measures mainly benefit voters who were already highly motivated to vote which stands against the argument of increasing the turnout with on-line possibilities.<sup>65</sup>

---

<sup>63</sup> Ibidem, p. 19.

<sup>64</sup> Ibidem, p. 20.

<sup>65</sup> B. Plumer, *Estonia gets to vote online. Why can't America?*, Washington Post, November 6, 2012, available at: <http://www.washingtonpost.com/blogs/wonkblog/wp/2012/11/06/estonians-get-to-vote-online-why-cant-america/>

Searching for solutions to increase election turnouts have led to the idea of electronic voting. So far, with exception of Estonia, the idea has not been commonly applied in the EP elections. In couple or few years however, more states will try it as confirmed by some symptoms of the use of electronic voting in the local and/or parliamentary elections in some Member States of the EU, e.g.: Belgium,<sup>66</sup> Ireland,<sup>67</sup> the Netherlands,<sup>68</sup> Austria.<sup>69</sup> It seems it is a matter of time for Member States to include e-voting in their electoral laws. It is not unlikely that in the future the EP will choose electronic voting a common method in the election procedure; it will be rather an exclusive form of voting. The US would certainly welcome the increase in turnout and use the votes lost in overseas and military voting ways. This time however, they will let the EU try those solutions first.

Establishing e-voting as a common principle to all Member States is a real challenge yet it is not impossible. Nowadays, it is rather wishful thinking. Even if e-voting were established in many Member States, it lacked the political salience of issues, such as a dual-mandates and the type of electoral system.

The build-up of a comprehensive system for e-voting in Europe cannot be recommended for the time being. The main reasons for this are cost-benefit considerations, technological issues and reasons of political legitimacy. E-voting seems to be more convenient than traditional voting. In reality it is more complicated than traditional voting because it requires digital signatures, PINs, complex authentication processes, encrypted transmission procedures, dedicated server structures, etc. These elements are (with the exception of Estonia) currently not available in European countries or in the US.

For the reasons above it is desirable that MS provide for optional e-voting for the EP elections. However, if we look at Article 223, it is politically impossible today that a uniform procedure in all EU MS, inclusive of e-voting would be accepted. As technology develops, we can expect only more MS accepting e-voting.

What the EP could learn from Estonian experience? First of all, introduction of electronic ID cards for all European citizens is required. The elec-

---

<sup>66</sup> C. Vegas González, *The New Belgian E-voting system*, [http://www.e-voting.cc/wp-content/uploads/downloads/2012/07/199-211\\_Vegas\\_Belgian-E-voting.pdf](http://www.e-voting.cc/wp-content/uploads/downloads/2012/07/199-211_Vegas_Belgian-E-voting.pdf), pp. 198-211.

<sup>67</sup> M. Mc Galey, J.P. Gibson, *Electronic Voting : A Safety Critical System*, <http://evoting.cs.may.ie/Project/report.pdf>, pp. 1-12.

<sup>68</sup> B. Jacobs, W. Pieters, *Electronic Voting in the Netherlands: from early Adoption to early Abolishment*, <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.159.9956&rep=rep1&type=pdf>

<sup>69</sup> P. Heindl, *E-voting in Austria. Legal Requirements and First Steps*, <http://subs.emis.de/LNI/Proceedings/Proceedings47/Proceeding.GI.47-17.pdf>, pp. 165-170.

tronic ID cards hold the digital signature of respective person. It would be a difficult and risky venture because of technological, economical and legal reasons. Secondly, as we mentioned above, 4/5 Estonians have regular access to the Internet. As far as the rest of the European citizens, data seem to be less optimistic.<sup>70</sup>

What could the EP learn from the US experience? Firstly, both Americans and European do not have their ID cards and as a consequence the identification process is very complicated and difficult. Secondly, technological issues play an important role. The opponents of e-voting say that I-voting will never reach an acceptable level of security and reliability, as hackers will always find ways to manipulate the system.

---

<sup>70</sup> H. Seybert, *Internet use in households and by individuals in 2012*, [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-SF-12-050/EN/KS-SF-12-050-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-12-050/EN/KS-SF-12-050-EN.PDF)

## Bibliography

- 2010 Election Administration and Voting Survey. A summary of key findings*, US Election Assistance Commission, December 2011.
- Act concerning the election of the representatives of the Assembly by direct universal suffrage, OJ, L 278, 8.10.1976.
- Altman A., *Will Online Voting Turn Into an Election Day Debacle?*, Time, Oct. 15, 2010.
- Alvarez R.M., J. Nagler, *The Likely Consequences of Internet Voting for Political Representation*, 34 Loy. L.A. L. Rev. 1115 2000-2001.
- Article I, Section 2 and 3 of the US Constitution, text available at: <http://www.law.cornell.edu/constitution/>
- Auer A., M. Mendez, *Introducing e-voting for the European Parliament elections. The constitutional problems*, [in:] A.H. Trechsel, F. Mendez (eds.), *The European Union and e-Voting. Addressing the European Parliament's internet voting challenge*, Routledge 2005.
- Bush v. Gore*, 531 U.S. 98 (2000).
- Charles A., *The Electronic State: Estonia's New Media Revolution*, „Journal of Contemporary European Research” 2009, vol. 5, no. 1.
- Charter of Fundamental Rights of the European Union, 2000/C 364/01.
- Clowers J.F., *I E-vote, U I-vote, Why Can't We All Just Vote?!: A Survey of the Changing Face of the American Election*, 42 Gonz. L. Rev. 61 2006-2007.
- Constitution of the Republic of Estonia, text available at: <http://www.president.ee/en/republic-of-estonia/the-constitution/>
- Council Decision of 25 June 2002 and 23 September 2002 amending the Act concerning the election of the representatives of the European Parliament by direct universal suffrage, Decision 76/787 ECSC, EEC, Euratom, Official Journal L 283, 21/10/2002.
- Czakowski M., *E-voting na przykładzie Estonii i Brazylii*, „Studia BAS” 2011, no. 3(27).
- Delta G. B., J. H. Matsuura, *Law of the Internet*, Aspen Publishers, § § 17.05, LOTIN Department of State information available at: [http://travel.state.gov/travel/living/overseas\\_voting/overseas\\_voting\\_4754.html](http://travel.state.gov/travel/living/overseas_voting/overseas_voting_4754.html)
- Elections to the European Parliament 4-7 June 2009*, OSCE/ODIHR Expert Group Report 11-30 May 2009, Warsaw 2009.
- Epstein J., *Internet voting, security and privacy*, 19 Wm. & Mary Bill Rts. J. 885 2010-2011.
- Federal Voting Assistance Program: <http://www.fvap.gov/>
- Garrone P., *Electoral Disputes – Substantive Aspects*, [http://www.venice.coe.int/web-forms/documents/?pdf=CDL-UD\(2009\)006-e](http://www.venice.coe.int/web-forms/documents/?pdf=CDL-UD(2009)006-e)
- Gibson R., *Elections Online: Assessing Internet Voting in the Light of the Arizona Democratic Party*, Political Science Quarterly, Vol. 116, No 4, (Winter 2001-2002).
- H.R. 6632 (112th): Voting Line Reduction and Online Registration Act, Status available at: <http://www.govtrack.us/congress/bills/112/hr6632>
- Heindl P., *E-voting in Austria. Legal Requirements and First Steps*, <http://subs.emis>.



- de/LNI/Proceedings/Proceedings47/Proceeding.GI.47-17.pdf  
<http://www.time.com/time/politics/article/0,8599,2025696,00.html#ixzz2cbCdv1yY>.  
[http://www.vvk.ee/public/dok/EPestonia\\_eng.pdf](http://www.vvk.ee/public/dok/EPestonia_eng.pdf)
- Huefner S.F., *Lessons from Improvements in Military and Overseas Voting*, 47 U. Rich. L. Rev. 833 2012-2013.
- Jacobs B., W. Pieters, *Electronic Voting in the Netherlands: from early Adoption to early Abolishment*, <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.159.9956&rep=rep1&type=pdf>
- Kang J., *E-racing, E-lections*, 34 Loy. L.A. L. Rev. 1155 2000-2001.
- Kivirähk J., *Estonia: the European Debate and Politics at a Time of Economic Crisis*, EuPI Policy Brief, June 2009.
- Krimmer R., A. Ehringfeld, M. Traxl, *The Use of E-Voting in the Federation of Students' Elections 2009*, (paper presented at the EVOTE 2010 conference, Lochau/Bregenz, Austria, July 22, 2010).
- Lauder K.-H., *e-Voting: a new political institution for the network society? New life for an old democratic procedure*, [in:] A.H. Trechsel, F. Mendez (eds.), *The European Union and e-Voting. Addressing the European Parliament's internet voting challenge*, Routledge 2005.
- Lepp Ü., E. Loide, *E-voting – a Key to Independence for All*. <http://ceur-ws.org/Vol-415/paper10.pdf>
- Madise Ü., T. Martens, *E-voting in Estonia 2005. The first practice of the country-wide binding Internet voting in the world*, [http://neu.e-voting.cc/wp-content/uploads/Proceedings%202006/1.1.madise\\_martens\\_e-voting\\_in\\_estonia.pdf](http://neu.e-voting.cc/wp-content/uploads/Proceedings%202006/1.1.madise_martens_e-voting_in_estonia.pdf)
- Mayoral J., *Democratic improvement in the European Union under the Lisbon Treaty*, Robert Schuman Centre for Advanced Studies, 2011, [www.eui.eu/Projects/EU-DO-Institutions/Documents/EUDoreport922011.pdf](http://www.eui.eu/Projects/EU-DO-Institutions/Documents/EUDoreport922011.pdf)
- McGaley M., J.P. Gibson, *Electronic Voting: A Safety Critical System*, <http://evoting.cs.may.ie/Project/report.pdf>
- Morshed Chowdhury M.J., *Comparison of e-voting schemes: Estonian and Norwegian solutions*, <http://courses.cs.ut.ee/2010/security-seminar-fall/uploads/Main/chowdhury-final.pdf>
- Musiał-Karg M., *Elektroniczne głosowanie. Wybrane dylematy dotyczące e-votingu*, [in:] M. Marczevska-Rytko (ed.), *Demokracja elektroniczna. Kontrowersje i dylematy*, Lublin 2012.
- Plumer B., *Estonia gets to vote online. Why can't America?*, Washington Post, November 6, 2012, available at: <http://www.washingtonpost.com/blogs/wonkblog/wp/2012/11/06/estonians-get-to-vote-online-why-cant-america/>
- Popular election of Senators, CRS Annotated Constitution, Legal Information Institute, Cornell University Law School, [http://www.law.cornell.edu/anncon/html/amdt17\\_user.html#amdt17\\_hd1](http://www.law.cornell.edu/anncon/html/amdt17_user.html#amdt17_hd1)
- Pub. L. No. 107-252, 116 Stat. 166 (codified at 42 U.S.C.A. §§ 15301–15545)
- Ramirez S., A. Organick, *Taking Voting Rights Seriously: Race and the Integrity of Democracy in America*, 27 N. Ill. U. L. Rev. 427 2006-2007.
- Seybert H., *Internet use in households and by individuals in 2012*, [http://epp.eurostat.ec.europa.eu/cache/ITY\\_OFFPUB/KS-SF-12-050/EN/KS-SF-12-050-EN.PDF](http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-SF-12-050/EN/KS-SF-12-050-EN.PDF)
- State Primary Election Types*, National Conference of State Legislatures, <http://www>.

- nctl.org/legislatures-elections/elections/primary-types.aspx
- Stockemer D., *Citizens' support for the European Union and participation in European Parliament elections*, "European Union Politics" March 2012, vol 3, no. 1.
- Stratulat C., J.A. Emmanouilidis, *The European Parliament Elections 2014. Washed or, again, washed out?*, 2013, European Policy Centre, [www.epc.eu/documents/uploads/pub\\_3699\\_ep\\_elections\\_2014.pdf](http://www.epc.eu/documents/uploads/pub_3699_ep_elections_2014.pdf)
- Tennant N.E., *Legislative Report, West Virginia Uniformed Services and Overseas Citizen Online Voting Pilot Project*, January 2011, available at: <http://www.sos.wv.gov/news/topics/elections-candidates/Documents/Report%20Final%202010%20General%20Election.pdf>
- Tokaji D.P., *The Paperless Chase: Electronic Voting and Democratic Values*, 73 *Fordham L. Rev.* 1711 (2005).
- Torline A., *Civic Education and Youth Voter Turnout: The Federal States of Germany during Elections for European Parliament*, <http://polisci.indiana.edu/undergraduate/theses/Torline.pdf>
- Treaty on the functioning of the European Union, C 326, 26.10.2012.
- Trechsel A.H., F. Mendez, R. Kies, *The European Parliament and the Challenge of Internet Voting*, EUI The Robert Schuman Centre for Advanced Studies, Policy Paper 03/3, [http://www.eui.eu/RSCAS/WP-Texts/03\\_03p.pdf](http://www.eui.eu/RSCAS/WP-Texts/03_03p.pdf)
- U.S. Election Assistance Commission. Testing and Certification Technical Paper # 2, *A Survey of Internet Voting*, September 2011, <http://www.eac.gov/assets/1/Documents/SIV-FINAL.pdf>.
- U.S. Government Accountability Office, *Elections: Federal Efforts to Improve Security and Reliability of Electronic Voting Systems are Under Way but Key Activities Need to be Completed*, GAO-05-956 (Sept. 2005).
- Uniformed and Overseas Citizen Absentee Voting Act (UOCAVA), 42 U.S.C. §§ 1973 ff–ff6 (2006), Military and Overseas Voter Empowerment Act (MOVE), Pub. L. No. 111-84, 123 Stat. 2190, 2321–22 (2009) passed as part of the National Defense Authorization Act for the 2010 Fiscal Year.
- Uniformed and Overseas Citizens Absentee Voting Act. Survey findings*, US Election Assistance Commission, July 2013.
- Vegas C. González, *The New Belgian E-voting system*, [http://www.e-voting.cc/wp-content/uploads/downloads/2012/07/199-211\\_Vegas\\_Belgian-E-voting.pdf](http://www.e-voting.cc/wp-content/uploads/downloads/2012/07/199-211_Vegas_Belgian-E-voting.pdf).
- Verified Voting, <https://www.verifiedvoting.org/resources/internet-voting/>
- Voting and Registration in the Election of November 1998. Population characteristics*, United States Census Bureau 2000.