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Informal meeting of experts on a possible update of Council of Europe Recommendation Rec(2004)11 on legal, operational and technical standards for e-voting

(Federal Ministry of the Interior, Vienna/Austria, 19 December 2013)

Document presented by the Directorate General of Democracy Directorate of Democratic Governance

Welcome and Introductory remarks

Mr. Robert Stein, Head of Department of Electoral Affairs, Austrian Federal Ministry of the Interior, welcomed the participants (cf. list of participants in Appendix II). He noted that this meeting is part of the activities under the Austrian Chairmanship of the Committee of Ministers.

Mr. François Friederich, DGII, Council of Europe Secretariat, thanked the Austrian authorities and in particular the Federal Ministry of the Interior for having accepted to host this informal meeting. The purpose and objective of the meeting was to examine in some more detail the expediency and requirements of updating Recommendation Rec(2004)11 of the Committee of Ministers on legal, operational and technical standards for e-voting, as suggested by the 4th biennial intergovernmental meeting to review developments in the field of e-voting since the adoption of Rec(2004)11, held in July 2012. The Agenda of the meeting is reproduced in Appendix I.

Mr. Michael Remmert, Deputy to the Director of Policy Planning of the Council of Europe, acted as moderator of the meeting. He said that it would be up to the Committee of Ministers to decide whether or not to update the Recommendation and in the affirmative, to issue a mandate to an intergovernmental body to implement the assignment (e.g. the new Steering Committee for Democracy and Governance, CDDG).

Another aspect to be considered is the continuation of the biennial intergovernmental meetings to review the application of Rec(2004)11. In this context, it was recalled that the above-mentioned 4^{th} biennial intergovernmental meeting had been held on 11 July 2012, for the first time in conjunction with the International Conference on e-voting in Bregenz, Austria. It was also noted that the non-profit organisation e-voting.cc was planning to hold the next international conference on e-voting in Bregenz in October 2014. Whether or not an intergovernmental review meeting would be held in 2014 would, however, have to be decided in the light of any general decision by the Committee of Ministers about the future of work by the Council of Europe on the subject of e-voting.

New developments in the field of e-voting

Ten out of forty seven Member States of the Council of Europe were present at the meeting and a number of independent experts attended as observers (cf. full list of participants in Appendix II). Presentations on new developments in the field of e-voting were given by Belgium (Brussels Capital Region), Estonia, Hungary, the Netherlands, Norway, and Switzerland. The Head of the Central Electoral Commission of the Russian Federation, Mr Vladimir Churov, addressed the meeting via a pre-recorded video message.

The <u>Belgian</u> report highlighted the improved paper-based e-voting system that was tested in regional elections in October 2012. The election experience revealed numerous problems with the new system, of which several aspects were subsequently modified. There is currently no political will to introduce Internet voting or advance voting in Belgium, except for the case of Belgians residing abroad. Despite certain voices preferring a return to paper balloting, Belgium considers Rec(2004)11 as an indispensable foundation for its e-voting practices. However, an update is necessary to maintain its relevance.

The representative of <u>Estonia</u> presented the percentage of Internet voters (I-voters) in the 2013 municipal elections (24.3%), as well as the legal amendments and institutional mechanisms put in place to improve the I-voting procedure. This included the establishment of an Electronic Voting Committee, consisting of IT professionals, to be responsible for conducting I-voting. The Estonian representative also highlighted the transparency measures in place, such as the publication of the source code and the newly introduced verification system, which allows the voter to verify that his or her vote has been registered as intended. The verification system was successfully tested in the 2013 municipal elections (in which 3.43% of votes were verified), and will be required by law from 2015.

The <u>Hungarian</u> presentation described the history and current state of e-solutions in Hungary. In Hungary, e-voting has mainly been considered for out-of-country voting. In 2003, and again in 2007, non-electronic solutions were selected to allow out-of-country citizens to vote. In 2013, scanners were introduced to speed up the counting of postal ballots, but there were problems: the IT company providing the scanner technology refused to publish the source code, while the legal provisions for scanning were only in the form of decrees, not acts. The compromise solution was that scanners are only used for preliminary out of country results, while only the full manual (re)count is legally binding.

In a pre-recorded video message, Vladimir Churov, chairman of the Central Election Committee of the <u>Russian Federation</u>, gave a comment on developments in Russia regarding e-voting. He said that elements of e-voting are being integrated into the electoral system in Russia like in other countries, with electronic devices using touch screens during the voting procedure in polling stations as the main e-voting method adopted by Russia. The Chairman also listed what he sees as the main problems with e-voting today, namely: insufficient mastering of e-voting, or an insufficient willingness to use it; technical imperfections; and limited trust in electronic systems from the voters. He also voiced concern regarding the practice of remote e-voting (i.e. via Internet), as this method cannot guarantee that the vote was voluntarily and freely cast by the voter. Finally, Mr Churov declared that Russia relies on Rec(2004)11 as an important guideline, but that rapid developments in technology pose the challenge of keeping the Recommendation up to date.

The <u>Norwegian</u> delegation offered an overview of the current status of I-voting in Norway, where extensive pilots have been conducted in relation to municipal elections in 2011 (10 municipalities, 4.5% of population) and parliamentary elections in 2013 (12 municipalities, 7% of population). The motivation behind the exploration of I-voting is the potential to improve accessibility, enhance efficiency and accuracy in the counting process, reduce costs, and increase voter turnout. It was emphasized that the Norwegian system enables voters to cast their vote from standard computers without extra equipment and is built around existing authentication infrastructure. Furthermore, the system aims to be fully transparent with an in-built verification system to enable each voter to verify his or her vote. Despite an incident where a programming error led to weak encryption of some votes, the pilots are deemed to have been successful. However, there is still political controversy surrounding I-voting, and the current government has yet to decide how to proceed on the topic.

The <u>Swiss</u> report detailed the current state of affairs regarding e-voting in Switzerland. Confirming that the strategic decision by the federal government to gradually expand the e-voting project is to continue, it then gave an overview of the new legal bases adopted at the federal level in December 2013. These legal revisions include competencies for the federal chancellery to regulate technical issues, as well as legal bases to extend the use of electronic voting, something that requires the introduction of features such as verifiability. A two-step model of verifiability is envisaged, as well as an auditing process carried out by a state accredited organisation. So far, 12 cantons have

practical experience with e-voting, and several others will introduce it shortly. E-voting in 2013 was conducted without incident, but some concern was raised after a simulated attack revealed weaknesses in some systems. As a result, requests on both federal and cantonal levels were made for higher security standards (including verifiability), which will be introduced by late 2014/early 2015.

Mr. Uwe Serdült, ZDA, Switzerland presented some empirical results on voter participation and behavior in e-enabled referendums in Switzerland.

The representative of OSCE/ODIHR introduced the new OSCE/ODIHR Handbook on New Voting Technologies.

Exchange of views on a possible update of the CM Rec(2004)11

Ms. Ardita Driza Maurer, LL.M., Legal expert, Consultant (Switzerland) presented her report that had been commissioned by the Council of Europe Secretariat on the possible update of CM Rec(2004)11.

The meeting considered the reasons for updating the Recommendation which, at a general level, would aim to:

- redress the original flaws related to vagueness, lacunae, inconsistencies, over- or underspecifications, redundancy and repetition; to consider the effects of relevant developments in national legislations and case-law/jurisprudence;
- take advantage of the practical and academic experience accumulated since the adoption of the original Recommendation, as well as of the sets of Guidelines on Certification and Transparency prepared by the Council of Europe since the adoption of Rec(2004)11;
- address the implications of emerging technical concepts and solutions, such as individual and/or public end-to-end (E2E) verifiability, use of return codes, use of voter verified paper audit trails (VVPATs) and second storage media and their implications for vote-counting;
- take account of lessons learned (e.g. Caltech/MIT 2012 Report on voting and its conclusion to switch from certification to auditing);
- set out a clear management and maintenance/updating policy to ensure sustainability of the Recommendation (Rec No. 5 of Rec(2004)11 which encourages updates to be made, but does not suggest any specified procedure).

At a more specific level, the meeting identified the need to:

- establish a clear distinction between e-enabled voting in controlled (e.g. voting machines in polling stations) and uncontrolled environments (e.g. internet voting);
- more systematically address the role of Electoral Management Bodies (EMB), and relations with vendors (e.g. during procurement processes);
- consider introducing some principles for the process of introducing e-voting (e.g. gradual introduction, pilots, trial runs, etc.), and provisions on how to deal with attacks on the system (technical and "socio-political" attacks).

When Rec(2004)11 was adopted about 10 years ago, it was the result of a rather theoretically driven exercise. Now, the standard-setting process could be much more driven by **experience and practice**.

While emerging technical concepts and solutions need to be taken into account, it is critically important that they **comply with the relevant legal principles**. While emerging technical concepts and solutions need to be taken into account, it is critically important that their **implementation be considered in the specific context of the given electoral system.** By way of example, the casting of a reversible vote in an internet voting system, although technically feasible, may not be possible in some countries as that opportunity is not allowed on all voting channels. This is motivated by the requirement not to place any voter at a disadvantage as a consequence of his/her choice of voting channel.

Also, there is general agreement that operational and technical provisions for voting systems need to be in conformity with **internationally accepted legal principles of democratic elections**, irrespective of the voting channels available in an election. It would, however, be beyond the scope of a CM Recommendation on e-voting to provide for a consolidated list of principles for democratic elections applicable to all voting channels, or to consider in greater detail the conformity of electoral systems with such principles across voting channels. Nonetheless, it would seem appropriate to acknowledge the **body of internationally accepted principles of democratic elections** by referencing them **in the preamble to the Recommendation**.

With regard to the kind of standard-setting document that is required by stakeholders, experience and lessons learned so far suggest that **a readily implementable checklist** is likely to receive greater attention by governmental and non-governmental stakeholders, as it would enable system certification/audit against a full set of (measurable) standards.

As to the **scope of a revision/update** of Rec(2004)11, the experts present at the meeting agreed that the objective should be to **enhance the existing recommendation rather than to rewrite it** and to favour **practically applicable provisions** rather than an overly detailed and theoretical approach. The whole process should be guided by a needs assessment of stakeholders, taking particular account of the views of member state governments, but also of non-governmental stakeholders.

With regard to the issue of the **frequency of updating intervals**, the meeting considered that there might be a difference between legal aspects on the one hand and operational/technical aspects on the other hand. Whereas legal standards (in particular higher level national and international legislation), may be rather persistent over time and might thus require less frequent updates, operational and technical aspects (such as processes regulated by lower level legislation or technology-dependent applications) might call for more frequent updates. Another difference lies in the fact that legal standards should be applicable to all e-voting systems irrespective of the local electoral system, while operational and technical requirements may be different so as to take account of local specificities, as long as they are in conformity with higher-level legal standards.

The experts present at the meeting therefore suggested that **a modular approach** be considered for the updated recommendation, meaning that operational and technical provisions might be prepared in optional or alternative clusters, with minimum requirements, thus availing some choice to member states. Such an approach would offer more flexibility, while at the same time being in conformity with legal principles.

There was agreement that the complexity of the subject of e-voting as well as its possible political implications require a **multidisciplinary and inclusive approach**. This means that it must be ensured that the necessary legal and technical expertise is available during the drafting process and that it must be open, with detailed mechanisms to be determined, to the full range of stakeholders, e.g. civil society actors, e-voting systems providers and possibly non-member states.

Summary and conclusions of the meeting

In conclusion, all participants in the meeting concurred with the view that the Council of Europe continues to be the only organisation in Europe that is able to set intergovernmental standards in the field of e-voting. Taking into account the issues listed in this report and the high probability that in the medium and long term, the number of electoral systems will comprise some electronic features, there are a number of strong and valid reasons for updating Recommendation Rec(2004)11.

A number of participants stated that their authorities and/or electoral Commissions are interested and ready to actively participate in any activity relating to taking forward the Council of Europe's work in the field of e-voting. The representative of the Brussels Capital Region of Belgium stated that his region has suggested to the Belgian authorities to consider hosting a meeting on e-voting during its CM Chairmanship of the Committee of Ministers from November 2014 to May 2015 if this was deemed useful in the light of relevant decisions by the Committee of Ministers with regard to e-voting activities.

Participants in the meeting agreed that subject to the availability of budgetary resources, some additional preparatory work could be commissioned already in the near future which, independently of any decision by the Committee of Ministers about further standard-setting work on e-voting, would benefit the international discussions in this field. Such work could consist of taking stock of legislative and jurisprudential developments relevant to e-voting, both with regard to the general international principles of democratic elections and case law and at the level of individual nation states.

Appendix I

AGENDA

I. Welcome and Introductory remarks

- Council of Europe Secretariat
- Austrian Federal Ministry of the Interior
- II. New developments in the field of e-voting
- **III. Presentation of the Report on the possible update of the CM Rec(2004)11** by Ms. Ardita Driza Maurer, LL.M., Legal expert, Consultant
- IV. Exchange of views on a possible update of the CM Rec(2004)11
- V. Summary and conclusions of the meeting

Appendix II

List of participants / Liste des participants

AUSTRIA / AUTRICHE

Ms Brigitta BLAHA, Federal Ministry for European and International Affairs, Republic of Austria Email: <u>brigitta.blaha@bmeia.gv.at</u>

Mr Robert STEIN, Federal Ministry of the Interior, Republic of Austria, Head of the Department of Electoral Affairs Email: robert.stein@bmi.gv.at

Mr Gregor WENDA, Federal Ministry of the Interior, Republic of Austria, Deputy Head of the Department of Electoral Affairs Email: <u>gregor.wenda@bmi.gv.at</u>

Prof. Dr. Reinhard POSCH, Federal Chancellery of Austria, Chief Information Officer Email: <u>reinhard.posch@cio.gv.at</u>

Heidi HAVRANEK, Federal Chancellery of Austria, Department for E-Government E-Mail: <u>heidi.havranke@bka.gv.at</u>

BELGIUM / BELGIQUE

Ms Fabienne BURY, Directeur, Administration des Pouvoirs locaux / Direction des Affaires Juridiques, Ministère de la Région de Bruxelles Capitale, Bd du Jardin Botanique 20, 1000 Bruxelles Tel: +32 2 800 32 36 Fax: +32 2 800 38 00 Email: FBury@mrbc.irisnet.be

Ms. Bernadette SCHEID, Belgian Embassy Email: <u>Bernadette.Scheid@diplobel.fed.be</u>

Mr Patrick TROUVEROY, Informaticien expert, Administration des Pouvoirs locaux / Direction des Affaires Juridiques, Ministère de la Région de Bruxelles Capitale, Bd du Jardin Botanique 20, 1000 Bruxelles Tel: +32 2 800 32 36 Fax: +32 2 800 38 00 Email: <u>ptrouveroy@cirb.irisnet.be</u>

ESTONIA /ESTONIE

Mr. ARNE KOITMÄE, legal advisor of the Estonian National Electoral Committee Email: <u>arne.koitmae@riigikogu.ee</u>

FINLAND / FINLANDE

Mr Jussi AALTONEN, Ministerial Adviser Ministry of Justice, Email: jussi.aaltonen@om.fi

GERMANY / ALLEMAGNE

Dr. Sebastian SEEDORF, Division V-I-5: Electoral Law and Law of Political Parties, German Federal Ministry of the Interior, Email: <u>sebastian.seedorf@bmi.bund.de</u>

HUNGARY / HONGRIE

Mr. Balazs FUGI, International Relations Advisor, National Election Office of Hungary, Email: <u>balazs.fugi@nvi.hu</u>

NETHERLANDS / PAYS-BAS

Mrs Maria GONZALEZ, Ministry of the Interior and Kingdom Relations of the Netherlands, Schedeldoekshaven 200, 2511 EZ, Den Haag, Kamer H 745, Postbus 20011, 2500 EA, Den Haag Tel: +31 70 - 426 7704 Email: Maria.Gonzalez@minbzk.nl

Mrs Diana VAN DRIEL, Ministry of the Interior and Kingdom Relations of the Netherlands, Schedeldoekshaven 200, 2511 EZ, Den Haag, Kamer H 745, Postbus 20011, 2500 EA, Den Haag Tel: +31 70 - 426 7704 Email: Diana.Driel@minbzk.nl

NORWAY/ NORVÈGE

Mr Henrik NORE, Project Manager, The Ministry of Local Government and Regional Development Email: <u>henrik.nore@krd.dep.no</u>

Ms Ida Sofie STENERUD, Evote Product Owner Email: <u>ida.stenerud@krd.dep.no</u>

Mr Christian BULL, Chief Security Officer Email: <u>christian.bull@krd.dep.no</u>

Mr. Christoffer WIIG, Legal advisor, Norwegian Ministry of Local Government and Regional Development Email: <u>Wiig@krd.dep.no</u>

RUSSIAN FEDERATION / FÉDÉRATION DE RUSSIE

Ms Vladislava FADEEVA, Chief consultant, Department of External Relations, Central Election Commission of the Russian Federation. E-mail: <u>vlfwork@gmail.com</u>

Mr Stanislav ANTIPIN, the Russian MFA, European Cooperation Department, Second Secretary

Mrs Vera SERGIEVA, the Russian MFA, European Cooperation Department, Third Secretary

SWITZERLAND / SUISSE

Mr. Beat KUONI, project coordinator and legal advisor , Federal Chancellery, Political Rights Section Bundeshaus West, 3003 Bern Email: <u>beat.kuoni@bk.admin.ch</u>

Mr. Geo TAGLIONI, responsible for international questions related to the project "vote électronique" Chancellerie d'Etat, Secrétariat général, Rue de l'Hôtel-de-Ville 2, Case Postale 3964, CH-1211 Genève 3 Email: Geo.Taglioni@bk.admin.ch

CONSULTANT EXPERT

Mrs Ardita Driza Maurer, LL.M., Legal expert, Consultant Email: <u>ardita.driza@sefanet.ch</u>

OBSERVERS / OBSERVATEURS

Mr Jordi BARRAT, Catalonian Government, Deputy Director within the Office for the Quality of Democracy, Email: jordi.barrat@gmail.com

Mr Robert KRIMMER, Senior Adviser on New Voting Technologies, OSCE/ODIHR,

Mr Paul-Henri PHILIPS, Vice-Chairman of CDLR Email: <u>phphilips@sprb.irisnet.be</u>

Univ.-Prof. Dr. Gabriele Kucsko-Stadlmayer, Member of the Venice Commission Email: <u>gabriele.kucsko-stadlmayer@univie.ac.at</u>

Mr. Dídac DOTRAS, Technician of the Centre of Telecommunications and Information Technology, Spanish Region of Catalonia Email: <u>ddotras@gencat.cat</u>

Ms. Montse VIDAL, Head of the EMB, Spanish Region of Catalonia Email: <u>montsev@gencat.cat</u>

Mr. Uwe SERDÜLT, Vice-Director of Centre for Research on Direct Democracy - c2d, Centre for Democracy Studies Aarau at the University of Zurich – ZDA Email: <u>uwe.serdult@zda.uzh.ch</u>

Mr. Peter WOLF, International IDEA HQ, Stockholm/Sweden. Email: <u>P.Wolf@idea.int</u>

Mr. Herbert LEITOLD, A-SIT (Secure Information Technology Center – Austria) Email: <u>Herbert.Leitold@a-sit.at</u>

Mr. Carl-Markus PISWANGER, Federal Computing Center of Austria Email: <u>Carl-Markus.Piswanger@brz.gv.at</u>

Mr. Childerik SCHAAPVELD, Head of Office, Council of Europe Office in Vienna Email: <u>childerik.schaapveld@coe.int</u>

COUNCIL OF EUROPE SECRETARIAT / SECRETARIAT DU CONSEIL DE L'EUROPE

Mr François FRIEDERICH Head of Division of Electoral Assistance and Census Council of Europe, F-67075 Strasbourg Cedex Tel: +33 (0) 3 90 21 53 02 Email: <u>francois.friederich@coe.int</u>

Ms Ana RUSU Programme Manager, Division of Confidence Building Measures and Electoral Assistance, Council of Europe, F-67075 Strasbourg Cedex Tel: +33 (0) 3 88 41 28 37 Email: <u>ana.rusu@coe.int</u>

Mr Michael REMMERT Deputy to the Director of Policy Planning, Directorate of Policy Planning, Council of Europe, F-67075 Strasbourg Cedex Tel: +33 (0) 3 88 41 34 05 Fax: +33 (0) 3 90 21 52 92 Email: <u>michael.remmert@coe.int</u>