Registries

4th June 2008

Submitted to:

Joint Standing Committee on Electoral Matters (JSCEM)
Attention: Ms. Cathryn Oliff
Via email: Cathryn.Ollif.Reps@aph.gov.au

Subject: New Inquiry into the 2007 Federal Election

The Joint Standing Committee on electoral matters has commenced a new inquiry into the 2007 Federal election. The Committee is keen to receive the view of the community and interested stakeholders and has requested Registries Limited to provide a submission.

Title: AEC/ADF pilot

Vendor Submission after technical pilot.
Defence Force personnel access to a national election provided via Defence Restricted Network – Intranet.

Submitted by

Registries Limited (Registries) and Everyone Counts Inc (E1C) were together the successful tenderer, with Registries as primary contractor, and Everyone Counts the technology provider for the pilot.

Introduction

E1C have been involved in several pilots of remote and poll-place voting technology outside Australia. The AEC/ADF pilot is the first of its kind in the world that saw active military personnel from any and all jurisdictions in their home country able to vote remotely. This is an important first for Australia and both Registries and E1C are very proud to have contributed to this pioneering work. This pilot and the AEC's use of this technology put Australia in a world leadership position much as has been the case for the Australian ballot. Together, we would like to introduce the benefits and opportunities visited by this technology in the remainder of this submission. We do not, however, elaborate on the details of the pilot in this submission as we were informed that the AEC has submitted its own report which will give an objective analysis of the pilot.

Providers

Registries formed technology partnership with E1C in 2004, and we believe we are uniquely place to meet the increasing demand for electronic ballots and related e-governance services within Australia.

With more than 25 years experience as a service provider to both listed and unlisted Australian companies, Registries offers an extensive and proven track record providing specialist share registry and voting management services. Registries offers ballot and election services for a broad spectrum of Government and non-government organisational electoral needs. This includes secret ballots for Board of Director elections, Academic and Student Union elections, Consultative Committee and Collective Agreement Ballots, as well as Proxy voting and Annual General Meetings.

This highly qualified core team has the required knowledge, skills and capability in the critical areas required to manage these projects and processes which is a key factor in mitigating risk. Depending on the size and

complexity of the Ballot our support staff and polling official numbers expand the scope of the project and our clients' requirements.

Our client base of more than 200 organisations across Australia and members of the Registries voting team have had experience working closely with a variety of small and large scale clients offering a variety of voting methods including; Attendance, Post, Internet, Telephone and "hybrid" or combinations of channels.

- o Australian Customs Service – Telephone, Collective Agreement Ballot.
- o Dept. Health & Ageing – Telephone and Internet, Collective Agreement Ballot.
- o University of Wollongong UniCentre and Student Union Elections – Electronic Elections.
- o Australian Health Management - Postal and Internet, Board of Directors Elections
- o RACV –Postal and Internet, Board of Directors Elections.

Everyone Counts Inc (E1C) is a Melbourne company with a ten year track record of providing high integrity, secured, Internet-based elections that improve access for remote (i.e. overseas and military) and non-able-bodied voters.   Using open-source-based software to ensure transparency in elections, E1C provided the first Preferential Election over the internet in October 1997, with voters in eight countries.

Since 2001 E1C has provided voting services for the UK Labour Party, most recently enabling remote members of the Party to vote via telephone and Internet, leading to the election of the UK's Deputy PM, Harriet Harmon. Everyone Counts voting solution has also been used by the Green Party of Canada and the US Democratic Party in a 2008 US Presidential Primary. In addition, E1C has provided voting services for each of the "Big Four" global auditors; Deloitte, KPMG, PricewaterhouseCoopers and E&Y.

Everyone Counts software has been analysed by Qinetiq[1] as well as BMM[2] and three other technical and security auditors. Everyone Counts contributed to the formation of international voting standards and has testified to the Victorian Parliament[3] as well as US and European electoral bodies including the UN. All technology is Australian developed and underpins our business processes and services.

Registries and E1C identified some key voter issues addressed in the trial as being;

Access for Voters in Remote Locations
Presently, Australians in active military service, itinerant, or Antarctic Territory voters[4] and others in local elections[5] are not subject to legislation on compulsory voting which otherwise applies to eligible citizens.

This reflects, among other things, the logistic constraints facing these citizens in returning a completed ballot. However, very many of these voters do vote and certainly want to vote.

Increasing Informality Rate
In addition, the informality rate for House of Representative ballots has been climbing over five elections until at least the 2004 election[6]. At least a proportion of these informal votes must be attributed to voter error. Indeed electoral law allows for errors and incompleteness on Senate ballots and will count such ballots with

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1 The former UK Defence Evaluation and Research Agency (DERA), owned by the Ministry of Defence. This organisation provided security analysis of our pilot for the UK Government (then Department of Transport Local Government and the Regions (DTLR)) http://www.electoralcommission.org.uk/templates/search/document.cfm/8267
2 A web version of BMM's signoff on E1C's solution http://www.aec.gov.au/Voting/e_voting/bvi_audit.htm
3 Victorian Parliament proceedings http://www.parliament.vic.gov.au/sarc/E-Democracy/Final_Report/AppendixA.htm
4 245(17) of Commonwealth Electoral Act 1918, the Act
5 for example in Victoria's Local Government elections those above age 70 years or out-of-municipality voters (personal communication)
6 see http://www.aec.gov.au/pdf/voting/compulsory_voting.pdf page 9

up to ten percent of preferences not provided[7]. This reflects that at least some voters in some circumstances will always struggle with Senate ballots. However, we believe it would be a great loss to Australia if the incentive or facility to number below-line candidates was diminished just to address vote formality problems.

Access for Non-able-bodied Voters

The need to support non-able-bodied voters has gained more exposure with Victoria's change to using STV in the State Legislative Assembly, necessitating Victoria's tender for an assistive e-voting device. E1C have taken part in similar developments in the US which has seen support for independent voting written in to the Help America Vote Act. E-voting is now the *cause célèbre* for the non-able-bodied community who want to vote. Support for this group among the military needs to also be expanded as hope to also serve injured service personnel and allow them to also vote from where they are stationed.

Electronic voting as a method for solving voter issues;

Access for Voters in Remote Locations

The AEC/ADF pilot allowed active-duty military serving in; Iraq, Afghanistan, East Timor and the Solomon Islands, to vote in the 2007 Parliamentary Election over a Department of Defence secured Intranet with a voting solution provided by E1C. Of the eligible voter roll, eighty-five percent of service members applied to vote, and seventy five percent of them did so online. This has demonstrated that at least one remote voter group is highly receptive to newer vote casting and collection systems (despite the Act not legally requiring their votes). It is very likely that other remote Australians would respond similarly to ameliorated voting services along the lines of this pilot. There were no security issues and voters noted the simplicity and usability of the system.

Other Internet-based elections and pilot results contribute to the notion of a tipping point in the uptake of this technology. In February of 2008, E1C provided the online channel for Democrats Abroad[8]. It was the first time in history that US voters living all over the world were able to remote-vote electronically in a Presidential Primary. Adding the online channel alone increased turnout seven-fold. Voters living in 164 countries, including US Antarctic Territory, were able to cast their votes and be counted. While these voters were given the option of voting by post, by fax, by Internet or in person, more than 50% chose to vote online[9].

Postal voting and scalability

In addition to improvements in usability is the unique property of networked remote electronic voting systems to greatly improve the reach of the electoral system where postal voting has failed. Not only has the time for ballots to reach voters (or come back from voters) been proven to be at times to be inadequate, and there are well documented problems with postal voting[10] which do not bode well for scaled use of postal voting in Australia. Remote networked e-voting in contrast, does not suffer from transport problems and can provide the benefits afforded by established cryptographic and privacy techniques, which include greater security, greater privacy and greater reliability.

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7 Act, 270(1)b)i, in addition to various voter-intention rules which are applied to incorrectly or illegibly provided preferences
8 http://www.wired.com/politics/onlinerights/news/2008/02/primary_evote
9 with 100 polling places in 30 countries, more than 50% of voters chose to vote online
http://www.democratsabroad.org/sites/default/files/DA%20Global%20Primary%20Results%20FINAL%20REVISED.pdf
10 which are described here: UK pilot problems with scaled use of postal ballots http://postalvoting.blogspot.com/ as well as the more general problems summarised in http://novbm.wordpress.com/why-not-vbm including a new weakness posted there on in http://novbm.wordpress.com/why-not-vbm/#comment-2585 by an E1C staff researcher)

Increasing Informality Rate

Remote voting systems we provided for the AEC/ADF pilot and for many elections abroad have demonstrated very high or perfect levels of vote formality. A voter can of course spoil a ballot if they so wish, but the vast majority of spoils for paper ballots are unintentional. Because E1C systems provide feedback and guidance to the voter on the formality of their choices (strongly segregating votes to above- or below- line and reporting any missed preferences on confirmation of their vote) we are confident more votes were counted per capita from the pilot voter group than from Australians as a whole in the 2007 Federal election.

Access for non-able-bodied Voters

We have followed the progress of an allied pilot for e-voting which has successfully enabled blind voters to vote unassisted in the 2007 Federal election, a program expanded after a six-site trial in the previous Victorian state election. Indeed such services make the unique Australian ballots more usable for any voter. We think it is a very worthy aim for the AEC to expand services providing non-able-bodied citizens with the means to vote independently. Adding the option for a non-able-bodied or infirmed voter to vote from home in front of a networked computer (of their own that the citizen has mastery of their preferred via assistive technologies) would be a hugely empowering experience for this voter group. E1C has recently pursued the design of a hardware device to allow severely disabled voters (able to operate a single-switch device) to use a telephone to vote.

Other benefits

Providing networked remote electronic voting also allows the provision of election and canvass materials to allow the voter a more deliberative environment in which to vote. The voter can also take their time as they do not need to vacate a poll place booth for others who may be queued. Remote electronic voting does not impinge on the ability of parties to canvass as it allows parties to deliver rich media content directly to voters; it allows them to engage with voters in real time. It allows voters to seek distribution of preference deals (information typically not provided at poll places). These facilities provide a much more modern and more valuable resource than the attendance style of election with spruikers who compete to reach voters at the poll-place.

Outcomes and solutions - electronic voting;

In the UK, E1C has evaluated a variety of projects and produced reliable statistics on the provision of new e-voting channels. Typically 95% of survey respondents want such services to be ongoing (evident in both of E1C's UK trials; footnotes 1 and 11). We hope JSCEM will consider allowing the AEC to repeat and extend this pilot to all citizens living abroad. Remote e-voting channels have reached a level of maturity which warrants their further piloting and potential deployment - a better concession to marginal voters than relaxing the law for attendance and the formality of the vote.

In a recent Collective Agreement Ballot for a government department, the Registries and E1C solution combined with a telephone provider facilitated the ballot for employees who were in remote locations and at sea up to 200 kms offshore. Registries have noted an increase in the uptake of electronic ballot and elections specifically for Collective Agreements and Board of Directors Elections.

Registries

Other Potential Solutions

In addition to serving millions of remote and non-able-bodied voters, we have provided electoral solutions for authenticating voters in polling places (referred to as Vote Anywhere, utilising a networked electoral role). This approach allowed voters to attend any polling station in the pilot city[11] whereas voters would normally be required to vote at one station. The solution also ensured every voter has only one vote, in real time, while ensuring other channels used (such as the telephone) did not allow voters more than one vote. Our related research work includes the use of Peer-to-Peer networks to deflect network-borne attacks[12], social networks to replace postal vote declarations as endorsements and other work over ten years[13].

Everyone Counts and Registries Limited would be delighted to present further information to the JSCEM.

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11 http://www.electoralcommission.gov.uk/templates/search/document.cfm/20110
12 http://www.everyonecounts.com/uploads/File/ivcp.pdf
13 This work involves providing a Google Open Social interface to Lawrence Livermore National Laboratory's "SmartOcracy" system, recently completed between Everyone Counts and Swinburne University.