SUBMISSION TO THE ELECTORAL MATTERS COMMITTEE INQUIRY INTO THE FUTURE OF VICTORIA'S ELECTORAL ADMINISTRATION

February 2013

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Introduction

The Victorian Electoral Commission (VEC) is pleased to contribute to the Electoral Matters Committee's inquiry into the future of Victoria's electoral administration.

The VEC is committed to continuous improvement, continually seeking effective and innovative ways to engage Victorians in the electoral process, and to expand and improve our processes to ensure that elections are administered efficiently and transparently. How our electoral administration fits with and supports changing community needs and expectations is an area of ongoing interest to the VEC.

The VEC notes that many of the questions raised in the discussion paper are requesting responses on matters of policy. Given the independence of the VEC's role, no comment has been made on matters of policy, but information has been provided where applicable to assist the Committee with its inquiry.

The VEC looks forward to engaging further with the Committee throughout the inquiry.

Liz Williams
Acting Electoral Commissioner

Discussion point one: Direct enrolment

1.1. What can you tell the Committee about direct enrolment in Victoria, and where applicable, other jurisdictions, including comparable overseas countries?

1.2. Besides direct enrolment, what other approaches can be used to address declining rates of electoral enrolment?

Direct enrolment provisions in the *Electoral Act 2002* (the Act) came into operation in August 2010, enabling the Victorian Electoral Commission (VEC) to update details or directly enrol a person on the Victorian register of electors if they fail to do so of their own accord within 21 days of becoming eligible.

Continuous Roll Update process

Prior to direct enrolment provisions being introduced, the VEC's Continuous Roll Update (CRU) program was the primary means by which the Victorian register of electors was maintained. Under its compulsory acquisition powers, the VEC receives change of address and new licence holder data from VicRoads, new tenant data from the Rental Tenancies Bond Authority (RTBA), tertiary student data from Victorian Tertiary Administration Centre (VTAC) and secondary student data from the Victorian Curriculum and Assessment Authority (VCAA). The data from these data providers is matched against the register of electors to determine whether a person:

- is enrolled correctly
- is still enrolled for an old address
- was previously, but is no longer enrolled, or
- has never been enrolled.

Anyone not correctly enrolled is sent an enrolment application to prompt them to act. The effectiveness of CRU had been declining in recent years, and at the time the direct enrolment provisions were enacted, the response rate for all programs was around 23%.

Direct enrolment process

Using the direct enrolment provisions, where it can be determined that a person is eligible to enrol, the VEC sends them a notice in writing advising that the VEC intends to enrol them on the register of electors for the address they use with the data provider. The person has 14 days to contact the VEC to advise if they are not eligible to enrol, or the address is not their principal place of residence. If no contact is made within the 14 days, the person is added to the register of electors and a letter of enrolment confirmation is sent.

Where eligibility to enrol cannot be confirmed, an enrolment form is sent prompting the person to enrol if they are eligible to do so.

Direct enrolment trial

Taking a cautious approach in implementing the new legislation, the VEC conducted a trial of direct enrolment in the lead-up to the 2010 State election. The trial was limited to students registered with the VCAA and born in Victoria.

Using data from the VCAA, the VEC identified 1,886 students who were 18 years of age or older as of 30 September 2010 and not enrolled. The VEC wrote to the students to notify them they had 14 days to advise the VEC of any errors in their details, or if they were ineligible to enrol. The students were also informed that the enrolment provisions only applied to voting at Victorian State and local government elections, and that they would need to go to the AEC website to enrol for Federal elections.

Only 15 letters were returned undeliverable (no longer at the address) and advice was received in regard to a further 17 students who did not understand the significance of enrolment and voting because of an intellectual impairment. Direct action was taken by 105 students, who enrolled directly via the AEC website, and the VEC enrolled the remaining 1,749 (93%) electors (see Figure 1). Of the electors directly enrolled, 80% voted at the 2010 State election.
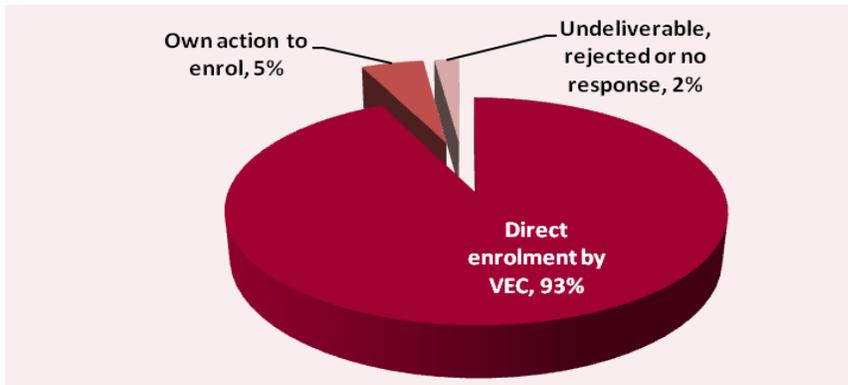
Figure 1: Results of VEC direct enrolment trial - students

The trial was generally well accepted and no flaws were identified in the process adopted. By comparison, when 30,537 people were sent enrolment forms in February 2012 (under the previous CRU process after notifying VicRoads of a change of address), only 19% were subsequently enrolled, 73% did not respond and 8% of letters were returned to sender (see Figure 2).
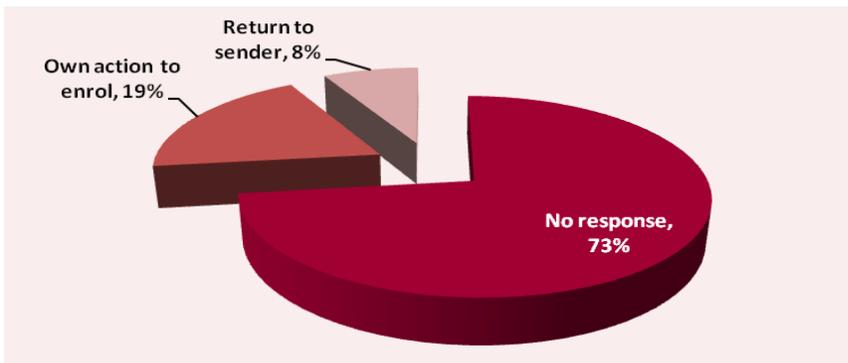

Figure 2: Results of CRU mailout – VicRoads change of address data

Direct enrolment extended and incorporated into the CRU program

Following the success of the student trial, the VEC incorporated direct enrolment into the CRU process, directly enrolling electors, where possible, rather than sending out an enrolment form. This action resulted in 95.9% of the 47,341 people targeted in the later part of 2011-12 being enrolled or having their address updated on the Victorian register of electors (see Figure 3).

Result	Number	%
Enrolled by VEC	36,779	77.69%
Subsequently enrolled	8,621	18.21%
Total resulting in enrolment	45,400	95.90%
Return to sender	470	0.99%
Interstate, overseas	105	0.22%
Not entitled (not principle place of residence, not capable, not citizen)	285	0.60%
Other	708	1.50%
Enrolment reversed	373	0.79%
Total not resulting in enrolment	1,941	4.10%

Figure 3: Results, extended VEC direct enrolment program incorporated into CRU program, 2011-12

The first mail-out using the new process took place in February 2012 using VicRoads change of address data. A number of minor anomalies were identified and, after making modifications to the process, a second mail-out was sent in May - again using VicRoads data.

Eligibility was confirmed for two-thirds of the licence holders that were not correctly enrolled on the register of electors. These people were sent a direct enrolment intent letter. The remaining people were sent an enrolment application for completion if eligible to enrol.

By 30 June 2012, only 7% (1,111) of those people sent an enrolment application had completed and returned the form to the VEC. In comparison, 95% (31,664) of people who had been sent a direct enrolment letter were either directly enrolled or had their address details updated. Of those sent an enrolment application, 12,653 did not respond. It is most likely that a number of these people would be Australian citizens and therefore eligible for enrolment.

In line with normal practices, the CRU program was suspended during the conduct of the 2012 local government elections (a period of three months) to avoid confusing electors.

Going forward

The VEC is working with the Victorian Registry of Births, Deaths and Marriages to develop a process to identify people born in Victoria, whose new details can be processed as direct enrolments.

The Department of Immigration and Citizenship (DIAC) now provides the VEC with citizenship data to use in its direct enrolment program. People identified through the CRU matching process with a DIAC record will, in future, receive a direct enrolment intent letter. People who have never been enrolled and without a DIAC record or a birth record in Victoria will continue to be sent enrolment forms.

In 2013, the VEC will increase the number of direct enrolment mail-outs and investigate the possibility of introducing new data sets in the program.

1.3. What do you think about compulsory electoral enrolment?

1.4. Should people be fined for failing to update and maintain their electoral details?

The VEC implements relevant legislation and provides advice on the impact of legislation on electoral administration, and does not comment on matters to do with government policy in relation to legislation. Accordingly, the VEC has no direct response to these questions.

The VEC ensures that communication, advertising and public awareness programs provide electors with information about compulsory electoral enrolment requirements, and undertakes enforcement of compulsory electoral enrolment where appropriate, and in accordance with legislative requirements.

1.5. Do you have concerns about the privacy implications of Victoria's direct enrolment laws?

The main functions of the VEC are prescribed under the *Electoral Act 2002*, (the EA). In addition, the *Local Government Act 1989*, and the *Infringements Act 2006* outline certain responsibilities of the VEC.

The VEC has developed and adheres to a comprehensive Privacy Policy Framework and Guidelines (Framework). The Framework outlines the possible uses of individual's private information held by or received by the Commission, in order to undertake its prescribed functions. The Framework has been developed to ensure that the Information Privacy Principles (IPP) outlined by the *Information Privacy Act 2000* (IPA) are applied in conjunction with the requirements of the other governing Acts.

As the majority of personal information held by the VEC is maintained within the VEC's information technology (IT) systems, the VEC has a comprehensive information systems security policy outlining the acceptable practices for all staff in the access and use of information held within VEC systems.

VEC information and systems are not directly accessed by any third party. The direct enrolment program has been implemented with the highest regard to information privacy. An issue relating to the timing of an intermediate stage of the process was identified during the VicRoads direct enrolment program. An extremely low likelihood of risk was identified, but the issue was addressed immediately and the relevant adjustments made to the process.

Discussion point two: Compulsory voting

2.1. What do you think about compulsory voting?

2.2. Do you think that people should be fined for failing to vote?

2.3. Do you think that civic education is a good way to increase community understanding about compulsory voting?

2.4. Can you offer the Committee observations about comparable overseas countries that have/do not have compulsory voting? What can Australia learn from these countries?

The VEC implements relevant legislation and provides advice on the impact of legislation on electoral administration, and does not comment on matters to do with government policy in relation to legislation. Accordingly, the VEC has no direct response to these questions.

The VEC ensures that communication, advertising and public awareness programs provide electors with information about compulsory voting requirements, and undertakes enforcement of compulsory voting in accordance with legislative requirements.

The VEC has a number of outreach and education programs which contribute to increased awareness about the compulsory nature of voting. The program content talks about the nature of voting as a right, responsibility and a privilege – see the response to Discussion Point Five for further information on the VEC's Education and Engagement Program.

Discussion point three: Informal voting

3.1. Can you share your views with the Committee about informal voting in Victoria?

The VEC implements relevant legislation and provides advice on the impact of legislation on electoral administration, and does not comment on matters to do with government policy in relation to legislation. Accordingly, the VEC has no direct response to these questions. The following information may assist the Committee.

Without question, there has been an upward trend in informality figures over the last decade – not only in Victoria (see Figure 4), but around Australia generally. The VEC undertakes analysis of informal votes after every State by-election and does a random selection of electoral districts and regions after each State election.
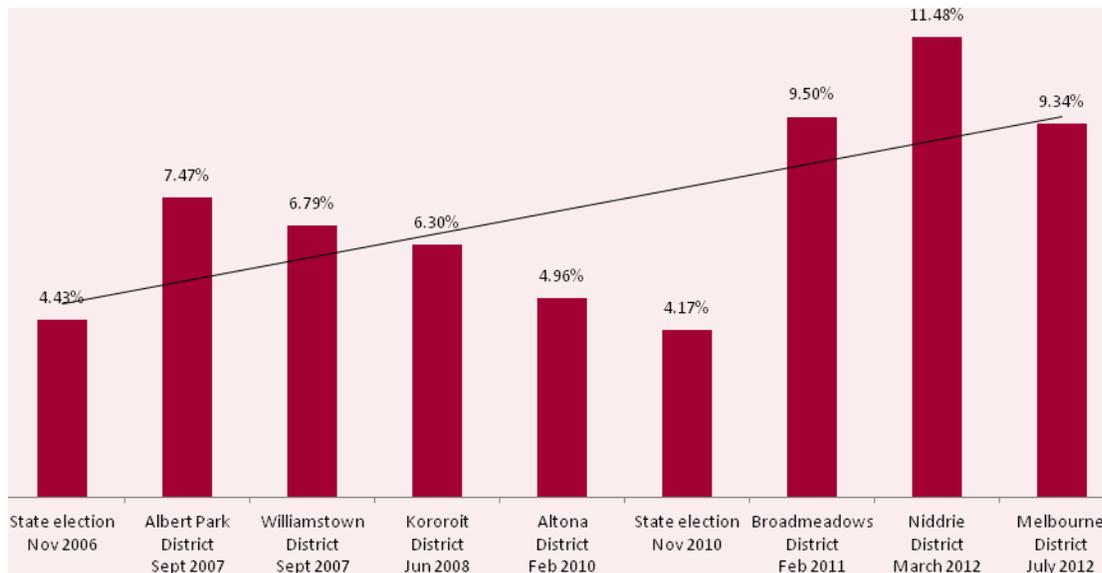

Figure 4: Informality trend – State elections and by-elections 2006-2012*
*Note: Average informality across Upper and Lower House used for State elections

Typically, the VEC expects increases in informality in State by-elections where any or all of the following influences are at play:

- a high number of candidates
- a high proportion of electors who are not proficient in English or who speak a language other than English at home
- a lower level of early voting, and/or
- the absence of a major party candidate.

It would appear from the figures presented in Figure 5 that there is an association between the lack of proficiency in English and an increased apparently unintentional informal vote. The absence of a major party candidate is also associated with an increase in apparently intentional informality at State by-elections. The exception is the Melbourne by-election, where the proportion of informal votes that were apparently intentionally informal was lower than at otherwise comparable by-elections. The high number of candidates, apparently offering Liberal electors other options, may have been a contributing factor.

It is also interesting to note, that at the 2010 State election, although the informality figure for the Upper House dropped compared to the 2006 State election, 71% of those votes appeared to be intentionally informal compared to 49% in 2006.

Year	Election	Informality	Apparently Intentional	Apparently Unintentional	Key factors present
2012	Melbourne by-election	9.34%	45.5%	54.5%	• Absence of Liberal candidate • 16 candidates • 25.37% pre-poll votes
2012	Niddrie by-election	11.48%	61.8%	36.5%	• 6.3% of electors not proficient in English[†] • 9 candidates • Absence of Liberal candidate • 23.63% pre-poll votes
2011	Broadmeadows by-election	9.5%	51.2%	48.7%	• 10.07% of electors not proficient in English[†] • Absence of Liberal candidate • 9 candidates • 22.39% pre-poll votes
2010	State election	UH 3.38% LH 4.96%	71.15% 47.52%	28.85% 51.74%	• 23.69% pre-poll votes
2010	Altona by-election	4.96%	62.5%	36.7%*	• 8 candidates • 26.80% pre-poll votes
2008	Kororoit by-election	6.3%	52.28%	47.39%	• 13.6% of electors not proficient in English[†] • 6 candidates • 23.14% pre-poll
2007	Albert Park by-election	7.47%	66.56%	33.19%	• Absence of Liberal candidate • 9 candidates • 19.56% pre-poll
2007	Williamstown by-election	6.79%	63.81%	35.88%	• 7% of electors not proficient in English[†] • Absence of Liberal candidate • 9 candidates • 17.29% pre-poll
2006	State election	UH 4.28% LH 4.56%	49.35% 40.82%	50.65% 59.18%	• 15.5% pre-poll

Figure 5: Comparison of informality figures 2006-2012

*Minor discrepancies in overall intentional/unintentional figures due to administrative errors – formal votes found.

[†] Australian Bureau of Statistics census data

3.2. What are some ways to reduce informal voting?

3.3. The Committee has learned that education programs focused on voting help reduce levels of informal voting in CALD communities. Do you have any other ideas to address the increasing trend in informal voting in Victoria?

As a result of the findings of the informal ballot paper survey (see Figure 5) and analysis of the types of unintentional mistakes made by electors, the VEC made a number of assumptions about the use of ticks and crosses to indicate preferences by electors from Chinese and Vietnamese communities and conducted some formal research. The research found that almost half (49%) of the respondents stated that they used ticks, crosses or crossed out a candidate's name to indicate their preference – rather than a numbering method. Mandarin speakers were more likely (47%) to do this than Cantonese speakers (28%).

Accordingly, the VEC targeted several Chinese and Vietnamese communities in high informality areas in the lead-up to the 2010 State election, delivering a small number of outreach education sessions about voting correctly/formal voting. Post election figures would indicate that this outreach did have a slightly positive effect.

The informal vote declined slightly in the targeted districts and the correlation between the informal vote and the populations not proficient in English also decreased slightly.

The VEC is soon to implement a pilot program, Democracy Ambassadors, within African communities. The focus will be on raising political literacy skills and understanding through the use of trained 'ambassadors' within a given community, which it is believed should result in an increase in participation and a decrease in unintentional informality. If the pilot is successful, the aim is to roll the program out to as many other culturally and linguistically diverse communities as possible.

This work will potentially be complemented by the VEC's electronic voting system, which is available in a number of languages. The system will warn the elector if they are about to cast an informal vote.

3.4. Do you have a view about optional preferential voting? Can it help to reduce informal voting in Victoria?

In accordance with legislation, the VEC implements exhaustive preferential vote counting in the Lower House. Could the introduction of optional preferential voting help to reduce the incidence of informality? In Figure 6 below, the types of informality that relate to electors using insufficient numbers or using '1' only when voting (both areas that could be addressed by the introduction of optional preferential voting) are compared for the last nine State electoral events in Victoria. The figures suggest that the use of optional preferential voting for the Lower House at State elections could prevent approximately a third of informal votes from being informal. The figure is less for State by-elections and ranges from 10%-18%. Optional preferential voting is used in the NSW Lower House. The average informality rate across the State for NSW's last two general elections is 2.78% (2007) and 3.2% (2010) – compared to Victoria's 4.56% (2006) and 4.96% (2010) respectively. The introduction of optional preferential voting in Victoria may save 1.5%-2% of informality across the State or the equivalent to 71,500 votes.

It is also noted that different systems across various levels of government may also impact on informality rates as voters may become confused about the correct voting method for a particular election.

Year	Electoral Event	'1' Only	Insufficient numbers
2012	Melbourne by-election	5.5%	12.4%
2012	Niddrie by-election	6.6%	5.9%
2011	Broadmeadows by-election	8.3%	9.7%
2010	State election	UH BTL 11.72% LH 23.79%	UH BTL 1.11% LH 7.40%
2010	Altona by-election	5.5%	5.9%
2008	Kororoit by-election	7.14%	5.97%
2007	Albert Park by-election	5.35%	4.68%
2007	Williamstown by-election	7.89%	18.82%
2006	State election	UH BTL 27.36% LH 26.38%	UH BTL 2.75% LH 6.97%

Figure 6: Statistics on types of informality which may be addressed by optional preferential voting

Discussion point four: Early voting

4.1. *What do you think about early voting? Do you think the increase in early voting at recent Victorian elections is a desirable trend?*

4.2. *Do you have any comments about early voting in other Australian and international jurisdictions?*

4.3. *Given current rates of early voting, do you think that holding elections on a single 'election day' is appropriate for Victoria? Or should Victoria move toward an 'election period'?*

4.4. *Do you have a view about the eligibility requirements for early voting in Victoria?*

4.5. *Do you have a view about the impact of early voting on political party campaigns?*

The VEC implements relevant legislation and provides advice on the impact of legislation on electoral administration, and does not comment on matters to do with government policy in relation to legislation. Accordingly, the VEC has no direct response to these questions. The following information may assist the Committee.

Research conducted after the 2010 Victorian State election looked at early voters' reasons for voting early and their satisfaction with the experience. More than a third (35%) of respondents who voted early did so as they were working on election day and a further 57% stated that they would be travelling (either within Victoria, interstate or overseas) and unable to vote on election day. Generally, the proportion of electors voting early around Australia is increasing.

State or Territory	Early voting type	Most recent election	Second most recent election	Third most recent election
Victoria	Postal	7.44%	6.26%	4.3%
	Early	16.33%	8.8%	5.98%
New South Wales	Postal	5.72%	5.53%	4.16%
	Pre-poll	8.22%	5.90%	3.75%
	ivote	10.92%		
Queensland	Postal	8.47%	7.45%	6.28%
	Pre-poll	9.81%	6.23%	3.94%
South Australia	Postal	11.08%	7.65%	5.59%
	Pre-poll	4.66%	3.51%	3.42%
Western Australia	Early[#]	9.75%	6.25%	4.94%
Northern Territory	Postal	3.9%	3.4%	3.4%
	Pre-poll	13.9%	11.0%	8.7%
Tasmania	Postal	7.19%	6.31%	5.74%
	Pre-poll	4.01%	2.45%	2.24%
Australian Capital Territory	Postal	4.30%	4.36%	2.89%
	Pre-poll	26.91%	20.29%	13.59%

Figure 7: Early voting statistics for three most recent State and Territory elections around Australia

[#] Pre-poll and postal figures unavailable

Discussion point five: Community engagement with electoral processes

5.1. What can you tell the Committee about the VEC's community engagement programs?

The Victorian Electoral Commission has a dedicated Community Education and Engagement Team and its Community Education Program provides year-round, grass roots, community-based outreach and education to those groups identified as being less likely to participate in the democratic process – typically young people, Aboriginal and Torres Strait Islander communities, people experiencing homelessness, culturally and linguistically diverse communities, prisoners and people with a physical, sensory or cognitive impairment.

The Team's work ranges from in-depth education about Australian democracy to the provision of information and awareness of elections to particular audiences – those people who may not necessarily access the VEC's broader election time campaigns, or who require specialist information according to their circumstances.

In terms of content, the program focuses on nurturing active citizenship and assisting people to make connections between the things they care about and the political process. It aims to actively engage the community in democracy, not just explain the mechanics of an election.

The following principles underpin the work of the Community Education Program:

Research driven: Responding to VEC research findings and ensuring that all community engagement and education work is based on sound evidence where possible.

Audience-based: Identifying and targeting those groups under-represented in the electoral process and ensuring - through research, consultation and partnership work - that activities are relevant and responsive to the needs of each group.

Partnerships: Collaborating and drawing on the expertise of key organisations in order to access particular audiences, allowing these organisations to demonstrate ownership over programs relating to democratic engagement and guaranteeing the longevity of the VEC's work.

Enabling: Building capacity within external organisations and among practitioners to deliver supported electoral education activities.

Impact: Focusing on activities which have a deep and long-term impact and are responsive to the needs of the community.

Specific programs and activities targeting electoral engagement and participation scheduled for the next 18 months include:

- A pilot Democracy Ambassador Program within African communities

- The development of a new prisoner education program

- An expansion of the VEC's Passport to Democracy Program being delivered within secondary schools

- The development of specific Aboriginal engagement resource materials for delivery to community

- The third year of an existing three year sponsorship with the Tigers in the Community Foundation's Korin Gamadji Institute – running leadership camps for potential young Aboriginal role models

- Expansion of the VEC's *Homeless Not Voteless* program in the lead up to the 2014 State election

- Involvement in the 2013 and 2014 Youth Parliament Program in Victoria

- Investigation of the feasibility of an elector notification and reminder system.

The VEC implements relevant legislation and provides advice on the impact of legislation on electoral administration, and does not comment on matters to do with government policy in relation to legislation. Accordingly, the VEC has no direct response to the remaining questions in Discussion point five.

Discussion point six: Electronic voting

6.1. Electronic voting is a relatively new feature of Victoria's electoral system; do you have any views about electronic voting in Victoria?

The VEC has provided electronic voting facilities for electors in accordance with Victorian legislation since 2006 and is currently preparing to implement an improved model for the 2014 State election. The following information provides some background on the work done to date in this area by the VEC, the benefits electronic voting can provide and the challenges associated with electronic voting from the VEC's point of view.

Background

In July 2006, new legislation allowed for the introduction of Electronically Assisted Voting (EAV) at the 2006 State election. The VEC conducted a limited pilot of EAV at six centres for the 2006 election allowing electors who were blind or had low vision to vote independently using a combination of touchscreen kiosk, headphones and keypad.

The *Electoral Act 2002* (The Act) was subsequently amended to expand the electors eligible to use EAV to include those with a motor skill impairment, electors whose first language is not English, and those with low or no English literacy.

The ability for the VEC to provide EAV services to electors located outside Victoria had been contemplated by the legislation passed prior to the 2006 State election, but regulatory amendments (made in 2010) were required to enable the provision of EAV to this group.

At the 2010 State election, EAV was successfully rolled out to each of the 101 early voting centres located across Victoria. Additionally, the VEC provided EAV facilities at eight interstate venues and two venues in the United Kingdom. As well as touchscreen voting, the VEC introduced telephone voting for blind or low vision electors.

Figure 8 below shows the number of venues provided, and total electronic votes cast at the 2006 and 2010 State elections.

State election year	Venues in Victoria	Votes cast	Venues outside Victoria	Votes cast	Total no of electronic votes
2006	6	199	0	0	199
2010	101	241	10	720	961

Figure 8: Number of venues and electronic votes cast at Victorian State elections

The increase in electors accessing EAV from 2006 to 2010 was in the main due to overseas electors accessing the system in London. Despite significantly increasing the number of access points in 2010, there was only a small increase in the take-up by eligible electors within Victoria. The VEC will continue to develop strategies to raise awareness of electronic voting across the legislated groups and is currently working to broadly survey blind or low-vision electors in order to understand their awareness and expectations of an electronic voting solution.

The VEC is currently reviewing and further developing its electronic voting services for future electoral events. An outline of the VEC's proposed electronic voting system for the 2014 State election is included in Appendix 1 and is referred to throughout this submission. The VEC would also welcome the opportunity to demonstrate its system to the Committee.

Benefits

Electronic voting provides a facility for electors with vision, motor or language barriers to independently cast a secret vote. This capability is currently only available in person at designated voting locations, but there would be some benefit in making electronically assisted voting facilities available to electors in their own homes. This would provide a more accessible voting option for electors with low vision or decreased mobility who find it difficult to attend a voting centre.

The voting period at a Victorian State election is extremely short, currently voting commences within four hours of the close of nominations. End to end printing of all ballot material takes almost a week with over 12 million ballot papers printed for 3.5 million enrolled electors at the 2010 State election. Such large numbers are required to ensure any elector can attend any voting location across the state, interstate and overseas and cast a vote for their electorate. Once printed, the ballot material must be shipped to each voting location in Australia and overseas and at the close of voting returned to the elector's home district.

Although the VEC establishes a number of interstate and overseas early voting locations, they are not always accessible to electors travelling in remote areas. Electors in remote areas are also less likely to have access to postal services in order to take advantage of postal voting, and less able to attend these centres in person, leading to electors being disenfranchised. For electors away from their enrolled address on election day, a remote electronic voting solution would provide access to voting facilities from anywhere within Australia or overseas within hours of the close of nominations. Given that ballot papers are printed on demand, electronic voting would reduce the wastage that results from printing such large quantities of ballot papers to cater for all electorates at all locations. The VEC will continue to explore ways to address the issue of wastage, which is not necessarily dependent on the provision of electronic voting facilities.

One of the benefits of an electronic voting system is the elimination of unintentional informal voting as the system can be designed to alert electors that they are about to cast an informal vote, and provide them with the opportunity to correct their vote before submitting it. The reduction in informality rates was apparent at the 2010 State election where the informality rate was 1% for votes taken electronically compared with an average informality rate of 4.17% for non-electronic votes.

Currently, ballot papers completed through electronic voting must be printed for inclusion in the count. At the 2010 State election the 961 electronic votes were printed centrally, reconciled and dispatched to the relevant election offices by way of the declaration exchange on the Monday and Tuesday following election day. This meant that electronic votes, while available from close of voting, were not counted until at least three days later.

The implementation of electronic voting on a broader scale, along with the ability to directly transfer preference information to count systems, could allow real-time reporting of voting statistics that could be made readily available to the media and public via computer, tablet, Smartphone or other device. It could also allow provisional election results, for votes captured electronically to be published shortly after the close of voting.

Challenges

There are high levels of confidence in the integrity of our current paper based voting system. Electors identify themselves in person at a voting centre and have their name marked off the roll. Their name is not linked in any way to how they vote and they are able to vote independently and in private (unless they request assistance). Electors place their completed ballot paper in a ballot box, which is sealed with tamper-evident seals.

At a point in time, the votes are removed from the ballot box and counted and the result of the election known. Each stage of the process is witnessed by election officials and scrutineers. Electors can be confident that their vote did not change throughout the process.

In summary, the VEC's paper based system meets accepted standards of elector authentication, accessibility, secrecy, transparency, security and accuracy.

Postal voting facilities are provided to electors who are unable to attend a voting centre on election day. In providing these services, there have been some compromises. For example, an elector completing a postal vote is not under the supervision of an election official, and if the elector chooses to they can show someone how they voted. Their ballot material travels via a third party such as Australia Post, between the elector and the election official and might be handled by many unknown parties before reaching its destination.

Electronic voting systems present some challenges in meeting the same very high standards experienced with paper-based voting. The most significant challenges are security and proof of integrity. Electronic voting systems must be protected from all possible forms of attack while remaining open to scrutiny. While authorised users of the system can monitor the system at all times, some forms of attack may be designed to go un-noticed by administrators. It is therefore desirable that systems are fully publicly verifiable, which will be a deterrent for malfeasance by ensuring that any breach of security is identified and that strong binding proof can confirm that the system has behaved as expected. The concept of verifiability is covered in more detail against 6.2.

While every effort can be made to maximise security, no system can be completely impervious to the possibility of attack. A fully verifiable system will ensure that administrators can quickly and accurately detect almost all forms of attack or machine failure, including those that would cause the voting system to erroneously say that all was well. In addition, electoral commissions must be in a position to assess and respond in a way that minimises impact to the integrity of the election should such an event occur. Electoral commissions must be able to provide independent proof of events in the event of any challenge to reported results.

Under the current paper-based system, it is possible that a ballot box could go missing in transit from an overseas location. However, electoral commissions have processes in place that will allow them to assess how many ballot papers from each electorate were in the ballot box, and therefore would be able to determine, in a very transparent way, what impact the loss of that ballot box would have had on the elections in affected electorates.

If it was identified that an electronic voting system was breached, electoral commissions need to be able to confidently assess how many votes had been compromised, and which electorates they related to. This would have to be done while maintaining full public confidence, or the integrity of the entire electronic voting data could be questioned. The larger the electronic data set, the greater the potential impact on the election. The VEC understands that research is being undertaken toward systems that would be able to identify and resolve integrity issues as they arise.

It is important that any electronic voting system has the trust of the electors. Electors must be confident that the vote they cast is the vote that is eventually counted in the election. Whilst a large number of people today conduct their day-to-day lives using technology there is no place for complacency and one can't assume trust in an electronic voting system given problems that have been reported overseas. The trust must be gained by providing tools and evidence that the integrity of the vote is sound.

Electronic voting systems must also be easy to use and understand. Research has found that it is not only the security of the system that provides confidence to stakeholders, the easier a system is to use, the more confident an elector will be that it is working properly. That is, new verification systems must not impinge on the voting ceremony, itself which must remain as straightforward as possible for all electors.

The VEC's redeveloped supervised electronic voting system will provide complete end-to-end verification while maintaining secrecy requirements. It is proposed that the system will again be available in early voting centres in Victoria and at some interstate and overseas locations, but will implement an adaptation of the *Prêt à Voter*[1] cryptographic voting system that provides electors with proof of their intended vote by way of an optional receipt at the end of the voting process that can be checked against receipts published to a Web Bulletin Board (WBB). The system provides proof of the correct capture of the elector's vote as well as proof that all votes were included and processed properly.

Further details on the challenges associated with electronic voting systems are included in this document at 6.3 and 6.5.

6.2. What can you tell the Committee about the concept of elector verifiability?

An important consideration when developing any electronic voting system is that it must be verifiable in order to be publicly transparent, like the paper voting system. It is also desirable that systems are universally verifiable as such systems provide strong mathematical evidence collected outside the system to prove that the system has performed as expected.

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[1] http://en.wikipedia.org/wiki/Pr%C3%AAt_%C3%A0_Voter

There are two parts to universal (end to end) verification. Individual verification - those checks an elector can do with their own vote, and checks that anyone can do on the entire set of collected votes. In terms of detecting loss or change to individual votes, the individual verification provides proof that a vote has been recorded as it was cast. In addition, members of the public can perform a number of other checks to confirm all electronic votes are included in the election. Taken together, the positive outcome of these various checks gives very strong confidence of the integrity of the election. The evidence provided by universal verification can be provided by electoral authorities in the event of any challenges to results.

Among the key benefits of this approach is that the system gains a high level of transparency, similar to the paper system, and that system errors, data damage or malicious activity can be reliably detected and measured – therefore providing a disincentive to those who might consider affecting an electronic voting system for malicious purposes.

The VEC's proposed electronic voting system will be universally verifiable and will also ensure the secrecy of the vote. One of the most important steps in this process is the shuffling and decryption of votes. This process needs to be made transparent because it is otherwise a very opaque step given the difficulty of demonstrating that a set of encrypted votes truly match the printed output votes without exposing vote secrecy.

The process works a little like passing a deck of cards around a table, giving each person a chance to shuffle the deck in plain sight of everyone else. Even if some participants are not very good at shuffling, or even if some are good enough to keep the same card on the bottom or play other tricks, everyone can be confident by the end of the process that the deck has been well shuffled. The verification process provides a mathematical proof that the value of each "card" (i.e. the set of encrypted votes) stays the same and is not changed by this process.

The second step is decryption of the shuffled votes, which involves a mathematical proof that the set of decrypted votes matches the output of the shuffle process. This proof is made public.

6.3. At present electronic voting in Victoria is limited to voting centres. Do you think votes for Victorian elections should be issued remotely i.e., via the internet?

6.5. What do you think about remote voting? Do you have a view about the security implications?

The VEC considers there are advantages and disadvantages associated with both supervised electronic systems made available to electors attending voting centres and unsupervised electronic voting systems that are made available to electors via the internet.

The most accessible tool for electors in remote locations is the internet. A further advantage of internet voting systems is that they remove the financial and administrative burden on electoral commissions involved in rolling out and supporting the operation of voting machines in voting locations. This is a particular consideration when establishing electronic voting facilities at interstate and overseas venues.

However, as discussed under question 6.1, the biggest hurdles to internet voting are security and proof of integrity. Internet voting systems are more exposed to potential attack than services that are not served over the internet.

Under an internet voting system, administrators have no control over the elector's voting equipment or network. This has the potential to compromise elector privacy where the elector's machine may be watched by a third party. Having no control over the network means election administrators cannot guarantee that a service will be available at all times.

A further challenge often raised in regard to internet voting is ensuring that the person voting is who they say they are. Options for elector authentication however, are available and are at least as strong as those that exist under current postal voting arrangements.

The secrecy of voting can never be strictly enforced under an internet system. In fact, this is the case for any system that allows people to vote away from a voting centre, including the current postal voting system. Those using these services can show someone else how they voted if they wish. While it is possible that an elector could be coerced to vote in a particular way, it is not something we have seen specific evidence of under the current postal voting system in Australia.

Supervised voting systems, such as the electronic voting solution the VEC is proposing, have the advantage of meeting all the standards that are currently met by current paper-based voting systems.

Because the system is not exposed to the internet, the threat of security breaches is significantly reduced. Having control of the hardware an elector uses means that electoral administrators can police the software installed and the data that is received and sent. Security protocols are managed to ensure the system meets a number of essential security requirements and the system can detect and report on any possible malicious or unauthorised changes. Universal verification also ensures that any breach would be detected and because the voting device and network are controlled by the administrator, there is a greater likelihood that affected data can be isolated to a particular device. This is not always possible where the voting devices and network cannot be controlled. The VEC's electronic voting system also maintains the secrecy of the vote, which is not possible under any remote voting facility.

The main disadvantage of supervised electronic voting systems is that access for electors is limited by their access to appointed voting centres. This is not a particularly effective solution for electors in remote locations, either interstate or overseas. In addition, there is a significant burden on administrators in distributing and supporting hardware and communication lines at voting centres in remote locations. The VEC believes there is a maximum number of voting locations that can be effectively supported without introducing unacceptable levels of risk. In 2010, this was 101 early voting centres within Victoria and nine voting centres in interstate and overseas locations.

With the roll out of its supervised electronic voting solution, the VEC will control the connectivity requirements for the system by working with third party network suppliers to ensure no 'down time' occurs during the voting period. In addition, should a voting device go offline, it cannot be used to vote.

With an unsupervised voting model it is impossible to guarantee the availability of service, because the service traverses devices the VEC does not control. If a connection fails it is difficult to prove that no ballots were lost.

The VEC has explored options to strengthen unsupervised electronic voting in an effort to provide a more accessible service for electors in remote locations. However solutions considered by the VEC to date involve a cumbersome arrangement where each elector is issued a security token. This approach has been used in Estonia where citizens carry a government-issued token anyway. It would not scale well for Victorian purposes and would be logistically difficult to support. The tokens provide a means for strong elector authentication, make it hard for the elector to lose, transfer or sell their access rights, facilitate the ability for an elector to verify their vote from any other device, and provide a double check that the elector's computer has performed the actions it is trusted to do, properly.

There are risks associated with all voting systems and electoral authorities must manage these to maximise election integrity. Within the current Victorian context, the VEC considers that the risks associated with internet voting options are too high at this point in time. However, the VEC will continue work in this area and follow relevant research so that an efficient and accessible option can be offered in the future for electors in remote locations or who experience difficulties accessing appointed voting locations. In the mean time, the VEC is investigating options for providing more efficient postal voting services for electors in remote locations - these are discussed under 6.6 in this document.

Under current Victorian legislation, access to electronic voting facilities in early voting centres within Victoria, is limited to electors who are unable to complete a paper-based vote without assistance. Access to electronic voting facilities for Victorian electors attending interstate and overseas voting centres does not have the same restriction.

Allowing any elector who is unable to attend a voting centre on election day during the hours voting to be able to choose to vote electronically at an early voting centre within Victoria if they wish, would enable more electors to utilise this service and would eliminate the discomfort that can arise from special category electors having to declare that they are unable to vote without assistance. The proposed VEC electronic voting system has been designed to accommodate larger numbers if required. A change to legislation would be required in this regard.

A summary comparing the VEC's assessment of the current postal voting process, supervised electronic voting, and unsupervised electronic voting (internet) options, is included in Figure 9.

	Postal voting	Supervised electronic voting (electoral commissions control machines)	Remote electronic voting (internet)
Elector authentication	Signature on application matched to signature on declaration envelope	Oral declaration before an election official	Varied strength of elector verification possible but can add to steps in process for elector
Secret vote	Electors can choose to complete vote in private, unless they need assistance Coercion is possible	Electors can choose to complete vote in private. Supervision by officials removes possible coercion	Electors can choose to complete vote in private. Coercion is possible. Opportunity for voting to be observed by parties unknown to voters
Ability for elector to cast and independent vote	Some electors require assistance	System can be designed for electors to vote independently	System can be designed for electors to vote independently
Accessibility	Accessibility limited by time and proximity of elector to mail services	Accessibility limited by elector's proximity to voting centre	Accessibility limited by elector's access to internet services but can also be impacted by the availability of voting service in the event of equipment or network failure
Security	Total end to end security reliant on security of 3rd party (i.e. postal services)	System not exposed to internet, reduced exposure to security breaches	System exposed to internet, greater exposure to security breaches
Integrity and transparency	Elector can check that their vote was received but cannot confirm that it was not tampered with Reliance on 3rd party for delivery and return Delays may disenfranchise elector Security breaches (or loss of ballot papers) usually limited to small samples	High integrity if universally verifiable Likely that any security breach can be isolated to small data set	High integrity if universally verifiable Possible that security breaches or uncontrolled PC or network failure could compromise larger data sets

Figure 9: VEC's assessment of the current postal voting process, supervised electronic voting, and unsupervised electronic voting (internet) options

6.4. Do you have a view about electronic roll mark-off, as used at the 2012 Niddrie District and Melbourne District by-elections?

At the 2010 State election, electronic roll mark-off was used in all early voting centres within Victoria, at the majority of mobile voting venues, and at 109 election day voting centres.

Over 1,000 netbooks were allocated for this purpose and were connected to the central roll via a fixed connection or the mobile network.

Netbooks were allocated to voting centres where large numbers of absent electors were expected, enabling easy identification of each elector's enrolled electorate and removing the need for the elector to complete a declaration envelope.

The VEC implemented electronic roll mark-off via wirelessly connected netbooks at all voting centre during the 2012 Niddrie District and Melbourne District by-elections and more recently for the October 2012 local council attendance elections.

The advantages of electronic roll mark-off include:

- elimination of the potential for multiple voting
- faster roll mark-off, which could be further enhanced by implementing barcode scanning of an elector's EasyVote card
- accuracy in determining an elector's correct electorate
- fewer written declaration votes in envelopes, which in turn reduces the counting time (roll marking and removal of ballot papers from envelopes are no longer required for these votes after election day)
- instant feedback on turnout, as statistics are available immediately
- the ability to track elector behaviour on election day and to identify voting centre activity
- reduced paper use as the need for hard copy scannable rolls was limited.

A total of 849 Netbooks were deployed on election day at the 2012 local council elections for marking the electors name on the roll. Prior to the commencement of voting the VEC became aware that a number of netbooks were not able to connect to the Telstra network. It was identified that an incorrect setting on one netbook caused the issue. Back-up procedures were implemented and affected voting centres reverted to manual processing until the matter was resolved. In response, the VEC is investigating alternative methods for connecting to the VEC network for future elections and believes there is merit in further developing the concept of electronic roll marking.

The VEC recognizes that there is a limit on the number of devices that can be deployed and supported for electronic roll marking and the large scale roll out of electronic roll mark-off at Victorian State elections is not currently viable at all election day voting centres with upwards of 6,000 issuing points across the State. In light of this options are currently being investigated to enable the application to be launched from any device including the possibility to utilise an election official's own device (e.g. phone or tablet). Initial analysis is underway as it would be necessary to ensure that the system is secure and could only be accessed by the appointed official on the relevant day and time of voting. Potentially, savings could be made should this initiative come to fruition.

6.6. What role does technology have to play in Victoria's electoral future? Are there any other technologies that could improve Victoria's electoral administration?

Electoral authorities have utilised technology very effectively to support the implementation of electoral events. Today's election management systems provide greater efficiency and accuracy when administering large volume transactions and enable electoral authorities and observers to access a central view of election progress in real time. The use of geo-spatial technology has also provided many benefits for electoral authorities in managing enrolment systems and supporting redistribution processes. Electoral information is more readily available on

websites and the development of online recruitment and training facilities have greatly assisted with the recruitment and training of large numbers of election officials required across dispersed areas.

While technology used by electoral commissions has generally been about supporting head office and election office functions, the VEC is focussing on further opportunities that can provide efficiencies between election participants and administrators. These processes have remained generally paper-based – usually involving the participant to complete a paper form, which is then scanned or data entered into an electronic system. Examples include:

- postal voting
- nomination processing
- personnel management
- how-to-vote card registration
- computer counting, and
- processes around the review of political party registration.

The introduction of a 'candidate helper' at the 2008 local council elections allowed candidates to complete their nomination form online prior to printing and lodging their form and deposit with the returning officer. This facility has been made available at all State and local council elections since 2008. Almost 1,300 candidates out of the 2,004 that nominated for election at the 2012 local council elections completed their nomination form online, and 1,096 candidates went on to complete their candidate statements online. The VEC is investigating options to further enhance this application to assist with the nomination processes for registered political parties at the 2014 State election. While this system goes someway to streamlining the nomination process, candidates and parties are still required to lodge paper forms and their nomination deposit in the form of cash or a bank cheque.

The postal voting process is particularly cumbersome but as discussed previously, is often the only option available to electors in remote locations. There is also the added challenge of turning around the entire process within the limited time available to ensure that completed votes can be included in the count. This is dependent on the voter's proximity to postal services and the efficiency of those services. There are 15 days between the close of nominations and election day at Victorian State elections for the VEC to send ballot material in response to a postal vote application and for the elector to complete their ballot material and post it back to the VEC.

Applications for a postal vote are received by mail, hand delivery or electronic means (fax or email). An applicant can complete an online application but this must be printed so that it can be signed and witnessed before being sent to the VEC (in some instances these applications are scanned and emailed back to the VEC). The VEC then processes applications through its election management system and despatches ballot material, declaration envelope and reply paid envelope to the voter by post. The voter completes their ballot material, encloses it in a declaration envelope, which is signed by the voter and witnessed before mailing to the VEC using the reply paid envelope. On receipt, the VEC matches the signature on the declaration envelope with the signature on the corresponding application before admitting the vote for counting.

For the 2010 State election, the VEC implemented an email process that introduced some efficiency into the postal voting process for electors in remote locations.

This option was only available to electors in remote areas or overseas who would experience difficulty in accessing postal facilities. Electors could submit a postal vote application by email, providing an email address for receipt of ballot material. The VEC processed each application and then sent two emails to each elector who requested the email ballot material service, the first containing a secure file with all ballot material required to vote, and the second containing a password for the elector to access the ballot material file.

While this might seem like a simple solution for the provision of postal voting services for electors in remote locations, workload for the VEC was considerable as there was no way to electronically manage the email requests. Each emailed postal vote application was printed before being processed through the VEC's election

management system. Bar-coded labels identifying the elector were printed and adhered to the specially designed A4 ballot paper envelope template before being individually scanned for issue to the elector along with ballot papers and voting instructions.

A total of 1,212 ballot packs were despatched by email during the election, each was handled at least seven times between the receipt of the application and the emailing of the ballot material to the elector.

The initiative was successful, though some issues were encountered when emailing ballot material to members of the armed forces serving overseas due the restrictions on email traffic from unknown sources. The VEC was fortunately able to establish a mechanism with the Department of Defence that ensured all ballot material from the VEC email address could be delivered to electors. The VEC will continue to refine this process within current legislative requirements, but considers that there are limitations on its scalability.

The VEC believes that pursuing options that can remove at least one step in the postal voting process that is reliant on standard postal services is desirable, and is considering options that would allow an elector to apply for a postal vote online. The elector would still need to provide the same details required on a paper application, but the VEC would propose an alternative form of voter authentication to replace the requirement to have the application signed and witnessed. Authentication steps could utilise secret questions, passport numbers, driver licences, Medicare numbers etc. that can be verified against official data sources.

Once authentication and enrolment is confirmed, the VEC would allow access for the elector to complete and print ballot papers relevant to their enrolled electorates. The voter would also print an additional document from the application to enclose with their completed ballot papers for posting back to the VEC in a plain envelope. The additional document would replace the requirement for a declaration envelope and would serve to confirm that the enclosed ballot paper came from a legitimate voter and that the ballot paper had not changed in transit. Processes would be designed to ensure that officials could not link a particular voter with the way they voted.

The options being investigated would require legislative change to allow the signature on an application to be replaced by an electronic authentication step, and the requirement to match the signature on a declaration envelope to the signature on an application, to be replaced by an alternative method for confirming that the returned completed ballot paper came from the voter who made the original application.

The VEC previously included recommendations in relation to the postal voting process in its *Report to Parliament on the 2010 State Election*.

Discussion point seven: Social media and Victorian electoral administration

7.1. *What can you tell the Committee about the use of social media as a tool for political campaign communication?*

7.2. *Do you think the social media content should be exempt from campaign material authorisation requirements in Victoria?*

7.3. *Do you have any other comments about the relationship between social media and Victoria's electoral administration?*

The VEC implements relevant legislation and provides advice on the impact of legislation on electoral administration, and does not comment on matters to do with government policy in relation to legislation. Accordingly, the VEC has no direct response to these questions. The following information may be of assistance to the Committee.

The VEC has previously identified the issues around authorisation of political comment on social media. In its Report on the Niddrie by-election (published in April 2012), the VEC recommended that Parliament consider introducing legislation to exempt certain social media platforms from authorisation requirements. The South Australian Parliament recently changed its electoral regulations to exclude blogging and applications such as Twitter from authorisation requirements.

Appendix 1: 2014 Electronic voting system

The Victorian Electoral Commission (VEC) has redeveloped its electronic voting system for the 2014 State election, which will help a wide range of electors with impairments or barriers to voting to be able to have a machine-assisted vote in private.

The system has been designed with consideration of experiences of other agencies outside Australia, and with the collaboration of academic voting system experts. The electronic voting system will provide public proof that it has worked as intended and such proof can be examined and confirmed by electors and any interested persons.

The main benefits of this system are that it provides a more accessible experience for the elector – that votes collected can be electronically counted, and that election integrity can be independently verified.

The system will serve 20 languages based on the top non-English languages in Victoria as identified by the 2011 Census. The languages will be provided on the voting system screen in textual format and spoken to a limited extent as aural introductions to the steps in voting. The voting devices which will be a common tablet computer and will provide moving video guidance, large coloured graphic buttons and support many tablet gestures such as tapping and scrolling.

For those not familiar with tablet gestures, the system will provide common buttons that can be touched to navigate and move around.

For low-vision users, the tablets will provide an entire English aural voting session. This will allow electors with no functional vision to either gesture on the screen, or press a set of physical telephone keypad buttons to receive verbal feedback to help them to complete the vote. In all instances, any elector can also submit an informal or incomplete vote if they wish, but the system alerts them to this at a number of steps.

The new verification system is based on a recently developed cryptographic design called *Prêt à Voter[2]*, which has been used elsewhere as a means of providing verifiable voting since 2006.

The elector experience is as follows:

1. The elector attends the early voting centre and is marked off the roll (it should be noted that where electronic roll mark-off is used, the roll mark-off system is independent to the voting system).
2. The elector is issued a piece of printed paper that looks like a shopping receipt. This is called the candidate list and is used for two purposes.
3. The elector takes the candidate list to an available voting tablet.
4. The candidate list is scanned by the voting machine to provide elector with their enrolled district and region electronic ballot papers on the tablet computer. The elector completes their district ballot paper and proceeds to their region ballot paper. The elector may complete their region ballot by voting either above or below the line.
5. After completing both ballot papers the elector reviews how they voted and if required may change how they voted on any of the ballots.
6. When the elector is happy with their voting preferences, the tablet prints out a second piece of paper which is a receipt.

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[2] http://en.wikipedia.org/wiki/Pr%C3%AAt_%C3%A0_Voter

7. The candidate list the elector was given after being marked off the roll lists all the candidates and groups for the elector's district and region, however, they are not in ballot draw order. The printed receipt is the elector's preferences as confirmed on the tablet, however, they are in the order of the candidate list. This order differs for each elector.
8. The elector holds the two lists together and checks that their most preferred candidate name aligns with the "1"; that the second most preferred name aligns with the "2"; and so on.
9. If the elector cannot see these lists, they can present both to any other voting tablet which can scan both lists and read all votes back in the order of preference.
10. When the elector is satisfied with this the process the candidate list is discarded. The receipt can be retained and taken away. The receipt does not allow anyone to see how the elector voted.
11. The elector can compare the printed receipt with the captured list of re-ordered preferences on the VEC website.
12. After close of polls, the VEC is able to print the scrambled votes as countable ballots.
13. Elector audits may be conducted at any time based on the information published on the VEC website. Audits can also be performed by electors with a vision impairment.

Some important facts about the system

1. Verification is needed for electronic voting because it is impossible for traditional election observation (which centres around observing paper) to remain meaningful. Verification provides meaningful proof to a court. In contrast, computer records of integrity may not be convincing if they were issued from within the same system which may be also under question. Verification takes place 'outside' the voting system and will detect failures in the voting system that leave no trace in traditional computer records.
2. The printed lists (candidate list, receipt) are needed because paper is still the only way to provide a convincing, yet simple way of showing just about anyone how their vote is captured.
3. Electors can discard both the printed lists at the voting centre; they are not obliged to perform any of the additional steps outside of using the voting devices to vote.
4. The verification system relies on some electors performing "audits". Comparing the lists after having voted is one of the audits.