

14 September 2023

The Committee,  
Technology Assisted Voting review  
NSW Electoral Commission  
GPO Box 832  
SYDNEY NSW 2001

**Re: Technology assisted voting Interim review report – Paper 2 (“the Paper”) – response**

Dear Committee,

As a provider of remote internet voting solutions and technology for use in elections, ScytI supports governments and organisations in using technology to conduct democratic processes including by making elections more accessible and convenient, amongst other benefits. The reasons for the use of technology assisted voting are covered thoroughly in the Paper prepared by the NSW Electoral Commission.

As acknowledged throughout the Paper, the limited use of technology assisted voting in recent elections in NSW has undoubtedly led to the disenfranchisement of some electors. Within this context ScytI would like to resume the use of remote electronic voting to enfranchise those cohorts of electors, such as the blind and visually impaired, for which there are no comparable voting channels. Further ScytI proposes that costs are spread potentially across other electors in major voting centres as described below.

Having reviewed the Paper, ScytI would like to highlight the following items we see based on our experience delivering internet voting and election modernisation solutions across the world:

1. Governments are often stymied when evaluating systems based on a cost per unit. In voting the cost of some votes are significantly higher than others, and so when justifying expense on a system, serving more users can drive down this cost per user – a point clearly made in the Paper, and discussed on p28. If a system is introduced that only supports the blind and visually impaired we can see that having a potential user base of around 4,000 (ref table 1, p15).
2. To address this cost per vote, a natural response is to increase the number of electors who use a system to improve the cost effectiveness. ScytI sees a potential path to take advantage of the same system for the cohort of supported remote internet voting electors to be shared by kiosk voting at selected major voting centres where the electors are voting by attendance, as discussed on p6 of the Paper.
3. Kiosk voting would be network connected (and not by the internet) to remove risks associated with internet delivery. The kiosk and the internet voting backend can share many components thus spreading the cost of infrastructure. The kiosk device can be a commodity style generic computing device – such as a readily available tablet or desktop computing device – browser support is the key requirement. A specific device such as seen in many electronic voting machines across the world can be avoided.
  - In an election recently completed in Ontario Canada, this was the selected approach.

4. ScytI sees a reduction in the printing of ballot papers as a benefit of deploying a kiosk-based system at major voting centres. Major voting centres, such as the Sydney Town Hall, generally provide ballot papers for all regions leading to paper volume estimates being required and potentially over supply of ballot papers – leading ultimately to paper waste.
5. To summarise, kiosk voting in major voting centres, such as the Sydney Town Hall can bring the following benefits:
  - Increased use of infrastructure to offset cost otherwise solely attributable to remote internet voting;
  - Support for electors who face language barriers or have limited English language proficiency by offering a multi-lingual interface to electors;
  - Reduce the requirement for printing ballot papers in high-volume major voting centres thereby reducing waste;
  - The same methodology can also support use in embassies and other approved locations to address some of the concerns associated with the postal ballot.
6. ScytI notes that, contrary to the statement 87 on p30, end-to-end verifiability has been achieved, and in fact the iVote system of NSW was recognised as ‘end-to-end verifiable’<sup>1</sup>. The system had the following features – ‘cast as intended’ by means of the verification app, ‘recorded as cast’, which allowed electors to ascertain that their encrypted vote had reached the voting server unmodified, and ‘counted as recorded’ which allowed auditors and authorised third parties to ascertain the correctness and accuracy of the anonymisation and counting procedures (by means of zero-knowledge proofs). When these three types of verification are combined they are recognised as ‘end-to-end verification’.

ScytI commends the Commission on the thoroughness and quality of the research that has gone into the preparation of the “Interim review report - Paper 2” and wishes to see the return of technology assisted voting in NSW as well as other states and territories in Australia.

Yours Sincerely,

Lachlan (Sam) Campbell  
Director, ScytI Australia Pty. Ltd

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<sup>1</sup> <https://elections.nsw.gov.au/getmedia/b07341b7-aab3-4be3-a7e2-8ff420668de2/ivote-refresh.pdf> p14.