Joint Standing Committee on Electoral Matters

Inquiry into proposals to increase voter engagement, participation and confidence

Answers to questions taken on notice by the Electoral Commissioner

Question from the Hon Robert Borsak

(1) Just going back to the counting system for the LC, are you talking about a complete rewrite or are you talking about a retrofitting of the existing software?

Answer:

As I noted in my answer during the hearing, the work needed on the Electoral Commission's count system before the 2027 State general election will address critical gaps, rather than build a new system, to reduce the risk of significant problems arising with the count.

The Electoral Commission's current count system was developed in response to a problem that arose at the 2003 NSW State election. At that election, I am advised there were delays to completing the Legislative Council count due to problems with the counting software in use at the time. The (then) State Electoral Office received funding to replace that count system. I understand that a staged approach to replacement was taken with an interim system used for the 2007 NSW State election and the current Proportional Representation Computer Count (PRCC) system developed for use at the 2011 NSW State election.

Since the 2011 NSW State election, the PRCC system has been used for both Legislative Council and Local government preference counts with no major upgrades to the underlying architecture. The same system has also been used to run the optional preferential counts for Legislative Assembly general elections since 2015 and state by-elections since 2017.

The system consists of four main components, integrated into a single application:

- Configuration Module – used to set up and manage election events, users, allocated computers etc.
- Ballot Paper Entry Module – used to manage the data entry and data validation of preferences of batches of ballot papers.
- Reporting Module – used to prepare reports required for scrutiny and overall management of data entry processes.
- Count Module – used to carry out validation of formality rules and carry out the distribution of preferences and generation of election results.

The PRCC system uses a 'thick client architecture', with the software (client and server-side applications) being unsupported since 2012 because the company originally providing support in Australia is no longer in business. Limited informal support has been historically provided through personal contacts with developers, however these channels are no longer available. The software is deployed and secured using an open-source software packaging tool that is also end of life, does not meet current security standards and has not received any new releases since 2020.

It is not possible to replace most of the unsupported components of the application because of the limited time now available before the 2027 State election. That work had been included in planning for the Electoral Commission's proposed Digital Modernisation programme, which is not able to proceed. Recent testing has indicated, however, that some key software is incompatible with infrastructure and cyber security updates that must be implemented prior to the 2027 State election. The ballot paper data entry and reporting modules will require an extensive re-write to ensure they are reliable and secure. The re-write will also provide an opportunity to modularise the application into smaller components making future support and upgrades simpler and more cost effective. Also, the Electoral Commission must upgrade the core formality and count engine components, which I understand can be done with little or no change to the underlying software. This is also necessary to reduce the risk of system failure for the 2027 State election, noting this is the software component that requires the most testing and certification as part of election preparation

Question from Mr Nathan Hagarty

(2) I don't want to get into a tech discussion about what it's *(the LC counting system)* written in and why, but maybe we can take that on notice as to sort of why.

Answer:

The Proportional Representation Computer Count system uses a 'thick client architecture', with the software (client and server-side applications) being unsupported since 2012 because the company originally providing support in Australia is no longer in business. Limited informal support has been historically provided through personal contacts with developers, however these channels are no longer available. The software is deployed and secured using an open-source software packaging tool that is also end of life, does not meet current security standards and has not received any new releases since 2020.

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Questions from The Chair, the Hon Peter Primrose

(3) Samuel Gilbert high school—during the last council campaign, people were making their way up to the only entrance, which was a very steep pathway. Then they reached the stairs…The supplementary part of that question is why should the Electoral Commission not be subject to the same requirements, in making access available for people with disabilities and differing abilities, to the rest of the community? Because this was access to the actual voting place and we made it impossible for people to actually get in there. Please, I don't want to put you on the spot.

Answer:

The hiring of appropriate venues for voting at a statewide election is always a challenging exercise but the NSW Electoral Commission does consider itself subject to requirements about accessibility, as well as public safety. It builds these considerations into all of its venue procurement decisions.

The process of venue selection for the 2024 NSW Local Government elections commenced 12 months prior to the elections. Venue considerations are extensive and include size, location, accessibility, amenities, street frontage, access for deliveries, internet connectivity and workplace health and safety. The ability to secure premises that meet all functional requirements is limited, however, particularly due to the need for the Electoral Commission to enter into hundreds of short-term leases over a limited supply of suitable commercial premises.

New South Wales legislation also requires that a pre-poll venue and polling place must be appointed in every local government area or ward. Community expectations and safety requirements also mean sufficient venues must be hired to avoid excessive wait times and queues. If only venues that meet full accessibility criteria were hired, it would significantly reduce the number of venues available for voters to use and this could be expected to create both public safety and voter convenience concerns.

To meet the needs of voters who require accessible voting options, therefore, the Electoral Commission publishes on its website the accessibility level of every pre-poll venue and election day polling place: that is, fully accessible, assisted access (partially accessible) and non-accessible (no wheelchair access). If a venue is only partially accessible, a description of the accessibility was also published on the Electoral Commission's website.

I can provide the following information in table form about accessibility levels of 2024 Local Government election venues when compared with the 2023 State election:

Venue type	Number of venues	Fully wheelchair accessible	Assisted access	No wheelchair access
Returning officers' office	70	41	27	2*
Pre-poll voting office	317	185**	132**	0
Polling place	2,099	588	1,345	166
Total	2,486	814	1,504	168
Percentage of total		**33%**	**60%**	**7%**
2023 NSW State election total percentages		29%	63%	8%

*The two returning officers' offices with 'no wheelchair access' did not conduct pre-poll. **Includes returning officers' offices that conducted pre-polling.*

In addition to leasing privately-owned commercial premises, the Electoral Commission has a Memorandum of Understanding with the NSW Department of Education for the hiring of public school premises on election day. The Electoral Commission is required to pay for public school venues according to fees set by the Department of Education.

At the 2024 NSW Local Government elections, approximately 60 per cent of election day polling places were schools. Schools are generally well located, are known to the community, have the space and most of the amenities required and are available on Saturdays. One drawback of such a high reliance on schools, however, is that the Electoral Commission is often not provided with access on election day to the school's carpark or the accessible toilet. Not having access to these facilities usually means that a school-based polling place cannot be identified as fully accessible.

I can provide the following information in table form about the accessibility of public school premises used as polling places at the 2024 Local government elections:

School premises	Number of venues
Full accessibility	288
Assisted access	841
Non-accessible	116
Total	**1,245**

In the case of Samuel Gilbert Public School, I was sorry to learn that some voters experienced difficulties voting there due to the presence of steps near the hall. I am advised that the Electoral Commission had sought to hire that school's new hall, in a more accessible part of the school, for use at the 2024 Local Government elections but was advised it was not available for public hire at the time. As this venue is regularly used at general elections and is known to the local community as a voting centre, the old school hall was hired instead. The Electoral Commission identified the venue as an assisted access venue only on its website.

For the 2027 State election, the Electoral Commission will explore publishing additional explanations about the accessibility of voting centres, with reference to voters who are not reliant on a wheelchair but do have other accessibility needs (such as the ability to access a venue with a pram or a walking aid). The Electoral Commission will also explore using the powers under section 111 of the *Electoral Act 2017* to mandate venue owners to make their premises available including for providing greater accessibility options, if there appears to be a need to provide further support for voters.

(4) In relation to the Victorian trials of having accessibility for people who have sensory, cognitive, hearing and visual impairments, there was a trial in relation to having low-sensory voting sessions available for people in Victoria. I was wondering if you have any advice or comment on the outcome of that trial, and whether you're considering it in New South Wales?

… Maybe I could come back to it if we've got time. If not, could you please take it on notice?
I think the Committee, in terms of our terms of reference, would be very interested in what progress you may make and what your thoughts are.

Answer:

The Electoral Commission recognises that noise, bright light, busyness, colours and queues on election day can be overwhelming for some voters. It is taking the following steps, therefore, to explore how it could trial "sensory friendly" spaces at elections in New South Wales:

- the Commission has proposed amendments to electoral legislation that would allow the issue of votes to electors outside a voting centre. Such amendments could permit its local election officials to issue votes near to a voting centre but not within the building, supporting both electors with mobility issues but also voters with sensory needs;

- during 2025, the Commission will invite additional representative bodies to join our Equal Access to Democracy Disability Reference Group so it can better understand the needs of voters with specific sensory needs, and identify what assistance could be offered both generally and at any specific pilot at the 2027 NSW State election;

- the Commission will review the evaluation of the recent low sensory voting trial by the Victorian Electoral Commission, and the evaluations of the ACT Electoral Commission's introduction of a low sensory voting centre at its October 2024 election and a pilot at the Western Australian State election in March 2025. These reviews will inform what could be piloted at the 2027 NSW State election.

Question from Mr Nathan Hagarty

(5) Just reflecting on the previous comments about key person risk around technology, obviously those funding demands go well before 2023, but just on the cybersecurity issue, the Federal Government has its Essential Eight maturity model. I don't know how across this you guys are, but you can take it on notice. I'd like to know have you done an Essential Eight assessment, where are you guys at, and what's the pathway to get it to where it needs to be, if it isn't already there?

Answer:

The NSW Electoral Commission is using the Australia Cyber Security Centre's (ACSC) Essential Eight Maturity Model, along with a risk-based assessment model, to drive its ongoing cyber security uplift programme. The Commission's ability to implement the Essential 8 security controls, however, continues to be hampered by its reliance on legacy systems to deliver critical election services.

As stated in the ACSC Essential 8 FAQs published by the Australian Signals Directorate:

> *"It is often difficult to implement the Essential Eight, either in part or in full, on legacy systems. In such cases, ASD strongly encourages organisations to upgrade their legacy systems as a priority so that the Essential Eight can be implemented in full. While a system is in the process of being upgraded, organisations should implement compensating controls where possible to do so."*

The Essential Eight Maturity model ranks maturity from 0 (lowest) to 3 (highest) and for each of the eight requirements provides a list of practices and processes that must be in place to achieve each maturity level.

The Commission has internally assessed its current maturity as on target to have all controls to a maturity level of (1) by the end of June this year. The Commission is targeting an overall maturity level of (2) and hopes to achieve this in some areas prior to the 2027 State election. Essential 8 controls can only be rolled out to Commission systems and applications, however, in a phased manner. Also, while additional compensating controls are being planned for the Commission's legacy systems and applications that are incompatible with Essential 8, under the maturity assessment process these compensating controls can only be taken into consideration as part of the maturity assessment if they are demonstrated to provide an equivalent level of overall protection. I understand that this is not the case for most controls, so the Commission's ability to increase its maturity will continue to be impacted by the limits of its legacy systems.

As the cybersecurity threat landscape continues to evolve and present the Electoral Commission with new challenges and threats, it is important that it is funded to operationalise, maintain, and continuously improve its Essential 8 controls.