Comments on the Conduct of the 2006 Victorian Election

Early Meetings on Election Result Media Feeds

Discussions between media outlets and the VEC began early in 2006. A meeting between media outlets and the VEC was held on 7 February 2006. The meeting was attended by me as a representative of the ABC and David Quin representing of the Nine Network.

Two days after this meeting, a workshop was conducted by the Australian Electoral Commission in Canberra, also attended by David Quin and myself, as well as representatives of other media outlets. The aim of this meeting was to completely re-design the method by which results were provided to the media by the AEC.

A key point made by both David Quin and myself to both meetings was that the AEC and VEC should talk to each other during the redevelopment. As organisations that cover elections in all Australian jurisdictions, media outlets are interested in maintaining some common standard across the country in the delivery of election results.

Discussions at both meetings agreed on two key changes to be made.

The first was the adoption of ‘XML’ as a standard for the generation of the data files. While this greatly increased the size of the data files generated, XML was adopted as it has become a computer industry standard for publishing websites and transferring data files.

The second major change was a switch from the past practice of electoral authorities ‘pushing’ results down a data line to the media, to the use of ‘pull’ protocols, where results were published to an internet linked file server and then pulled down from the site by the media. This allowed other interested parties, such as bloggers and political parties, to access data previously only made available to the media.

It should also be pointed out that the feed changes, along with the continuing use of the internet to publish results, means that media organisations no longer need to attend a central tally room to obtain results. It may yet be that the 2006 election will be the last Victorian election to be conducted with a full tally room.

The Commonwealth Parliament’s Joint Standing Committee on Electoral Matters has recently begun an inquiry into the future of tally rooms for Commonwealth elections, and its recommendations will no doubt be of interest to the Committee.

Co-operation between the AEC and VEC

In general, we were happy that the VEC chose to adopt many aspects of the media feeds proposed by the AEC. This created some difficulty for the VEC, as the AEC was still developing its XML model, and some aspects of the design did not relate to functions undertaken by the VEC. However, at all times the VEC was co-operative and understanding of the desire by media organisations to have a common standard.

In the month before the election, several flaws with what was proposed came to light. These included confusion with the counting of Early votes and how these would be shown in the feed, and also problems with the file naming conventions when data updates were published. The VEC acted promptly to resolve these problems.

With one or two minor faults, the feed as it was eventually produced was entirely workable for the media. The format used in Victoria is very similar to that which will be provided at the 2007 Federal election. The format was also re-produced by the NSW Electoral Commission in 2007 after objections by the media at the very different feed originally proposed by the NSW Commission.
Provision of Legislative Council Results

At the first meeting with the VEC in February 2006, there was discussion at the level of detail required for the Legislative Council. It was decided at that point that the media were not interested in receiving a detailed feed with booth details for the Council. Some have criticised the VEC since the election for not having provided this. However, almost all of the developments concerning outfeeds took place in consultation with the media, and there was no indication of any interest in a Legislative Council feed that included booth results.

Media organisations would be very concerned if problems encountered by a small number of interested parties in 2006 resulted in the VEC devoting vast resources to producing booth by booth Legislative Council results on election night. XML is a verbose method of delivering data, and there are considerable overheads in generating XML files. I would be extremely concerned if election night computer resources were diverted to generating vast files of Legislative Council election results, potentially slowing down the generation and transmit time for lower house results.

The election night Legislative Council result is always provisional and requires re-counting by more experienced staff on subsequent days. It may be that more attention needs to be given to more detailed post-election results files for the Legislative Council. However, I do not feel that this should be a priority on election night.

I would point out that the new format adopted for the Senate will not have full detail on election night. This is only done in the days after the election.

The most critical aspect of the election count is to ensure that it is as accurate as possible on the night. Equally as important is to ensure that there are adequate batch and audit controls to ensure that any errors on the night can be located, and subsequent errors can always be undone by referring back to original documentation.

It may be that this level of election night documentation for the Legislative Council is best done manually and cannot be achieved with full reporting on election night. This is the method adopted by the AEC, which conducts a group-level count on election night, as well as a polling booth audit total of ballot papers. The full detail of the count by booth only becomes available at a later time.

Providing full Council results by booth on the night has the potential to slow transmission of Assembly results on the night. Data entry time on computers would have to be set aside to enter full booth results in the Council, and there is a strong possibility that without the devotion of considerable extra resources to this task, it can only interfere with the entry and transmission of primary and two-candidate preferred results for the Assembly.

Validation on Data Entry

Before joining the ABC, I worked in the computer industry, for much of my life involved in writing data entry systems. With the ABC, I have also had considerable involvement with the problem of working out the best way to load and verify data into computer systems, both manually and through automatic processes.

I have brought this experience with me to numerous discussions with Electoral authorities on their methods for data entry. It is always a concern to me to ensure that errors are detected at data entry time, rather than incorrect data be transmitted to the media.

One of the prime errors is the transposition of two-party preferred results, where results for Liberal and Labor candidates are reversed. One of the easiest ways to prevent an error of this type is to ensure that any two-party preferred entry must have a higher value than the primary count for the candidate. From my observation of Victorian elections, this is not adequately checked for on election night. For instance, at the Victorian election, a keying error briefly gave the seat of Caulfield to a Family First candidate. This should have been prevented at data entry.
I should point out that the above error would only affect reporting on the night. Scrutineering would always detect the error. In addition, the final result is determined not by election night preference counts in booths, but by electorate-wide primary counts and preference distributions.

Another error that occurred in testing for the Victorian election was data transmitted to the media where the total votes counted was higher than the enrolment for a district. Such an error occurs because results are entered by polling place. However, such an error should be prevented. The ABC's computer system rejected such transactions as errors, which suggests the VEC data entry system should have rejected the result in the first place.

While I am not aware of the full details of the data entry errors associated with the Legislative Council, the fact such keying and total checking errors could occur with the Assembly count suggests that similar errors could have occurred in the Council.

A key point to make about any errors that occurred is that they were recoverable. A re-count found the errors and corrected them. However, for public confidence in the electoral system, it would have been best if major tallying errors had been found at the time of data entry, not on re-check.

The results in several Legislative Council provinces were so close that it was always possible a re-count could change the result. That can happen in close counts, especially as the initial level of scrutineering in the Council would have been low. However, confusion was increased by concerns whether the first count was correct, and effort should be put into systems and procedures that catch errors earlier.

**Publication of Detailed Results on the VEC Website**

One of the more trenchant critics of the VEC's performance at the 2006 election was Anthony van der Craats through his website MelbourneCityBlog. Much of his criticism was that vast reams of audit trails for the Council were not published on the VEC website. As I understand he was not in the country at the time of the election, I consider this criticism was very much centred on his own difficulty in accessing the data.

In conducting the count, it is the prime responsibility of the VEC to make count audit material available to scrutineers involved in the count. I'm not sure the VEC should have to re-design its entire website methodology to make the material available to anyone who is interested.

Material was available on the web more readily than at any Australian election on which I have worked. The 2006 election was the first at which anyone interested could access the results through the Media feed. Numerous websites made use of the XML data files to publish results. In terms of public accessibility, the Victorian election provided better access than any previous state or Federal election, and the VEC should be congratulated for the advances it made.

However, updating of results did become more spasmodic in the post-election period. At the March 2007 NSW election, the election results feed had been set up in a manner that allowed regular post-election updates. It is intended by the AEC that its post-election feed will work in the same manner at this year's Federal election.

I will acknowledge in relation to post-election counting that updating is not continuous. Counting of declaration votes tends to be undertaken in batches, which means results are not constantly updated. Still, some attention should be given to improving post-election processing so that result updates are more regular, and in the case of the Legislative Council, more meaningful.
Publication of Preference Counts

There was considerable interest in the distribution of preferences for the Legislative Council. Like many others, I had preference calculation software that could be used to predict final outcomes. Based on the published Council figures, it was possible to estimate final results.

However, all estimates were based on assuming that below the line votes had the same preferences as above the line ticket votes, an assumption which was known not to be correct. With several seats decided by preferences of below the line votes, the final result was always going to be close when the final distribution of preferences was undertaken.

I would like to point the Committee to the approach taken by the ACT Electoral Commission. ACT elections are conducted under the Hare-Clark electoral system, with no ticket voting. Many pre-poll votes are cast using an electronic voting system, and all other votes are data entered to undertake the complex distribution of preferences.

However, unique in Australia, the ACT Electoral Commission chooses to publish daily updates to the distribution of preferences. Based on the votes counted to date, the Commission uses its software to publish progressive distributions of preferences.

One problem with this is that in very close counts, the names of people elected from day to day can vary. However, it permits understanding of how the count is going after preferences, not just on the primary votes.

As far as I understand, there is nothing to prevent similar distributions to be conducted in Victoria. At the end of each days data entry, all votes currently in the data entry system could be transferred to the software used to undertake the distribution of preferences. In the case of close counts at the 2006 Victorian election, these provisional counts could have helped remove some of the ambiguity in the result.

My view is that it is better for the VEC to publish these provisional counts than for the Commission to release the data files of ballot papers. If scrutineers are only permitted to observe the count, and even touching the ballot papers is frowned upon, I cannot see how data files of ballot papers can be released before the count is complete.

Vision Centre Booths

In the week before the election, there was considerable confusion over what was being done with the Vision Centre booths. Every district in the state had six new booths created, one for each Vision Centre. In the end, these were not used as counting centres on the night. However, they remained as counting centres in the post election period. As the VEC reports of Legislative Council Regions included a tally of booths counted, the Vision Centres amounted to 60-70 booths in each region.

It was well over a week after the election before these booths were entered. While the count progressed each day, it still appeared that 60-70 booths in each region remained uncounted, raising confusion about the progress of the count.

The Vision Centre booths caused considerable confusion as to how they could be dealt with on election night for organisations like the ABC that uses booth results to predict the outcome. Given they involved creating more than 400 notional polling places, but the number of votes involved was always going to be tiny, my view is that an attempt to include them in the election night count is essentially a waste of time and effort. It would be of more use if they were entered into the system after polling day, along with the various categories of declaration votes.
Speed of Reporting Results

While very difficult to quantify, it appeared to me on election night that the progress of the count was slow. In seats like Melbourne, results appeared to trickle in to the VEC system.

It may be that too much effort was put into providing full detail for the Legislative Council count. All other states and the Commonwealth simply tally votes by group on election night, with the breakdown of votes into above the line group votes, and below the line candidate votes, not taking place until after election night.

It may be that changing the way Legislative Council votes are counted and reported on election night should be changed for two reasons. One is to improve the scrutiny of the Council count. The second would be to speed up the transmission of lower house results.

If I appear as a witness before the committee, I am happy to provide more detail on how I understand upper house counts are conducted in other jurisdictions.