

# TRANSCRIPT

## ELECTORAL MATTERS COMMITTEE

### Inquiry into electronic voting

Melbourne — 24 October 2016

#### Members

Ms Louise Asher — Chair

Mr Russell Northe

Ms Ros Spence — Deputy Chair

Ms Fiona Patten

Ms Lizzie Blandthorn

Mr Adem Somyurek

Mr Martin Dixon

#### Staff

Executive officer: Mr Mark Roberts

#### Witness

Mr Anthony van der Craats.

**Necessary corrections to be notified to  
executive officer of committee**

**The CHAIR** — I call the room to order. You have appeared before this committee before, so I will not go through the introductions, as I think you are pretty familiar with the membership of the committee. I advise you, as I am duty bound to do, that this hearing is protected by privilege. Can I check that you have read the guide to giving evidence at a public hearing pamphlet?

**Mr van der CRAATS** — I have.

**The CHAIR** — And you know that, should you wish to repeat, particularly given the contents of your submission, some of that outside, I would caution you not to. As long as you understand what privilege means and what it does not, that is terrific. Could I initially ask you to state your full name and your business address if you have got one. I do not need your private address; the committee does not need that. If you could advise us if you are attending in a private capacity or not and perhaps say a couple of things in relation to your submission, then we can ask you questions. But again, Mr van der Craats, can I emphasise to you that these public hearings are about electronic voting. You have covered a range of other matters in your submission, which is fine and I was happy to read it, but the actual term of reference from the government is on electronic voting. I will hand over to you.

**Mr van der CRAATS** — Anthony van der Craats is my name. I am a systems analyst and also practise as a migration agent. I have got an office in Melbourne. My verbal submission here is going to concentrate on the matters relating to the electoral count. The other issues that I put in there were just for the record, and I stand by them.

I have a number of concerns over the electronic counting. As a systems analyst I have spent a considerable amount of time studying the electronic counting system. There are numerous flaws that have been left over from the days when we did a manual count, and I am hoping to address some of those. My submission falls broadly into two or three categories. The first category is the casting of the vote — filling out the ballot paper.

Probably the one that I am more concerned about and I would like to see addressed is the way in which we tabulate and count the vote. I think there are obviously issues related to moving towards an electronic counting model, particularly if the state goes it alone. The cost factors alone I think are somewhat prohibitive. If the state and the federal government start developing their own systems, of course we are going to be duplicating those systems time and time again. I think that is something that should be taken into serious consideration. Public money certainly should not be wasted where it can be saved.

I share some of the concerns expressed in Vanessa Teague's submission. However, I would add to her submission the need to look closely at the scrutiny of an electronic count. Scrutiny of the count I think is important, and it can only be done if the information that is tabulated and used to determine the results of an election are readily available and open and transparent. Currently that is not necessarily the case, although the VEC and the AEC have made some large steps towards making it more transparent in the sense that they now provide copies of the preference data file to scrutineers, which allows them to plough through that data and to analyse where there may be certain flaws in the counting system that need to be looked at a second time.

That does not appear in local government. Local government still maintains a secrecy behind the electronic counting system, and I think it is an issue this committee should put its mind to at some stage. It falls within the terms of reference of the committee. Unfortunately the committee has not really looked at local government per se, at least not in the time, that I am aware.

I have made a number of recommendations in my submission particularly related to the method of counting the proportional representation in the upper house. The current system, as I mentioned before, is outdated. It was designed to facilitate a manual count when there were predominantly two major parties — Labor and Liberal — and 95 per cent of the time the vote outcome probably reflected the results that were determined. However, those processes that were put in place to facilitate a manual count distort the proportionality of the election and they do change the results of the election when you get down to the mathematical accuracy of reflecting or representing the vote.

I have taken a preliminary look at previous Senate elections, and I have seen changes in the Senate count, which in my view should not have happened if it was reflecting the Senate vote. For example, One Nation in electing two senators in my view is a result of the flaw in the system and the way in which the votes are distributed and

counted. Had it been a pure proportional system, One Nation certainly would not have got two senators up. I have not done a detailed analysis as yet of the other states, but I hope to find time to eventually do that.

However, the principles are pretty clear. If we are going to reflect the views of the voters, then we must mathematically make sure it is correct, and the best way in my view to do that is to first have a weighted transfer system. At the moment the transfer system is based on the number of ballot papers. Some ballot papers will have a full value and a large number of ballot papers will have a fraction of the value. By the time it gets transferred out it sort of flattens out, and those with minor values end up increasing their vote in value disproportionately, and that distorts the outcome of the vote. A weighted surplus transfer system would certainly address the majority of the issues that I have raised.

**The CHAIR** — You might want to move more onto just the electronic voting.

**Mr van der CRAATS** — I think that is about electronic voting, because it relates to the way in which we count the vote, and I think that is important. I really urge the committee to seriously look at that aspect of it, along with the need to have a reiterative count, where every time a candidate is excluded from the election as a result of having insufficient votes, the count should start afresh.

The current system and the way we count electronically strongly disadvantages major parties — strongly disadvantages — because they are all elected way up the top when they probably should be spread out. If you vote above the line, and I support above-the-line voting, then your vote should be distributed equally across all candidates within that group. If you take the time to analyse that proposal, you will see that a party that may have 2.4 quotas would be distributed out as having three candidates each sitting on 0.8 of a quota, and that keeps them fairly and accurately alive in the count long enough to collect more preferences as the count progresses. The current system favours minor parties unfairly and disproportionately, and I think that needs to be addressed, and a reiterative counting system is the best way to do that.

So those mechanisms that I have highlighted in how to begin to address the flaws in the way in which we count the system become relevant to the electronic count, because in the past it would have been prohibitive time wise and resource wise to go to the effort of properly proportioning out the vote as it was recorded. With an electronic counting system, which we have now, we can certainly move into reforming the way the vote is counted and make it more accurate and more reflective. What I have outlined in my submission I believe endeavours to do that, and I urge the committee strongly to look at those proposals that I have put forward in their fullest.

Getting back to the casting of the ballot papers, I am of the view in looking at it that there are potentially many flaws in going holus-bolus to an electronic counting system at this stage, partly because of some of the issues raised in Vanessa Teague's submission and also because there is this uncertainty of errors that could occur in the electronic data space. I think we saw that was fairly evident when we saw the stuff-ups that took place in the collection of the data of the census files. Having said that, I think we still need to head in that direction at some stage. Certainly electronic voting would be ideal and useful for absentee voting, postal votes and the like. I would hesitate in wanting to jump in holus-bolus at this particular point, given I think there is a lot more water to be passed through and a lot more analysis to take place, because I think it is just too risky to go holus-bolus. We could do it tomorrow — I am sure we could — but people might not trust the system.

If we do head down that path, and I believe we should progressively head down that path with postal votes and absentee votes and the like, then I think it is important that we maintain a record of the data as the data is entered into the system. Some people have suggested this should be done through a written manual printout of some kind. I do not think that is necessary. I think a couple of optical drives that are 'write once only' could record that information. If it was going to happen on one particular day or spread out over a couple of days, the various parties should have access to that information on the proviso that that information is not released publicly.

**The CHAIR** — Can you explain to me, on page 13, what this write-once, read-only optical drive is?

**Mr van der CRAATS** — It means you cannot overwrite the data. Once you write the data to the hard disk you cannot rewrite it; it is fixed, permanent. It is like having a DVD that is not rewritable — write once. That is important because otherwise somebody could get in there and manipulate the data and change it.

Obviously there are situations where a vote will change because it may have been put on the wrong pile and attributed to the wrong thing or interpreted wrongly. That can be reflected in the data log itself. But as long as you have a log and there is transparency behind that log, I think that would suffice. It is a matter of making sure that that information is recorded on these optical devices at the earliest stages without any interference or anyone tapping in or manipulating the data prior to its being recorded. As I said, each political party or interest then could have their own copy of that information made available upon request.

**The CHAIR** — Will that change the role of scrutineers?

**Mr van der CRAATS** — The scrutineers role has already changed. I am talking again upper house. Single members are a different question. I do not think you need an electronic count on a single member. Unless a scrutineer has access to the preference data file there is no way they (scrutineers) can ascertain whether the data file reflects the voter's marked ballots. A scrutineer cannot watch every data entry person. They can randomly sample every now and then, but that is about it. If you have access to this data file, which I have been calling for — it is available in the City of Melbourne but not necessarily in other municipalities or necessarily to the state government, although the VEC have made this information available, and I thank them greatly for taking steps in that direction — it allows a scrutineer to do a preliminary analysis of that data if they are skilled enough, and we are all becoming more and more skilled. It is not very difficult to understand and count it all. But clearly you can find focus points that are of interest, and you can go back and look at those ballot papers again if you have got access to that data. If you do not have access to the data in the raw format, then it is impossible for a scrutineer to electronically scrutinise the ballot.

**Mr DIXON** — You made a point that you do not think there is a need for electronic voting in the lower house. Can you just expand on that?

**Mr van der CRAATS** — I think the time taken to data enter a single-member electorate is more than it would take to manually count it. If we are going to record the ballot electronically, obviously it will happen automatically, and you have got to have other mechanisms to monitor that.

I am a strong believer at this stage of the process, certainly probably for the next two or three elections even, that attendance voting should continue. It has a community role that goes beyond the election cycle itself. It allows people an opportunity to congregate, and schools can all of a sudden become prominent within their communities. So there is a social factor that adds to it all as well. Candidates get to actually meet the voters.

A perfect example of a single-member electorate is the Lord Mayor's election, which has just finished, where they are data entering the Lord Mayor votes. They have not undertaken a preliminary sorting of the ballot papers into primary votes, which is a shame because that helps with better scrutiny and that is what takes place at a state and federal election. It would be quicker in my view just to manually count it than to data enter the recorded preferences. Data entry creates a mystique that people cannot follow. It is a waste of time if it is recorded manually.

**Ms PATTEN** — When you were talking about the preference data files you mentioned that there are flaws that are found in it. Can you elaborate on what sorts of flaws you would find in that sort of data file?

**Mr van der CRAATS** — I have found some flaws in the dataset because there are some characters that are not there. When you look at the data flow and the way the vote has been recorded it sort of throws out from the normal patterns that you would see and a '7' might all of a sudden become a '1'. It has got to do with the translation between someone reading the ballot paper quickly, punching in the information, and then accepting the vote. So there are some funny characters in the dataset. I have gone in and tried to look for them, and I have tried to analyse whether they have affected the results of the election, and I have not found them affecting the results, so they are not significant enough to warrant me going back and looking at them physically. But there are issues in some of the data files.

**Ms PATTEN** — So it is an input error.

**Mr van der CRAATS** — More predominantly, and of course if you move towards an electronic counting system where the voter enters it in, then theoretically any mistakes made are the voter's mistakes in their intention. Yes, most mistakes I think at this stage happen as a result of data entry errors. There are mechanisms that have been introduced to correct and to try and catch those errors where possible, and I think they probably

catch a large majority of them. The AEC once did a triple data entry process. If the data is entered independently, you can do a crossmatch and you generally find most of those errors.

**Ms PATTEN** — Just following on from that, because you also raise in your submission that you are greatly concerned about the lack of transparency with the VEC and the way that they count. In fact you go so far as to say it has undermined public confidence in elections in Victoria. I have not seen that. I have not seen a public mistrust of the VEC or the election process. On that, I would be interested in what you think they should be doing better now. You date back to 2006 and 2008, but in 2016.

**Mr van der CRAATS** — I think it is because of their (the VEC's) reluctance, and it has taken a while for the VEC to come on board to provide access to these data files. There was no reason not to provide it. I had to take the City of Stonnington to VCAT, and there was a big dispute and debate as to the interpretation that was applied, to try to get access to this data file, which I think is a public document. It was — —

**The CHAIR** — When did the VEC agree to give access to it?

**Mr van der CRAATS** — At the City of Melbourne they give access to it. I have taken them to VCAT a number of times, and there was provision put into the City of Melbourne Act that they are required to do it. The VEC has made an administrative policy to provide access to that in respect to the upper house in Victoria, and likewise the AEC are providing this information, not necessarily in a timely fashion but they certainly are providing that.

**The CHAIR** — When did they make the decision to do that?

**Mr van der CRAATS** — They have done it for the last two elections if I recall correctly, certainly at the last election that I scrutineered. The AEC have come on board and they have realised that it is in their interests for scrutineers to look at that data, because that is the information that determines the outcome of the election. If there were anything untoward, and I do not think there is and I do not claim there is, anyone who has access to that record of the information, that centralised tabulation, can change the results of the election quite quickly without even knowing the outcome.

And we have seen that by mistakes that were made in publishing the results at some stage. They left out a bundle or they double counted a couple of times. That shows up if you have got the data file. You can look for double entry cases. As a scrutineer I could run queries against the dataset that probably would not necessarily fall under the remit of the VEC, but I am looking for a particular outcome and I am looking for a particular situation. It is fair that everyone has access to it. There is no loss of privacy. It is purely looking at the votes in the same way as you would look at them manually.

**Ms PATTEN** — Great. You also mentioned the voting kiosks and your concerns with the VEC. We had a demonstration of it just a couple of weeks ago. I would say it is probably substantially different from the 2006 model.

**Mr van der CRAATS** — I think my concern back in 2006 — and it is an issue that concerned me and caused a lot of conflict between me and the then Electoral Commissioner, Mr Steve Tully, which set off a whole chain of events, and I will not go into that — was that the VEC indicated that they had accessed the results in the early days of testing the kiosks data file. It concerned me that they had access to that information without scrutineers being present, and it seems to me to be wrong that that information should be made available prior to the close of the poll. I raised a concern about that. I understand at the time it was a very small sample, and I understand they were in testing mode. I was just concerned that, if that was not raised then, it would get bigger as they uplifted the whole process.

**Ms PATTEN** — I think they have updated those procedures.

**Mr van der CRAATS** — I hope they have, and I think perhaps it needs to be done legislatively. Obviously there is an opportunity and a need for scrutineers to have access to the data, particularly if voting is going to occur over a longer period of time. But if they do have access, they will have to have it under certain terms and conditions that limit or sequester that information so that information could not get out until the close of the poll.

**The CHAIR** — Just before we finish up do you want to speak to your recommendation that the Ombudsman should have some oversight of the VEC?

**Mr van der CRAATS** — Yes. This goes back to my earlier complaint against the commissioner. I tried to have my issues heard in a proper forum, and I think I was denied that opportunity and justice in the process. In looking at the mechanisms that are in place I understood that the commissioner was exempt from the Ombudsman Act. I came to the view, being an aggrieved party, that I would have liked the Ombudsman to have had some oversight of the administrative role of the VEC, not necessarily the policy directions that they were implementing. I felt that I was denied natural justice in the process. Now, whether or not this new corruption committee that has now been established does cover that, I am not sure; I have not really had a chance to look at it. I have had to put this issue behind me. It cost me a lot in terms of professional standing and what have you, and I still feel that I never had my hearing properly heard.

**The CHAIR** — Thank you very, very much for your ongoing willingness — —

**Mr van der CRAATS** — Can I really stress that you look at the method of counting the vote, particularly if Victoria moves down the path of the Senate election, where they change the above-the-line voting rules and make it a bit more optional and preferential. I think my system that I am recommending addresses that issue to a large extent. If you move towards the model that is now in the Senate, the flaws that I have identified become exacerbated and you end up having a wasted quota sitting around that can outpoll candidates, whereas if you have a reiterative count and a system that is weighted properly, it adjusts it all as the count progresses and people fall off the count, so to speak. So I highly urge you to look at the counting recommendations.

**The CHAIR** — Thank you very, very much again for your willingness to participate in the committee's deliberations. It is greatly appreciated.

**Mr van der CRAATS** — My favourite committee.

**The CHAIR** — We are not allowed to have a favourite witness.

**Mr van der CRAATS** — I do not want to be a favourite witness; I just want to be heard.

**The CHAIR** — We have a frequent witness. You will, of course, receive a Hansard transcript, and you understand that if there is something that you think is not right, you cannot change your evidence, but if you think something is not accurate, you are free to make those amendments. You will receive a copy of that in about a fortnight.

**Mr van der CRAATS** — Thank you. When does the committee hope to report on its deliberations?

**The CHAIR** — The government's date given to us is April 2017.

**Mr van der CRAATS** — Well in time for the next state election.

**The CHAIR** — Well, that is up to the government. The committee can only recommend.

**Mr van der CRAATS** — We have a good government.

**The CHAIR** — I do not know whether that is acceptable evidence. Thank you very much.

**Witness withdrew.**