TRANSCRIPT

ELECTORAL MATTERS COMMITTEE

Inquiry into electronic voting

Melbourne — 22 August 2016

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Mr Sam Campbell, director, Scytl Australia Pty Ltd

Necessary corrections to be notified to executive officer of committee

The CHAIR — Mr Campbell, thank you very much first of all for putting a submission to the committee and for coming along to expand on that submission. It is greatly appreciated. I am obligated to ask you if you have received the guide to giving evidence at a public hearing pamphlet.

Mr CAMPBELL — Yes, I have.

The CHAIR — You have, and you understand adequately the distinction between parliamentary privilege in this room and parliamentary privilege outside of this room?

Mr CAMPBELL — Yes.

The CHAIR — Could you please state your full name and your business address and tell us whether you are giving evidence in a private capacity or as a representative of an organisation. Then perhaps you might like to make some comments in relation to the hearing, and bear in mind that of course Hansard is recording all of this.

Mr CAMPBELL — Thank you, Chair. I am Sam Campbell. My business address is Suite 104, 4 Columbia Court, Baulkham Hills, New South Wales. I would like to make an introductory statement. I do represent Scytl Australia. They are a subsidiary of Scytl electronic voting, a global company based in Barcelona, Spain, and I am the local director. If I can make an introductory statement?

The CHAIR — Please.

Mr CAMPBELL — Scytl has been involved extensively in electoral projects involving secure electronic and internet voting as well as other electoral services since around 2001. Scytl has worked within the Victorian Electoral Commission in 2006 and 2010 on previous electronic voting systems and is currently engaged with the New South Wales Electoral Commission for the delivery of the iVote core voting system. I have been involved in each of these projects. I appreciate the opportunity to highlight some matters in our recent submission and others.

Scytl has successfully implemented election-related projects in many countries. These projects include such programs as work with the French ministry of foreign affairs, with five elections since 2009; and ongoing implementation with the Swiss canton of Neuchatel, covering elections, referendums and citizen consultation since 2004, with those works being extended in both reach and scope. In New South Wales the iVote system collected over 280 000 votes, with a very high level of satisfaction reported. Scytl has 30 scientific papers published in international journals, and our website points to these and other discussion papers on secure electronic voting protocols and related matters.

I do not plan to go into the election security protocols in detail. Suffice to say that they have been reviewed independently by experts, are subject to peer review as well as review by researchers and government bodies within Australia, France, Switzerland, Norway and the US, to name a few, and continue to stand as leading research in this field.

The power of democracy is linked strongly to the compulsory vote in Australia. Yet it is hard for some members of the community, as described in our submission: the visually impaired, those who are travelling or far from a polling booth, those with other disabilities that prevent access to a polling booth and those who do not speak English — in short, those who would otherwise not have been able to have the private, secure vote experience otherwise made available to the regular voter. These are the people being let down if their needs are not addressed.

Voting has a number of risks associated with it: the risk that a ballot is lost, the risk that a voter is coerced, the risk that a 1 is interpreted as a 7 or vice versa, the risk that a ballot does not make it into the ballot box, and more. Each of these risks describes the reality of the existing paper system. The risks are real and failures happen, as we have seen locally over the years. These failures are generally low in number and a reality of most manual labour-based systems.

It is Scytl's view that the risks associated with internet voting and electronic voting, when they are correctly and appropriately implemented, are lower than those associated with paper-based voting and, in the case of internet voting, are lower than postal votes. Increasing costs of postage will take an increasing chunk of the budget. We can see that the VEC requested after the 2014 election to allow extra time for postal ballots to be returned due to delays in the mail. That is not to say a switch from a paper system to an electronic voting system overnight is a good approach. Voters and electoral commissions alike must take the time to learn these new processes, adapt to them and understand them. In reviewing the submissions I saw some from those who say that internet voting should not happen because it is not perfect. They want us to wait until it is perfect.

The AEC had a re-run of the WA half-Senate election from 2013 due to a widely publicised loss of ballot papers, an unfortunate event which simply demonstrated that the running of a paper election was a challenging endeavour. A number of suggestions for improvement came from the AEC itself, from the ANAO and from other bodies, suggesting improvements to move towards a stronger system.

All this is to say that the current voting process was not delayed until it was perfect. The Australian ballot started in Victoria in 1856 and has continued to be improved since that time. In recent years development of the voting system seems to have slowed. This is not because the system is perfect but because to go further requires step changes in the process. The introduction of electronic voting is one of them. The point has been made by others that the government must have the skills in order to use internet voting. Skills are developed through trial and activity. Without using the systems and learning the systems those skills will not be developed. The VEC started the process of learning about electronic voting in 2006, and that learning should not be stopped; it should be built upon.

The only recommendation Scytl will make to this committee is that the state continues on its path towards using technology to further the voting franchise and target the difficult and expensive votes. For this, electronic voting should be used. If we stop and wait until it is perfect, we will never start — until the day the public demands get so great a snap decision is made to introduce it in one fell swoop, with the risk that the electoral commission will be caught underskilled and underprepared. It is crazy to think that in 10 years, which is only two or three electoral cycles, everyone will be relying on paper and the postal system. At the end of this session, I know that as usual I will be asked by someone within the next week, 'When will we have electronic voting? It's about time'.

The CHAIR — Thank you very much. My question relates to commercial organisations and the trust and scrutiny of the existing system. I would just like you to try and walk me through my concern, which is that at the moment I have reasonable confidence that the election manager handling my nomination will do so impartially. Although my position on the ballot paper is a pressing of the button, at least I know if I hand in my nomination in, or my party does, that my nomination will end up on the ballot paper. I have a good trust of the election manager's capacity to count the vote because my party is sitting in there with scrutineers, telephoning what my vote is to me every night. I have a good trust even at pre-poll, which I note one of the submissions addressed, because my party is notified when pre-polling is being counted and can go down there and see the piles of ballot papers. If, as has occurred on multiple occasions, they are put in the wrong pile, my scrutineers can say, 'No, they're Asher's votes, and they don't belong to the other party; they belong in that pile'.

So I have a reasonable trust through the operations of the VEC and the operations in particular of the scrutineering system that exists for members of major parties at least. I am not so sure if I will have the same level of trust in a commercial organisation. Now, I love commercial organisations, and I think profit is a wonderful thing. You create employment and I am in favour of it. But impartiality to conduct an election, for me, is a threshold issue. Could you please walk me through what protections a political candidate such as myself would have if private commercial organisations — and they are already part of the process — have an even larger role to play in voting?

Mr CAMPBELL — Being a representative of a commercial organisation makes that a challenging question to answer because what I say will be heavily reviewed by others in trying to work out how impartial the response it is. In scrutineering there are a few aspects that are taken into account. Looking at

the paper process you will observe that the ballot box is empty, and you will observe that people go into a polling booth and do not have someone standing next to them when they cast a vote. The ballot papers will be poured upon a table in front of an audience of people who will sift through them. That process has been tested over time, and people have a level of comfort with that process.

We see issues arise, but there is the understanding that they are detected when they happen and steps can be taken. If you were to put in full-scale internet voting for the next election, you would have every question about how you would protect against that information. So we believe we are reliant on others to provide a solution to this, and by saying that we mean that the electoral commissions are involved, the researchers are involved and those with an understanding of the technologies that are used in these processes are involved, which is why we have not said to switch across to electronic voting overnight. We have said that this will take time for the skills to be developed by all parties. If they are not developed by all parties, they will not be trusted and whoever is sitting in my seat will have a very difficult time. So time must be spent to collect the knowledge and absorb the knowledge and make it part of the government infrastructure, the research environment and those sorts of matters around it.

If we look at the experience with New South Wales and my experiences with the Victorian Electoral Commission, we have probably been held under a microscope. We are looked at for what we do, our code is reviewed by others, the systems are watched by others and to a certain extent we provide an application that collects people's votes. That application is reviewed by a number of people, and their findings go into inquiries such as this. So if we were to do something interesting with our software, there is every chance that it would be picked up on the way, whether it is through the review or whether it is through looking at the outside of the system. Did the votes come up differently in the internet vote than they did in the paper vote? Those sorts of analyses can be done to look for change. Such change would be observable. People would then go to look at the code, and then hard questions would be asked. So it is a question of education. It is a question of the verification processes such as you would have seen in New South Wales run by different parties, different organisations and some oversight that bring a level of comfort to people that the system is doing what it is designed to do.

Mr SOMYUREK — If I could just revisit the West Australian vote, let us be clear what happened. People did not follow the Australian Electoral Commission rules, and that is that you cannot transport ballot papers in an open truck, and so they literally fell off the back of the truck.

The CHAIR — I am restraining myself from interjecting at this point.

Mr SOMYUREK — So I think you will find that we have actually got a pretty good record in terms of the integrity of the count in Australia. That was clearly an anomaly. But the point is human error can happen, especially when you do not follow the process. In this instance there were just 1300 votes. We had a whole Senate election, so that is how seriously we take this. Any error in an electronic system might compromise the whole vote everywhere, and that is what we are really scared of. You might have a government that is formed that might not have the legitimacy because of some technical issues.

The CHAIR — Did you want Mr Campbell to comment on that?

Mr SOMYUREK — Yes. It was a comment, but also it does require a bit of a comment.

The CHAIR — That is all right. Try to make it into a question. A comment has been requested.

Mr CAMPBELL — I certainly was not making a negative comment about the AEC, and I did not want it to be interpreted that way.

Mr SOMYUREK — I am not here to defend the AEC either, by the way.

Mr CAMPBELL — It is an example which everyone in the room is aware of. That is all it is. It is no more than that. That was detected. Someone determined that the count was fairly close. I believe they recounted, and that drew a question and the question was then investigated by large numbers of people. An investigation was carried on, and an investigation did make some recommendations and ultimately another

election was called. Through our systems we have — for instance, in New South Wales — this verification system so if people are dissatisfied with the result of that verification process, questions can be asked. We are looking for evidence that something unusual has happened. That is why logs are maintained and that is why I will not say it is a fully open process, but there are protocols up on the web about how that system is held together and how the protocol works so that people can ask questions and seek a level of comfort.

Ms PATTEN — Fascinating. I suppose following on from the Chair's questions about commercial companies being involved, there was a comment made by one of the previous witnesses around the AEC's reluctance to show open-source code for the programs that they were using. So I was wondering: from your company's perspective, is open source viable for you in this area, or do you need to have that proprietary protection as a commercial company?

Mr CAMPBELL — Our organisation has released some code into the public for review by others, an example being the project completed in Norway. That resulted in, from my understanding, not a lot of people reviewing that code. There has been an error found in that code, which was dealt with at the time, but putting it up in the public domain did not find that. That was not found. The question about releasing something as open-source code is determining the benefit of it to whether it be the government, the electoral commission or the private enterprise involved. Generally the purpose of open source is either so other people can use it or in the view that many eyes will find a bug.

If we were to put an online voting system up on the internet, I do not know that as many people would look at that package as they might look at, say, a standard piece of web server software. People with an interest in finding a bug for their own purposes might read the code. People who want to find something about the election and bring it up at an unpleasant time, not necessarily for the vendor but for the government, might use that information as well. Whereas someone who did actually happen to go through the code and find something and flag that appropriately, that would be useful, but we approach that in other ways. If we look at New South Wales — and this happened in Victoria as well — our code was made available to others for review. The government engaged people to do that activity. Whilst that is not open source, you might say that when someone is paid to review something they will use a level of care and thoroughness in looking for an answer.

Ms PATTEN — Following on from what Dr Wen was saying about — what was it called? — failure-critical engineering, I guess what you are suggesting is to have it at that level means that open source is not a particularly good tool when you are trying to make it robust and failure proof.

Mr CAMPBELL — Correct. I cannot talk too much about failure-critical engineering. It is not a topic I am overly familiar with. But we are comfortable with the fact that when we present our software to run elections a number of parties are involved. It is not a case of one or two guys from an organisation such as ours and a project manager from the government. If we look at our projects, they have been fairly well staffed from our perspective and from the government's perspective, and the government side — I am using that term as in the other side of a contract — may well be a number of other providers and it might be some oversight and some other aspects that are brought together to create a project.

One would expect that when a number of organisations are involved in producing an outcome it is in everyone's interest to have a good outcome. There have been challenges in some of the topics brought up by Mr Wen, but they often come down to project time lines, as has been suggested. It has been observed that a number of projects done in the electoral space are done in a very short period of time. Maybe a bit more time over electoral cycles can create a stronger system.

Mr DIXON — I have just a quick question. In your overseas experience — for example, in Switzerland and that canton there — what was the scope of what you did there? How many voters were involved in that?

Mr CAMPBELL — It is a while since I have looked at Switzerland. Effectively Neuchâtel started with Scytl around 2005, which was around the same time the first project was done with the VEC in around 2006. That was to create an internet-based voting system to collect votes for, I think, citizens travelling

abroad. Now, within Switzerland they have done a number of projects between what they call cantons. We can talk about where that translates to our councils or states. They did that one with Scytl, and over time that is now evolving into a system which is being with the government and put across other cantons to further the use of that system. They vote very regularly in Switzerland — I believe it is four times a year or so; I might have to correct that later — but there are a number of events, so they are looking for a system to collect those votes for those events.

Mr DIXON — So they are minor votes? Are they citizen-initiated referenda?

Mr CAMPBELL — They are referenda, but they are binding government events.

Mr DIXON — You are saying for an overseas or an absent clientele?

Mr CAMPBELL — Someone who is away, and there are other categories in there. I can take that on notice if you need it.

Mr DIXON — No. That gives me an idea.

Ms PATTEN — So 90 per cent use postal voting.

The CHAIR — Thank you very much for your willingness to come along and to answer questions and expand on your original submission. Again, as you have heard me say, you will get your transcript from Hansard in around about a fortnight. Feel free to amend any errors, but obviously do not substantially change the content.

Mr CAMPBELL — Thank you very much, committee, for your time.

The CHAIR — Thank you very much. Thank you for your help.

Witness withdrew.