

Submission to the Commission on Electronic Voting in relation to its work.

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1.Membership of the Commission

Noteworthy in their absence from the membership of the commission are the Comptroller and Auditor General and the Ombudsman. Given the task of the commission, and the potential for the absence of public confidence in the proposed system, I submit that the membership of the commission should include these two individuals. In addition, the Commission membership appears not to consist of any experts on Electronic Voting. Whilst it is within the terms of reference of the commission to “retain the service of such consultants or other persons that it considers are desirable”, I submit that at least one member of the commission should actually have expertise in the area so as to be able to judge any advice/information received from such consultants.

2.Secretcy and Accuracy of the Nedap/Powervote System

Deadline for Submissions

The commission has invited the public to “make submissions to it in relation to its work, specifically, on the secrecy and accuracy of the chosen Nedap/Powervote electronic voting system and the testing thereof.” However, details of the system are not generally available to the public. Whilst some information has been obtained by various individuals and political parties using the Freedom of information Act, this information is not immediately available to the public at large. The Government has not released, by any other means, any information whatsoever pertaining to the system which would allow a member of the public to make a judgement “*specifically on the secrecy and accuracy*” of the chosen system and the testing thereof. The public notices issued by the commission are dated 11th March 2004, with a deadline of 15 days within which the public could make submissions. However, the period within which a Freedom of Information Act request must be served by the Government is four weeks from the date of receipt of the request. Therefore, if a member of the

public had made a request to the relevant Government Department for information regarding the system, under the terms of the Freedom of Information Act, I submit that it is very possible that that information would not have been released to the individual concerned by the deadline for submissions to the commission. I submit that the time from publication of the invitation of submissions to the deadline for making such submissions should have been sufficiently longer than four weeks, so that a member of the public would have been able to obtain information in the only way possible with this particular issue – namely via the Freedom of Information Act – analyse that information, and make an informed submission to the commission. Given that this has been the only means at the disposal of the public for obtaining information regarding the “*secrecy and accuracy*” of the system, I submit that the deadlines imposed on or by the commission are a violation of the principle of natural justice in that they do not allow the public to assess the system, and have its voice heard by way of *informed* submission.

Information not available to the Public or to the Commission

On Wednesday 24th March 2004 at 3:30pm, I telephoned Mr. Alan Murphy, Secretary of the Commission, to make a request for a copy of the source code of the system. Mr. Murphy replied to me that “that was a tall order”. He further stated that the commission itself did not have a copy of the source code. Presumably, this is because the source code for the system is proprietary, and developed with a closed source license by a private company? When I enquired as to what information the commission would then be using to make its assessment of the system, he stated that they would be basing their assessment on submissions from the public and “other information sources”. When I enquired as to whether these other information sources would include the source code of the system, he responded by saying, (and I paraphrase), “Well, I have already told you we don't have a copy of it. So, I think you can draw your own conclusions from that”.

I submit that it is impossible for me or any other member of the public to make a submission *specifically* on the “*secrecy and accuracy*” of the system without being able to view and scrutinise the source code; such source code being the central element of the entire system. I submit that the commission not having available to it, a copy of the source code, makes a total farce of the very existence of the commission itself. Since the source code is unavailable for public scrutiny and for peer review by all independent experts who may wish to review it, I also submit that public confidence in the system will be considerably lower than the essentially 100% confidence in our existing paper-based system.

3.General Comments regarding Computer Systems

Notwithstanding the above, I make the following comments regarding computer software and computer systems in general. It is accepted within the IT and Academic Communities, that it is virtually impossible to develop bug-free software. It is for this very reason, and because of the additional possibility of hardware failure, both of which can result in data loss or data errors that virtually all computer-based transactions which ordinary people conduct throughout their daily lives possess paper-based backup systems/audit trails. The Nedap/Powervote system should be no different. Furthermore, since the proposed system will play a central role in our democratic system, I submit that all possible checks, balances, paper-based audits and full and open public transparency and scrutiny should be incorporated into the system. If this costs money. So be it. Who ever said democracy should be cheap?

4.Proposals regarding the Nedap/Powervote System

I submit that the Government should impose the following changes in the contracts to the relevant company or companies regarding the Nedap/Powervote system (regardless of cost) to ensure that, with immediate effect,

1. the source code for the system is released into the public domain with an Open Source license so that it may be continually open to public scrutiny. (Note that, the software for the electronic voting system developed for the Australian Government is based on an Open Source software license).
2. the system is developed and run on an Open Source platform such as the Linux Operating System, FreeBSD Operating System or OpenBSD Operating System. (Note that, the Operating System used for the electronic voting system developed for the Australian Government is based on the Linux Operating System; an Open Source platform).
3. all specifications of the hardware of the voting machines and counting machines is released into the public domain
4. the system complies with the recommendations of the Mercuri Method (see <http://www.redbrick.dcu.ie/~afrodite/E-Voting/Report/node16.html>) . In particular, it should possess a voter-verifiable paper-based audit trail is incorporated into the system. (Note that, in the USA, there are currently two bills – one before the House of Representatives, and one before the Senate – with the aim of “requir[ing] a voter-verified permanent record or hardcopy”. See: <http://thomas.loc.gov/cgi-bin/query/D?c108:4:./temp/~c108fZVkRw::> and <http://thomas.loc.gov/cgi-bin/query/D?c108:6:./temp/~c108fZVkRw::>

Ends.