

Statement on e-voting

The student representatives in the ÖH will be elected from May 26-28 2009. In the week before the actual elections, it will be possible to vote by Internet (e-voting) for the first time in Austria. We, as the representatives of the students of computer sciences have been closely watching this development and have carefully examined it.

Many critics argue that the right to free elections is reduced because it can no longer be guaranteed that voters give their vote without being influenced from outside. This point holds true both for e-voting via Internet and for voting by mail, which was introduced in 2007 without a public debate. This susceptibility alone is a grave problem. However, it is not the only point of concern, as e-voting causes much more serious problems.

The classic election on paper ballots is easy to understand, transparent, verifiable, and difficult to falsify. The system is wonderfully simple: A cross in the voting booth and the ballot in an envelope put into the ballot box. For counting the votes the envelopes are opened and the votes counted. Representatives of all candidate parties control each other during this process. In the case of any uncertainties, the ballots can simply be counted again. Election fraud is made nearly impossible through the mutual control by all parties, at the most only a very few votes can be manipulated.

E-voting stands in contrast to the above procedure. Digital technology as such is very complex, and only a very small percentage of the population have even a minimal understanding of the system. Even the basics of how e-voting functions is not easy to understand. The interpretation of source code is a matter for computer scientists, and the necessary encryption algorithms are a special subject area and are understandable only for experts. Thus e-voting becomes a "black box", the correct processing of an election is no longer a matter for the people but only for a few experts, whom we are supposed to simply believe.

An electronic election is extremely open to attack. Not only the voting process, but also the results are in practice not verifiable. Even if legitimate doubts as to the integrity of the votes arises, manipulation cannot be proven. Part of the principle of e-voting is that the proof of identity and the vote are kept together, encrypted. This is a condition which never occurs in a normal paper ballot vote. Even assuming the safety of the encryption, an attacker who attains access to the system, can at the right moment assign all the votes to the voters.

While potential damage through manipulation is very small in a paper ballot election, it is possible in the worst case to manipulate the entire election in an e-voting election. An attacker who manages to attain access to the system can thus determine the entire results of the election. That makes the infrastructure of e-voting an attractive goal for hackers.

As if the principle technical problems were not enough, the ministry is trying to force e-voting on us by evading/bypassing all basics of law. The way the technical infrastructure functions is kept secret. The source code for the election system is an operational secret of a profit-orientated company. The election commission was allowed to inspect the source code, but only eight hours were allowed for the examination of the 183,000 lines, and important parts were withheld. The remaining code did not correspond to the certified source code. It contained no comments and was changed during the inspection by employees of the company Scytll (whose systems were recently banned in Finland for losing 2% of all votes) and was not even able to function. Which operating system and

whether or not a virus scanner and firewall is installed on the servers is a secret. The decision of an election commission not to go ahead with e-voting because of these grave flaws was canceled by the ministry.

The current process shows that the ministry is not interested in a fair election. Instead its own interests for gaining more votes is in the foreground. Robert Krimmer, founder of e-voting.cc has made a bad impression not only with outrageous incompetence, but also because he is an incumbent official of the ÖVP associated Aktionsgemeinschaft. Together with the intransparent and dubious awarding of the project, the whole matter throws an very mistrustful/distorted light on the ÖVP. Last, but not least, Thomas Grechenig, professor at the Faculty for Computer sciences wants to find an application for his project "Bürgercard" ("citizen card") and as "advisor" tells the ministry and the public all kinds of things, even if he proves the opposite in his lectures.

We urge all members of the faculty to stop all activities endorsing e-voting.

We are therefore forced to very sharply condemn electronic elections in general and especially in the current form. The current process is **not** tolerable. We will make use of every legal possibility to have votes given by e-voting annulled, to expose those responsible for this disaster and to reveal their real motives.

We call on all students to vote in the coming ÖH elections (May 26-28) only on paper ballots and to boycott e-voting!