Chapter 18

PRIVACY ISSUES IN AN ELECTRONIC VOTING MACHINE

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Abstract: The Open Voting Consortium has developed a prototype voting system that includes an open source, PC-based voting machine that prints an accessible, voter-verified paper ballot along with an electronic audit trail. This system was designed for reliability, security, privacy, accessibility and auditability. This paper describes some of the privacy considerations for the system.

Key words: electronic voting, privacy, secret ballot, Open Voting Consortium, Electronic Ballot Printer, paper ballot, barcodes, accessible, reading impaired interface, multiple languages, accessible voter-verified paper ballot

1. INTRODUCTION – WHY A SECRET BALLOT?

The requirements for secrecy in elections depend upon the values and goals of the political culture where voting takes place. Gradations of partial and complete privacy can be found in different cultural settings. For instance, in some cantons in Switzerland, voters traditionally communicate their choices orally in front of a panel of election officials. In contrast, in most modern polities, the ideal of complete privacy is institutionalized by relying on anonymous balloting.

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The use of secret balloting in elections – where a ballot's contents are disconnected from the identity of the voter – can be traced back to the earliest use of ballots themselves. The public policy rationales for instituting anonymous balloting are typically to minimize bribery and intimidation of the voter. For example, in Athens, Greece during the sixth century B.C.E., Athenians voted by raising their hands "except on the question of exiling someone considered dangerous to the state, in which case a secret vote was taken on clay ballots." In this case, presumably it was deemed necessary to vote via secret ballot to avoid bodily harm to the voter.

Secret ballots, although not always required, have been in use in America since colonial times. The Australian ballot, designed to be uniform in appearance because it is printed and distributed by the government, was adopted throughout most of the U.S. in the late 1800's. Today, approximately one hundred years after most states in the U.S. passed legal provisions for anonymous balloting, a strong sense of voter privacy has emerged as a third rationale. All fifty states have provisions in their constitutions for either election by "secret ballot" or elections in which


4 In 1682, the Province of Pennsylvania in its Frame of the Government required "THAT all the elections of Members or Representatives of the People, to serve in the Provincial Council and General Assembly ... shall be resolved and determined by ballot." (Votes and Proceedings of the House of Representatives of the Province of Pennsylvania. Printed and sold by B. Franklin and D. Hall, at The New Printing Office, near the Market. Philadelphia, Pennsylvania MDCCCLII, at xxxi.) In 1782, the legislature of the Colony/State of New Jersey tried to intimidate Tories by requiring viva voce voting. (At that time, about half of New Jersey voted with ballots and the other half viva voce.) They rescinded this in their next session. (Richard P. McCormick, THE HISTORY OF VOTING IN NEW JERSEY 74 (1953).) In 1796, the State of New Jersey required federal elections to be by ballot and extended that to state elections the following year. (Id. at 106.) In the 1853 pamphlet SECRET SUFFRAGE, Edward L. Pierce recounted Massachusetts' battle to make the secret ballot truly secret. The Massachusetts Constitution in 1820 required elections for representatives to have "written" votes. In 1839, the legislature attacked the secrecy of the written ballot by requiring the ballot to be presented for deposit in the ballot box open and unfolded. In 1851, the legislature passed the "Act for the better security of the Ballot," which provided that the ballots are to be deposited in the ballot box in sealed envelopes of uniform size and appearance furnished by the secretary of the Commonwealth (State of Massachusetts). The battle waged until a provision in the State Constitution made the secret ballot mandatory. (Edward L. Pierce, SECRET SUFFRAGE 7 (1853)(published by the Ballot Society, No. 140 Strand, London, England).

5 The more general "Australian ballot" is a term used for anonymous balloting using official non-partisan ballots distributed by the government. See Albright 1942 at 26. "The very notion of exercising coercion and improper influence absolutely died out of the country." See supra note 3, at 24, quoting Francis S. Dutton of South Australia in J. H. Wigmore's THE AUSTRALIAN BALLOT SYSTEM (2nd ed., Boston, 1889) at 15-23.