Internet Voting Presentation to the TGDC

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Sec. 567. Repeal of requirement to conduct electronic voting demonstration project for the federal election to be held in November 2004.

Senate amendment to delay demonstration project until November 2006. House amendment to delay demonstration project until first regularly scheduled general election for federal office that occurs after the EAC notifies the Secretary that the Commission has established electronic absentee voting guidelines and certifies that EAC will assist the Secretary in carrying out the project.

Conferees recognize the magnitude of the technical challenge associated with ensuring the security of electronic voting using the Internet. The DoD Secure Electronic Registration and Voting Experiment (SERVE) was an important prototype for electronic voting that should not be abandoned. The conferees encourage the Secretary to provide funding to the EAC and NIST to advance electronic absentee voting by U.S. voters located overseas and Uniformed Services voters.

Degrees of Separation: 1

Pollsite Voting

- Voter registers to vote
- Voter appears in person to vote
- Eligibility decided by poll worker
- Poll worker ensures voter get correct ballot
- Voter makes ballot selections
- Ballot placed in ballot box

Degrees of Separation: 2

Absentee By-Mail Voting

- Voter registers to vote
- Voter requests absentee ballot
- Eligibility decided by election official
- Election official sends correct ballot to voter
- Voter makes ballot selections, signs and returns ballot
- Signature verified by election official
- Voter identification removed
- Ballot placed in ballot box

Degrees of Separation: 3

Internet Voting

- Voter registers to vote
- Voter requests ballot electronically
- Identity and eligibility checked by software
- Software selects correct ballot
- Voter makes ballot selections, signs electronically and returns
- Electronic signature or PIN verified by software
- Voter identification removed
- Ballot placed in ballot box

New Voting Process Elements

- Identification and authentication of voter by voting system
- Authentication of voting system by voter
- Matching voter to correct ballot style
- Ensuring ballot integrity
- Security, availability, reliability of communications links within voting process
- Security, availability, reliability of voting "device"

Need to Define Internet Voting System

- Where are the system boundaries?
- What are the interfaces to the Election Management System?
 - □ Voter registration data
 - □ Ballot style definitions
 - □ Tabulation
 - □ Audit logs
- What are the functions of the system?
- What is the voting device?
- Who controls it?

Voting Over the Internet Architecture



SERVE Architecture



Questions

