

Security Breakout Session

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Security Breakout

- **Charge:**

- What should go into the security sections of a next-generation VVSG?
- What are your priorities?
- What problem areas or threats concern you most?

Session participants discussed questions in 5 subgroups before returning as a group.

Topic Areas

- Auditability
- Access Control
- Software Security
- Data Security
- Monitoring/Logging
- Physical Security
- Documentation
- Risk Management

Major Themes

- Risk Management
- Auditability
- Communications

Risk Management

- Clear interest in risk assessments in voting systems
- Participants believed this would:
 - Encourage security from the start
 - Allow for higher-level, more flexible requirements.
 - Have the greatest impact on security
- Risk assessments could provide election officials with more information for risk decisions

But, significant questions remain on implementation

Potential Issues

- Implications of high-level requirements
- Conformance testing vs. security assessment
- Repeatability of tests
- Cost of testing
- Make-up of security testing/evaluation teams?
- Who defines the acceptable level of risk (and how)?

Auditability

- Participants recognized importance of auditability, but desired flexibility to accommodate:
 - Different systems
 - Varying procedures/laws by States
- Some identified voter verifiability and post-election audits as priority areas
- Noted tension between security and U&A
- Future guidelines should align with 2011 TGDC Auditability Working Group report

Auditability Working Group

Auditability

Definition: The transparency of a voting system with regards to the ability to verify that it has operated correctly in an election, and to identify the cause if it has not.

“The Auditability Working Group found no alternative that does not have as a likely consequence either an effective requirement for paper records or the possibility of undetectable errors in the recording of votes.”

--Executive Summary of the Auditability Working Group Report

Communications

- Highly contentious topic
 - Some said to avoid telecommunications at all cost
 - Others noted it was a “fact of life,” particularly for reporting
- Recommendation to revisit requirements for clarity and look for unintended consequences

Other Topics (1)

- **Access Control:**
 - Important, particularly for tracking access to critical functions/data
- **Software Security:**
 - Some desired access to source code
 - Use existing standards for software quality and quality assurance programs
 - How can the program accommodate timely patches for vulnerabilities/bugs?

Other Topics (2)

- ***Data Security:***

- NIST cryptographic standards/guidelines provide building blocks
- If ePollbooks are used, there are new privacy considerations

- ***Monitoring/Logging:***

- Jurisdictions may not know how to use logs effectively
- A common data format for logs could spur development of tools to parse logs

Questions