Voting Systems Priorities and Strategy

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Background

- TGDC passed 31 resolutions at January plenary

- Resolutions requested NIST's technical assistance

- In order to be responsive to voting community, resolutions need to be prioritized

Strategy for Determining Priorities

- States need guidance for the 2006 election cycle
- In order to affect the 2006 election cycle, guidance and requirements are needed ASAP
- Thus, highest priority resolutions are addressed in the April work products that impact the 2006 election cycle and focus on:
  - Improving the 2002 VSS by filling in gaps (VVPAT, wireless, human factors, and others)
  - Correcting errors in the 2002 VSS
  - Issues facing the states (e.g., helping to ensure that installed voting system software is the software that has been tested)

How Will the Strategy be Implemented?

- Highest priority items will be packaged into an addendum, or incorporated in-line, that augments and corrects the 2002 VSS

- A draft of the new redesigned voting systems standard will be developed in parallel

Grouping the Priorities

- Group 1
  - Work targets the highest priority resolutions
  - Work augments and corrects the 2002 VSS
  - Guidance and requirements in April

- Group 2
  - Work targets the second highest priority resolutions
  - Work develops a new standard
  - Builds upon the 2002 VSS but enhances security, human factors and the precision and testability of requirements
  - Initial work products in April
  - Plans for completion in November

- Group 3
  - Work targets the remainder of the resolutions
  - They will be addressed after April
  - Plans for completion in November

Group 1

- **Requirements for VVPAT, including DREs with attached printers**
  - *Resolution: 12-05 and TGDC/EAC requests*
- **Accessibility and usability requirements based on current technology**
  - *Resolutions: 2-05, 3-05, 4-05, 9-05*
- **Software distribution and setup validation procedures, including use of the NSRL**
  - *Resolutions: 15-05, 16-05*
- **Use of wireless technology**
  - *Resolution: 35-05*
- **Interim conformance clause**
  - *Resolution: 24-05*
- **Revised glossary**
  - *Resolution: 33-05*

Group 2

- **Analysis of 2002 VSS**
  - *Resolutions: 25-05, 29-05*
- **Analysis of voter verifiability**
  - *Resolution: 12-05*
- **Additional requirements and test methods for human factors and accessibility**
  - *Resolutions: 2-05, 3-05, 4-05, 5-05, 6-05, 8-05, 9-05*
- **Test strategies and analysis, addressing COTS software, documentation requirements, non-conformant voting systems, and publicly available test suites and test reports**
  - *Resolutions: 14-05, 17-05, 18-05, 25-05, 26-05, 27-05, 28-05*
- **Strategy for addressing multiple representation of ballots**
  - *Resolution: 21-05*
- **Analysis of federal and consensus standards for applicability to voting**
  - *Resolution: 22-05*
- **Draft of next version of the VSS**
  - *Resolutions: 24-05, 25-05, 29-05, 33-05*

Group 3

- Usability of the Standards
  - *Resolution: 10-05*
- Common ballot format specifications
  - *Resolution: 23-05*
- Quality management standards
  - *Resolution: 30-05*
- Maintenance of the VSS
  - *Resolution: 31-05*
- Sharing information and de-qualification of voting systems
  - *Resolution: 32-05*
- Assessment papers on recommendation for future work
  - *Resolution: 34-05*

Doc. ID	Committee	Document Name	Resolution number	Priority Group	Disposition
The following documents will be presented and are in your Workbooks					
A	---------	Strategies and Priorities	N/A	N/A	N/A
B	Human Factors	Assessment of Current Status	2-05, 3-05, 4-05, 7-05	1	Augmented VSS: April
C	Human Factors	Augmented Usability Section for VSS	2-05, 3-05	1	Augmented VSS: April
D	Human Factors	Augmented Accessibility Section for VSS	2-05, 3-05	1	Augmented VSS: April
E	Human Factors	Draft Roadmap for TGDC Resolutions #2-05 through #12-05	5-05	Planning Doc.	Redesigned VSS
F	Security	Draft Standard for Voter Verified Paper Audit Trails in DRE Voting Systems	10-05, 12-05	1	Augmented VSS: April
G	Security	Draft Standard for Use of Wireless Communications Devices in Voting Systems	35-05	1	Augmented VSS: April
H	Security	Draft Recommendation for Software Distribution	15-05	1	Augmented VSS: April
I	Security	Draft Recommendation for Software Validation	16-05	1	Augmented VSS: April
J	Core Req	Draft Conformance Clause	24-05	1	Augmented VSS: April
K	Core Req	Draft Voting Glossary	33-05	1	Augmented VSS: April

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L	Security	Securing Vote Capture and Verification in DV and IV Voting Systems	12-05, 21-05	2	Redesigned VSS
M	Security	NIST Approach to Multiple Representations of the Voter's Choices	21-05	2	Redesigned VSS
N	Security	Threats to Voting Systems	12-05	Planning Doc.	Redesigned VSS
O	Core Req	Disposition of the Requirements from the 2002 VSS	25-05	2	Redesigned VSS
P	Core Req	Change Track Revisions to VSS Volume I, Chapter 4	29-05	2	Redesigned VSS
Q	Core Req	Change Track Revisions to VSS Volume II, Chapter 5	29-05	2	Redesigned VSS
R	Core Req	Voting Process Model	33-05	2	Redesigned VSS
S	Core Req	Core Requirements & Testing: Testing and Transparency Section	29-05	2	Redesigned VSS
T	Core Req	Core Requirements & Testing: Rationale Section		2	Redesigned VSS
U	Core Req	Core Requirements & Testing: Product Standards	25-05	2	Redesigned VSS
These documents are not being presented, but are available in your Workbooks					
V	Security	Draft Electronic Voting System Security Controls	22-05	2	Redesigned VSS
W	Security	Security Testing of Voting Systems	14-05, 17-05	2	Redesigned VSS

Issues for Discussion

- Packaging of April work product that augments and corrects the VSS 2002. Two alternatives:
  - Addendum to the 2002 VSS
  - New version of the 2002 VSS with changes in-line
  - Due to the magnitude of changes, we recommend including the changes in-line and highlighting them
  - In parallel we will be developing the new redesigned voting standard
- What do we call the augmented VSS 2002 and new redesigned standard?
  - Version 2.1 and Version 3.0? VSS 2002 Revision 1?
- Both standards will have requirements for voting officials as well as for voting systems and testing labs
  - Should voting official requirements be in a separate section/volume?