## NIST Voting Program Activities Update

March 29, 2006 Mark Skall Chief, Software Diagnostics and Conformance Testing Division NIST

## Activities Since 9/05 TGDC Meeting

- October 2005: NIST Threat Analysis for Voting Systems Workshop
- November 2005: VVSG 2007 Timeline approved by EAC
- November/December 2005: Assisted EAC in VVSG Comments Resolution
- December 2005: Final VVSG adopted Dec 13, 2005
- Jan/Feb/March 2006: Continued VVSG 2007 research and development

# Threat Analysis Workshop

- Held October 2005, NIST
- Goal was to arrive at general agreement on drivers for security requirements
  - Most major players from academia and election community
  - All threats and analysis were public
- General agreement that the workshop was effective at focusing work on specific threats (as opposed to speculation)
- Draft workshop report available at <u>http://vote.nist.gov</u>
- More extensive analysis underway
- Follow-on Workshop planned for June 2006

## VVSG 2005 Comments Resolution

- EAC asked NIST for assistance
- Significant 45 day effort, led by EAC
- NIST analyzed comments and provided input, EAC made final determinations
- Many comments deemed "carry-over" to be addressed in 2007 version

## VVSG 2007 Timeline

- Completion date is July 2007
- Issues with module swapping
  - Multiple public reviews
  - Requirements may/will change based on interrelationships with other requirements
  - Would complicate certification timeline
  - Confusion from vendors and election officials
  - Consensus is to make completed modules available, but not have them "swapped" into VVSG 2005
- Two ways to promulgate modules
  - TGDC Plenary meeting prior to each module completion date
  - No TGDC meetings prior to completion date but sub-group review/endorsement
    - TGDC Plenaries December 2006, April? and July, 2007
- FY07 funding to include development of test suites for requirements

## **NVLAP Accreditations**

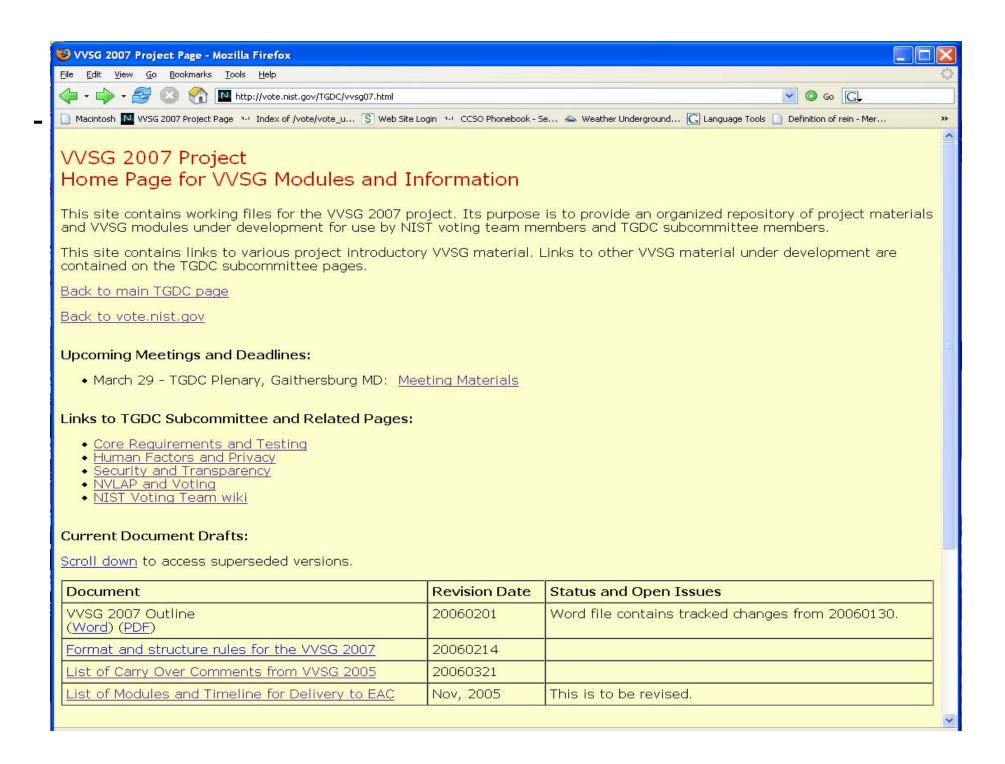
- Five Labs requested accreditation
- Three potential test labs scheduled for preassessments starting in April
  - Three day on-site visits
  - NVLAP requests EAC, other NIST involvement
  - Two more labs in queue for next round of preassessments

## **Outreach Efforts**

- NIST reaching out to vendors, election community for input and data
  - ITAA-sponsored vendor teleconferences
  - Q&As with election community on accuracy and security issues
  - Presentations/talks at NASS, NASED, The Election Center, State governments, IACREOT
  - Coordination with NSF-funded ACCURATE group
  - More workshops planned (e.g., threat analysis)

# New TGDC Working Pages

- Designed to work more effectively with subcommittees and TGDC as a whole
- Material, issues, meeting agendas easily accessed from the web
- Effort has been made to have material available to TGDC well before meetings



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#### VVSG July 2007 Project Core Requirements and Testing Subcommittee (CRT)

This site contains working files for the CRT. It contains upcoming telecon information and documents for review, as well as links to other related material. All previous telecon meeting minutes are found here.

#### Links to Other Subcommittee Pages:

- Human Factors and Privacy
- Security and Transparency
- Main Project Page

#### Upcoming Meetings and Deadlines:

Each meeting is at 10:00 a.m. EST.

- Thursday, March 23 agenda

- Thursday, March 25 <u>agenda</u>
  Thursday, March 9 <u>agenda</u>
  Thursday, February 23 <u>agenda</u>
  Thursday, February 2 <u>agenda</u>

#### Current Document Drafts:

Scroll down to access superseded versions.

Document	Revision Date	Status and Open Issues
Introduction to CRT TGDC March 2006 Material	20060324	
DWF-WorkingDraft-20060317 (Web) (Word) (PDF) (OpenDocument)	20060317	Different sections at different levels of maturity.
Excerpt: <u>Conformance clause</u> ( <u>Web</u> ) ( <u>Word</u> ) ( <u>PDF</u> ) ( <u>OpenDocument</u> )	20060317	This will be presented at the March meeting.
Excerpt: <u>Casting</u> , <u>Counting</u> , and <u>Reporting</u> requirements ( <u>Web</u> ) ( <u>Word</u> ) ( <u>PDF</u> ) ( <u>OpenDocument</u> )	20060317	This will be presented at the March meeting.
General performance and workmanship requirements (Web) (Word) (PDF)	20060317	This will be presented at the March meeting.

#### Related White Papers and Other Documents:

• VVSG'05 snapshots

## **General Comments**

- The VVSG 2007 is a major undertaking
- NIST is attempting to
  - Make the VVSG specific, unambiguous, and testable
  - Make it understandable to many audiences testers, vendors, election officials, public
  - Reexamine all previous versions of standards
  - Coordinate with vendors, test labs
  - Perform research, work with other researchers
  - Work with TGDC, other standards bodies, the public

# **Growing Complexity**

- Material in the VVSG may tend to be hard to understand for certain audiences
- NIST must communicate its work effectively
  - Introductory volume will focus on making the material understandable to a broad range of audiences
  - Subsequent drafts will be in a new format and consistently structured
  - Future 2-day TGDC meetings could include overview session on 1st day

# **Today's Presentations**

- Including "Supplemental Guidance" in VVSG
- Human Factors and Privacy
  - White papers discussion
  - Current research discussion
- Core Requirements and Testing
  - Cast, Count and Report requirements
  - Conformance Clause and Classes
  - Performance/Workmanship, Electrical/RF, and QA/Configuration Management
- Security
  - Core Cryptographic and Access Control requirements
  - Open Ended Testing white paper
  - VVPAT Update