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Our customers come first.

FEBRUARY 27, 2013

EXPLORING ALTERNATIVE METHODS & GOALS FOR FEDERAL TESTING

EDWIN B. SMITH, DOMINION VOTING SYSTEMS

WHAT DO WE NEED IN A FEDERAL CERTIFICATION PROGRAM?

- JUST AS THE VOTING SYSTEMS NEED CERTAIN "-ILITIES" THE RESULTING CERTIFICATES NEED PROPERTIES SUCH AS:
- Believability
- Reliability
- Integrity
- EAC LEADERSHIP HAS INVESTED QUITE A BIT OF THOUGHTFUL EFFORT TO ENSURE THESE ARE MAINTAINED IN THE PROGRAM
- THESE PROPERTIES ENSURE THE VALUE OF CERTIFICATES TO THE ELECTIONS COMMUNITY AT LARGE
- Manufacturers
- Jurisdictions
- Interested Citizens
- The EAC itself

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WHAT DO WE NEED IN A FEDERAL CERTIFICATION PROGRAM?

- **WE** NEED COMMISSIONERS !
- THAT'S A LARGE "WE"
- Allows for updated/improved VVSG publication
- Allows for Certification and Laboratory Program updates
- Allows for incorporation of new certification concepts from other federal agencies
  - Recent NIST BIOS protection publication
  - Recent FDA guidelines to manufacturers of home-use medical devices
  - Incentives for Manufacturers who incorporate published requirements above and beyond VVSG
- CHANGES WOULD ALLOW FOR COMPONENT LEVEL CERTIFICATION OF DEVICES (VVSG AND P1622 WORK PRODUCTS COMPLIANT?) AS WELL AS OTHER IMPROVEMENTS SUCH AS THE RAISED ENTRY CRITERIA DISCUSSED EARLIER

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WHAT ABOUT VVSG?

- WE NEED A NEW VVSG; VVSG 1.1 IS BETTER, TIME FOR A RE-WRITE
- VVSG 2.0 WRITTEN TO BETTER ADDRESS CURRENT TECHNOLOGY AND FUTURE NEEDS; EVEN IT NEEDS A SIGNIFICANT UPDATE
- Better represents modern software coding constructs (as does VVSG 1.1)
- Better able to accommodate new technologies in voting systems
- Needs to be written like standards in more mature standards setting processes, like these manufacturers' guidelines recently published by the FDA:

Lay users should not be expected to understand how to avoid electrostatic discharge (ESD) or how to take proper ESD precautions. You should consider that the standard ESD test levels are often exceeded in the home environment and home use devices should be designed to reduce this increased risk to an acceptable level.

When designing devices, you should take into account that users may not understand multiple steps, may receive minimal training or teaching on how to operate these devices, and may not be able to understand multiple warnings and precautions. In addition, users may not understand the need to calibrate, clean, and maintain the device.

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LET'S GO FORWARD -- TOGETHER

- DO MORE TO MARRY/ALIGN STATE AND FEDERAL TESTING
- Time/cost/confidence all enhanced
- Some successes, but an elusive goal for many years
- SOURCE CODE REVIEW
- Another reason to update VVSG – get rid of 1970's coding requirements
- Balance away from source code review, spend the time doing logic analysis
- IN THE ABSENCE OF THE STANDARDS BOARD AND BOARD OF ADVISERS, UTILIZE SOME INFORMAL GROUP MEETINGS AT THE EAC'S OFFICES
- Let's continue to move away from the unwarranted paranoia toward the Manufacturers that has kept our input out of standards setting and certification process formation.
- Instead let's mirror what has been successful in many other federal agencies and allow participation from ALL stakeholder areas

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THANK YOU

I wish to thank NIST and the EAC for the honor of being on this Panel. I also wish to thank the participants in this symposium for your participation.

These are topics that warrant the thoughtful discussion with which they have been treated.

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