

Technical Guidelines Development Committee

March 22, 2007 Plenary Meeting

Core Requirements and Testing

Part 1

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Contents of CRT Presentation

- Electromagnetic Compatibility Requirements
- Quality Assurance/Configuration Management Requirements
- Review of CRT Changes from the previous VVSG draft
- Benchmarks
- Discussion

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Electromagnetic Compatibility Requirements

- Revision of VVSG 2005, Volume I:
 - Sections 4.1.2.4 - 4.1.2.12
 - Part of Section 6 (Telecommunications)
- Revision of VVSG 2005, Volume II:
 - Section 4.8

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Electromagnetic Compatibility Requirements

- Conducted Disturbances - completed
- Radiated Disturbances - tbd
- Telecommunications Disturbances- incomplete

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QA/CM Requirements

- Response to
 - TGDC Resolution 30-05
 - Statement of direction at December 2006 TGDC plenary that ISO 9000/9001 standard should provide the framework for VVSG 2007 requirements dealing with quality assurance
- Replacement for VVSG 2005:
 - Volume I: Sections 8 and 9
 - Volume II: Section 7

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QA/CM Requirements

- The VVSG 2007 requirements:
 - require conformance with ISO 9000/9001
 - are more detailed than those in VVSG 2005 in terms of
 - vendor quality and configuration management procedures
 - required documentation of these procedures
 - data to be delivered to EAC/test labs
 - etc,
 - require the vendor to specify its QA procedures early in process, not when the product is submitted for certification

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QA/CM Requirements

- Unresolved Issue:
 - A key to QA success is for the QA process to underlie the entire life cycle of a product, starting before work on a new product begins
 - How can this goal be accomplished in the context of voting system certification?
 - The EAC Manufacturer Registration process would seem to be the obvious place for the examination and approval of the vendor's proposed procedures

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QA/CM Requirements

- Problem: The EAC Manual doesn't specify a time frame for the Manufacturer Registration process
 - could occur the day before the vendor delivers its product for testing
 - if deficiencies were discovered in the procedures, it may be too late to do anything about them
 - may be impossible to determine whether or not the delivered procedures were, in fact, adhered to during the design and development stages

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QA/CM Requirements

- One solution:
 - Be explicit, and require that the delivery of the QA/CM procedures for approval “shall occur during the Manufacturer Registration process as specified in the EAC Testing and Certification Manual, and before the start of the design and development process for the given voting system”
 - But this has the effect of specifying a time frame on the Manufacturer Registration process, thus adding a nontrivial requirement to the EAC manual, which may be outside the scope of the VVSG

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QA/CM Requirements

- Alternative:
 - Drop the “before the start of the design and development process for the given voting system” condition
 - There could then be an informative discussion in the VVSG that advises that the vendor submission should be done before the start of design and development
 - But this defeats the goal of ensuring in advance that the vendor has adequate procedures in place