

Notice of Clarification

NOC 09-003: Clarification of De Minimis Change Determination Requirements

Issue by Program Director, September 18, 2009



Section of Manual to Be Clarified:

3.5. De Minimis Changes. A de minimis change is a change to voting system hardware that is so minor in nature and effect that it requires no additional testing and certification. Such changes, however, require VSTL review and endorsement as well as EAC approval. Any proposed change not accepted as a de minimis change is a modification and shall be submitted for testing and review consistent with the requirements of this Manual. An approved de minimis change is not a modification.

3.5.1. De Minimis Change—Defined. A de minimis change is a change to a certified voting system's hardware, the nature of which will not materially alter the system's reliability, functionality, capability, or operation. Software and firmware modifications are not de minimis changes. In order for a hardware change to qualify as a de minimis change, it must not only maintain, unaltered, the reliability, functionality, capability and operability of a system, it shall also ensure that when hardware is replaced, the original hardware and the replacement hardware are electronically and mechanically interchangeable and have identical functionality and tolerances. Under no circumstance shall a change be considered a de minimis change if it has reasonable and identifiable potential to impact the system's operation and compliance with applicable voting system standards.

3.5.2. De Minimis Change—Procedure. Manufacturers who wish to implement a proposed de minimis change must submit it for VSTL review and endorsement and EAC approval. A proposed change is not a de minimis change and may not be implemented as such until it has been approved in writing by the EAC.

3.5.2.1. *VSTL Review.* Manufacturers must submit any proposed de minimis change to an EAC VSTL for review and endorsement. The Manufacturer will provide the VSTL (1) a detailed description of the change; (2) a description of the facts giving rise to or necessitating the change; (3) the basis for its determination that the change will not alter the system's reliability, functionality, or operation; and (4) upon request of the VSTL, a sample voting system at issue or any relevant technical information needed to make the determination. The VSTL will review the proposed de minimis change and make an independent determination as to whether the change meets the definition of de minimis change or requires the voting system to go through additional testing as a system modification. If the VSTL determines that a de minimis change is appropriate, it shall endorse the proposed change as a de minimis change. If the VSTL determines that

modification testing and certification should be performed, it shall reject the proposed change. Endorsed changes shall be forwarded to the EAC Program Director for final approval. Rejected changes shall be returned to the Manufacturer for resubmission as system modifications.

3.5.2.2. VSTL Endorsed Changes. The VSTL shall forward to the EAC any change it has endorsed as de minimis. The VSTL shall forward its endorsement in a package that includes:

3.5.2.2.1. The Manufacturer's initial description of the de minimis change, a narrative of facts giving rise to or necessitating the change, and the determination that the change will not alter the system's reliability, functionality, or operation.

3.5.2.2.2. The written determination of the VSTL endorsement of the de minimis change. The endorsement document must explain why the VSTL, in its engineering judgment, determined that the proposed de minimis change met the definition in this section and otherwise does not require additional testing and certification.

3.5.2.3. EAC Action. The EAC will review all proposed de minimis changes endorsed by the VSTL. The EAC has sole authority to determine whether any VSTL endorsed change constitutes a de minimis change under this section. The EAC will inform the Manufacturer and VSTL of its determination in writing.

3.5.2.3.1. EAC approval. If the EAC approves the change as a de minimis change, it shall provide written notice to the Manufacturer and VSTL. The EAC will maintain copies of all approved de minimis changes and otherwise track such changes.

3.5.2.3.2. EAC denial. If the EAC determines that a proposed de minimis change cannot be approved, it will inform the VSTL and Manufacturer of its decision. The proposed change will be considered a modification and require testing and certification consistent with this Manual.

3.5.3. De Minimis Change—Effect of EAC Approval. EAC approval of a de minimis change permits the Manufacturer to implement the proposed change (as identified, endorsed, and approved) without additional modification testing and certification. Fielding an engineering change not approved by the EAC is a basis for system Decertification.

Purpose:

This clarification is intended to identify those items that are eligible for consideration of being declared a de minimis change. Specifically the question has arisen whether or not changes to the voting systems Technical Data Package (TDP) can be considered a de minimis change.

Clarification:

The EAC's "Voting System Testing and Certification Program Manual" currently allows only changes to voting system hardware to be considered de minimis. The definition goes on to make very clear that both software and firmware modifications are not eligible for a de minimis change. However, the Program Manual is totally silent with regard to changes to the voting system's TDP.

The purpose of the de minimis change section of the manual is to allow minor changes that have little to no impact on the actual functioning of the system to pass through the process quickly and without any additional testing. The section is also very conservative regarding what is allowed to be considered a de minimis change because of the risk that exists in allowing a change without testing.

The TDP for the voting system represents all of the documentation necessary to identify the various components of the voting system and then operate the voting system. This includes specifications regarding secure set up of the voting system and proper configuration of the operating system. Changes in certain portions of the TDP can result in major configuration and operational changes to the voting system. However, some changes to the TDP will have no impact on the performance of the system at all and are simply documentation changes.

Because modifications to the TDP are not addressed in section 3.5 of the Program Manual there is a need to clarify whether or not modifications to the TDP can be considered de minimis. The EAC finds that modifications to the TDP can be found to be de minimis. In order for a modification to the TDP to be found to be de minimis the procedure outlined in section 3.5.2 of the Program Manual must be followed. This includes an independent determination by the VSTL as to whether or not the modification to the TDP meets the definition of de minimis, and a final determination by the EAC program director regarding the purposed change. This means that the VSTL must find that a change to the system's TDP will not materially alter the system's reliability, functionality, capability, or operation. Under no circumstance shall a change to the system's TDP be considered de minimis if it has reasonable and identifiable potential to impact the system's performance and compliance with applicable voting system standards.

Conclusion:

A change to a voting system's TDP can be considered de minimis provided the change meets the requirements of section 3.5 of the EAC's Program Manual. Changes to the TDP that have the potential to effect the reliability, functionality, capability, and operability of a system will not be considered de minimis and must pass modification testing before being approved.