



**U. S. ELECTION ASSISTANCE COMMISSION**  
**VOTING SYSTEM TESTING AND CERTIFICATION PROGRAM**  
1201 New York Avenue, NW, Suite 300  
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## Notice of Clarification

### **NOC 12-01: Clarification of COTS Product Equivalency for De Minimis Change**

Issue by Program Director, 2/08/12

#### **Section of Manual to Be Clarified:**

**De Minimis Changes.** As outlined in Section 3.5 of the EAC *Testing and Certification Program Manual (Manual)* 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. 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 the *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 identifiable potential to impact the system's operation and compliance with applicable voting system standards.

#### **Purpose:**

This notice of clarification is a logical extension of NOC 11-01 and is intended to identify additional items that are potentially eligible for being declared as a de minimis change under the above referenced sections. As part of ongoing discussions regarding voting system sustainability and the use of COTS products in voting systems, the EAC has received input from both voting system manufacturers and election officials regarding the difficulties of replacing COTS desktops, laptops, servers and other peripheral devices from major COTS manufacturers. Given the realities of voting system developmental testing, Federal and state certification as well as other time-to-market issues, these COTS products are often obsolete by the time they are introduced into the marketplace.

Under the current process, EAC certified voting systems are accompanied by a Certificate of Conformance that not only lists the specifications for desktops, laptops, servers and other devices associated with the voting system, but also identifies the specific manufacturer and model of the devices tested and certified with the particular voting system. Because commercial computer product manufacturers often have product lifecycles that last only an average of 8 months to one year, voting system manufacturers and election officials are often unable to purchase certified COTS products with the exact same commercial product.

### **Clarification:**

Section 3.5.1 of the Manual should be read to permit the replacement of **equivalent** laptops desktops, servers, printers, keyboards (dumb), mice (dumb), monitors (defined as a display device attached to a PC for election management use), power cables, Ethernet cables, speakers and microphones supporting the election management system of EAC certified voting systems using the following process:

1. Notification to the EAC and an accredited VSTL by a registered voting system manufacturer that a model of laptop, desktop, server or other component listed above certified with a particular voting system is no longer manufactured and/or offered for sale by the COTS vendor (e.g., Dell, HP, etc.).
2. Submission to the EAC and an accredited VSTL of official communication from the COTS vendor or its third party agent regarding the recommended replacement component.
3. Manufacturers are permitted to install updated drivers (sound, network, etc.) necessary to integrate the equivalent hardware devices. **Manufacturers shall not install drivers that could potentially integrate new uncertified functionality.**
4. Voting system manufacturers shall perform and document testing to verify that the voting system functions correctly with the new hardware after any driver updates are installed. Thorough manufacturer testing shall support and confirm the declaration of equivalency of the new desktop, laptop, server or other component listed above to those originally certified with the voting system.
5. All test documentation shall be submitted to the VSTL and EAC along with the manufacturers de minimis change submission according to the requirements of Section 3.5.2 of the *Manual*.

### **Conclusion:**

The replacement of certain obsolete or end-of-life COTS components in an EAC certified voting system with equivalent components is permitted. Using the process outlined above, the equivalence of the replacement components can be demonstrated and be considered for a de minimis classification provided the change meets the requirements of section 3.5 of the EAC's *Program Manual* and this clarification. The EAC will continue to monitor the use of COTS products in voting systems and make appropriate changes to its procedures in instances in which it sees minimal risk to voting system integrity and potential cost savings.