

## McDannold, Bruce

---

**From:** Paul Craft [craft@paulcraft.net]  
**Sent:** Friday, December 30, 2005 5:38 AM  
**To:** McDannold, Bruce; [REDACTED]  
**Subject:** RE: Quick question

Sorry I missed the beginning of this string last night.

I don't think we have quite the same problem with the ES&S products. They are annoying because, as with the DRE's, you cannot really directly and easily validate the firmware once it is loaded on the chip with an election definition. The last time I went through that loop, it involved a binary file comparison and audit of the election management software components, producing a duplicate scanner chip and then comparing the check sum of the duplicate chip with the chip used in the election. I was able to validate that part of the system although it did not give me the level of certainty that I really wanted to support a positive finding of compliance. However it worked out because the SOE had hired a contractor to modify another part of the system configuration and it was determined not to be a Florida certified system anyway.

I don't remember the file in the central system that provides the executable code but I do remember that it was static, identifiable on the central system, and has been reviewed by the ITA's

However, we may need to revisit it depending on what we learn and what policy decisions are made with Diebold.

So perhaps go ahead and send this out. I think ES&S will have to say that they do and describe the way their system works. I'm not sure where Sequoia and the ES&S Optech product line falls with this. So we might as well find out.

Slight suggested edits.

*Please advise us immediately as to whether or not any of your voting systems used in California include on the transport media (floppy, zip disk, pc card, other removable memory and storage devices, etc.) any kind of program code, including scripts, that can be loaded, interpreted or executed by your system's vote devices, tabulating equipment or system servers.*

*If so, please describe the nature of the code, where it appears and how it is used in the system.*

*We need your response to this no later than close of business on January 4, 2006.*

If we need to discuss I'm available all day

Thanks

Paul

---

**From:** McDannold, Bruce [mailto:bmcdanno@ss.ca.gov]

Sent: Thursday, December 29, 2005 11:33 PM

To: [REDACTED]

Cc: Paul Craft

Subject: RE: Quick question

This is supposed to be your time off, and I really hate bothering you.

---

From: Steve Freeman [mailto:[REDACTED]]

Sent: Thu 12/29/2005 8:10 PM

To: McDannold, Bruce; Paul Craft

Subject: RE: Quick question

Yes the source code is reviewed by the ITAs. The process is different than the one we are worrying but it is on the fringe of meeting you request. I suspect some of the differences are why ES&S is trying to get the M115/315/150/550 all updated as they are not 2002 VSS compliant for other reasons. Paul has an old complaint about it because every election gets a new copy installed with slight differences in the actual executable code due to the active linking to the election definition tables.

We maybe should talk about this at your convenience.

Steven W. Freeman

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

-----Original Message-----

From: McDannold, Bruce [mailto:bmcddanno@ss.ca.gov]

Sent: Thursday, December 29, 2005 19:22

To: [REDACTED] Paul Craft (E-mail)

Subject: RE: Quick question

Just tell me that the code on the ES&S EEPROMS was reviewed by the ITAs!

(Do you really consider these in the same class as other transportable media?)

-----Original Message-----

**From:** Steve Freeman [mailto: [REDACTED]]  
**Sent:** Thursday, December 29, 2005 4:26 PM  
**To:** McDannold, Bruce; 'Paul Craft (E-mail)'  
**Subject:** RE: Quick question

Do we need to make a distinction between systems that install the voting machine program fresh each election and those that are loading executable code that modifies the main program as part of the election definition installation? Consider for example ES&S program EEPROM chips that are installed before each election (they contain the election definition built into the actual executable program).

I would suggest changing "including scripts" to "including scripts, macros, control language, or intermediate code forms of such objects."

Steven V. Freeman

[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED]

-----Original Message-----

**From:** McDannold, Bruce [mailto:bmcdanno@ss.ca.gov]  
**Sent:** Thursday, December 29, 2005 17:24  
**To:** Paul Craft (E-mail); Steven V. Freeman (E-mail)  
**Subject:** Quick question

I've been directed to inquire from all the other vendors if they have any kind of executable code on their transport media. Does the following look adequate? Have I missed anything?

*Please advise us immediately as to whether or not any of your voting systems used in California include on the transport media (floppy, zip disk, pc card, etc) any kind of program code, including scripts, that can be loaded, interpreted or executed by your system's vote devices, tabulating equipment or system servers.*

*If so, please describe the nature of the code, where it appears and how it is used in the system.*

*We need your response to this no later than close of business on January 4, 2006*