



Initial Notes on the Draft Voting System Standards 11/09/05

There is much detail in the [Draft Voting Systems Standards](#) released by the New York State Board of Elections, and a truly thorough analysis will take time. NYVV is working on a detailed technical analysis which will take a few weeks to complete.

The Draft Standards as currently written are very poor and do little to protect the integrity of our vote. In their present form, they are unacceptable. They must not be approved in their current form.

Here are some initial observations. **Please keep in mind that this is not an exhaustive security analysis of the Standards, but only a very high level first take.** NYVV will be releasing a detailed analysis of the Draft Standards in a few weeks.

- 1) In general, vendors are given too much latitude in this document to define and satisfy tests.
- 2) It allows the vendor to define what they consider to be proprietary, and makes no allowance for independent public review and analysis of documentation. **It is imperative that the code not be considered proprietary of the manufacturer, but in the public domain so that the software can be reviewed by independent auditors or third parties.**
- 3) It is insufficient in calling for full access and independent review of vendor source code and other materials.
- 4) The Standards allow the State BOE to waive any part of the requirements they choose if the vendor submits test reports on its own! (Section 6209.6 B) But we know that the vendors use so-called Independent Testing Authorities (ITAs) to produce these reports that are neither independent, conduct adequate tests, or are authorities. **There should be no reason that any part of the test and other requirements can simply be waived by the State BOE. This makes even the best regulations meaningless.**
- 5) **Vague definition of crucial terms.** For example, The Standards say (Section 6209.6 B.1) “All subsequent changes to the software baseline configuration shall be subject to re-examination.” But with no definition of what is the “baseline configuration,” and what constitutes a change that would require re-examination?
- 6) In the section for testing, **paper ballot systems seem to be held to a standard that the DREs are not.**

Separate sections have substantial differences in rigor DREs and Paper Ballots. Paper ballots/Scanner verification and testing is more rigorous and the same rigor should be applied to DREs for example:

- a. The testing of DRE equipment (Section 6209.11 Routine Maintenance Test of DRE Voting Equipment) seems to be limited to test periods, but does not call for testing during the election process as required of the Paper Ballot machines. Nor do they call for public demonstrations of DREs as they do for the Paper Ballots.
- b. All of the sections in Section 6209.12 Operational and Testing Procedures for Paper-based Voting Systems must also be applied to DREs. The “test deck” concept should also be applied to DREs. This requires manual entry of test votes on the DRE, not an automated testing cartridge supplied by the vendor (typically how DREs are tested). The DRE “test deck” will have to be a list of votes to be entered – quite tedious, but democracy is at stake here so the effort is necessary. All of the touch screen machines have to be run through this routine just as should the scanners.

7) The regulations seem to imply that the machines will be part of a network which is remote controlled.

Each machine must be “stand-alone” equipment and render totals specific to the machine.

Wireless communication capabilities of any sort must not be allowed!

8) **The Standards must require that vendors who make both DREs and optical scanners submit NYS law compatible scanners if their DREs are to be considered for certification.**

We cannot allow the vendors to tell us what voting system we can choose from.