**Test Assertions for VVSG 1.1, Volume 1, Section 8.2**

**September 23, 2016**

**VVSG 1.1, Vol 1, Requirement 8.2a:**

1. Each voting system **shall** have an identification tag that is attached to the voting system component. The tag **shall** be tamper-resistant and difficult to remove. The tag **shall** contain the following information:
2. The voting system model identification in the form of a model number and possibly a model name. The model identification identifies the exact variant or version of the system;
3. The serial number that uniquely identifies the system;
4. Identification of the manufacturer, including address and contact information for technical service, and
5. Date of manufacture of the voting system.
6. The system’s power requirements, if applicable.

**Test Assertions**

**TA82a-1:** Voting Systems SHALL contain an identification tag.

**TA82a-1-1:** The identification tag SHALL be attached to the voting system component.

**TA82a-1-2:** The identification tag SHALL be tamper-resistant.

**TA82a-1-2-1:** Any ATTEMPT to tamper SHALL leave/produce evidence of those attempts.

**TA82a-1.3:** The identification tag SHALL be difficult to remove.

**TA82a-1-3-1:** Any ATTEMPT to remove SHALL leave/produce evidence of those attempts.

**TA82ai-1:** The identification tag SHALL contain voting system model identification in the form of a model number.

**TA82ai-2:** The identification tag MAY contain voting system model identification in the form of a model name.

**TA82ai-3:** The model identification SHALL identify the exact variant OR the exact version of the voting system **component**.

**TA82aii-1:** The identification tag SHALL contain the serial number that uniquely identifies the system.

**TA82aiii-1:** The identification tag SHALL contain the identification of the manufacturer.

**TA82aiii-1-1:** The tag SHALL unambiguously determine the component manufacturer.

**TA82aiii-2:** The identification tag SHALL contain the address of the manufacturer.

**TA82aiii-3:** The identification tag SHALL contain the contact information of the manufacturer for technical service.

**TA82aiv-1:** The identification tag SHALL contain the date when the voting system was manufactured.

**TA82av-1:** The identification tag SHALL contain the system’s power requirements.

**VVSG 1.1, Vol 1, Requirement 8.2b:**

1. For each voting system manufactured, a Voting System Configuration Log **shall** be established. The Log is initialized by the configuration data supplied by the manufacturer. From that point on, it functions like a diary of the system. Entries are made by election officials whenever any change occurs. Every exception, disruption, anomaly, and every failure is recorded. Every time the cover is opened for inspection or a repair or maintenance is performed, an entry details what was done, and what component was changed against what other component, as well as any diagnosis of failures or exceptions. The Log **shall** be kept on a medium that allows the writing, but not the modification or deletion, of records. The Log **shall** contain the following information:
2. The information on the system tag described in Requirement a;
3. The identification of all critical parts, components, and assemblies of the system; and
4. The complete historical record, as developed by the manufacturer per Requirement II.2.1.l, of all critical parts, components, and assemblies included in the voting system.

The list of critical parts, components, and assemblies should be consistent with the rules for determining which of these entities is critical, as specified in the Quality and Configuration Manual. See Requirement Vol. II, 2.1.f.

**Test Assertions**

**TA82b-1:** Voting Systems SHALL establish a Voting System Configuration Log.

**TA82b-1-1:** The TDP SHALL direct the log to be initialized by the configuration data supplied by the manufacturer.

**TA82b-1-2:** The TDP SHALL instruct election officials to record an entry in the log whenever any change to the voting system occurs.

**TA82b-1-3:** The TDP SHALL instruct election officials to record every exception, disruption, anomaly, and failure.

**TA82b-1-4:** The TDP SHALL instruct election officials to record an entry detailing what was done, and what component was changed against what other component, as well as any diagnosis of failures or exceptions each time the cover is opened for inspection or a repair or maintenance is performed.

**TA82b-1-5:** The Voting Systems Configuration Log SHALL be kept on a medium that allows the writing of records.

**TA82b-1-6:** The medium for the Voting Systems Configuration Log SHALL NOT allow the modification of records.

**TA82b-1-7:** The medium for the Voting Systems Configuration Log SHALL NOT allow the deletion of records.

**TA82bi-1:** The Voting Systems Configuration Log SHALL contain the information on the system tag described in Requirement a.

**TA82bii-1:** The Voting Systems Configuration Log SHALL contain the identification of all critical parts of the system.

**TA82bii-2:** The Voting Systems Configuration Log SHALL contain the identification of all critical components of the system.

**TA82bii-3:** The Voting Systems Configuration Log SHALL contain the identification of all critical assemblies of the system.

**TA82biii-1:** The Voting Systems Configuration Log SHALL contain the complete historical record, as developed by the manufacturer per VVSG 1.1 Volume II. Requirement 2.1.l, of all critical parts included in the voting system.

**TA82biii-1-1:** The list of critical parts SHOULD be consistent with the rules for determining which of these entities is critical, as specified in the Quality and Configuration Manual, using Requirement Vol. II, 2.1.f.

**TA82biii-2:** The Voting Systems Configuration Log SHALL contain the complete historical record, as developed by the manufacturer per VVSG 1.1 Volume II. Requirement 2.1.l, of all critical components included in the voting system.

**TA82biii-2-1:** The list of critical components SHOULD be consistent with the rules for determining which of these entities is critical, as specified in the Quality and Configuration Manual, using Requirement Vol. II, 2.1.f.

**TA82biii-3:** The Voting Systems Configuration Log SHALL contain the complete historical record, as developed by the manufacturer per VVSG 1.1 Volume II. Requirement 2.1.l, of all critical assemblies included in the voting system.

**TA82biii-3-1:** The list of critical assemblies SHOULD be consistent with the rules for determining which of these entities is critical, as specified in the Quality and Configuration Manual, using Requirement Vol. II, 2.1.f.