- V1 2.1.8 Question: In paper based system a "ballot" indicates a single physical piece of paper, and not a collection of pages?
- V1 2.3.1.3 Question: How can we "prove" that memory, files etc. are clear of any residual votes if the printing of the zero count is not enough?
- V1 2.4.1.b/d Question: Should not the successful completion of the close process be its own verification and how is this report supposed to verify/prove that the process completed successfully. Are we verifying operator process? Or internal software process?
- 2.4.4.1 Question: What is the benefit/difference for using a FIPS-140 implementation vs. using a FIPS-140 approved algorithm?
- V1 3.2.4.g Question: Must an icon have linguistic tags on-screen, or can published definitions (such as can be used for over vote education) be used. Given limited on screen real estate, and the constraints on font size, this requirement has the potential to overwhelm the ballot data on screen?
- V1 3.2.5.a Question: Are the VSTLs required to test these requirements (contrast ratio etc.) independently, or are manufacturer (in the case of COTS) specifications enough? If not, what allowances are made for differences in manufacturers testing methodology?
- V1 3.3.1.g.i Comment: Audio playback of scanned paper ballots can be time consuming to the extent of disenfranchising other voters who are waiting for the scanner.
- V1 4.1.7.2.b Question: what is meant by being able to print contest "labels"?
- V1 5.2.3 Question: The Java coding standard specifically contradicts certain areas of the VVSG 1.0. What is the policy for handling legacy code that is being resubmitted unchanged for recertification?
- V1 5.2.4 Question: What is the definition of module? Is it a class or each method with a class? The glossary seems to indicate a module is the class/file, but some of the language seems to contradict this.
- V1 5.2.5 Question: Under what circumstances would a named block exit be allowable in Java? It is common and very efficient construct that makes for clean code. Is this up to the discretion of developer or the VSTL?
- V1 5.2.5 Question: There are additional constructs, including the use of Generic Types for prevent casting errors and the use of enhanced for loops with the structure:

```
for (FormalParameter : Expression) Statement
Where:

// Assume we have an instance of StringBuffer "sb"
public void oldFor(Collection c) {
```

```
for(Iterator i = c.iterator(); i.hasNtext(); ) {
   String str = (String) i.next();
   sb.append(str);
}
```

## Can be replaced by this:.

```
// Assume we have an instance of StringBuffer "sb"
public void newFor(Collection<String> c) {
  for(String str : c) {
    sb.append(str);
  }
}
```

Are these acceptable constructs?

- V1 5.2.6.h Comment: Change logs should include only FUNCTIONAL changes to the code and not updates to comments within the code.
- V1 5.2.6.c Question: What is the purpose of adding the protocols to the module comments (and is this truly "module" as defined in glossary), or is this at the function/method level? In most 4GL languages this would basically be a repetition of the method calls within the code, but without comments. Mode is gained by actually reading the code comment. So what information is the protocol section trying to convey to the reviewer?
- V1 5.2.8 Question: In this section is "unit" synonymous with "module" or with "method"?
- V1 5.4.1.f Question: In what format do the "final ballot formats" need to be written to the log? Are ID values in sequence enough?
- V1 5.4.2.e Question: Is stating in the log that a file has been created/cleared enough? If it is not sufficient, how can we prove that the action took place correctly?
- V1 7.4.6.a Comment: We can check certain areas of the system to make sure that no additional files have been added, and that critical files are valid. But to do a complete validation on all operating system files would cause undue delay in system startup. We can ensure that unwanted files are not RUNNING.
- V1 7.4.6.g Question: What sort of values do you mean by this? Where should they be displayed?
- V1 7.5.5.a Question: What is the definition of "external access"?

V2 - 2.5.9.2 – Comment: Would like some clarification as to what is mean by interface in SDS. In a programming environment this can be a very ambiguous term. (User Interface, Hardware Interface, Interface Class)

## **General Comments:**

Linux Operating Systems - Linux operating systems are very flexible, but it should not be the responsibility of the VSTL to create the installation disks for a Linux operating system. They should only be required to validate that the required packages and installed/not installed/running after installation from a disk provided by the voting system manufacturer. This would decrease the complexity of the build process for the VSTL and put Linux systems on a more equal footing as those systems running on Windows.

Open Source - Can the EAC look into the possibility of monitoring and controlling an external review process to improve system transparency and community dialog? Commenting that is more in-line with industry standard (i.e. NOT readable by non programmers) will have greater credence with the technical community if such a policy in implemented, as well as a strict adherence to a review period (with consequences for violation) for external reviewers