From the Vendor Trace document or declaration, identify all documents that pertain to the **System Overview**. Each submitted (Vol. 1, Sect. 1.1) Technical Data Package document (Vol.2 Sect. 6.6) is reviewed (Vol. 1, Sect. 1.6.2.2).

Note about revisions: The first time a review form is completed, the form revision number is 01. As the review process continues, newer versions of vendor documents, or additional documents, will be submitted to close discrepancies. Each time new versions of documents are examined, the review form is saved with a new revision number. Save the form with the new revision (Save As) before you update the document names, versions and/or file names. Enter your name and date on the new revision.

Applicable TDP Documents table: List each applicable TDP document. Put the Title from inside the document in the first column, along with the version and date. Under "File name," copy the full document file name.

Trace Table: Verify whether the vendor correctly documented each applicable VVSG requirement listed in this template. Use the following notations to indicate results:

- **Traced** column: For each positive finding, enter the document number(s) corresponding to the **Applicable TDP Documents** Table below, with the section number(s) in each applicable document where the requirement is fulfilled. (Example: Doc. 2, Sec. 1.2)
- **Comments** column:
  - **"Y"** indicates that the document(s) fulfill the requirement.
  - **"N"** indicates that the document(s) do not fulfill the requirement.
  - **"P"** indicates that the document(s) partially fulfill the requirement
  - **"NT"** (not tested) indicates documents that are part of the system configuration but outside the scope of this certification review effort (only if not a full cert).
  - **"NS"** (not supported) indicates requirements that apply to features that are not supported in the configuration being tested (such as paper ballots).
  - Explain "**P**", "**N**", "**NT**" or "**NS**" findings here.
  - In addition, use the Comments column to enter any comments that would be helpful throughout the project.
  - **Discrepancies:**
    - List discrepancies in red.
    - A Documentation discrepancy is written when a VVSG requirement is not fulfilled or is partially fulfilled in the TDP.
    - An Informational discrepancy is written when the issue is outside the scope of the certification; Informational discrepancies are provided to the client but do not preclude certification.
    - Enter the discrepancy number of any discrepancies written (from the separate discrepancy report), with a short description in the Comments column.

Vendor :	**Hart**	**Reviewer(s):**	Lesley Hoppert
Voting System:	**Verity 1.0**	**Review Date:**	12/12/2014

Applicable TDP Documents

Document Title (from cover pg), version, date	Doc #	File name
Verity System Description Technical Document Rev A.08 10/31/2014	#1	Verity System Description 4005466 A08
Verity Voting Performance Characteristics Rev A.07 12/6/2014	#2	Verity Performance Characteristics 4005497 A07.pdf
Verity XML Import Guide Rev A02, No Date Document # 6620-006 A03	#3	Verity XML Import Guide 6600006 A03

Document Title (from cover pg), version, date	Doc #	File name
Verity Airgap Interface, Rev A02, No Date	#4	Verity Airgap Interface Technical Reference 4005512 A02
Verity Software Architecture & Design Technical Documentation Rev A.02 11/22/2014	#5	Verity Software Architecture-Design 4005463 A02.pdf
Verity 1.0 Technical Data Package Overview Rev A.09 12/12/2014	#6	Verity 1.0 TDP Overview 4005511 A09.pdf
Verity Service and Maintenance Technical Reference Manual, Rev A01, 12/11/2014	#7	Verity Service and Maintenance Technical Reference Manual 6610-001 A02.pdf
Verity Trace - System Overview, saved to PDF 12/11/2014	#8	Verity Trace - System Overview
Verity Voting Verity Operational Environment, Rev A.04, 11/11/2014	#9	Verity Operational Environment 4005515 A04.pdf
Manifest files: Build-Client-Manifest, BuildCount-Client-Manifest, BuildCount-Server-Manifest, Build-Server-Manifest, Central-Client-Manifest, Central-Server-Manifest, Count-Client-Manifest, Count-Server-Manifest, Scan-Device-Manifest, Touch-Device-Manifest, Verity Build and Count Manifest, Verity Build Manifest, Verity Central Manifest, Verity Count Manifest	#10	Folder: File Manifests (14 files)

Trace Table

Req #	VVSG 2005 Testing Standards - Vol.2 unless otherwise specified	Traced	Comments
2	**Technical Data Package**		
2.1	**Scope**		
2.1.1	**Content and Format**		
2.1.1.1	**Required Content for Initial Certification** *(Indicate "*" if this document does not fall into the identified category of documentation.)*		
a.	At minimum, the TDP shall contain the following documentation: System configuration overview;	**Doc #6** - Entire Doc	**Y**
2.1.1.3	**Format**		
	The requirements for formatting the TDP are general in nature; specific format details are of the vendor's choosing. The TDP shall include a detailed table of contents for the required documents, an abstract of each document and a listing of each of the informational sections and appendices presented. A	**Doc #6** - Entire Doc	**Y**

Req #	VVSG 2005 Testing Standards - Vol.2 unless otherwise specified	Traced	Comments
	cross-index shall be provided indicating the portions of the documents that are responsive to documentation requirements for any item presented.		
2.1.3	**Protection of Proprietary Information**		
	The vendor shall identify all documents, or portions of documents, containing proprietary information not approved for public release. Any person or test agency receiving proprietary information shall agree to use it solely for the purpose of analyzing and testing the system, and shall agree to refrain from otherwise using the proprietary information or disclosing it to any other person or agency without the prior written consent of the vendor, unless disclosure is legally compelled.	**Doc #1** - Entire Doc **Doc #2** - Entire Doc **Doc #3** - pg. 2 **Doc #5** - Entire Doc **Doc #6** - Entire Doc **Doc #7** - pg. 2	**Y** Doc #4 (Verity Airgap Interface) is NOT proprietary.
2.2	**System Overview**		
	In the system overview, the vendor shall provide information that enables the test lab to identify the functional and physical components of the system, how the components are structured, and the interfaces between them.	**Doc #1 -** Section 1.1.1 Verity Voting Configurations, pgs. 7-9,Section 2.1 Overall System Capabilities, pg. 19, Section 3 System Description, pgs. 31-32 **Doc #4 -** Chapter 1 Airgap Interface, pgs. 5-7. **Doc #5 -** Section 4.3 Interfaces, pg. 15, Section 4.7 Deployment, pgs. 15-16.	**Y**
2.2.1	**System Description**		
a.	The system description shall include written descriptions, drawings and diagrams that present: A description of the functional components (or subsystems) as defined by the vendor (e.g., environment, election management and control, vote recording, vote conversion, reporting, and their logical relationships).	**Doc #1** - Section 1.0 - Brief Description, pgs. 7-18. Section 2.0 - System Overview, pgs. 19-30. **Doc #4** - Entire Doc. **Doc #5** - Section 4.1 Desktop and Embedded Common Approaches Figure 1 - Generic Layer Architecture, pgs. 11-13, Section 4.7 Deployment Deployment Figure 2 – Desktop Deployment Diagram - client/server and monolithic models, pgs. 15-16	**Y** Info DISC# **VTY-1** In Doc #1, the List of Figures, pg. 6 contains **Error! Bookmark not defined.** messages for Figure 7 - Verity Relay Component, Figure 15 - High-Level Workflow for Relay, & Figure 19 – Activity diagram for a curbside voting session. **CLOSED** - L. Hoppert, 12/8/14: Vendor fixed the issue in the current version of Doc #1 (A.08)

Req #	VVSG 2005 Testing Standards - Vol.2 unless otherwise specified	Traced	Comments
b.	The system description shall include written descriptions, drawings and diagrams that present: A description of the operational environment of the system that provides an overview of the hardware, software, and communications structure.	**Doc #1** - Section 4.0 - Verity Hardware, pgs. 61-68. **Doc #4** - Entire Doc.	**Y**
c.	The system description shall include written descriptions, drawings and diagrams that present: A concept of operations that explains each system function, and how the function is achieved in the design.	**Doc #1** - Section 1.0 - Brief Description, pgs. 7-18. Section 4.0 - Verity Hardware, pgs. 61-68. **Doc #4** - Entire Doc.	**Y**
d.	The system description shall include written descriptions, drawings and diagrams that present: Descriptions of the functional and physical interfaces between subsystems and components.	**Doc #1** - Section 3.1 - System and Subsystem descriptions, pgs. 31-52. **Doc #4** - Entire Doc.	**Y**
e.	The system description shall include written descriptions, drawings and diagrams that present: Identification of all COTS hardware and software products and communications services used in the development and/or operation of the voting system, identifying the name, vendor and version used for each such component, including: 1. Operating systems; 2. Database software; 3. Communications routers; 4. Modem drivers; and 5. Dial-up networking software	**Doc #1** - Section 4.1.1 - Verity Voting Devices – Common Design, pg. 61. Section 4.1.1.1 - Computer Specifications, pg. 61 Section 1.2.1 - Verity Build - Election Definition and Device Settings **-** Verity Build optional COTS devices, pg. 10. **Doc #4** - Entire Doc. **Doc #5 -** Section 4.2 - Tools and Technologies, pgs. 14-15. **Doc #9** - Section 2.3.2 Verity Devices lists the COTS software devices, vendors and versions	**Y DISC # VTY-16** Missing the version identification of the COTS software products used in development and/or operation of the voting system. **CLOSED**, L. Hoppert, 12/8/2014 - Traced to Doc #9 Doc #5 **Info DISC # VTY-17** Incomplete sentences in the following: 4.3 Interfaces Air Gap interface – The air gap is a physical separation that describes **how non-certified and certified voting system components**. The architecture will be reused across Verity Office, Verity Voting and the election devices, allowing the same code used for cross cutting concerns and the key **mechanism to written** once and tested in a centralized way.

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			Note 12/12/14: The vendor response states this discrepancy is resolved, but both incomplete sentences still occur in vA02 of the Software Architecture-Design doc.
f.	The system description shall include written descriptions, drawings and diagrams that present: Interfaces among internal components, and interfaces with external systems. For components that interface with other components for which multiple products may be used, the TDP shall provide an identification of: i. File specifications, data objects, or other means used for information exchange; ii. The public standard used for such file specifications, data objects, or other means;	**Doc #1** - Section 1.0 - Brief Description, pgs. 7-18. Section 3.0 - System Description, pgs. 31-58. **Doc #3 -** Entire Doc. **Doc #5 -** Section 4.0 - 4 Common Architecture and Design Attributes, pgs. 11-16. Section 5.0 - Client Server Architecture, pgs. 17-19. Section 6.0 - Embedded Device Design, pgs. 20-22. Section 7.0 - Security, pg. 22.	**Y**
g.	The system description shall include written descriptions, drawings and diagrams that present: Benchmark directory listings for all software (including firmware elements) and associated documentation included in the vendor's release in order of how each piece of software would normally be installed upon setup and installation.	**Doc #8** - Verity Trace - System Overview, pg. 4 **Doc #1 -** Section 3.1.1.14 Installation, pg. 33. **Doc #10** - Actually a folder containing 14 manifests with the benchmark directory listings, Entire Doc (all docs) **Doc #9** - shows an order of installation	**Y** **DISC # VTY-18** The Benchmark directory listings and the software installation documentation are required for review by the VSTL, even if it is not customer-installable. **CLOSED** 12/8/14 - L Hoppert: Traced to Doc #10 (Folder: File Manifests (14 files)) and Doc #9, Verity Operational Environment 4005515 A04.pdf **Doc #8** Verity Trace - System Overview traces the requirement in the following way: *Doc1: 3.1.1.14* *Software and Firmware is installed only by Hart personnel; no installation software is available to jurisdictions* **Doc #1** Section 3.1.1.14 Installation states:

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			Hart provides all installation, configuration, and initial testing for every Verity Voting system component in-house. • Verity Voting is capable of being implemented in a standalone or client-server configuration. • Verity Voting components are not customer-installable. • Professional services options are available to further demonstrate the configured system per election day needs.
2.2.2	**System Performance**		
a.	The vendor shall provide system performance information including: The performance characteristics of each operating mode and function in terms of expected and maximum speed, throughput capacity, maximum volume (maximum number of voting positions and maximum number of ballot styles supported), and processing frequency	**Doc #1 -** Section 2.1.1 System Performance, pg. 19 **Doc #2 -** Verity Central Scanner **expected and maximum speed** Section 3.6 Verity Central Scanner, pg. 13 Verity Build Ballot Production Printer **expected and maximum speed** Section 3.12.2 Verity Build Ballot Production Printer, pg. 16 Scan, Touchwriter, Build & Central **expected and maximum throughput capacity** - 4.1 Verity Voting System Performance, pg. 19 Build Ballot Production Printer and Touchwriter printer **maximum volume -** Section 3.12, pgs. 15-18 Verity Scan **processing frequency** - Section 4.1.1 Polling Place capacity, pg. 19 Verity Central **processing frequency** - Section	**Y**

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		4.1.3 Verity Central Capacity, pg. 19 Verity Count **processing frequency** Section 4.1.4 Verity Count Capacity, pg. 19	
b.	The vendor shall provide system performance information including: Quality attributes such as reliability, maintainability, availability, usability, and portability;	**Doc #2 - Quality attributes:** **Portability,** Section 3 VERITY VOTING COMPONENTS, pg. 6 **Doc #7 - Quality attributes:** **Maintainability,** Chapter 2 - Preventive Maintenance Procedures, pgs. 51-57 **Usability,** Chapter 2 - Performing Functionality Tests, pgs. 58-65	**Y**
c.	The vendor shall provide system performance information including: Provisions for safety, security, privacy, and continuity of operation	**Doc #2 Safety:** Section 4.1.5 Safety, pgs. 19-20 **Doc #2 - Security:** Section 2.1 Verity Voting Device Case Characteristics, pgs. 5-6 Section 5 - Verity Design Constraints, pg. 20 **Doc #2 - Privacy:** Section 5.2 Privacy, pg. 20 **Doc #2 - Continuity of Operation:** Section 3.8 Battery Power, provides a min. of 2-hour operation for devices, pg. 14	**Y**
d.	The vendor shall provide system performance information including: Design constraints, applicable standards, and compatibility requirements.	**Doc #2 - Design Constraints:** Section 3 BACKGROUND, pgs. 9-10 **Doc #2 - Applicable Standards:** Section 5.5 Applicable standards, pgs. 20-21 **Doc #2 - Compatibility requirements:** Section 5.4 System compatibility, pg. 20	**Y** DISC # VTY-32 Missing compatibility requirements. **CLOSED**, L. Hoppert, 12-8-2014: Vendor added section 5.4 System Compatibility to Doc #2

End of Document