



From the Vendor Trace document or declaration, identify all documents that pertain to the **System Hardware Specification**. 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 InterCivic	Reviewer(s):	L. Hoppert, Georgia Fortun
Voting System:	Verity 2.0	Review Date:	11/20/2015, 02/08/2016

Applicable TDP Documents

Document Title (from cover pg), version, date	Doc #	File name
Verity Operational Guide, Rev B.00, no date	#1	Verity Operational Guide 6640001 B00
Verity Voting Performance Characteristics, Rev B.00, 10/22/2015	#2	Verity Performance Characteristics 4005497 B00
Bills of Materials: Scan, Controller, Touch Writer, Touch with Access, Touch, Print, Ballot	#3	All Bills of Materials (BOMs) in the "hardware" folder - 9



Document Title (from cover pg), version, date	Doc #	File name
Box, Standard Booth Accessible Booth		files
Verity Scan schematics	#4	3005350 folder (Scan)
Verity Touch Writer schematics	#5	3005352 folder (Touch Writer)
		(Was Access in 1.0 cert - NA)
Verity Ballot Box schematics	#7	3005357 folder (BallotBox)
Verity Standard Booth Assembly	#8	3005358 folder (Standard-Booth)
Verity Accessible Booth Assembly	#9	3005359 folder (Accessible-Booth)
Verity System Design: Verity Electronics Specification, Rev A.07, 9/28/2015	#10	Verity Electronics Specification 4005461 A07
Verity Base Station Microcontroller Specification, Rev A.01, 5/26/2015	#11	Verity Base Station Microcontroller Specification 4005462 A01
FCCB Emissions Test Reports	#12	Verity_Controller_FCCB_TwA_FCCB_Emissions, Verity_Print_FFCB_Immunity_Emissions, Verity_Scan_FCCB_Radiated_Emissions_15Sept2014, Verity_Writer_FCCB_Radiated_Emissions_17Sept2014
	#13	(Combined into #12)
Verity Trace - System Hardware Specifications, 4/21/2015	#14	2.4 Verity Trace - System Hardware Specifications
Verity 1.3.0 Technical Data Package Overview, Rev B.00, 10/10/2015	#15	Verity 2.0 TDP Overview 4005511 B00
Verity System Description Technical Document, Rev B.00, 8/14/2015	#16	Verity System Description 4005466 B00
Verity - Operations PRD Ops/Services/Supply Chain Planning Document, Rev A.01, 12/11/14	#17	Verity OPS-Services-SC Plan 4005302 A01
Verity Controller Schematics	#18	3005351 folder (Controller)
Verity Touch with Access Schematics	#19	3005353 folder (Touch with Access)
Verity Touch Schematics	#20	3005355 folder (Touch)
Verity Print Schematics	#21	3005356 folder (Print)
Verity 2.0 Technical Data Package Overview, Rev B.01, 02/02/2016	#22	Verity 2.0 TDP Overview 4005511 B01.pdf

Trace Table

Req #	VVSG 2005 Testing Standards - Vol.2 unless otherwise specified	Traced	Comments
2	Technical Data Package		
2.1	Scope		



Req #	VVSG 2005 Testing Standards - Vol.2 unless otherwise specified	Traced	Comments
2.1.1	Content and Format		
2.1.1.1	Required Content for Initial Certification (<i>Indicate "*" if this document does not fall into the identified category of documentation.</i>)		
c.	At minimum, the TDP shall contain the following documentation: System hardware specifications;	Doc #2, 3, 4, 5, 7, 8, 9, 10, 11, 18, 19, 20, 21 - 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 cross-index shall be provided indicating the portions of the documents that are responsive to documentation requirements for any item presented.	Doc #1 and 2 - Table of Contents Doc #15 - Entire doc	Y Info DISC 9: The cover page of the document "Verity 2.0 TDP Overview 4005511 B00" Refers to Verity 1.3.0 rather than 2.0: Discrepancy resolved by Doc #22, pg.1. Info DISC 10: The Table of Contents of the document "Verity 2.0 TDP Overview 4005511 B00" contains errors. This occurs in some other documents as well - we recommend you check and correct every TOC. Discrepancy resolved by Doc #22, pgs.4-5.
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 #2 - Cover pg and footers Doc #10 - Cover pg and footers Doc #11 - Cover pg and footers Doc #15 - 2.1.1 TDP Document Catalog	Y Info DISC 11: In the document "Verity 2.0 TDP Overview 4005511 B00" the word "public" is misspelled multiple times on pages 9-10. Discrepancy resolved by Doc #22, pgs. 9-10.
2.4	System Hardware Specifications		
	The vendor shall expand on the system overview by providing detailed specifications of the hardware components of the system, including specifications of hardware used to support the telecommunications capabilities of the system, if applicable.	Doc #1 - Section 14 Specifications Doc #2 - Entire doc Bills of Materials: Doc #3 (9 docs) - Entire doc Schematics: Docs #4, 5, 7, 8, 9, 18, 19, 20, 21 - Entire doc	Y



Req #	VVSG 2005 Testing Standards - Vol.2 unless otherwise specified	Traced	Comments
		Doc #10 - Entire doc Doc #11 - Entire doc	
2.4.1	System Hardware Characteristics		
	The vendor shall provide a detailed discussion of the characteristics of the system, indicating how the hardware meets individual requirements defined in Volume I, Section 4, including:	See below	Y
a.	Performance characteristics: This discussion addresses basic system performance attributes and operational scenarios that describe the manner in which system functions are invoked, describe environmental capabilities, describe life expectancy, and describe any other essential aspects of system performance;	Attributes and operational scenarios: Doc #1 - Entire doc Environmental capabilities: Doc #2 - 3.6 Equipment Environmental Standards Life expectancies: Doc #1 - Section 7 Voting - Verity Polling Place Equipment, subsection Performance Other aspects: Doc #1 and #2 - Entire doc	Y
b.	Physical Characteristics: This discussion addresses suitability for intended use, requirements for transportation and storage, health and safety criteria, security criteria, and vulnerability to adverse environmental factors;	Storage: Doc #2 - Section 3.6 Equipment Environmental Standards Health/safety: Doc #2 - Section 5.1.6 Safety; Doc #1 - Section 1 Security: Doc #1 - Section 7 Voting - Verity Polling Place Equipment, subsection Security and Section 13 Security; Doc #2 - Section 6.1 Security Vulnerability: Doc #1 - Section 11 Storage and Deployment subsection Transportation and Storage; Doc #2 - Section 3.6 Equipment Environmental Standards	Y
c.	Reliability: This discussion addresses system and component reliability stated in terms of the systems operating functions, and identification of items that require special handling or operation to sustain system reliability;	Identification of items the require special handling: Doc #1 - Section 7, subsection Reliability; Section 11 Storage and Deployment and Section 12 Preventive Maintenance Procedures System and component reliability: Doc #10 -	Y



Req #	VVSG 2005 Testing Standards - Vol.2 unless otherwise specified	Traced	Comments
		Section 15.1 System Reliability	
d.	Maintainability: Maintainability represents the ease with which maintenance actions can be performed based on the design characteristics of equipment and software and the processes the vendor and election officials have in place for preventing failures and for reacting to failures. Maintainability includes the ability of equipment and software to self-diagnose problems and make non-technical election workers aware of a problem. Maintainability also addresses a range of scheduled and unscheduled events;	Doc #1 - Section 12 Preventive Maintenance Procedures, section 7 subsection Maintainability	Y
e.	Environmental conditions: This discussion addresses the ability of the system to withstand natural environments, and operational constraints in normal and test environments, including all requirements and restrictions regarding electrical service, telecommunications services, environmental protection, and any additional facilities or resources required to install and operate the system.	Doc #1 - Section 11 Storage and Deployment, subsection Storage Procedures (electrical requirements) Doc #2 - Section 3.6 Equipment Environmental Standards	Y
2.4.2	Design and Construction		
	The vendor shall provide sufficient data, or references to data, to identify unequivocally the details of the system configuration submitted for testing.	Doc #1 - Section 3 Brief Description (Also covered in more detail in the System Description doc)	Y
	The vendor shall provide a list of materials and components used in the system and a description of their assembly into major system components and the system as a whole.	Doc #1 - Sections 6 Pre-Voting Verity Print, 7 Voting - Verity Polling Place Equipment, 8 Verity Hardware Accessories Bills of Materials: Doc #3 (9 docs) - Entire doc Schematics: Docs #4, 5, 7, 8, 9, 18, 19, 20, 21 - Entire doc	Y
a.	Paragraphs and diagrams shall be provided that	Materials, parts, assembly Doc #3 (9 docs) -	Y



Req #	VVSG 2005 Testing Standards - Vol.2 unless otherwise specified	Traced	Comments
	describe: Materials, processes, and parts used in the system, their assembly, and the configuration control measures to ensure compliance with the system specification;	Entire doc; Schematics: Docs #4, 5, 7, 8, 9, 18, 19, 20, 21 - Entire doc Configuration control measures: Doc #17 - Section 6.12	
b.	Paragraphs and diagrams shall be provided that describe: The electromagnetic environment generated by the system;	Doc #2 - 6.5 Applicable standards	Y (Test documents also provided for radiated emissions for hardware components except for Touch and Touch with Access - Doc #12)
c.	Paragraphs and diagrams shall be provided that describe: Operator and voter safety considerations, and any constraints on system operations or the use environment;	Doc #1 - Section 1 Important Safeguards	Y
d.	Paragraphs and diagrams shall be provided that describe: Human factors considerations, including provisions for access by disabled voters.	Doc #1 - Section 7 Voting - Verity Polling Place Equipment, subsections Accessibility, Verity Access; Section 8 Verity Hardware Accessories, subsection Verity Accessible Booth Docs #9 and 19	Y
Vol. 1, 4.1.4.3	DRE System Recording Requirements		
bi	To ensure vote recording accuracy and integrity while protecting the anonymity of the voter, all DRE systems shall: Contain all mechanical, electromechanical, and electronic components; software; and controls required to detect and record the activation of selections made by the voter in the process of voting and casting a ballot;	Doc #1 - Section 7 subsection Verity Controller (I/N 3005351) with Touch (I/N 3005355) and Touch with Access (I/N 3005353)	Y
b.ii	To ensure vote recording accuracy and integrity while protecting the anonymity of the voter, all DRE systems shall: Incorporate redundant memories to detect and allow correction of errors caused by the failure of any of the individual memories	Doc #1 - Section 7 subsection Verity Controller (I/N 3005351) with Touch (I/N 3005355) and Touch with Access (I/N 3005353)	Y
Vol. 1,	Transport and Storage of Precinct Systems		



Req #	VVSG 2005 Testing Standards - Vol.2 unless otherwise specified	Traced	Comments
4.2.3			
a.	All precinct voting systems shall Provide a means to safely and easily handle, transport, and install voting equipment, such as wheels or a handle or handles	Docs #4, 5, 7, 8, 9, 18, 19, 20, 21	Y
Vol. 1, 4.3.1	Materials, Processes, and Parts		
	Precinct count systems shall be designed in accordance with best commercial practice for microcomputers, process controllers, and their peripheral components. Central count voting systems and equipment used in a central tabulating environment shall be designed in accordance with best commercial and industrial practice.	See below	See below
a.	All voting systems shall: Be designed and constructed so that the frequency of equipment malfunctions and maintenance requirements are reduced to the lowest level consistent with cost constraints	Doc #16 - 4.1.10.9 Maintenance (applies to Scan) Doc #1 - Section 7 Voting - Verity Polling Place Equipment	Y
b.	All voting systems shall: Include, as part of the accompanying Technical Data Package, an approved parts list	Doc #1, Section 8, subsection Verity Parts List Doc #3 (9 docs) - Bills of Materials	Y
c.	All voting systems shall: Exclude parts or components not included in the approved parts list	Doc #3 (9 docs) - Bills of Materials, including Approved Vendor List (AVL) tabs	Y

End of Document
