Voting System Standards

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Volume I, Appendix A
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A   Glossary

Absentee Ballot
A ballots cast by a voter unable to vote in person at his or her polling place on election day.

Acceptance Test
The examination of a voting system and its components by the purchasing election authority (usually in a simulated use environment) to validate performance of delivered units in accordance with procurement requirements, and validate that the delivered system is, in fact, a certified or qualified system. Testing to validate performance may be less broad than that involved with qualification testing and successful performance for multiple units (precinct count systems) may be inferred from a sample test.

Ballot Counting Logic
The software logic that defines the combinations of voter choices that are valid and invalid on a given ballot and that determines how the vote choices are totaled in a given election. States differ from each other in the way they define valid and invalid votes and in their vote counting procedures. For example, voters in some States are permitted to both select the straight party option and vote "by exception" for candidates from a different political party. Voters in other States that choose the straight party option and any candidates from a different party for some contests will be considered to have overvoted in those contests.

Ballot Format
One of any number of specific ballot configurations issued to the appropriate precinct. Also referred to as "ballot style."

Ballot Image
An electronically produced record of all votes cast by a single voter. (Also referred to as "ballot set").

Ballot Preparation
The process of using election databases to select the specific contests and questions to be contained in a ballot format and related instructions; preparing election specific software containing these selections; producing all possible ballot formats (or styles); and validating the correctness of ballot materials and software containing these selections for an upcoming election.

Ballot Production
The process of converting the ballot format to a media ready for use in the physical ballot production or electronic presentation.

Ballot Rotation
The process of varying the order of the candidate names within a given contest to reduce the impact of voter bias towards the candidate(s) listed first. States that require ballot rotation may do so for primary elections, general elections, or both. States may rotate the names according to a number of different formulas including by political subdivision, by election district, by precinct, or by ballot displays or voting machines.

Ballot Set
See "Ballot Image."

Baseline	A product configuration that has been formally submitted for review against the the Standards, which thereafter serves as the basis for further development; and can be changed and offered to jurisdictions only through formal change control and requalification procedures (and/or recertification procedures where applicable). (Patterned after IEEE Std. 610.12-1990)
Ballot Scanner	A device used to read the data from a marksense ballot
Candidate Register	The record that reflects the total votes cast for the candidate. This record is augmented as each ballot is cast on a DRE or as digital signals from the conversion of voted paper ballots are logically interpreted and recorded.
Canvass	A compilation of election returns and validation of the outcome that form the basis of the official results.
Catastrophic System Failure	A total loss of function or functions, such as the loss or unrecoverable corruption of voting data, or the failure of an on-board battery for volatile memory.
Certification Testing	The state examination, and possibly testing, of a voting system to determine its compliance with state laws, regulations, and rules and any other state requirements for voting systems.
Closed Primary	A primary election in which voters receive a ballot listing only those candidates running for office in the political party with which the voters are affiliated, along with nonpartisan offices and ballot issues presented at the same election. Usually, unaffiliated voters are permitted to vote only on nonpartisan offices and ballot issues. In some cases, one or more political parties within a state may allow unaffiliated voters to choose to vote in their party's primary.
Component	Individual elements or items that collectively comprise a device. Examples include circuit boards, internal modems, processors, disk drives, computer memory.
Configuration Identification	An element of configuration management, consisting of selecting the configuration items for a system and recording their functional and physical characteristics in technical documentation. (Patterned after IEEE Std. 610.12-1990)
Configuration Item	An aggregation of hardware, software, or both that is designated for configuration management and treated as a single entity in the configuration management process. (Patterned after IEEE Std. 610.12-1990)
Configuration Management	A discipline applying technical and administrative direction and surveillance to: identify and document functional and physical characteristics of a configuration item, control changes to these characteristics, record and report change processing and implementation status, and verify compliance with specified requirements. (Patterned after IEEE Std. 610.12-1990)
Configuration Status Accounting	An element of configuration management, consisting of the recording and reporting of information needed to manage a configuration effectively. This information includes a listing of the approved configuration identification, the status of proposed changes to the configuration, and the implementation status of approved changes. (Patterned after IEEE Std. 610.12-1990)
Count	The process of totaling votes.

Cross-party Endorsement

The endorsement of a single candidate or slate of candidates by more than one political party. The candidate or slate appears on the ballot representing each endorsing political party. State requirements vary for how votes are recorded when a voter selects the same candidate or slate more than once. Also referred to as "cross filing."

Cumulative Voting

A practice where voters are permitted to cast as many votes as there are seats to be filled. Voters are not limited to giving only one vote to a candidate. Instead, they can put multiple votes on one or more candidates.

Data Accuracy

The system's ability to process voting data absent errors generated by the system internally. It is distinguished from data integrity, which encompasses errors introduced by an outside source.

Data Integrity

The invulnerability of the system to accidental intervention or deliberate, fraudulent manipulation that would result in errors in the processing of data. It is distinguished from data accuracy that encompasses internal, system generated errors.

Device

A functional unit that performs its assigned tasks as an integrated whole.

Direct Record Electronic (DRE) Voting System

A voting system that records votes by means of a ballot display provided with mechanical or electro-optical components that can be actuated by the voter; that processes the data by means of a computer program; and that records voting data and ballot images in internal and/or external memory components. It produces a tabulation of the voting data stored in a removable memory component and in printed copy.

Election Coding

See "Election Programming."

Election Counter

A counter in a voting device that counts the ballots cast in a single election or election test. Previously known as public counter.

Election Databases

A data file or set of files that contains geographic information about political subdivisions and boundaries; all contests and questions to be included in an election; and the candidates for each contest.

Election District

A contiguous geographic area represented by a public official who is elected by voters who live within the district boundaries. The district may cover an entire state or political subdivision, may be a portion of the state or political subdivision, or may include portions of more than one political subdivision.

Election Management System

A set of processing functions and databases within a Voting System that define, develop and maintain election databases; perform election definition and setup functions; format ballots; count votes; consolidate and report results; and maintain audit trails.

Election Programming

The process by which election officials or their designees use voting system software to logically define the ballot for a specific election. Also referred to as "election coding."

FEC

An acronym for the Federal Election Commission.

Firmware

Computer programs (software) stored in read-only memory (ROM) devices embedded in the system and not capable of being altered during system operation. For purposes of applying the Standards, firmware is considered a form of software.

Functional Test	A test performed to verify or validate the accomplishment of a function or a series of functions.
General Election	An election in which voters, regardless of party affiliation, are permitted to select persons to fill public office and vote on ballot issues. Where the public office may be filled by a candidate affiliated with a political party, voters choose among the nominees of political parties and, as permitted by state law, unaffiliated candidates.
ITA	An acronym for Independent Test Authority.
Life Cycle Counter	A counter in a voting device that records every test and official ballot counted since the unit was built.
Logical Correctness	A condition signifying that, for a given input, a computer program will satisfy the program specification (produce the required output).
Marksense Voting System	A system by which votes are recorded by means of marks made in voting response fields designated on one or both faces of a ballot card or series of cards. Marksense systems use a ballot scanner to read the ballots.
Measure Register	The record that reflects the total votes cast for and against a specific ballot issue. This record is augmented as each ballot is cast on a DRE or as digital signals from the conversion of voted paper ballots are logically interpreted and recorded.
Non-partisan Office	An elected office for which candidates run independent of political party affiliation.
Nonvolatile Memory	Memory in which information can be stored indefinitely with no power applied. ROMs and EPROMs are examples of nonvolatile memory.
Open Primary	A primary election in which voters, regardless of political affiliation, may choose in which party's primary they will vote. Some states require voters to publicly declare their choice of party ballot at the polling place, after which the poll worker provides or activates the appropriate ballot. Other states allow the voters to make their choice of party ballot within the privacy of the voting booth. Voters also are permitted to vote on nonpartisan offices and ballot issues that are presented at the same election.
Overvotes	The generally prohibited practice of voting for more than the allotted number of candidates for the office being contested.
Paper-Based Voting System	A voting system referred to in the 1990 Standards as a Punchcard and Marksense (P&M) Voting System that records votes, counts votes, and produces a tabulation of the vote count, using one or more ballot cards.
Partisan Office	An elected office for which candidates run as representatives of a political party.
Political Subdivision	Any unit of government, such as counties and cities but often excepting school districts, having authority to hold elections for public offices or on ballot issues.
Polling Location	The physical address of a polling place.
Polling Place	The area within the polling location where voters cast ballots.

Precinct	An administrative division representing a contiguous geographic area in which voters cast ballots at the same polling place. Voters casting absentee ballots may also be combined into one or more administrative absentee precincts for purposes of tabulating and reporting votes. Generally, voters in a polling place precinct are eligible to vote in a general election using the same ballot format. In some jurisdictions, however, the ballot formats may be different due to split precincts or required ballot rotations within the precinct.
Primary Election	In most cases, an election held to determine which candidate will represent a political party in the general election. During presidential election years, voters in primary elections may also select delegates to presidential nominating conventions. Some states have an "open primary", while others have a "closed primary". Sometimes elections for nonpartisan offices and ballot issues are held during primary elections.
Primary Presidential Delegation Nominations	A primary election in which voters choose the delegates to the Presidential nominating conventions allotted to their state by the national party committees.
Public Network Direct Record Electronic (DRE) Voting System	A form of DRE voting system that uses electronic ballots and transmits official vote data from the polling place to another location (such as a central count facility) over a public network beyond the control of the election authority. These networks include public telephone lines and the Internet.
Punchcard Voting System	A voting system where votes are recorded by means of punches made in voting response fields designated on one or both faces of a ballot card or series of cards.
Qualification Number	A number issued by NASED to a system that has been tested by certified Independent Test Authorities for compliance with the qualification test standards. The issuance of a Qualification Number indicates that the system qualifies for certification process of states that have adopted the Standards.
Qualification Test Report	A report of results of independent testing of a voting system by an Independent Test Authority indicating the date testing was completed, the specific system version tested, and the scope of tests conducted
Qualification Testing	The examination and testing of a computerized voting system by an Independent Test Authority using qualification test standards to determine if the system complies with the qualification performance and test standards and with its own specifications. This process occurs prior to state certification.
Recall Issues (with Options)	The process that allows voters to remove their elected representatives from office prior to the expiration of their terms of office. Often, the recall involves not only the question of whether a particular officer should be removed from office, but also the question of naming a successor in the event that there is an affirmative vote for the recall. There are no provisions for the recall of federal office holders.
Recertification	The state examination, and possibly the retesting, of a voting system that was modified subsequent to receiving state certification. The object of this process is to determine if the modification still permits the system to function properly in accordance with state requirements.
Runoff Election	An election to select a winner following a primary, or sometimes a general election, in which no candidate in the contest received the required minimum percentage of the votes cast. The two candidates receiving the most votes for the race in question proceed to the runoff election.

Split Precinct	A split precinct is a precinct containing more than one ballot format because the contiguous geographic area served by the precinct has been split by crossing election district boundaries.
Straight Party Voting	A mechanism by which voters are permitted to cast a vote indicating the selection of all candidates on the ballot for a single political party.
Support Software	Software that aids in the development or maintenance of other software, for example compilers, loaders and other utilities. (Patterned after IEEE Std. 610.12-1990)
Tabulation	See "Count."
Undervotes	The practice of voting for less than the total number of election contests listed on the ballot, or of voting for less than the number of positions to be filled for a single office. (i.e. A person would undervote if a contest required the selection of 3 out of a given number of candidates, and the voter chose only two candidates).
Validation	The process of evaluating a system or component during or at the end of the development process to determine whether it satisfies specified requirements. (Patterned after IEEE Std. 610.12-1990)
Verification	The process of evaluating a system or component to determine whether the products of a given development phase satisfy the conditions (such as specifications) imposed at the start of that phase. (Patterned after IEEE Std. 610.12-1990)
Vote for N of M	A ballot choice in which voters are required to vote for a limited number of candidates for a single office from a larger field of candidates. For example, in an election for city council voters may be told that they can only vote for six -the number of council seats up for election- out of twelve candidates actually listed on the ballot.
Voter Registration System	A set of processing functions and data storage that maintains records of eligible voters. This system generally is not considered a part of a Voting System subject to the Standards.
Voting Position	Specific response fields on a ballot where the voter indicates the selection of a candidate or ballot proposition.
Write-in-Voting	A means to cast a vote for an individual not listed on the ballot. Voters may do this by using a marking device to physically write their choice on the ballot or they may use a keypad, touchscreen or other electronic means to indicate their choice.