IC 3-11-15
Chapter 15. Ballot Card and Electronic Voting Systems; Additional Standards and Procedures for Approving System Changes

IC 3-11-15-1
Applicability of chapter
Sec. 1. Except as otherwise provided, this chapter applies to any election in Indiana where voting is by means of a ballot card or electronic voting system.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-2
Applicability of performance and test standards and fees
Sec. 2. The performance and test standards and fees under this chapter apply to an optical scan voting system or an electronic voting system described in IC 3-11-7 or IC 3-11-7.5.
As added by P.L.3-1997, SEC.332. Amended by P.L.221-2005, SEC.92.

IC 3-11-15-3
Vendors; application to examine voting system
Sec. 3. A vendor may apply to the election division to examine a voting system and report on its accuracy, efficiency, and capacity.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-4
Application for certification; fee; disposition of fee
Sec. 4. Each application for certification of a voting system shall be accompanied by a fee of one thousand five hundred dollars ($1,500). All fees collected under this section shall be deposited with the treasurer of state in the voting system technical oversight program account established by IC 3-11-17-6.
As added by P.L.3-1997, SEC.332. Amended by P.L.120-2009, SEC.9.

IC 3-11-15-5
Vendors; reimbursement to election division for cost of examination
Sec. 5. Each vendor shall reimburse the election division an amount equal to the total cost of examining the system.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-6
Approval of system dependent on payment of fees and expenses
Sec. 6. The commission shall not approve any system until the fee and the expenses incurred by the election division (or the person designated under IC 3-11-16) in making the examination are paid by the person making the application.
As added by P.L.3-1997, SEC.332. Amended by P.L.221-2005,

SEC.93.

IC 3-11-15-7
Applications; contents
  Sec. 7. (a) Each application must be in writing, sworn to or affirmed by the applicant, under the penalties of perjury, on a form prescribed by the commission, and must satisfy the following requirements:

    (1) Provide the name and address of the vendor submitting the application.
    (2) Provide the telephone number of the vendor.
    (3) Provide the name, address, and telephone number of the individual representing the vendor regarding the application.
    (4) Provide the model name and number of the submitted voting system, stating the hardware, firmware, and software version numbers of the system.
    (5) State whether the voting system is a direct record electronic voting system or an optical scan ballot card voting system.
    (6) Provide a description of the voting system and its capabilities, including the following:
      (A) Photographs.
      (B) Engineering drawings.
      (C) Technical documentation.
      (D) Fail-safe and emergency backup information.
      (E) Environmental requirements for storage, transportation, and operation.
    (7) Include an agreement to pay for the total costs of the examination.
    (8) Provide documentation of the escrow of the voting system's software, firmware, source codes, and executable images with an escrow agent approved by the election division.
    (9) Provide a functional description of any software components.
    (10) Provide schematics or flowcharts identifying software and data file relationships.
    (11) Describe the type of maintenance offered by the vendor.
    (12) Provide the names, addresses, and telephone numbers of the vendor's maintenance providers.
    (13) Provide a description of the training courses offered by the vendor for the voting system.
    (14) Provide user manuals, operator and system manuals, and problem solving manuals.
    (15) Provide a statement of the current and future interchangeability of all subcomponents of the voting system.
    (16) Provide documentation from all independent testing authorities that have examined the system.
    (17) Provide documentation from all election jurisdictions that have previously approved the system.
    (18) Pay the application fee required under section 4 of this chapter.

(b) If an application does not include any of the applicable requirements listed in subsection (a), those requirements must be filed with the election division before the application may be considered by the commission.
As added by P.L.3-1997, SEC.332. Amended by P.L.14-2004, SEC.133.

IC 3-11-15-8
Applications; length of validity
Sec. 8. An application under this chapter is valid for one (1) year after the date that the application is filed with the election division and for any additional time that the commission considers necessary to act upon the application.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-9
Prompt response to inquiries by applicant required
Sec. 9. An applicant must vigorously and continuously seek approval of an application by promptly responding to inquiries from the commission and the election division. The commission may, following a hearing under IC 4-21.5, dismiss an application if the commission determines that the applicant has not complied with this requirement.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-10
Repealed
(Repealed by P.L.221-2005, SEC.144.)

IC 3-11-15-11
Repealed
(Repealed by P.L.221-2005, SEC.144.)

IC 3-11-15-12
Applications; form
Sec. 12. Each application under this chapter must be in writing on a form prescribed by the commission and must comply with the requirements of this chapter.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-13
Repealed
(Repealed by P.L.164-2006, SEC.143.)

IC 3-11-15-13.1
Voting system display of candidate name; optional display of candidate designations
Sec. 13.1. (a) If a voting system has the capability, the voting system must display on the medium used by the voter to cast the voter's ballot the name of each candidate.

(b) A county election board (or a board of elections and registration established under IC 3-6-5.2 or IC 3-6-5.4) may require a voting system to display on the medium used by the voter to cast the voter's ballot a ballot number or other candidate designation uniquely associated with the candidate.

As added by P.L.66-2003, SEC.43. Amended by P.L.190-2011, SEC.12.

IC 3-11-15-13.3
Federal voting system standards; use of voting system with expired certification

Sec. 13.3. (a) To be approved by the commission for use in Indiana, a voting system must meet:
    (1) the Voting System Standards adopted by the Federal Election Commission on April 30, 2002; or
    (2) the Voluntary Voting System Guidelines adopted by the United States Election Assistance Commission on December 13, 2005.

(b) A county may continue to use an optical scan ballot card voting system or an electronic voting system whose approval or certification expired on or before October 1, 2013, if the voting system:
    (1) was:
        (A) approved by the commission for use in elections in Indiana before October 1, 2013; and
        (B) purchased by the county before October 1, 2013; and
    (2) otherwise complies with the applicable provisions of HAVA and this article.
However, a voting system vendor may not market, sell, lease, or install a voting system described in this subsection.

(c) As provided by 42 U.S.C. 15481, to be used in an election in Indiana, a voting system must be accessible for individuals with disabilities, including nonvisual accessibility for the blind and visually impaired, in a manner that provides the same opportunity for access and participation (including privacy and independence) as for other voters.

(d) As provided by 42 U.S.C. 15481, an election board conducting an election satisfies the requirements of subsection (c) if the election board provides at least one (1) electronic voting system or other voting system equipped for individuals with disabilities at each polling place.

(e) If a voter who is otherwise qualified to cast a ballot in a precinct chooses to cast the voter's ballot on the voting system provided under subsection (d), the voter must be allowed to cast the voter's ballot on that voting system, whether or not the voter is an individual with disabilities.

As added by P.L.209-2003, SEC.164. Amended by P.L.221-2005, SEC.94; P.L.164-2006, SEC.118; P.L.120-2009, SEC.10; P.L.219-2013, SEC.51.

IC 3-11-15-13.4
Voting system and voters with disabilities
Sec. 13.4. (a) This section does not apply to the purchase, lease, or lease-purchase of additional or replacement components of a voting system in use in a county before January 1, 2005.

(b) The commission shall determine whether a voting system provides a practical and effective means for voters with disabilities to cast ballots in private.

(c) If the commission determines that any voting system meets the criteria described in subsection (b), a county may not purchase, lease, or lease-purchase any other voting system that does not meet the criteria described in subsection (b).
As added by P.L.97-2004, SEC.10.

IC 3-11-15-13.5
Repealed
(Repealed by P.L.97-2004, SEC.133.)

IC 3-11-15-13.6
Compliance with standards for disability access
Sec. 13.6. (a) This section applies only to a voting system purchased with funds made available under Title II of HAVA (42 U.S.C. 15321 through 15472) after December 31, 2006.

(b) As required by 42 U.S.C. 15481, the voting system must comply with the Voting System Standards for disability access referred to in section 13.3 of this chapter and 42 U.S.C. 15481(a)(3) to be used in an election.
As added by P.L.97-2004, SEC.11.

IC 3-11-15-13.7
Requirements of voting systems to indicate overvotes
Sec. 13.7. (a) If a voting system has any of the following functions, the functions must be operable in the voting system's equipment actually in use in a precinct:
> (1) The voting system can demonstrate to the voter that the voter has cast votes for too many candidates for an office.
> (2) The voting system can demonstrate to the voter that the voter has cast votes both in favor of and in opposition to a public question.

(b) Except as provided in subsection (c), a voting system described in subsection (a) must be able to inform the voter how the voter may correct errors on the voter's ballot.

(c) A voting system is not required to provide the information required by subsection (b) if the information is provided in writing conspicuously on or near the components of the voting system where the voter casts the voter's votes.
As added by P.L.126-2002, SEC.76.

IC 3-11-15-14
Ballot counting devices and equipment; verification

Sec. 14. In ballot card voting systems, each precinct ballot counting device, and all central counting equipment, must contain provisions for verifying:

(1) its proper preparation for an election; and
(2) that both the hardware and the software are functioning correctly.

As added by P.L.3-1997, SEC.332.

IC 3-11-15-15
Ballot counting devices and equipment; tests and diagnostic procedures
Sec. 15. The tests and diagnostic procedures described in section 14 of this chapter:

(1) may be executed manually or automatically; and
(2) must allow for operator intervention to validate the proper execution of individually selected equipment functions.

As added by P.L.3-1997, SEC.332.

IC 3-11-15-16
Electronic voting system; verification
Sec. 16. Each electronic voting system or vote recording and data processing device shall contain hardware and software provisions for verifying:

(1) its proper preparation for an election; and
(2) that both the hardware and the software are functioning correctly.

As added by P.L.3-1997, SEC.332.

IC 3-11-15-17
Electronic voting system; tests and diagnostic procedures
Sec. 17. The tests and diagnostic procedures described in section 16 of this chapter:

(1) may be carried out manually or automatically; and
(2) must allow for operator intervention to validate the proper execution of individually selected equipment functions.

As added by P.L.3-1997, SEC.332.

IC 3-11-15-18
Repealed
(Repealed by P.L.26-2000, SEC.46.)

IC 3-11-15-19
Repealed
(Repealed by P.L.26-2000, SEC.46.)

IC 3-11-15-20
Voting system; accuracy
Sec. 20. (a) A voting system must be able to record accurately each vote and be able to produce an accurate report of all votes cast.

(b) As used in this subsection, "error rate" refers to the error rate

of the voting system in counting ballots (determined by taking into account only those errors that are attributable to the voting system and not attributable to an act of the voter). As required by 42 U.S.C. 15481, a voting system must comply with the error rate standards established under section 3.2.1. of the Voting System Standards approved by the Federal Election Commission on April 30, 2002, as those standards were in effect on October 29, 2002.

(c) The inclusion of control logic and data processing methods incorporating parity and check-sums (or equivalent error detection and correction methods) must demonstrate that the system has been designed for accuracy.

As added by P.L.3-1997, SEC.332. Amended by P.L.209-2003, SEC.166.

IC 3-11-15-21
Voting system; software

Sec. 21. Software used in a voting system must monitor the overall quality of data read-write and transfer quality status, checking the number and types of errors that occur in any of the relevant operations on data and how they were corrected.

As added by P.L.3-1997, SEC.332.

IC 3-11-15-22
Ballot card voting system; verification and accuracy

Sec. 22. Ballot card voting systems must rely on the retention of ballots as a redundant means of verifying or auditing election results. As a means of assuring accuracy in electronic voting systems, the unit must incorporate multiple memories in the machine itself and in its programmable memory devices.

As added by P.L.3-1997, SEC.332.

IC 3-11-15-23
Electronic voting system; preservation of electronic images of ballots

Sec. 23. To attain a measure of integrity over the process, the electronic voting systems must also maintain an image of each ballot that is cast, such that records of individual ballots are maintained by a subsystem independent and distinct from the main vote detection, interpretation, processing, and reporting path. The electronic images of each ballot must protect the integrity of the data and the anonymity of each voter, for example, by means of storage location scrambling. The ballot image records may be either machine-readable or manually transcribed, or both, at the discretion of the vendor.

As added by P.L.3-1997, SEC.332.

IC 3-11-15-24
Voting system; status and degree of operability

Sec. 24. Ballot card voting and electronic voting systems must include built-in test, measurement, and diagnostic software, and

hardware for detecting and reporting the system's status and degree of operability.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-25
Voting system; recording and reporting capabilities
Sec. 25. A voting system must include capabilities of recording and reporting the date and time of normal and abnormal events and of maintaining a permanent record of audit information that cannot be turned off. A voting system must include provisions to detect and record significant events, such as casting a ballot, error conditions that cannot be disposed of by the system itself, or time-dependent or programmed events that occur without the intervention of the voter or a polling place operator.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-26
Ballot counting software
Sec. 26. The ballot counting software must be designed in a modular fashion and not be self-modifying. Modular programs must consist of code written in relatively small and easily identifiable sections, with each unit having a single entry point and a single exit point. Each module must have a specific function that can be tested and verified more or less independently of the remainder of the code.
As added by P.L.3-1997, SEC.332. Amended by P.L.219-2013, SEC.52.

IC 3-11-15-27
Repealed
(Repealed by P.L.26-2000, SEC.46.)

IC 3-11-15-28
Repealed
(Repealed by P.L.26-2000, SEC.46.)

IC 3-11-15-29
Repealed
(Repealed by P.L.26-2000, SEC.46.)

IC 3-11-15-30
Repealed
(Repealed by P.L.26-2000, SEC.46.)

IC 3-11-15-31
Repealed
(Repealed by P.L.26-2000, SEC.46.)

IC 3-11-15-32
Repealed
(Repealed by P.L.219-2013, SEC.53.)

IC 3-11-15-33
Real-time monitoring of system status and data quality
    Sec. 33. The vendor shall provide for the real-time monitoring of system status and data quality. The election division (or the competent person designated by the commission to act on behalf of the election division) shall determine methods of assessment with the advice of a test authority. Implementation options include the following:
        (1) Hardware monitoring of redundant processing functions which are carried out in parallel or serially.
        (2) Statistical assessment and measures of system operation.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-34
Quality assessment
    Sec. 34. Measurement of the relative frequency of entry to program units and the frequency of exception conditions must be included as part of the quality assessment.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-35
Repealed
    (Repealed by P.L.176-1999, SEC.134.)

IC 3-11-15-36
Errors in operations; corrections
    Sec. 36. Software used in all systems must monitor the overall quality of data read-write and transfer quality status, checking the number and types of errors that occur in any of the relevant operations on data and how the errors were corrected. If the total number of corrected errors exceeds a predetermined threshold, or if errors on any one (1) type occur repeatedly, then the operation of the affected device must be suspended until the condition generating the errors has been corrected. Any uncorrectable error must result in an immediate halt and provide an appropriate message to the voter or polling place official.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-37
Retention of ballots for verification of election results
    Sec. 37. Ballot card voting systems must rely on the retention of ballots as a redundant means of verifying election results. As a means of assuring accuracy in electronic voting systems, the unit must incorporate multiple memories in the machine itself and in the unit's programmable memory devices. To attain a measure of integrity over the process, an electronic voting system must also maintain images of each ballot that is cast so that records of individual ballots are maintained by a subsystem independent and distinct from the main vote detection, diagnostic, processing, and

reporting path.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-38
Stored images of ballots
Sec. 38. The stored images of each ballot must protect the integrity of the data and the anonymity of each voter by such means as storage location scrambling. The ballot image records may be either machine readable or manually transcribed, or both, at the discretion of the vendor.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-39
Firmware instructions; undervoting permitted
Sec. 39. The electronic voting system firmware instructions must contain necessary logical instructions to determine correct recording of each and every candidate or public question selection made by the voter to the appropriate memory registers and tables. In the case of a partially voted ballot, deliberate undervoting by a voter must be permitted. This undervoting must be validated by machine determination that particular candidate or public question selections have not been made. In cases where a selected candidate or vote on a public question is not recording correctly upon casting of the ballot, the electronic voting system equipment must generate an error signal and automatically stop operation of the machine until the problem is resolved.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-40
Reconciliation of sum of selections and undervotes
Sec. 40. After every ballot is cast, a reconciliation of the sum of selections and undervotes must occur. The undervotes may not be generated as a default but must be generated as the result of scanning the ballot as the ballot is cast.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-41
Status messages
Sec. 41. Status messages must become part of the real-time audit record. Latitude in software design is necessary so that consideration can be given to various user processing and reporting needs. The user shall require status and information messages to be displayed and reported in real-time.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-42
Status messages; display
Sec. 42. Depending on the critical nature of the message, and the particular jurisdiction's needs, status messages shall preferably be displayed and reported by suitable, unambiguous indicators or

English language text. Noncritical status messages may be displayed if the message does not require operator intervention by means of numerical codes, for subsequent interpretation and reporting as ambiguous text.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-43
Audit record; ability of voter to change vote before ballot cast
Sec. 43. (a) The audit record provisions in this chapter are essential to the complete recording of election operations and reporting of the vote tally. This list of audit records must reflect all of the idiosyncrasies of a system.

(b) As required by 42 U.S.C. 15481, the voting system must:
(1) produce a permanent paper record with a manual audit capacity for the system; and
(2) provide the voter with an opportunity to change the ballot or correct any error before the permanent paper record is produced.

(c) The paper record produced under subsection (b) must be made available as an official record for a recount or contest conducted with respect to any election in which the voting system was used.
As added by P.L.3-1997, SEC.332. Amended by P.L.209-2003, SEC.168.

IC 3-11-15-44
In-process audit records; contents
Sec. 44. In-process audit records consist of data documenting precinct and central count system operation during diagnostic routines and the casting and tallying of ballots. At a minimum, the in-process audit records for all systems must contain the following items, except as otherwise noted:
(1) Machine generated error and exception messages to ensure that successful recovery has been accomplished. Examples include the following:
(A) The source and disposition of system interrupts resulting in entry into exception handling routines.
(B) All messages generated by exception handlers.
(C) The identification code and number of occurrences for each hardware and software error or failure.
(D) Notification of system log-in or access errors, file access errors, and physical violations of security as they occur, and a summary record of these events after processing.
(E) For ballot card voting systems, an event log of any ballot-related exceptions, such as the following:
(i) Quantity of ballots that are not processable.
(ii) Quantity of ballots requiring special handling.
(iii) In a central count environment, quantity identification number of aborted precincts.
(F) Other exceptional events such as power failures, failure of critical hardware components, data transmission errors, or

other types of operating anomalies.

(2) Critical system status messages other than informational messages displayed by the system during the course of normal operations. These items include the following:

(A) Diagnostic and status messages upon startup.

(B) The "zero totals" check conducted before opening the polling place or counting a precinct centrally.

(C) For ballot card voting systems, the initiation or termination of card reader and communications equipment operations.

(D) For electronic voting system machines, the event (and time, if available) of enabling/casting each ballot that is each voter's transaction as an event. This data can be compared with the public counter for reconciliation purposes.

(3) Status messages that are generated by the machine's data quality monitor or by software and hardware condition monitors. For example, a cumulative or summary record of data read-write-verify, parity, or check-sum errors and retries is required. The intent is to gauge the accuracy of the ballot data and adequacy of the system in monitoring and detecting system processing errors.

(4) System generated log of all normal process activity and system events that require operator intervention so that each operator access can be monitored and access sequence can be constructed.

As added by P.L.3-1997, SEC.332.

IC 3-11-15-45
General features and capabilities of access policy; disclosure
    Sec. 45. The vendor shall disclose the general features and capabilities of the access policy. The generic capabilities should include the following:

(1) Software access controls.

(2) Hardware access controls.

(3) Effective password management.

(4) The protection abilities of a particular operating system.

(5) The general characteristics of supervisory access privileges.

As added by P.L.3-1997, SEC.332.

IC 3-11-15-46
Access policies defined by using jurisdiction
    Sec. 46. The using jurisdiction in charge of voting system operations is responsible for defining the specific access policies applying to each election and for defining any variations of these resulting from use of the system in more than one (1) environment.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-47
Access control policy; limitations on access
    Sec. 47. The access control policy must identify all persons to

whom access is granted and the specific functions and data to which each holds authorized access. If an authorization is limited to a specific time, time interval, or phase of the voting or counting operations, this limitation must also be specified.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-48
Access control policy; requirements
    Sec. 48. The access control policy:
        (1) may not affect the ability of a voter to record votes and submit a ballot; and
        (2) must preclude voter access to all other physical facilities of the vote-counting processes.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-49
Approval required before voting system is marketed, sold, leased, installed, or implemented; exception for display or demonstration, conditions
    Sec. 49. (a) Except as provided in subsection (b), before a vendor markets, sells, leases, installs, or permits the implementation of a voting system in Indiana, the commission must have approved the vendor's application for the approval of the voting system.
    (b) A vendor may display or demonstrate a voting system that has not been approved by the commission for use in Indiana, if the vendor complies with all the following requirements:
        (1) The display or demonstration occurs at a conference of election officials sponsored by:
            (A) a state agency; or
            (B) an association of circuit court clerks or voter registration officers.
        (2) The vendor files a notice with the election division at least seven (7) days before the scheduled starting date of a conference referred to in subdivision (1) setting forth the following:
            (A) The name of the vendor and each vendor representative scheduled to display or demonstrate the voting system.
            (B) The address and telephone number of the vendor.
            (C) The model name and number of the voting system, including the hardware, firmware, and software version number for the voting system.
            (D) The name and manufacturer of the voting system.
            (E) The date and location of the display or demonstration of the voting system.
        (3) The vendor displays the voting system with a notice that:
            (A) is in at least 16 point type size;
            (B) is posted on the face of the voting system; and
            (C) states that the voting system is "Not Approved for Use in Indiana".
        (4) The vendor ensures that each communication concerning the

voting system that is available or made at a conference referred to in subdivision (1) includes a statement that the voting system is "Not Approved for Use in Indiana". A printed communication must include the statement in a type size that is at least as large as the largest type size used in the communication.
As added by P.L.3-1997, SEC.332. Amended by P.L.14-2004, SEC.135; P.L.219-2013, SEC.54.

IC 3-11-15-50
Repealed
(Repealed by P.L.221-2005, SEC.144.)

IC 3-11-15-51
Repealed
(Repealed by P.L.221-2005, SEC.144.)

IC 3-11-15-52
Repealed
(Repealed by P.L.221-2005, SEC.144.)

IC 3-11-15-53
Repealed
(Repealed by P.L.221-2005, SEC.144.)

IC 3-11-15-54
Software or source code changes
Sec. 54. Notwithstanding any other provision of this chapter, the software or source code of a voting system may not be changed while an election is being conducted or during the canvassing of the election's results.
As added by P.L.3-1997, SEC.332.

IC 3-11-15-55
Repealed
(Repealed by P.L.221-2005, SEC.144.)

IC 3-11-15-56
Repealed
(Repealed by P.L.221-2005, SEC.144.)

IC 3-11-15-57
Repealed
(Repealed by P.L.221-2005, SEC.144.)

IC 3-11-15-58
Repealed
(Repealed by P.L.221-2005, SEC.144.)