



EAC Decision on Request for Interpretation 2012-01 (Ballot Handling)

2005 VVSG Volume I, Section 4.1.5.1.e.i

Date:

February 03, 2012

Question:

How should a central count optical scan device perform the “halt” function required in VVSG 4.1.5.1.e.i when it detects a multiple feed?

Section of Guidelines:

4.1.5.1 Ballot Handling

Ballot handling consists of a ballot card’s acceptance, movement through the read station, and transfer into a collection station or receptacle.

- e.** Ballot readers shall prevent multiple feed or detect and provide an alarm indicating multiple feed. Multiple feed occurs when a ballot reader attempts to read more than one ballot at a time.
 - i.** If multiple feed is detected, the card reader shall halt in a manner that permits the operator to remove the unread cards causing the error, and reinsert them in the card input hopper

Discussion:

The requestor suggests the standard does not define the timing of the “stop” or “halt” action of the card reader. The requestor states that the requirement only says that the machine must stop in a manner which allows the user to remove the unread cards causing the error and reinsert them into the card input hopper.

The requestor believes that a central count scanner with multiple bins may, upon detection of a multiple feed condition, allow the scanning of all ballots in the input hopper to complete as long as the following conditions are met. According to the requestor, the scanner must only:

- prevent the multi-feed ballots from being processed,

- outstack the ballots to an output hopper separate from the output hopper containing processed ballots so as to allow them to be reinserted into the input tray for reprocessing, and
- upon completion of scanning, alert the operator that a multi-feed has occurred, require them to acknowledge the alert message, and direct them to immediately rescan the outstacked ballots.

The requestor also feels that stopping for a multi-feed in the middle of a run increases the likelihood of operator error resulting in uncounted or incorrectly counted ballots.

The EAC disagrees with the requestor's interpretation of the standard. The implementation of the central count scanner provided by the requestor does not meet the requirements of Section 4.1.5.1.e. i.

Section 4.1.5.1.e states that: *“Ballot readers shall prevent multiple feed or detect and provide an alarm indicating multiple feed. Multiple feed occurs when a ballot reader attempts to read more than one ballot at a time.”* The implementation in question does not prevent multiple feeds, so the initial section of the first sentence of the requirement has not been met by the implementation. Since the first sentence of the requirement contains an “or” clause, the second section of the first sentence of the requirement (detect and provide an alarm . . .) thus becomes mandatory. While the implementation does “detect” multi-feeds, it does not provide an alarm indicating that a multiple feed situation has occurred. **“Alarm”** as used in this section of the VVSG is generally accepted to mean “a signal (as a loud noise or flashing light) that warns or alerts.” The only notification that the current implementation provides is a screen, currently under development, which appears at the end of the batch run noting that a multiple feed or ballot too long condition has occurred. This screen does not meet the clear wording of the “alarm” portion of the requirement.

Section 4.1.5.1.e.i. also states that: *“If multiple feed is detected, the card reader shall halt...”* As used in laws, regulations and standards, the word **“shall”** is defined as “an action that is mandatory.” The word **“halt”** is generally defined in the English language as meaning “to stop; cease moving, operating, etc., either permanently or temporarily.” Further, the word **“stop”** is generally defined as meaning “to cease moving, proceeding, speaking, acting, operating, etc.; to pause; desist.” Given these commonly accepted definitions, it is impossible to read the standard in any other way than to say that the system must cease operating as immediately as practicable in order to allow operator actions that follow (i.e. permits the operator to remove the unread cards causing the error, and reinsert them in the card input hopper). The EAC does not accept the interpretation of the requirement that stopping only after completing a scan of ballots contained in the batch input tray of the central scanner (up to 300 ballots per batch) would meet this requirement. In addition, the EAC finds no clear purpose for this requirement if the word “halt” was defined to mean the time after the machine has processed all ballots contained in a batch. The scanner, by design, will stop after each batch is processed because there are not ballots left in the input tray,

thus obviating the requirement. Since all requirements were inserted into the VVSG for a reason, defining halting in the proposed manner cannot satisfy the wording of the requirement.

The EAC also disagrees with the argument that stopping for a multi-feed in the middle of a run increases the likelihood of operator error resulting in uncounted or incorrectly counted ballots. If the central scanner in question meets the requirements of VVSG Section 4.1.5.1.e.ii (“The frequency of multiple feeds with ballots intended for use with the system shall not exceed 1 in 10,000.”), the operator would stop to deal with multi-feed issues no more frequently than once in every 33 (approximate) batches of ballots. Given these facts, the rare instances of stoppage would be extremely unlikely to produce any added operator error resulting in uncounted or incorrectly counted ballots.

Conclusion:

The EAC disagrees with the interpretation proposed by the requestor for the reasons noted above and suggests that voting system manufacturers discuss all proposed interpretations of the VVSG with the EAC *before* implementing any such interpretation in order to save both time and money. Given the operation of the specific central count scanning unit in question, an appropriate implementation of the standard in question would be to institute a system halt once a multi-feed situation was detected and the remainder of the ballots circulating in the transport path have cleared the path and been deposited into an outfeed tray.

Effective Date:

Effective immediately upon publication.