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4/25/2021

SUBJECT: Follow-up response to your invitation to send additional information

Thank you again for meeting with us about our comments on S.1 and for inviting us to provide further information on several specific topics. That information is included below, as follows:

1. Proposed wording about UOCAVA internet return, based on existing state laws
2. Deadline and funding to speed up EAC component testing
3. Research on accessible remote voting, and measuring the need for it
4. Grants to buy equipment now
5. Multiple meanings of the word “cast” in S.1

We suggest adding the **bold words** shown below to our previous comments, which are still underlined. We hope these additions to our previous suggestions are helpful. We would be happy to discuss them further and answer any questions.

Paul Burke, Camarillo, California  
Noel H. Runyan, Campbell, California  
John McCarthy, Berkeley, California  
Stephanie Singer, Portland, Oregon  
Luther Weeks, Connecticut  
Neal McBurnett, Colorado  
Harvie Branscomb, Colorado

## **PROPOSED WORDING ABOUT UOCAVA INTERNET RETURN, BASED ON EXISTING STATE LAWS**

Wording is based on South Carolina and Texas, plus a limitation based on weekly mail service.

We do not propose where to put this in S.1. Information on all states is at:

<https://www.ncsl.org/research/elections-and-campaigns/internet-voting.aspx>

Texas space rule is at: [http://txrules.elaws.us/rule/title1\\_chapter81\\_sec.81.35](http://txrules.elaws.us/rule/title1_chapter81_sec.81.35)

### **States may not allow electronic ballot return, except by**

- 1) **citizens on a space flight during early voting and election day, or**
- 2) **active duty uniformed service members (or their immediate family members) who are casting a ballot from an area where they can be expected to have less than weekly mail service, and are:**
  - a) **eligible to receive hostile fire/imminent danger pay,**
  - b) **servicing underwater for an extended period,**
  - c) **in an area that has been designated as a combat zone by the President of the U.S.**

## **DEADLINE AND FUNDING TO SPEED UP EAC COMPONENT TESTING**

SUGGESTED REVISED HR1 LANGUAGE: 3302(a)(4) creates HAVA 301(b)(2) any electronic poll book and other systems used to determine the eligibility of voters or ballot packets, including signature verification systems, used with respect to the election. All such components should be considered extensions of the voting system. The EAC will test and certify such extensions separately, not as part of a voting system (as originally defined by HAVA). Such extensions are to be tested and certified separately and can be selected for purchase by jurisdictions separately. By December 2022, the EAC shall separately test and certify components of voting systems (such as ballot marking devices, scanners and election management systems) as well as entire voting systems and shall require that components are interoperable.

**NIST shall be granted \$500,000 to finish developing the necessary interoperability standards and the EAC shall be granted \$500,000 to develop the test and certification protocols.**

## **RESEARCH ON ACCESSIBLE REMOTE VOTING, AND MEASURING THE NEED FOR IT**

Our additions in items 1 and 4 below cover accessible remote voting without the internet. Item 5 has the research we discussed on how many people truly need internet return of ballots, because of UOCAVA or disability. In writing them we had these examples in mind: submariners and merchant mariners away from port for multiple weeks, Peace Corps volunteers and researchers without reliable mail, people with print disabilities whose motor limitations prevent them putting a paper ballot in an envelope, home-bound people with a smart or dumb phone and no printer and unable to hand-mark a ballot, etc.

**S.1 §1503(b) creates new HAVA §247 Study and report on accessible voting options**

(a) Grants To study and report. The Commission, in coordination with the Access Board and the Cybersecurity and Infrastructure Security Agency, shall make grants to not fewer than 7 –3 eligible entities:

(1) To study, test and develop accessible and secure remote voting systems and voting, verification **(including adding recognition of mark-sense targets to optical character recognition apps used by voters with visual impairments), and casting devices, and methods and guidelines for best practices, in order** to enhance the accessibility of voting and verification for individuals with disabilities, **including efficient transport of HAVA-compliant equipment and ballot boxes to voters.** Any proposed method for electronic return of completed ballots must meet the criteria in (3)

(2) To independently study and test existing and proposed remote voting systems to identify flaws, limitations and security weaknesses. Testing must incorporate criteria in (3)

(3) Criteria for testing and development:

- a) The system is secure from hacking and malware, including on the client, on the server, and man-in-the-middle attacks
- b) The system includes effective voter authentication
- c) The system protects ballot secrecy. The system creates no information that can be used to associate a voter with their choices
- d) An undetected change or fault in the system cannot cause undetectable errors in election outcomes. This includes Software Independence as defined in VVSG 2.0: “a previously undetected change or fault in software cannot cause an undetectable change or error in election outcome.”
- e) Each voter can verify their vote selections were correctly received by the election office.
- f) The design of the system and methods of verification are publicly disclosed, including source code or other implementation of any tools required for verification, so that anyone can actually conduct verifications.

(4) **To develop, test and publicize models and best practices to make pre-election and post-election information more accessible, such as more accessible websites, sending voters links to a sample ballot and remote accessible ballot, both of correct style for them, and sending accessible election results for the contests appearing on the ballot. in their precinct.**

(5) **To research the numbers of Americans with disabilities and those eligible for UOCAVA voting, who may need internet return instead of paper return. Grant recipients will consult with representatives of people with disabilities, merchant mariners, civilians abroad, the armed forces, State Department, USPS and private delivery services. The project will cover:**

- a) **People with no available paper mail or private delivery service in the month before an election, so they cannot return a paper ballot.**
- b) **People whose available paper mail and private delivery services are less secure or private than internet return**
- c) **People who are physically unable to use paper mail or private delivery services to return a ballot independently and privately**

- d) **People who cannot vote by any plausible method, such as prisoners abroad**
- e) **Identification of the fractions of people in (a) - (c) who could or could not return their votes by internet (including fax or email)**
- f) **Costs for election officials to bring HAVA-compliant equipment to US residents in (c) as an alternative to internet return**
- g) **Clear list of categories of people with different needs for internet return**
- h) **Research on improved methods for allowing or restricting internet return based on categories identified**
- i) **Recommendations for actions by the Defense and State Departments to improve access to voting on paper**

**GRANTS TO BUY EQUIPMENT NOW:** §1105 of S.1 expands grants to states and local governments to cover variations in accessibility.

*Existing words in HAVA §261 in italics, and addition by S1 §1105, not in italics:*

*52 U.S. Code § 21021 [HAVA §261] (a) In general -The Secretary of Health and Human Services shall make a **payment** to each eligible State and each eligible unit of local government (as described in section 21023 of this title).*

*(b) Use of funds - An eligible State and eligible unit of local government shall use the payment received under this subpart for—*

HAVA §261(b)(1) making absentee voting and voting at home accessible, secure, and private, while authenticating voters and protecting ballot secrecy so that a voter's selections cannot be associated with the voter, and independently testing whether the system is accessible, secure and protects ballot secrecy; for ~~to~~ individuals with the full range of disabilities (including impairments involving vision, hearing, mobility, or dexterity) ~~through the~~ **such as taking a ballot marking device, printer or paper ballot, as needed, and a secure ballot container, directly to individual voters, and other** implementation of accessible absentee voting systems that work in conjunction with assistive technologies for which individuals have access at their homes, independent living centers, or other facilities; Any grants for accessible in-home voting must be certified by the EAC/CISA to meet these criteria:

- a) The system is secure from hacking and malware, including on the client, on the server, and man-in-the-middle attacks
- b) The system includes effective voter authentication
- c) The system protects ballot secrecy. The system creates no information that can be used to associate a voter with their choices
- d) An undetected change or fault in the system cannot cause undetectable errors in election outcomes. This includes Software Independence as defined in VVSG 2.0: “a previously undetected change or fault in software cannot cause an undetectable change or error in election outcome.”
- e) Each voter can verify their vote selections were correctly received by the election office.
- f) The design of the system and methods of verification are publicly disclosed, including source code or other implementation of any tools required for verification, so that anyone can actually conduct verifications.

## MULTIPLE MEANINGS OF THE WORD “CAST” IN S.1

“CAST” has two meanings in S.1. In over 50 places it means an action by a voter, as used in VVSG 2.0. VVSG 2.0 defines “cast” as: “The final action a voter takes in selecting contest options and irrevocably confirming their intent to vote as selected.” In order to avoid uncertainty and future reinterpretation during any litigation we suggest to incorporate this definition in S.1. [https://www.eac.gov/sites/default/files/TestingCertification/Voluntary\\_Voting\\_System\\_Guidelines\\_Version\\_2\\_0.pdf](https://www.eac.gov/sites/default/files/TestingCertification/Voluntary_Voting_System_Guidelines_Version_2_0.pdf)

We found six places where “cast” has a different meaning. It appears to mean “accepted” by election officials. Leaving the term “cast” with both meanings in S.1 weakens the paper ballot requirement by possibly allowing the paper ballot to exist only at the election office after electronic return and not at the voter’s site. Therefore we suggest changing the word “cast” to “accepted” where that is the meaning in the six places shown below. “Accepted” can happen far from voters, after mail is received. Acceptance of a ballot happens only once per voter per election, while some voters cast more than once, such as an absentee ballot with a missing signature, replaced by an in-person ballot.

*The italic paragraph below does not need to be changed, and is here for context, since it uses “cast” with the meaning in VVSG 2.0. The other paragraphs show changes needed (with links to text on Govtrack). In item (III), we suggest adding the words “and election procedures” to recognize that voting systems do have ballots in identifiable envelopes. Procedures (e.g. for opening them), not the voting system, prevent associating voters with their votes.*

*(i) Paper ballot requirement (I) The voting system shall require the use of an individual, durable, voter-verified paper ballot of the voter’s vote that shall be marked and made available for inspection and verification by the voter before the voter’s vote is cast and counted, [“cast” here matches the definition in VVSG 2.0]*

(III) The voting system **and election procedures** shall not design, handle or preserve the voter-verified paper ballots in any manner that makes it possible, at any time after the ballot has been **accepted, east**, to associate-a voter with the record of the voter’s vote; ~~without-except this~~ **prohibition shall not apply to marks made by the voter’s consent.** ([pp.163-164](#))

[\(3\) Post-election report](#) on number of absentee ballots transmitted and received. ... number of such ballots which were returned by such voters and **east accepted** in the election, and shall make such report available to the general public that same day.

[\(C\) The record contains](#) the following information with respect to the ballots **east-accepted** and counted in the election:

- (i) The total number of ballots **east accepted** and counted by the agency (including undervotes, overvotes, and other invalid votes).
- (ii) The total number of ballots **east accepted** in each election administered by the agency (including undervotes, overvotes, and other invalid votes).

[\(2\) The term incorrect outcome](#) means an outcome that differs from the outcome that would be determined by a full tabulation of all votes validly **east accepted** in the election, determining voter intent manually, directly from voter-verifiable paper records.