



July 16, 2021

Submitted Electronically

Dr. James Olthoff, Director
U.S. Department of Commerce
National Institute of Standards and Technology
Washington, DC

Re: Comments of the ACM U.S. Technology Policy Committee on RFI
Regarding Promoting Access to Voting (Docket 210608-0123)*

Dear Under Secretary Olthoff:

On behalf of the U.S. Technology Policy Committee (USTPC) of the Association for Computing Machinery (ACM),¹ we appreciate both this opportunity to submit comments in the above-referenced docket (RFI) and promulgation of Executive Order 14019, which this proceeding was initiated to implement.² Including particularly USTPC's [Comments to the National Institute of Standards and Technology on Accessible and Usable Voting Systems](#) in 2015, this submission marks the fourth instance in recent years that we have addressed the critical accessibility policy issues at the core of this docket.³ As noted in USTPC's 2017 [Statement on Accessibility, Usability, and Digital Inclusiveness](#), democracy demands that we foster digital inclusiveness in all things:

*/ Principal contributors to this document for USTPC were Juan Gilbert, Lorraine Kisselburgh and Barbara Simons.

¹ ACM, the Association for Computing Machinery, is the world's largest and longest-established association of computing professionals, representing approximately 50,000 individuals in the United States and 100,000 worldwide. It is dedicated to advancing the arts, sciences, and applications of information technology with members engaged in virtually all aspects of computing in academia, government, and both the public and private sectors. ACM is a non-profit, non-lobbying, and non-political organization. USTPC is ACM's U.S. public policy arm. It's mission is to educate U.S. policymakers, the computing community, and the American public on matters of domestic public policy concerning information technology.

² Exec. Order No. 14019, *Promoting Access to Voting*, 86 FR 13623 (Mar. 7, 2021).

³ See also, [Statement on ADA 25th Anniversary](#), ACM U.S. Public Policy Council (2015). https://www.acm.org/binaries/content/assets/public-policy/usacm/accessibility/letters/usacm_statement_ada25_july2015.pdf

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A technology-centered society must consider that individuals may have a range of accessibility concerns associated with mobility, vision, hearing, cognition, disabilities and changes in abilities associated with aging. Current and emerging ICT and assistive technologies should consider all of these audiences and plan for appropriate accessibility.

In addition to commending these principles to NIST, USTPC offers the following responses to specific questions posed in the RFI⁴ regarding: 1) election security; 2) voter privacy; 3) election website accessibility; and 4) the advantages offered by ballot-marking devices:

1. *Election and Voting Security*: We have stated⁵ – and strenuously reaffirm today – that at this writing all internet-connected voting technologies and systems which return an electronic or digital ballot remain insecure.⁶ Because all voters, no matter what physical or geographical challenges they face, are legally and morally owed a highly secure and private way to cast their ballots, internet-facilitated voting cannot fairly be said to provide meaningful access to the ballot at all. AS EO 14019 implicitly recognizes by omitting internet-facilitated voting entirely from its scope, such technologies thus must not be relied upon to assure the voting rights of disabled and distant voters unless and until they are transparently, independently, and conclusively proven safe. (**Question 14**)
2. *Balancing Privacy and Accessibility*: All voters have a right to independent and private voter processes. However, process modifications made to improve accessibility can compromise voter privacy in unintended ways. Requiring a voter to depend upon a poll worker or other individual's assistance, for example, is inherently inconsistent with independent voting. In other circumstances, well-intentioned technical modifications may make it impossible to preserve privacy. These may include installation of large screens for the benefit of sight-impaired voters but without privacy screens so that they are visible to others in the room, or screen reader technology that provides audible translation of ballot text, but which can easily be overheard by poll workers and other voters nearby; (**Question 1**)

⁴ For ease of reference, the number(s) of the twenty specific questions enumerated in the RFI to which each of USTPC's comments here relate appear in italics and parentheses at the end of each section of numbered text.

⁵ See, [Joint Letter to Utah State Representatives re: Insecurity of Online Voting](#), ACM US Technology Policy Committee (December 22, 2020); [Joint Letter to Governors and Secretaries of State on the Insecurity of Online Voting](#), ACM US Technology Policy Committee (April 9, 2020); and [Joint Report on Email and Internet Voting: The Overlooked Threat to Election Security](#), ACM US Technology Policy Committee with Common Cause Education Fund, National Election Defense Coalition, and R Street Institute (October 10, 2018), respectively available online at: <https://www.acm.org/binaries/content/assets/public-policy/utah-house-letter-insecure-voting.pdf>; <https://www.aaas.org/sites/default/files/2020-05/AAAS%20EPI%20Center%20Group%20Letters%20on%20Internet%20Voting%20Combined%20582020.pdf>; and <https://www.acm.org/binaries/content/assets/public-policy/jtreportemailinternetvoting.pdf>

⁶ See, e.g., *The Ballot is Busted Before the Blockchain: A Security Analysis of Voatz, the First Internet Voting Application Used in U.S. Federal Elections*, MIT (2020): https://internetpolicy.mit.edu/wp-content/uploads/2020/02/SecurityAnalysisOfVoatz_Public.pdf; and *Security Analysis of the Democracy Live Online Voting System*, MIT (2020), <https://internetpolicy.mit.edu/wp-content/uploads/2020/06/OmniBallot.pdf>.

3. *Website Accessibility*: Election websites are the most common source of information about voter registration and polling locations. They also are regularly used to request early or mail-in ballots, or voting privileges or accommodations. Yet, most such websites (often maintained by county or municipal governments) do not meet minimum accessibility standards.⁷ For example, some election websites cannot accommodate screen magnification or screen reading. Others require manual dexterity for site navigation, thus making them inaccessible to voting citizens with visual and mobility impairments. Inaccessible websites clearly impede access to voting information, registration, and balloting processes. (**Questions 3, 7-10**)

4. *Value of Ballot Marking Devices (BMDs)*: BMDs, in the Committee’s view, have had the most salutary impact on enabling people with disabilities to vote privately and independently. Most often used in conjunction with digital optical scanning technology, BMDs at their best produce a paper ballot of record in traditionally readable and intelligible ballot form. In addition, as noted by the Brennan Center for Justice: “By offering a “read-aloud” feature, BMDs enable voters with limited reading skills in the ballot language or visual impairments to have the ballot read to them on headphones. BMDs are also able to efficiently provide ballots in alternative languages. In addition, BMDs can improve the accuracy of voters’ intentional markings on paper ballots, including elderly voters and those with hand tremors;”⁸ (**Question 6**)

USTPC also broadly urges NIST to:

- Review to full advantage the excellent and extensive recent work done in this arena by NIST itself⁹ and many others, including particularly the following source documents:
 - *Enhancing Accessibility in U.S. Elections*, Center for American Progress (2021) <https://www.americanprogress.org/issues/democracy/reports/2021/07/08/501364/enhancing-accessibility-u-s-elections/>;
 - *Disability and Voting Accessibility in the 2020 Elections*, Schur and Kruse (2020). https://www.eac.gov/sites/default/files/voters/Disability_and_voting_accessibility_in_the_2020_elections_final_report_on_survey_results.pdf;

⁷ See Schur and Kruse cited in text below. Indeed, a study by the American Civil Liberties Union found in 2015 that only one state in the nation, California, had an online registration system that was fully accessible!

<https://www.aclu.org/files/022415-ACLU-VoterReg.html>

⁸ See Brennan Center Overview of Voting Equipment (May 31, 2018) <https://www.brennancenter.org/our-work/research-reports/brennan-center-overview-voting-equipment>

⁹ NIST (2020). Risk Management for Electronic Ballot Delivery, Marking, and Return.

[https://s.wsi.net/public/resources/documents/Final %20Risk Management for Electronic-Ballot 05082020.pdf](https://s.wsi.net/public/resources/documents/Final%20Risk%20Management%20for%20Electronic-Ballot%2005082020.pdf)

- *ADA Compliance Meter Report: Swing State Board of Elections Websites*, Miami Lighthouse for the Blind and Visually Impaired (2020); <https://www.miamilighthouse.org/ADAComplianceMeterReport.asp>;
- *Securing the Vote: Protecting American Democracy*, National Academies of Science, Engineering, and Medicine (2018) <https://verifiedvoting.org/wp-content/uploads/2020/07/National-Academy-Report- Securing-the-Vote-Protecting-American-Democracy.pdf>;
- *Access Denied: Barriers to Online Registration for People with Disabilities*, Susan Mizner and Eric Smith for the NY American Civil Liberties Union (2015). https://www.aclu.org/sites/default/files/field_document/021915-aclu_voterregonline_0.pdf; and to
- Affirmatively underscore, contrary to frequent false assertions, that robust accessibility at every stage of the voting process is in no way in tension with maximizing voting security. Indeed, to the extent that the odds of detecting electronic intrusion increase with the numbers of votes cast, accessibility and security can be mutually reinforcing.

USTPC looks forward to continuing to contribute the expertise of its members in this and other NIST dockets in the service of enabling and empowering all those eligible to vote with security, privacy and dignity.

Respectfully submitted,



Alec Yasinsac, Vice Chair