Voting Accessibility Advisory Committee
City and County of San Francisco
John Arntz, Co-Chair, Director of Elections
Nicole Bohn, Co-Chair, Director, Mayor's Office on Disability

October 29, 2018

Steven Bennett
Regional Sales Representative
Dominion Voting Systems
26561 Amherst Court
Loma Linda, California 92354

Dear Mr. Bennett:

On behalf of the City and County of San Francisco's Voting Accessibility Advisory Committee (VAAC), please consider our recommendations for improvements to Dominion's ICX Voting System's accessibility and usability by people with disabilities.

The VAAC is thankful that you took the time to present the Dominion ICX Voting System at the VAAC meeting on July 31, 2018. We look forward to our continued collaboration to enhance the accessibility and user experience of your product and help ensure that the voting process is cohesive with the voiced access needs of the City's disability community.

The Dominion ICX Voting System incorporated some desirable features expressed by our members. The VAAC believes that the handheld control's large size, different colors and shapes are helpful for usability. Additionally, the blackout screen is a great function to ensure private voting.

There are some recommendations for improvement pertaining to other accessibility features of the voting system. What follows are potential solutions for consideration in future development of the system.

I. Platform
    A. The ICX *is not universally* accessible for independent use during voting and scanning ballot.

        1. Some voters with disabilities using the ICX will require assistance from a poll worker or an elections official to initiate the voting.

        2. After finishing voting, some voters with disabilities, especially those who are blind, will require assistance from a poll worker or an elections official to print out the paper ballot, move the record ballot to a separate piece of voting equipment, and then insert the ballot into this second unit for scanning and tabulation.

English (415) 554-4375   sfelections.org   中文 (415) 554-4367
Fax (415) 554-7344   1 Dr. Carlton B. Goodlett Place   Español (415) 554-4366
TTY (415) 554-4386   City Hall, Room 48, San Francisco, CA 94102   Filipino (415) 554-4310

Proposed Solution:

Allow for universal independence for voters who use the ICX. Add features to the ICX and other voting equipment that allows blind voters and/or people with low vision to independently select to print the paper on the ICX and then independently insert their ballot into the ballot-scanning equipment.. Such features will reduce the for poll workers or elections officials to assist voters to cast their ballots.

II. Audio
A. Voters cannot independently access the audio instructions when using the ICX.
1. A blind voter cannot start the audio function independently.
2. Before the audio function starts; the audio function must be selected on the touchscreen, something that a blind voters cannot do because they cannot see the touchscreen.

B. The speech output is a synthesized voice rather than a human voice.
1. The synthesized "voice" of instructions is not clear, and the sound is outdated.
2. If a person were not use to this synthesizer, it would take a while to get used to it.

C. There were technical difficulties with the speech output.
1. The machine for scanning the ballot did not provide audio feedback on whether ballots were correctly marked.
2. The Dominion personnel were unable to determine the reason that the audio feedback function was not operating.

Proposed Solutions:

Enable the ICX to provide audio instructions as the default setting so that blind voters are not required to initiate the feature. Additionally, the audio instructions in all voting equipment should be fully tested to ensure that voters' will encounter functional audio, allowing them to vote independently. All instructions ought to use human voice recordings, and in all required languages, to remove the need for using the synthesized voice function so that instructions are more clear and easier to understand

III. Text
A. The zoom feature should allow for a greater range of enlargement beyond the one option to increase the magnification to one "large" setting.
1. Currently there are only two size options to enlarge text on the zoom feature.

B. The customized features for text should be broader.
1. The customization is limited to enlarging the text size and does not include other text properties.

Proposed Solutions:

Upgrade the zoom feature to provide a greater range of enlargement so that voters with varying degrees of low vision can utilize this feature. At the minimum, the lowest zoom setting should start at 18+ Sans Serif Fonts. Any magnification setting below 18+ San Serif is not considered large print.

The customization for text should include options to change the text display such as its spacing, font, and color. This will enhance the accessibility for people with dyslexia and other cognitive and learning disabilities. It will also allow the content to be more adaptable to smaller and larger screen displays and be more user friendly when text is translated into different languages since sentences are different lengths in various languages.

IV. Color Contrast
A. The contrast feature is limited.
1. The ICS currently provides voters with only two settings contrast content on the screen.

Proposed Solution:

Modify the contrast feature so there are more than two contrast options. Allowing for additional contrast capability will enhance the accessibility for low vision users, like people with low contrast sensitivity. Additional contrast functionality will also display ballot content that is easier to read for all voters, especially in consideration of the different lighting conditions such as sunlight and the effects of glare occurring at polling places.

V. Voting Machine Usability
A. The ICX is difficult to use for some voters.
1. The tilt angle of the ICX is not easily adjustable for ease of use, especially for voters with disabilities.
2. The presentation of ballot content on the ICX does not allow for voters to view one contest per screen. Having multiple contests appear on one screen can be difficult and confusing for voters with disabilities to navigate the ballot content.
3. Some users expressed a lack of confidence in the process and comfort using the machine.
4. Some users also expressed that the voting process and machine are difficult to understand.

Proposed Solutions:

The base of the ICX needs to be more easily adjustable for people with disabilities so that people with different heights and reach ranges can modify the tilt angle to better access the screen's features and ballot content. Additionally, the ICX needs to include a feature allowing for one contest per screen so that voters wanting to use this function can more easily understand the information on the screen, and will also allow blind and low vision voters to vote privately and independently. The ICX would ideally present one contest per screen as the default view and also allow people to adjust this setting to their preference. For instance, Los Angeles' new voting system, the Voting System for All People, only provides one contest per screen to allow immediate access for people who are blind or low vision. The system has been extensively user tested.

Thank you for reviewing our concerns and exploring our proposed solutions. In order for us to support the most accessible product, a meaningful conversation between all parties involved and creative problem solving is essential. We look forward to having you and other representatives from Dominion return to meet with our VAAC members and provide updated plan for the Dominion ICX Voting System.

Respectfully,

John Arntz, VAAC Co-Chair   Nicole Bohn, VAAC Co-Chair
Director of Elections   Director, Mayor's Office on Disability