



May 27, 2015

Office of Technical and Information Services
Access Board
1331 F Street NW, Suite 1000,
Washington, DC 20004-1111.

Docket number ATBCB-2015-0002

Dear Sir/Madam:

Thank you for the opportunity to comment on the [Proposed Information and Communication Technology \(ICT\) Standards and Guidelines](#) published in the Federal Register on February 27. The Access Board is proposing to revise and update both its standards for electronic and information technology developed, procured, maintained, or used by federal agencies covered by Section 508 of the Rehabilitation Act of 1973, and its guidelines for telecommunications equipment and services and customer premises equipment covered by Section 255 of the Communications Act of 1934.

The Arc applauds this comprehensive effort to make ICT more accessible to persons with disabilities. We firmly believe that technology is transformative and must be made widely available and be accessible to all of our citizens, including those with cognitive disabilities. In fact, ICT can be particularly beneficial for persons who have challenges in their ability to think, concentrate, formulate ideas, problem solve, reason, and remember.

The Arc is the largest national community-based organization advocating for and serving people with intellectual and developmental disabilities and their families. We encompass all ages and more than 100 different diagnoses including autism, Down syndrome, Fragile X syndrome, and various other developmental disabilities.

Over 16 million persons in the U.S. report having a cognitive disability. This is nearly 7% of the non-institutionalized population, a prevalence rate that is second only to those who report problems with movement (ambulatory disability).¹ Cognitive disability includes intellectual disability, including those caused by congenital conditions such as Down syndrome, Autism, and Fetal Alcohol Syndrome as well as age-related conditions such as Dementia. The diagnosis may also include less severe conditions such as Dyslexia, Attention Deficit Disorder, and other learning disabilities. This vast and largely untapped market of persons with cognitive disability

is expected to grow dramatically in the coming decades, primarily due to the aging of the population.

In light of the above, The Arc is pleased to offers comments on the notice of proposed rulemaking (NPRM) for your consideration. First and foremost, we applaud the Access Board for proposing to replace the current product-based approach with requirements based on functionality. This change will help to keep pace with fundamental advances in technology, most notably the proliferation of devices with multifunctional capabilities, such as smartphones and tablets. Interestingly, this shift complements advances in the disability field to focus on functional abilities of individuals rather than the medical or behavioral causes of their disability.

We also appreciate the numerous provisions that will benefit all users. These include, among other things, built-in voicing of displayed content, consistent navigation, and error identification and suggestion. We offer, however, the following comments on additional provisions that are needed for persons with cognitive limitations:

Functional Performance Criteria. The Arc is pleased to see the inclusion of the following functional performance criteria: 302.1 Without Vision; 302.2 With Limited Vision; 302.3 Without Perception of Color; 3.02.4 Without Hearing; 302.5 With Limited Hearing; 302.6 Without Speech; 302.7 With Limited Manipulation; and 302.8 With Limited Reach and Strength. However, The Arc requests the addition of functional performance criteria “302.9 With Limited Cognition, Language, or Learning: ICT shall provide at least one mode of operation that minimizes cognitive, memory, language and learning skills required of the user.”

Given the large and growing number of Americans with cognitive disability, we believe the absence of such criteria to be incompatible with your goal of greater accessibility. This omission stands in contrast to the [European Commission ICT Standards](#) which address cognitive accessibility. Specifically Section 4.2.10, Usage with Limited Cognition, mentions adjustable timings, error indication and suggestion, and a logical focus order as examples of suggested design features. In addition, the [Telecommunications Act Section 255 Accessibility Guidelines published in the Federal Register on February 3, 1998](#), includes functional performance language on cognitive accessibility. Section §1193.41 states that “input, control, and mechanical functions shall be locatable, identifiable, and operable in accordance with each of the following, assessed independently:.... (i) operable with limited cognitive skills. Provide at least one mode that minimizes the cognitive, memory, language, and learning skills required of the user “. ² The lack of a functional performance criterion undercuts the global harmonization of accessibility standards. In addition, the absence poses a specific operational problem related to the purpose that the Access Board has identified for functional performance criteria - guidance when specific Web Content Accessibility Guidelines (WCAG) 2.0 A or AA standards are not met.

Simplified text. The Plain Writing Act of 2010 requires federal agencies to write clear government communication that the public can understand and use. The Arc believes that the importance of establishing “a system of transparency, public participation, and collaboration” as stated in President Obama’s January 21, 2009 memorandum on transparency and open government must be applied fully across the ICT sphere. Moreover, plain and intelligible text is perhaps the clearest example of universal design in ICT – all users of the information resource will benefit, and none will be inconvenienced. Reaching this objective is becoming increasingly within reach in a low cost manner. For instance, the [Simplext](#) product from Spain uses natural language processing technology to create simple, easy to understand text specifically for this population. Therefore, we recommend the addition of ‘[WCAG Success Criterion, 3.1.5, Reading Level](#). When text requires reading ability more advanced than the lower secondary education level after removal of proper names and titles, supplemental content, or a version that does not require reading ability more advanced than the lower secondary education level, is available. (Level AAA).’

This NPRM presents a rare opportunity to advance guidance on cognitive accessibility for ICT in the U.S. as no such guidance was included in the first regulations that came out in 2000. Much has happened since then in the ICT field and the cognitive disability community cannot wait another 15 years for its interests to be included. We can reasonably anticipate exponential change in the next several years and urge you to address cognitive accessibility in the present revision.

Again, The Arc commends the Access Board for its comprehensive effort to modernize the standards for electronic and information technology.

Sincerely,

Annie Acosta
Director, Fiscal and Family Support Policy

¹ American Community Survey, 2013. U.S. Census Bureau.

² <http://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-telecommunications-act-guidelines/section-255-guidelines>