

Recommendation of the Disability Advisory Committee
Adopted September 22, 2016

Best Practices to Promote Effective Access to and Usability of ICT Products and Services for Americans with Cognitive Disabilities

On October 28, 2015, the Federal Communications Commission (FCC) held a summit on the communications needs of people with cognitive disabilities¹ to learn more about how this population uses information and communication technology (ICT).² The FCC and participants, including Disability Advisory Committee (DAC) members, learned how ICT products and services have enabled millions of people with cognitive disabilities to more fully and independently participate and access educational, economic, civic, and personal interaction opportunities, while also learning about the accessibility and usability barriers that people with cognitive disabilities may continue to face. Participants also learned that people with cognitive disabilities have strong potential to consume mainstream technology products and services at higher rates than in the past, due to the decrease in cost of technology, the increase in availability of technology through public services (e.g., IDEA provides technology to students with disabilities in schools), the increased prevalence of caregivers who can train people with cognitive disabilities to use mainstream technology, and the rapid emergence of technologies that are particularly useful to people with cognitive disabilities (e.g., more intuitive user interface hardware and software features, sensors, artificial intelligence, etc.).

At the FCC summit, consumer stakeholders highlighted some of the challenges that people with cognitive disabilities may face when accessing and using ICT products and services, including challenges comprehending complex screen menus and guides, limited memory or recall skills to enter passwords or interact with security or navigation features, and loss of customized feature options when modifications are made to interfaces through software updates. Consumer stakeholders also highlighted the fact that users with cognitive disabilities often require customer support, onboarding experiences, user manuals and other information that is tailored to meet their user adoption needs. ICT stakeholders also described key personalization and customization features and capabilities that help to address these challenges, including innovative device unlocking capabilities (e.g., fingerprint, facial, or optical recognition), pictures or images to reach specific contacts, screen readers, settings that enable a user, supporter or caregiver to control the complexity of user interfaces by selectively revealing or hiding features, and augmentative communication applications. Given the FCC's recent efforts in facilitating discussions about the needs of people with cognitive disabilities, participants generally understood that greater awareness among people with cognitive disabilities, caregivers, and industry stakeholders about these solutions may be necessary.

To increase awareness among ICT stakeholders, including manufacturers, service providers, and application developers, the FCC's DAC recognizes and recommends the following best practices to promote effective access to and usability of ICT products and services for Americans with cognitive disabilities (Best Practices).³

¹ A cognitive disability may generally limit a person's information processing, comprehension, or communication skills. For this reason, the term "cognitive disability" may refer to a wide-range of disabilities. A diverse range of features, services and functions can address the needs of people with cognitive disabilities to help facilitate independence and interactions.

² ICT includes telecommunications and advanced communications products and services, and applications or other services that may be helpful to people with cognitive disabilities.

³ The FCC DAC believes these Best Practices are consistent with the declaration of principles in *The Rights of People with Cognitive Disabilities to Technology and Information Access*, developed by a consortium of consumers, national organizations and experts in cognitive disability through the Coleman Institute of the University of Colorado. Coleman Institute, *The Rights of People with Cognitive Disabilities to Technology and Information Access*, <http://www.colemaninstitute.org/declaration-text> (attached as Appendix).

Inclusion & Awareness

- Where appropriate, ICT stakeholders should keep informed about the needs of and solutions for people with cognitive disabilities as communications technologies evolve in the 21st century by proactively seeking out and maintaining collaborative relationships with people with cognitive disabilities either individually or through organizations that have established expertise with or represent these individuals.
- Where appropriate, ICT stakeholders should seek opportunities to understand accessibility and usability issues for people with cognitive disabilities, which may include, for example, following and participating in national research, learning about emerging standards and guidance from knowledgeable organizations (e.g., the World Wide Web Consortium), participating in cognitive disabilities conferences, and participating in online communities and other user communities comprised of users with cognitive disabilities and their caregivers.
- Where appropriate, ICT stakeholders should include people with cognitive disabilities and their representatives in product and service design and development processes, as early as possible, to identify unmet user needs for features, products or services, and evaluate the accessibility and usability of solutions, features, and functions, including, for example, market research, product testing, demonstrations, or trials.

Personalization & Customization of Features and Functions

- In furtherance of the principles of universal design and to minimize the need for costly and difficult-to-find accessories, ICT stakeholders should, where appropriate, make efforts to incorporate features that allow for personalization and customization of features and functions that facilitate the accessibility and usability of ICT and applications for people with cognitive disabilities.

Instructions, Guides and Interactions

- Where appropriate, ICT stakeholders should offer accessible instructions, user guides, customer support services, and other information in ways that may enable people with cognitive disabilities to independently, or with their caregivers or support staff, learn to operate and use ICT products and services.
- Where appropriate, ICT stakeholders should make efforts to raise awareness among designers, developers, service personnel and customer representatives about the needs of people with cognitive disabilities and their support networks, including identifying features and functions of products and services that may be useful to people with cognitive disabilities.

The Rights of People with Cognitive Disabilities to Technology and Information Access

WHEREAS

- Twenty-eight million United States citizens have cognitive disabilities such as intellectual disability; severe, persistent mental illness; brain injury; stroke; and neurodegenerative disorders such as Alzheimer's disease;
- People with cognitive disabilities must have access to commercially available devices and software that incorporate principles of universal design such as flexibility and ease of use for all;
- People with cognitive disabilities are entitled to inclusion in our democratic society under federal laws such as the Americans with Disabilities Act (ADA), the Developmental Disabilities Assistance and Bill of Rights Act (DD Act), the Individuals with Disabilities Education Act (IDEA), Section 504 of the Rehabilitation Act, and under state and local laws;
- The disruptive convergence of computing and communication technologies has substantially altered how people acquire, utilize, and disseminate knowledge and information;
- Access to comprehensible information and usable communication technologies is necessary for all people in our society, particularly for people with cognitive disabilities, to promote self-determination and to engage meaningfully in major aspects of life such as education, health promotion, employment, recreation, and civic participation;
- The vast majority of people with cognitive disabilities have limited or no access to comprehensible information and usable communication technologies;
- Technology and information access by people with cognitive disabilities must be guided by standards and best-practices, such as personalization and compatibility across devices and platforms, and through the application of innovations including automated and predictive technologies;
- Security and privacy must be assured and managed to protect civil rights and personal dignity of people with cognitive disabilities;
- Enhanced public and private funding is urgently required to allow people with cognitive disabilities to utilize technology and access information as a natural consequence of their rights to inclusion in our society;
- Ensuring access to technology and information for the 28 million people with cognitive disabilities in the United States will create new markets and employment opportunities; decrease dependency on public services; reduce healthcare costs; and improve the independence, productivity, and quality of life of people with cognitive disabilities.

We hereby affirm our commitment to equal rights of people with cognitive disabilities to technology and information access and we call for implementation of these rights with deliberate speed.