Recommendation of the FCC Disability Advisory Committee
Cognitive Disability Working Group

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 disabilities[1] 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.

At the conference, 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 features, and loss of customized feature options when modifications to are made to interfaces through software updates. 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, and augmentative communication applications. However, 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 Disability Advisory Committee (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]** The FCC DAC encourages ICT stakeholders and their representatives to promote these Best Practices in order to continue enhancing the accessibility and usability of ICT for people with cognitive disabilities.

Inclusion & Awareness

- To keep informed about the needs of and solutions for people with cognitive disabilities as communications technologies evolve in the 21st century, ICT stakeholders should maintain relationships with people with cognitive disabilities either individually or

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

[2] ICT includes telecommunications and advanced communications products and services subject to Sections 255 and 716 and the Commission's rules, 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).

through an ongoing dialogue with 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, including, for example, national research and cognitive disability community conferences.

- 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 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, 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. Examples of personalization and customization feature or function options may include:

- easy-of-use identification and operation of input, control, and mechanical functions of products and services;
- images or pictorial descriptions that are associated with buttons/functions;
- remote assistance from the user's support network, including caregivers;
- features that support error-minimization; or
- flexible interactions with security and privacy protocols, while maintaining the security and privacy of the device, service, or application.
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Instructions, Guides and Interactions

- Consistent with Sections 255 and 716, ICT stakeholders should offer instructions, user guides, and other information in formats that enable people with cognitive disabilities to independently learn to operate and use ICT products and services. Examples of formats that make such information accessible and usable by people with cognitive disabilities may include, for example, providing multiple means of content representation (*e.g.*, pictorial or auditory descriptions) or providing content in understandable (*e.g.*, non-technical) language.

- Where appropriate, ICT stakeholders should make efforts to raise awareness among 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 and effective strategies to communicate information about accessible products and services to people with cognitive disabilities.