

Subpart B—Definitions

§ 7.3 Definitions.

(a) The term *accessible* shall mean that:

(1) Input, control, and mechanical functions shall be locatable, identifiable, and operable in accordance with each of the following, assessed independently:

(i) Operable without vision. Provide at least one mode that does not require user vision.

(ii) Operable with low vision and limited or no hearing. Provide at least one mode that permits operation by users with visual acuity between 20/70 and 20/200, without relying on audio output.

(iii) Operable with little or no color perception. Provide at least one mode that does not require user color perception.

(iv) Operable without hearing. Provide at least one mode that does not require user auditory perception.

(v) Operable with limited manual dexterity. Provide at least one mode that does not require user fine motor control or simultaneous actions.

(vi) Operable with limited reach and strength. Provide at least one mode that is operable with user limited reach and strength.

(vii) Operable with a Prosthetic Device. Controls shall be operable without requiring body contact or close body proximity.

(viii) Operable without time-dependent controls. Provide at least one mode that does not require a response time or allows a response to be by-passed or adjusted by the user over a wide range.

(ix) Operable without speech. Provide at least one mode that does not require user speech.

(x) Operable with limited cognitive skills. Provide at least one mode that minimizes the cognitive, memory, language, and learning skills required of the user.

(2) All information necessary to operate and use the product, including but not limited to, text, static or dynamic images, icons, labels, sounds, or incidental operating cues, comply with each of the following, assessed independently:

(i) Availability of visual information. Provide visual information through at least one mode in auditory form.

(ii) Availability of visual information for low vision users. Provide visual information through at least one mode to users with visual acuity between 20/70 and 20/200 without relying on audio.

(iii) Access to moving text. Provide moving text in at least one static presentation mode at the option of the user.

(iv) Availability of auditory information. Provide auditory information through at least one mode in visual form and, where appropriate, in tactile form.

(v) Availability of auditory information for people who are hard of hearing. Provide audio or acoustic information, including any auditory feedback tones that are important for the use of the product, through at least one mode in enhanced auditory fashion (*i.e.*, increased amplification, increased signal-to-noise ratio, or combination).

(vi) Prevention of visually-induced seizures. Visual displays and indicators shall minimize visual flicker that might induce seizures in people with photosensitive epilepsy.

(vii) Availability of audio cutoff. Where a product delivers audio output through an external speaker, provide an industry standard connector for headphones or personal listening devices (e.g., phone-like handset or earcup) which cuts off the speaker(s) when used.

(viii) Non-interference with hearing technologies. Reduce interference to hearing technologies (including hearing aids, cochlear implants, and assistive listening devices) to the lowest possible level that allows a user to utilize the product.

(ix) Hearing aid coupling. Where a product delivers output by an audio transducer which is normally held up to the ear, provide a means for effective wireless coupling to hearing aids.

(b) The term *compatibility* shall mean compatible with peripheral devices and specialized customer premises equipment commonly used by individuals with disabilities to achieve accessibility to voicemail and interactive menus, and in compliance with the following provisions, as applicable:

(1) External electronic access to all information and control mechanisms. Information needed for the operation of products (including output, alerts, icons, on-line help, and documentation) shall be available in a standard electronic text format on a cross-industry standard port and all input to and control of a product shall allow for real time operation by electronic text input into a cross-industry standard external port and in cross-industry standard format. The cross-industry standard port shall not require manipulation of a connector by the user.

(2) Connection point for external audio processing devices. Products providing auditory output shall provide the auditory signal at a standard signal level through an industry standard connector.

(3) TTY connectability. Products which provide a function allowing voice communication and which do not themselves provide a TTY functionality shall provide a standard non-acoustic connection point for TTYs. It shall also be possible for the user to easily turn any microphone on and off to allow the user to intermix speech with TTY use.

(4) TTY signal compatibility. Products, including those providing voice communication functionality, shall support use of all cross-manufacturer non-proprietary standard signals used by TTYs.

(c) The term *customer premises equipment* shall mean equipment employed on the premises of a person (other than a carrier) to originate, route, or terminate telecommunications.

(d) The term *disability* shall mean a physical or mental impairment that substantially limits one or more of the major life activities of an individual; a record of such an impairment; or being regarded as having such an impairment.

(e) The term *interactive menu* shall mean a feature that allows a service provider or operator of CPE to transmit information to a caller in visual and/or audible format for the purpose of management, control, or operations of a telecommunications system or service; and/or to request information from the caller in visual and/or audible format for the purpose of management,

control, or operations of a telecommunications system or service; and/or to receive information from the caller in visual and/or audible format in response to a request, for the purpose of management, control, or operations of a telecommunications system or service. This feature, however, does not include the capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications for any purpose other than management, control, or operations of a telecommunications system or service.

(f) The term *manufacturer* shall mean an entity that makes or produces a product.

(g) The term *peripheral devices* shall mean devices employed in connection with equipment covered by this part to translate, enhance, or otherwise transform telecommunications into a form accessible to individuals with disabilities.

(h) The term *readily achievable* shall mean, in general, easily accomplishable and able to be carried out without much difficulty or expense. In determining whether an action is readily achievable, factors to be considered include:

(1) The nature and cost of the action needed;

(2) The overall financial resources of the manufacturer or service provider involved in the action (the covered entity); the number of persons employed by such manufacturer or service provider; the effect on expenses and resources, or the impact otherwise of such action upon the operations of the manufacturer or service provider;

(3) If applicable, the overall financial resources of the parent of the covered entity; the overall size of the business of the parent of the covered entity with respect to the number of its employees; the number, type, and location of its facilities; and

(4) If applicable, the type of operation or operations of the covered entity, including the composition, structure and functions of the workforce of such entity; and the geographic separateness, administrative or fiscal relationship of covered entity in question to the parent entity.

(i) The term *specialized customer premises equipment* shall mean customer premise equipment which is commonly used by individuals with disabilities to achieve access.

(j) The term *telecommunications equipment* shall mean equipment, other than customer premises equipment, used by a carrier to provide telecommunications services, and includes software integral to such equipment (including upgrades).

(k) The term *telecommunications service* shall mean the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.

(l) The term *usable* shall mean that individuals with disabilities have access to the full functionality and documentation for the product, including instructions, product information (including accessible feature information), documentation, bills and technical support which is provided to individuals without disabilities.

(m) The term *Voicemail* shall mean the capability of answering calls and recording incoming messages when a line is busy or does not answer within a pre-specified amount of time or number of rings; receiving those messages at a later time; and may also include the ability to determine the sender and time of transmission without hearing the entire message; the ability to forward the message to another voice messaging customer, with and/or without an appended new message; the ability for the sender to confirm receipt of a message; the ability to send, receive, and/or store facsimile messages; and possibly other features.

Subpart C—Obligations—What Must Covered Entities Do?

§ 7.5 General Obligations.

(a) **Obligation of Manufacturers.** (1) A manufacturer of telecommunications equipment or customer premises equipment covered by this part shall ensure that the equipment is designed, developed and fabricated so that the voicemail and interactive menu functions are accessible to and usable by

individuals with disabilities, if readily achievable;

(2) Whenever the requirements of paragraph (a)(1) of this section are not readily achievable, the manufacturer shall ensure that the equipment is compatible with existing peripheral devices or specialized customer premises equipment commonly used by individuals with disabilities to achieve access, if readily achievable.

(b) **Obligation of Service Providers.** (1) A provider of voicemail or interactive menu shall ensure that the service is accessible to and usable by individuals with disabilities, if readily achievable.

(2) Whenever the requirements of paragraph (a)(1) of this section are not readily achievable, the service provider shall ensure that the service is compatible with existing peripheral devices or specialized customer premises equipment commonly used by individuals with disabilities to achieve access, if readily achievable.

§ 7.7 Product design, development, and evaluation.

(a) Manufacturers and service providers shall evaluate the accessibility, usability, and compatibility of equipment and services covered by this part and shall incorporate such evaluation throughout product design, development, and fabrication, as early and consistently as possible. Manufacturers and service providers shall identify barriers to accessibility and usability as part of such a product design and development process.

(b) In developing such a process, manufacturers and service providers shall consider the following factors, as the manufacturer deems appropriate:

(1) Where market research is undertaken, including individuals with disabilities in target populations of such research;

(2) Where product design, testing, pilot demonstrations, and product trials are conducted, including individuals with disabilities in such activities;

(3) Working cooperatively with appropriate disability-related organizations; and

(4) Making reasonable efforts to validate any unproven access solutions through testing with individuals with