

(e) The term *compatible* shall have the meaning provided in § 14.21(d).

(f) 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.

(g) The term *customized equipment or services* shall mean equipment and services that are produced or provided to meet unique specifications requested by a business or enterprise customer and not otherwise available to the general public, including public safety networks and devices.

(h) 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.

(i) The term *electronic messaging service* means a service that provides real-time or near real-time non-voice messages in text form between individuals over communications networks.

(j) The term *end user equipment* shall mean equipment designed for consumer use. Such equipment may include both hardware and software components.

(k) The term *hardware* shall mean a tangible communications device, equipment, or physical component of communications technology, including peripheral devices, such as a smart phone, a laptop computer, a desktop computer, a screen, a keyboard, a speaker, or an amplifier.

(l) The term *interconnected VoIP service* shall have the same meaning as in § 9.3 of this chapter, as such section may be amended from time to time.

(m) An *interoperable video conferencing service* means a service that provides real-time video communications, including audio, to enable users to share information of the user's choosing.

(n) The term *manufacturer* shall mean an entity that makes or produces a product, including equipment used for advanced communications services, including end user equipment, network equipment, and software.

(o) The term *network equipment* shall mean equipment facilitating the use of a network, including, routers, network interface cards, networking cables, modems, and other related hardware.

Such equipment may include both hardware and software components.

(p) The term *nominal cost* in regard to accessibility and usability solutions shall mean small enough so as to generally not be a factor in the consumer's decision to acquire a product or service that the consumer otherwise desires.

(q) A *non-interconnected VoIP service* is a service that:

(1) Enables real-time voice communications that originate from or terminate to the user's location using Internet protocol or any successor protocol; and

(2) Requires Internet protocol compatible customer premises equipment; and

(3) Does not include any service that is an interconnected VoIP service.

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

(s) The term *service provider* shall mean a provider of advanced communications services that are offered in or affecting interstate commerce, including a provider of applications and services that can be used for advanced communications services and that can be accessed (*i.e.*, downloaded or run) by users over any service provider network.

(t) The term *software* shall mean programs, procedures, rules, and related data and documentation that direct the use and operation of a computer or related device and instruct it to perform a given task or function.

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

(v) The term *usable* shall have the meaning provided in § 14.21(c).

(w) The term *real-time text* shall have the meaning set forth in § 67.1 of this chapter.

(x) The term *text-capable end user device* means end user equipment that is able to send, receive, and display text.

[76 FR 82389, Dec. 30, 2011, as amended at 82 FR 7707, Jan. 23, 2017]

Subpart C—Implementation Requirements—What Must Covered Entities Do?

§ 14.20 Obligations.

(a) *General Obligations.* (1) With respect to equipment manufactured after the effective date of this part, a manufacturer of equipment used for advanced communications services, including end user equipment, network equipment, and software, must ensure that the equipment and software that such manufacturer offers for sale or otherwise distributes in interstate commerce shall be accessible to and usable by individuals with disabilities, unless the requirements of this subsection are not achievable.

(2) With respect to services provided after the effective date of this part, a provider of advanced communications services must ensure that services offered by such provider in or affecting interstate commerce are accessible to and usable by individuals with disabilities, unless the requirements of this paragraph are not achievable.

(3) If accessibility is not achievable either by building it in or by using third party accessibility solutions available to the consumer at nominal cost and that individuals with disabilities can access, then a manufacturer or service provider shall ensure that its equipment or service is compatible with existing peripheral devices or specialized customer premises equipment, unless the requirements of this subsection are not achievable.

(4) Providers of advanced communications services shall not install network features, functions, or capabilities that impede accessibility or usability.

(5) Providers of advanced communications services, manufacturers of equipment used with these services, and providers of networks used with these services may not impair or impede the accessibility of information content when accessibility has been incorporated into that content for transmission through such services, equipment or networks.

(b) *Product design, development, and evaluation.* (1) Manufacturers and service providers must consider performance objectives set forth in § 14.21 at

the design stage as early as possible and must implement such performance objectives, to the extent that they are achievable.

(2) Manufacturers and service providers must identify barriers to accessibility and usability as part of such evaluation.

(c) *Information Pass Through.* Equipment used for advanced communications services, including end user equipment, network equipment, and software must pass through cross-manufacturer, nonproprietary, industry-standard codes, translation protocols, formats or other information necessary to provide advanced communications services in an accessible format, if achievable. Signal compression technologies shall not remove information needed for access or shall restore it upon decompression.

(d) *Information, documentation, and training.* Manufacturers and service providers must ensure that the information and documentation that they provide to customers is accessible, if achievable. Such information and documentation includes, but is not limited to, user guides, bills, installation guides for end user devices, and product support communications. The requirement to ensure the information is accessible also includes ensuring that individuals with disabilities can access, at no extra cost, call centers and customer support regarding both the product generally and the accessibility features of the product.

§ 14.21 Performance Objectives.

(a) *Generally.* Manufacturers and service providers shall ensure that equipment and services covered by this part are accessible, usable, and compatible as those terms are defined in paragraphs (b) through (d) of this section.

(b) *Accessible.* 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 response time 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, [shall] 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.

(3) *Real-Time Text.* Wireless interconnected VoIP services subject to this part and text-capable end user devices used with such services that do not themselves provide TTY functionality, may provide TTY connectability and signal compatibility pursuant to paragraphs (b)(3) and (4) of this section, or support real-time text communications, in accordance with 47 CFR part 67.

(c) *Usable.* 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 and technical support functionally equivalent to that provided to individuals without disabilities.

(d) *Compatible.* The term compatible shall mean compatible with peripheral