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and consistently as possible. Manufacturers shall identify barriers to accessibility and usability as part of such a product design and development process.

(b) In developing such a process, manufacturers 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 disabilities or with appropriate disability-related organizations that have established expertise with individuals with disabilities.

## Subpart C—Requirements for Accessibility and Usability

#### §1193.31 Accessibility and usability.

When required by §1193.21, telecommunications equipment and customer premises equipment shall be accessible to and usable by individuals with disabilities and shall comply with §§1193.33 through 1193.43 as applicable.

# §1193.33 Information, documentation, and training.

(a) Manufacturers shall ensure access to information and documentation it provides to its customers. Such information and documentation includes user guides, installation guides for enduser installable devices, and product support communications, regarding both the product in general and the accessibility features of the product. Manufacturers shall take such other steps as necessary including:

(I) Providing a description of the accessibility and compatibility features of the product upon request, including, as needed, in alternate formats or alternate modes at no additional charge;

(2) Providing end-user product documentation in alternate formats or al-

ternate modes upon request at no additional charge; and

(3) Ensuring usable customer support and technical support in the call centers and service centers which support their products at no additional charge.

(b) Manufacturers shall include in general product information the contact method for obtaining the information required by paragraph (a) of this section.

(c) Where manufacturers provide employee training, they shall ensure it is appropriate to an employee's function. In developing, or incorporating existing training programs, consideration shall be given to the following factors: (1) Accessibility requirements of in-

dividuals with disabilities;

(2) Means of communicating with individuals with disabilities;

(3) Commonly used adaptive technology used with the manufacturer's products;

(4) Designing for accessibility; and

(5) Solutions for accessibility and compatibility.

#### § 1193.35 Redundancy and selectability. [Reserved]

### §1193.37 Information pass through.

Telecommunications equipment and customer premises equipment shall pass through cross-manufacturer, nonproprietary, industry-standard codes, translation protocols, formats or other information necessary to provide telecommunications in an accessible format. In particular, signal compression technologies shall not remove information needed for access or shall restore it upon decompression.

#### \$1193.39 Prohibited reduction of accessibility, usability, and compatibility.

(a) No change shall be undertaken which decreases or has the effect of decreasing the net accessibility, usability, or compatibility of telecommunications equipment or customer premises equipment.

(b) Exception: Discontinuation of a product shall not be prohibited.

#### §1193.41 Input, control, and mechanical functions.

Input, control, and mechanical functions shall be locatable, identifiable,