

Basic Guidelines and Strategies for Access to Electronic Products and Documents

Basic Access Guideline	Why	How – General
<p>Make all information (including status & labels for all keys & controls) perceivable</p> <ul style="list-style-type: none"> - Without vision - With low vision and no hearing - With little or no tactile sensitivity - Without hearing - With impaired hearing - Without reading (due to low vision, learning disability, illiteracy, cognition or other) - Without color perception - Without causing seizure - From different heights - NOTE: other aspects of cognition covered below 	<p>Information which is presented in a form that is only perceivable with a single sense (e.g., only vision or only hearing) is not accessible to people without that sense.</p> <p>Note: This includes situations where some of the information is only presented in one form (e.g. visual) and other information is only presented in another (e.g. auditory).</p> <p>In Addition: Information which cannot be presented in different modalities would not be accessible to those using mobile technologies e.g.</p> <ul style="list-style-type: none"> - Visual only information would not be usable by people using an auditory interface while driving a car. - Auditory only information would not be useable by people in noisy environment 	<p>FOR INFORMATION: Make all information available either in</p> <p>a) presentation independent form (e.g., electronic text) that can be presented (rendered) in any sensory form (e.g. visual-print, auditory-speech, tactile-braille)</p> <p>OR</p> <p>b) sensory parallel form where redundant and complete forms of the information are provided for different sensory modalities (synchronized). (e.g., a captioned and described movie – including e-text of both),</p> <p>FOR PRODUCTS: Provide a mechanism for presenting all information (including labels) in visual, enlarged visual, auditory, enhanced auditory (louder and if possible better signal to noise ratio) and, (where possible), tactile form.</p> <p>NOTE: - this includes any information (semantics or structure) that is presented via text formatting or layout.</p>
<p>Provide at least one mode (or set of different modes) for all product features that is operable:</p> <ul style="list-style-type: none"> - Without pointing - Without vision - Without requirement to respond quickly - Without fine motor movement - Without simultaneous action - Without speech - Without requiring presence or use of particular biological parts (touch, fingerprint, iris, etc.) 	<p>Interfaces which are input device or technique specific cannot be operated by individuals who cannot use that technique (e.g., a person who is blind cannot point to a target in an image map; some people cannot use pointing devices accurately).</p> <p>In Addition: Technique specific interfaces may not be accessible to users of mobile devices. For example people using voice to navigate may not be able to “point”.</p>	<p>Provide at least one mode (set of modes) where...</p> <p>a) all functions of the product are controllable via tactilely discernable controls and both visual and voice output is provided for any displayed information required for operation including labels, AND</p> <p>b) there are no timeouts for input or displayed information, OR allow user to freeze timer or set it to long time (5 times default or range), OR offer extended time to user and allow 10 seconds to respond to offer.</p> <p>AND</p> <p>c) all functions of the product operable with:</p> <ul style="list-style-type: none"> - No simultaneous activations - No twisting motions - No fine motor control required - No biological contact required - No user speech required; - No pointing motions required <p>AND</p> <p>d) If biological techniques are used for security, have at least two alternatives with one preferably a non-biological alternative unless biological based security is required.</p>
<p>Facilitate Orientation and Navigation</p> <ul style="list-style-type: none"> • Without sight • Without pointing ability • Without fine motor control • Without prior understanding of the content • Without the ability to hear • Without good memory 	<p>Many individuals will have trouble using a product (even with alternate access techniques) if the layout / organization of the information or product is too difficult to understand.</p> <p>Many individuals will not be able to operate products, such as workstations, with sufficient efficiency to hold a competitive job if navigation is not efficient.</p>	<p>a) Make overall organization understandable (e.g. provide overview, table of contents, site maps, description of layout of device, etc.).</p> <p>b) Don't mislead/confuse. (Be consistent in use of icons or metaphors. Don't ignore or misuse conventions.)</p> <p>c) Allow users to jump over blocks of undesired information (e.g., repetitive info – or jump by sections if large document) , especially if reading via sound or other serial presentation means.</p> <p>d) Make actions reversible or request confirmation.</p> <p>e) Consider having different navigation models for novice vs expert users</p>
<p>Facilitate Understanding of Content</p> <ul style="list-style-type: none"> • Without skill in the language used on the product (poor language skills or it is a second language for them) • Without good concentration, processing • Without good memory • Without background or experience with the topic 	<p>People with cognitive or language difficulties [or inexperienced users] may not be able to use devices or products with complex language.</p>	<p>a) Use the simplest, easiest to understand language and structure/format as is appropriate for the material/site/situation.</p> <p>b) Using graphics to supplement or provide alternate presentations of information</p> <p>c) If phrases from a different language (than the rest of the page) are used in a document either identify the language used (to allow translation) or provide a translation to the document language.</p>
<p>Provide Compatibility with Assistive Technologies commonly used by people</p> <ul style="list-style-type: none"> • With low vision • Without vision • Who are hard of hearing • Who are deaf. • Without physical reach and manipulation • Who have cognitive or language disabilities 	<p>In many cases, a person coming up to a product will have assistive technologies with them. If the person cannot use the product directly, it is important that the product be designed to allow them to use their assistive technology to access the product.</p> <p>[This also applies to users of mobile devices people with glasses, gloves or other extensions to themselves.]</p>	<p>a) Do not interfere with use of assistive technologies</p> <ul style="list-style-type: none"> - Personal aids (e.g. hearing aids) - System based technologies (e.g. OS features) <p>b) Support standard connection points for</p> <ul style="list-style-type: none"> - audio amplification devices - alternate input and output devices (or software) <p>c) Provide at least one mode where all functions of the product are controllable via human understandable input via an external port or via network connection.</p>