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Voluntary Product Accessibility Template®

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Company Name: Environmental Systems Research Institute, Inc. (Esri)

Product Name: ArcGIS API for JavaScript 3.x and 4.x

Contact for More Information: For more information regarding accessibility and Section 508, visit http://www.esri.com/legal/section508.

Specific inquiries may be emailed to section508@esri.com, or mailed to Esri, Contracts and Legal Department, 380 New York Street, Redlands, California 92373.

Summary Table

Criteria	Supporting Features	Remarks and Explanations
Section 1194.21 Software Applications and Operating Systems	Generally Supports (see remarks and explanations for exceptions)	ArcGIS API for JavaScript contains Section 508 compliant tools and may, in most cases, be used with Assistive Technology (see the remarks and explanations below).
Section 1194.22 Web-based Internet Information and Applications	Generally Supports (see remarks and explanations for exceptions)	ArcGIS API for JavaScript contains Section 508 compliant tools and may, in most cases, be used with Assistive Technology (see the remarks and explanations below).
Section 1194.23 Telecommunications Products	Not Applicable	
Section 1194.24 Video and Multi-media Products	Not Applicable	
Section 1194.25 Self-Contained, Closed Products	Not Applicable	
Section 1194.26 Desktop and Portable Computers	Not Applicable	
Section 1194.31 Functional Performance Criteria	Generally Supports (see remarks and explanations for exceptions)	See the remarks and explanations below.

| Section 1194.41 Information, Documentation and Support | Supports | See the remarks and explanations below. |

Section 1194.21 Software Applications and Operating Systems – Detail

Criteria	Supporting Features	Remarks and Explanations
(a) When software is designed to run on a system that has a keyboard, product functions shall be executable from a keyboard where the function itself or the result of performing a function can be discerned textually.	Supports with Exceptions	ArcGIS API for JavaScript uses web browsers to host the dialogs and interfaces. Keyboard or device interaction is governed by the support of the browser and web pages. Note: ArcGIS API for JavaScript contains geographic information system (GIS) technology that captures, manages, and analyzes complex and dynamic data through digital maps. As such, some GIS functions may not have equivalent keyboard facilitation.
(b) Applications shall not disrupt or disable activated features of other products that are identified as accessibility features, where those features are developed and documented according to industry standards. Applications also shall not disrupt or disable activated features of any operating system that are identified as accessibility features where the application programming interface for those accessibility features has been documented by the manufacturer of the operating system and is available to the product developer.	Supports	
(c) A well-defined on-screen indication of the current focus shall be provided that moves among interactive interface elements as the input focus changes. The focus shall be programmatically exposed so that Assistive Technology can track focus and focus changes.	Supports	ArcGIS API for JavaScript uses web browsers to host the dialogs and interfaces, any keyboard or device interaction is governed by the support of the browser and web pages.
(d) Sufficient information about a user interface element including	Supports	

the identity, operation and state of the element shall be available to Assistive Technology. When an image represents a program element, the information conveyed by the image must also be available in text.		
(e) When bitmap images are used to identify controls, status indicators, or other programmatic elements, the meaning assigned to those images shall be consistent throughout an application's performance.	Supports	ArcGIS API for JavaScript uses web browsers to host the dialogs and interfaces, any keyboard or device interaction is governed by the support of the browser and web pages.
(f) Textual information shall be provided through operating system functions for displaying text. The minimum information that shall be made available is text content, text input caret location, and text attributes.	Supports	ArcGIS API for JavaScript uses web browsers to host the dialogs and interfaces, any keyboard or device interaction is governed by the support of the browser and web pages.
(g) Applications shall not override user selected contrast and color selections and other individual display attributes.	Supports	
(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.	Supports	
(i) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Supports	
(j) When a product permits a user to adjust color and contrast settings, a variety of color selections capable of producing a range of contrast levels shall be provided.	Supports	
(k) Software shall not use flashing or blinking text, objects, or other elements having a flash or blink frequency greater than 2 Hz and lower than 55 Hz.	Supports	

(l) When electronic forms are used, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Supports when combined with compatible Assistive Technology	

Section 1194.22 Web-based Internet Information and Applications – Detail

Criteria	Supporting Features	Remarks and Explanations
(a) A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).	Supports with Exceptions	Most controls provide 'alt' text but some do not given the inherent nature of GIS software, mapping software, and/or general limits on the framework or technology. Note: ArcGIS API for JavaScript contains geographic information system (GIS) technology that captures, manages, and analyzes complex and dynamic data through digital maps. As such, some GIS functions may not have equivalent non-text elements.
(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.	Not Applicable	
(c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.	Not Applicable	
(d) Documents shall be organized so they are readable without requiring an associated style sheet.	Not Applicable	
(e) Redundant text links shall be provided for each active region of a server-side image map.	Supports with Exceptions	Most controls support redundant text links but some do not given the inherent nature of GIS software, mapping software, and/or general limits on the framework or technology. Note: ArcGIS API for JavaScript contains geographic information system (GIS) technology that captures, manages, and analyzes complex and dynamic data through digital maps. Some aspects of a digital map or of GIS software are inherently

		visual/graphical and may not be adequately represented in text.
(f) Client-side image maps shall be provided instead of server-side image maps except where the regions cannot be defined with an available geometric shape.	Supports	
(g) Row and column headers shall be identified for data tables.	Supports	
(h) Markup shall be used to associate data cells and header cells for data tables that have two or more logical levels of row or column headers.	Supports	
(i) Frames shall be titled with text that facilitates frame identification and navigation.	Not Applicable	
(j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	Supports	
(k) A text-only page, with equivalent information or functionality, shall be provided to make a web site comply with the provisions of this part, when compliance cannot be accomplished in any other way. The content of the text-only page shall be updated whenever the primary page changes.	Not Applicable	ArcGIS API for JavaScript is geographic information system (GIS) technology that captures, manages, and analyzes complex and dynamic data through digital maps. Some aspects of a digital map or of GIS software are inherently visual/graphical and may not be adequately represented in text.
(l) When pages utilize scripting languages to display content, or to create interface elements, the information provided by the script shall be identified with functional text that can be read by Assistive Technology.	Supports	
(m) When a web page requires that an applet, plug-in or other application be present on the client system to interpret page content, the page must provide a link to a plug-in or applet that	Not Applicable	

complies with §1194.21(a) through (l).		
(n) When electronic forms are designed to be completed on-line, the form shall allow people using Assistive Technology to access the information, field elements, and functionality required for completion and submission of the form, including all directions and cues.	Not Applicable	
(o) A method shall be provided that permits users to skip repetitive navigation links.	Not Applicable	
(p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	Not Applicable	

Section 1194.23 Telecommunications Products – Detail

Criteria	Supporting Features	Remarks and Explanations
(a) Telecommunications products or systems 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. Microphones shall be capable of being turned on and off to allow the user to intermix speech with TTY use.	Not Applicable	
(b) Telecommunications products which include voice communication functionality shall support all commonly used cross-manufacturer non-proprietary standard TTY signal protocols.	Not Applicable	
(c) Voice mail, auto-attendant, and interactive voice response telecommunications systems shall be usable by TTY users with their TTYs.	Not Applicable	
(d) Voice mail, messaging, auto-attendant, and interactive voice response telecommunications systems that require a response from a user within a time interval, shall give an alert when the time interval is about to run out, and shall provide sufficient time for the user to indicate more time is required.	Not Applicable	
(e) Where provided, caller identification and similar telecommunications functions shall also be available for users of TTYs, and for users who cannot see displays.	Not Applicable	
(f) For transmitted voice signals, telecommunications products shall provide a gain adjustable up to a minimum of 20 dB. For incremental volume control, at	Not Applicable	

least one intermediate step of 12 dB of gain shall be provided.		
(g) If the telecommunications product allows a user to adjust the receive volume, a function shall be provided to automatically reset the volume to the default level after every use.	Not Applicable	
(h) Where a telecommunications product delivers output by an audio transducer which is normally held up to the ear, a means for effective magnetic wireless coupling to hearing technologies shall be provided.	Not Applicable	
(i) Interference to hearing technologies (including hearing aids, cochlear implants, and assistive listening devices) shall be reduced to the lowest possible level that allows a user of hearing technologies to utilize the telecommunications product.	Not Applicable	
(j) Products that transmit or conduct information or communication, shall pass through cross-manufacturer, non-proprietary, industry-standard codes, translation protocols, formats or other information necessary to provide the information or communication in a usable format. Technologies which use encoding, signal compression, format transformation, or similar techniques shall not remove information needed for access or shall restore it upon delivery.	Not Applicable	
(k)(1) Products which have mechanically operated controls or keys shall comply with the following: Controls and Keys shall be tactilely discernible without activating the controls or keys.	Not Applicable	

(k)(2) Products which have mechanically operated controls or keys shall comply with the following: Controls and Keys shall be operable with one hand and shall not require tight grasping, pinching, twisting of the wrist. The force required to activate controls and keys shall be 5 lbs. (22.2N) maximum.		
(k)(3) Products which have mechanically operated controls or keys shall comply with the following: If key repeat is supported, the delay before repeat shall be adjustable to at least 2 seconds. Key repeat rate shall be adjustable to 2 seconds per character.	Not Applicable	
(k)(4) Products which have mechanically operated controls or keys shall comply with the following: The status of all locking or toggle controls or keys shall be visually discernible, and discernible either through touch or sound.	Not Applicable	

Section 1194.24 Video and Multi-media Products – Detail

Criteria	Supporting Features	Remarks and Explanations
a) All analog television displays 13 inches and larger, and computer equipment that includes analog television receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals. As soon as practicable, but not later than July 1, 2002, widescreen digital television (DTV) displays measuring at least 7.8 inches vertically, DTV sets with conventional displays measuring at least 13 inches vertically, and stand-alone DTV tuners, whether or not they are marketed with display screens, and computer equipment that includes DTV receiver or display circuitry, shall be equipped with caption decoder circuitry which appropriately receives, decodes, and displays closed captions from broadcast, cable, videotape, and DVD signals.	Not Applicable	
(b) Television tuners, including tuner cards for use in computers, shall be equipped with secondary audio program playback circuitry.	Not Applicable	
(c) All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain speech or other audio information necessary for the comprehension of the content, shall be open or closed captioned.	Not Applicable	
(d) All training and informational video and multimedia productions which support the agency's mission, regardless of format,	Not Applicable	

that contain visual information necessary for the comprehension of the content, shall be audio described.		
(e) Display or presentation of alternate text presentation or audio descriptions shall be user-selectable unless permanent.	Not Applicable	

Section 1194.25 Self-Contained, Closed Products – Detail

Criteria	Supporting Features	Remarks and Explanations
(a) Self contained products shall be usable by people with disabilities without requiring an end-user to attach Assistive Technology to the product. Personal headsets for private listening are not Assistive Technology.	Not Applicable	
(b) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	Not Applicable	
(c) Where a product utilizes touchscreens or contact-sensitive controls, an input method shall be provided that complies with §1194.23 (k) (1) through (4).	Not Applicable	
(d) When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, shall also be provided.	Not Applicable	
(e) When products provide auditory output, the audio signal shall be provided at a standard signal level through an industry standard connector that will allow for private listening. The product must provide the ability to interrupt, pause, and restart the audio at any time.	Not Applicable	
(f) When products deliver voice output in a public area, incremental volume control shall be provided with output amplification up to a level of at least 65 dB. Where the ambient noise level of the environment is above 45 dB, a volume gain of at least 20 dB above the ambient level shall be user selectable. A function shall be provided to	Not Applicable	

automatically reset the volume to the default level after every use.		
(g) Color coding shall not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.	Not Applicable	
(h) When a product permits a user to adjust color and contrast settings, a range of color selections capable of producing a variety of contrast levels shall be provided.	Not Applicable	
(i) Products shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	Not Applicable	
(j) (1) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: The position of any operable control shall be determined with respect to a vertical plane, which is 48 inches in length, centered on the operable control, and at the maximum protrusion of the product within the 48 inch length on products which are freestanding, non-portable, and intended to be used in one location and which have operable controls.	Not Applicable	
(j)(2) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Where any operable control is 10 inches or less behind the reference plane, the height shall be 54 inches maximum and 15 inches minimum above the floor.	Not Applicable	

(j)(3) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Where any operable control is more than 10 inches and not more than 24 inches behind the reference plane, the height shall be 46 inches maximum and 15 inches minimum above the floor.	Not Applicable	
(j)(4) Products which are freestanding, non-portable, and intended to be used in one location and which have operable controls shall comply with the following: Operable controls shall not be more than 24 inches behind the reference plane.	Not Applicable	

Section 1194.26 Desktop and Portable Computers – Detail

Criteria	Supporting Features	Remarks and Explanations
(a) All mechanically operated controls and keys shall comply with §1194.23 (k) (1) through (4).	Not Applicable	
(b) If a product utilizes touchscreens or touch-operated controls, an input method shall be provided that complies with §1194.23 (k) (1) through (4).	Not Applicable	
(c) When biometric forms of user identification or control are used, an alternative form of identification or activation, which does not require the user to possess particular biological characteristics, shall also be provided.	Not Applicable	
(d) Where provided, at least one of each type of expansion slots, ports and connectors shall comply with publicly available industry standards.	Not Applicable	

Section 1194.31 Functional Performance Criteria – Detail

Criteria	Supporting Features	Remarks and Explanations
(a) At least one mode of operation and information retrieval that does not require user vision shall be provided, or support for Assistive Technology used by people who are blind or visually impaired shall be provided.	Supports when combined with compatible Assistive Technology	ArcGIS API for JavaScript can be used by developers to build websites with geospatial content. The web developer may format information so as to take advantage of Assistive Technology for the blind or visually impaired through use of the software. For example, the developer may use ArcGIS API for JavaScript to include a map window in the website and displays vector and raster elements of geographic information. Note: ArcGIS API for JavaScript is geographic information system (GIS) technology that captures, manages, and analyzes data through digital maps. Some aspects of a map or of GIS software are inherently visual/graphical.
(b) At least one mode of operation and information retrieval that does not require visual acuity greater than 20/70 shall be provided in audio and enlarged print output working together or independently, or support for Assistive Technology used by people who are visually impaired shall be provided.	Supports when combined with compatible Assistive Technology	ArcGIS API for JavaScript supports Assistive Technology for the client. For example, a website's map window may have zoom features, scale changes, or a magnifier window to make the output more usable by the visually impaired.
(c) At least one mode of operation and information retrieval that does not require user hearing shall be provided, or support for Assistive Technology used by people who are deaf or hard of hearing shall be provided.	Supports	There is no reliance on hearing to operate.
(d) Where audio information is important for the use of a product, at least one mode of operation and information	Not Applicable	There is no reliance on hearing to operate.

retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.		
(e) At least one mode of operation and information retrieval that does not require user speech shall be provided, or support for Assistive Technology used by people with disabilities shall be provided.	Supports	There is no reliance on speech to operate.
(f) At least one mode of operation and information retrieval that does not require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.	Supports	Operation and information retrieval is dependent on operating system settings and configurations. The software supports operating systems and configurations designed to assist users with accessibility.

Section 1194.41 Information, Documentation and Support – Detail

Criteria	Supporting Features	Remarks and Explanations
(a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge.	Supports	Most product documentation is delivered with the product or is available at https://developers.arcgis.com/javascript/. Some product documentation is available in HTML web-page format but may be exported to alternate formats.
(b) End-users shall have access to a description of the accessibility and compatibility features of products in alternate formats or alternate methods upon request, at no additional charge.	Supports	Accessibility and compatibility features of Esri software are described in the product documentation or are available at https://developers.arcgis.com/javascript/ . Additional information may be requested.
(c) Support services for products shall accommodate the communication needs of end-users with disabilities.	Supports	Esri provides technical support through e-mail, fax, documentation, and chat client. Esri support is available through a variety of channels, including phone, email, and online. Information on Esri support services can be found at http://support.esri.com/en/.