

Voluntary Product Accessibility Template (VPAT)

Name of Product	Engineering Village (EV for short)
Date	January 8 2016
Completed by	Heather Singleton
Contact for More Information	<p>Heather Singleton User Experience Specialist heather.singleton@elsevier.com</p> <p>Ted Gies Principal User Experience Specialist ted.gies@elsevier.com accessibility@elsevier.com</p>
Product Version Number	N/A
Product Release Date	12/16/2015
Testing Tools and Methods	<p>Hands-on keyboard operation Firebug/Code inspection JAWS 17 on Mozilla Firefox 43 and MS IE 11 on Windows 7 Open Ajax Alliance (OAA) side bar Wave toolbar</p>
Guidelines Used to Complete this VPAT	<p>SSA guide to filling out a VPAT: http://www.socialsecurity.gov/accessibility/files/SSA_guide_to_completing_the_voluntary_product_accessibility_template.pdf</p> <p>Webaim.org Section 508 checklist: http://webaim.org/standards/508/checklist</p> <p>Jim Thatcher's online course on Section 508 Guidelines: http://jimthatcher.com/webcoursec.htm</p> <p>The W3C WCAG 2.0 scripting techniques used to guide the scripting section: http://www.w3.org/TR/WCAG20-SCRIPT-TECHS/client-side-script.html</p> <p>Elsevier Accessibility Checklist: http://romeo.elsevier.com/accessibility_checklist/</p>
Pages Covered	<p>Quick Search, Search Results</p> <p>Home, Quick Search, Sign in, Search Results, Record page</p>

Applicable Sections

Section	Supporting Features	Remarks
<p>Section 1194.21 Software Applications and Operating Systems</p>	<p>Supports: B, E, F, G, I, L</p> <p>Supports with exceptions: A, C, D</p> <p>Not applicable: H, J, K</p>	<p>a) Most functionality in the user interface is keyboard operable.</p> <p>b) EV should not interrupt with any APIs/Os functions</p> <p>c) Most links and buttons do not have a visually distinct keyboard focus state.</p> <p>d) The UI is HTML, CSS and JavaScript. Almost all browser windows, forms and controls are in HTML, and each has identifiable label and state properties. ARIA roles are used throughout.</p> <p>e) EV uses consistently named image controls/links across the site.</p> <p>f) All text information should be exposed to AT/screen readers.</p> <p>g) EV will not override any user-applied contrast settings, and allows for disabling CSS and application of an external CSS.</p> <p>h) No animation is available on EV.</p> <p>i) Color coding is minimal and is supplemented by meaningful text.</p> <p>j) Not applicable</p> <p>k) Not applicable</p> <p>l) Forms are tagged with <label>. Error messages are tagged with <h3> headings.</p>
<p>Section 1194.22 Web-based Internet Information and Applications</p>	<p>Supports: C, D, G, H, K, M, N, O, P</p> <p>Supports with exceptions: A, L</p> <p>Not applicable:</p>	<p>a) Most graphical elements have meaningful text equivalents. A few exceptions exist.</p> <p>b) Not applicable</p> <p>c) Color coding is minimal and is supplemented by alternative text.</p> <p>d) EV uses separate CSS files and is usable</p>

	B, E, F, I, J	<p>with CSS turned off.</p> <p>e) Not applicable</p> <p>f) Not applicable</p> <p>g) Data tables have appropriate table headers.</p> <p>h) Tables properly use the scope attribute.</p> <p>i) Not applicable</p> <p>j) Not applicable</p> <p>k) The main UI does not warrant a text-only version.</p> <p>l) Most of the displayed content does not use JavaScript to function normally, and most areas of content that do are identified and read by assistive technology. A few exceptions exist.</p> <p>m) The main application does not require any plugins to operate. We provide links for users to download a PDF reader when necessary to view content.</p> <p>n) Forms use standard HTML markup including label tags and asterisks to identify required fields.</p> <p>o) Users can use a skip to main content link to bypass repetitive navigation. EV uses ARIA landmarks, unordered lists and headings to allow users of screen readers to jump around pages more quickly.</p> <p>p) EV has an inactivity session logout which allows users a chance to extend the session before timing out.</p>
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	<p>Supports: B, C</p> <p>Supports with exceptions: A, F</p> <p>Not applicable: D, E.</p>	<p>A) EV uses HTML and Javascript for the primary user interface which are able to be read by Screen Readers.</p> <p>All content is available in HTML format which is able to be read by Screen Readers and braille displays.</p> <p>Several features have been added to enhance the use of EV for users who use screen readers including alerts, ARIA roles and state, and best practice for structure.</p> <p>The exceptions to the vision requirement include the items concerning alternative text as described in 1194.22 (A).</p> <p>B) All content and controls should be compatible with screen enlargement software and with built-in browser zoom functionality.</p> <p>C) All functionality in the interface is usable without requiring hearing.</p> <p>D) Not applicable</p> <p>E) Not applicable</p> <p>F) Most of EV's controls and links are keyboard operable.</p>
Section 1194.41 Information, Documentation and Support	Supports: A, B, C.	<p>A) Each function on EV is supported by HTML contextual help. Narrated instructional video is also available at the Elsevier TrainingDesk.</p> <p>B) The EV Accessibility Statement can be found at: https://www.elsevier.com/solutions/engineering-village/features/accessibility</p> <p>C) The Elsevier Helpdesk can be reached by web page form submission found on each EV page under Contact & Support. A representative will contact users within two business days. Accessibility support team can be reached through accessibility@elsevier.com</p>

Legend			
Not Applicable	Supports, or Supports with assistive technology	Supports with exceptions	Does not support

Section 1194.21 Software Applications and Operating Systems		
Criteria	Supporting Features	Remarks
(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	<p>Most primary functionality in EV is operable using keyboard only.</p> <p>Dialogue windows can be closed using the Escape key.</p> <p>Exceptions:</p> <ul style="list-style-type: none"> On the Quick Search page, the expand/collapse "Show" link in the "More Sources" box On the Search Results page, the "Remove Duplicates" box On the Search Results and Search History page, the custom "combine" dropdown for group selection/checkbox Ask an Expert 3 graphical links
(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	EV does not have features that would interfere with standard API features of an OS including the MSAA (Microsoft Active Accessibility).

<p>(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.</p>	<p>Supports with exceptions</p>	<p>EV uses CSS styling to indicate widgets links that are focused on when using a mouse or keyboard. For instance, text links become underlined.</p> <p>The application uses standard HTML links and form fields, which have a focus state that is exposed by some browsers.</p> <p>Exceptions:</p> <ul style="list-style-type: none"> • Graphical buttons (Check Local Full-text) • Form elements (checkboxes, text inputs) <p>EV pages have a logical tab order. The system manages keyboard focus when necessary using JavaScript to set the cursor, such as when opening panes or dialogue boxes.</p>
<p>(d) Sufficient information about a user interface element including 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.</p>	<p>Supports with exceptions</p>	<p>EV uses standard HTML form elements such as checkboxes and radio buttons that offer label and state information to assistive technology such as JAWS. Additionally, ARIA labels are used throughout the product for providing additional context to screen reader users for example to buttons and links that have the same label. Form alerts and messages are communicated in a way that will alert assistive technology.</p> <p>Exceptions:</p> <ul style="list-style-type: none"> • The login link in the Megamenu does not communicate to assistive technology that it is a select menu. Apply aria-expanded="true/false". • The auto-suggest feature does not indicate there is a menu of suggested search terms being displayed. Furthermore, the menu itself is not marked up as a menu. • The tutorial feature shows text about the UI that is not currently announced by the screen reader as dialog windows when displayed.

<p>(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.</p>	<p>Supports</p>	<p>EV uses minimal images for the user interface. Such images are consistently titled using the alt attribute.</p>
<p>(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.</p>	<p>Supports</p>	<p>EV uses standard methods for displaying text such as HTML, JavaScript and PDF files.</p> <p>All text information is exposed to AT/screen readers.</p> <p>EV uses ARIA labels for providing enhanced context and meaning to panes, dialogue boxes and controls.</p>
<p>(g) Applications shall not override user selected contrast and color selections and other individual display attributes.</p>	<p>Supports</p>	<p>EV will not interfere with any contrast settings, magnification settings or keyboard sensitivity settings.</p> <p>EV uses a separate CSS so that users may disable the CSS or apply their own style sheet, such as allowing for high contrast views.</p>
<p>(h) When animation is displayed, the information shall be displayable in at least one non-animated presentation mode at the option of the user.</p>	<p>Not applicable</p>	<p>No animation is available on EV.</p>
<p>(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.</p>	<p>Supports</p>	<p>EV currently relies on the browser to visually indicate links when using a keyboard.</p> <p>Error messages and status messages are identified using an icon with alternative text such as "Error," "Alert" and "Important Message."</p>
<p>(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.</p>	<p>Not applicable</p>	<p>EV does not allow the user to change the contrast or color settings. However, EV allows users to disable style sheets, or users can apply their own style sheets if they need to enhance contrast or apply different color combinations.</p>
<p>(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.</p>	<p>Not applicable</p>	<p>EV does not have any flashing or blinking texts or objects.</p>

(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	Each form element uses a label or title tag to associate the proper text with its form label. This includes Registration, Contact Us, and Search form fields. The Registration form includes a text asterisk key to denote required fields.
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Section 1194.22 Web-based Internet information and applications		
Criteria	Supporting Features	Remarks
(a) A text equivalent for every non-text element shall be provided (e.g., via "alt", "longdesc", or in element content).	Supports with exceptions	Nearly all image button/image links have a meaningful text equivalent. Graphical charts are minimal in the system but are accompanied by CSV/Excel download equivalent. Exceptions: <ul style="list-style-type: none"> • Additionally, images & figures provided by authors are unable to be supported. • The 'X' icon to remove all selected records on the Search Results page needs null alt text (alt="").
(b) Equivalent alternatives for any multimedia presentation shall be synchronized with the presentation.	Not applicable	There are no multimedia presentations in EV.
(c) Web pages shall be designed so that all information conveyed with color is also available without color, for example from context or markup.	Supports	EV currently relies on the browser to visually indicate links when using a keyboard. Error messages and status messages are identified using an icon with alternative text such as "Error," "Alert" and "Important Message."
(d) Documents shall be organized so they are readable without requiring an associated style sheet.	Supports	EV uses external style sheets instead of inline styles. EV is usable with style sheets disabled.
(e) Redundant text links shall be provided for each active region of a server-side image map.	Not applicable	EV does not have any server-side image maps.
(f) Client-side image maps	Not applicable	EV does not have any 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.		
(g) Row and column headers shall be identified for data tables.	Supports	EV identifies columns with <th> markup.
(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	Tables use proper scope attributes.
(i) Frames shall be titled with text that facilitates frame identification and navigation	Not applicable	EV does not use frames.
(j) Pages shall be designed to avoid causing the screen to flicker with a frequency greater than 2 Hz and lower than 55 Hz.	Not applicable	EV does not use any images that flash, blink or flicker. Ads that have revolving text may be closed by users.
(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.	Supports	EV does not have any primary functionality that warrants a separate text-only page.
(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 with exceptions	<p>Most of the displayed content does not use JavaScript to function normally, and the areas of content that do are identified and read by assistive technology.</p> <p>Exceptions:</p> <ul style="list-style-type: none"> On AutoSuggest, there is not an indication of the suggested terms pane. We can provide an invisible live region to communicate, e.g. <code>10 auto-complete suggestions are available, use the up and</code>

		<p>down arrows to navigate.</p> <ul style="list-style-type: none"> • Apply aria-expanded="true/false" to expandable content (Login dropdown, More Sources hide/show button, Search History hide/show button, Remove Duplicates hide/show button) • On the Search Results page, for article-based repeated text links, replace the aria-labelledby with aria-describedby. Additionally, remove the aria-labelledby for author links. • On the Search History page, the 'X' icon to delete has an inaccurate aria-labelledby. It should contain the id of itself (self-referencing) and id of the search string that the user is deleting.
<p>(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 complies with §1194.21(a) through (l).</p>	<p>Supports</p>	<p>The main application does not require any plugins or applications on the client system in order to use the core features.</p> <p>If the client does not have Adobe PDF Reader, many Windows operating systems will provide a link to Adobe's site to download the Adobe Reader. The help system also provides a link to Get Adobe Reader.</p>
<p>(n) When electronic forms are designed to be completed online, 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.</p>	<p>Supports</p>	<p>Each form element uses a label tag to associate the proper text with its form label. Forms include Registration, Contact Us and Search.</p> <p>The Registration form includes a text asterisk key to denote each required field.</p> <p>Field instructions are provided for acceptable passwords.</p> <p>Form error messages are contextual to each field and are marked with <H3> to allow for screen reader discoverability.</p> <p>Form alerts and messages are communicated in a way that will alert assistive technology.</p>
<p>(o) A method shall be provided that permits users to skip repetitive navigation links.</p>	<p>Supports</p>	<p>EV provides a Skip to Main Content link which is visible at the top of pages.</p> <p>The application uses ARIA landmarks to allow users with the JAWS screen reader to skip between areas such as Main and Quick Search.</p> <p>EV uses headings and unordered lists to allow</p>

		<p>JAWS users to skip repetitive links and to skip from heading to heading such as when navigating search results.</p> <p>EV uses headings properly to allow JAWS users to bring up a list of headings to skip to a specific area of the web page.</p> <p>EV uses headings on search results to allow quick skipping from article to article.</p>
(p) When a timed response is required, the user shall be alerted and given sufficient time to indicate more time is required.	Supports	EV has a session timeout after 25 minutes of inactivity. Users are given a message and 2 minutes to extend the session.

Section 1194.31
Functional Performance Criteria

Criteria	Supporting Features	Remarks
(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 with minor exceptions	<p>EV is a web application that uses HTML, CSS and JavaScript. HTML and JavaScript are both supported by screen readers such as JAWS and by Braille displays.</p> <p>The UI itself uses standard HTML controls such as links, buttons and form controls which are all identifiable by screen readers.</p> <p>All content is available in HTML format including, and is marked up with well-structured headings to allow for better compatibility and navigation with screen readers and Braille displays.</p> <p>Specific features that have been included in EV to support use by sight impaired users include:</p> <ul style="list-style-type: none"> • Use of headings and landmarks to allow understanding and navigation of web pages and content. • Use of specific page titles to facilitate orientation in the system. • Use of web pages and forms that are compatible with screen readers. • Use of controls and buttons that are compatible with screen readers.

		The exceptions to the vision requirement include the items concerning alternative text as described in 1194.22 (A).
(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	EV uses HTML and text for its content as well as independent CSS for formatting to allow users to apply their own style sheets. Other browser controls such as Mozilla Firefox Zoom-In feature will work with EV. EV can be enlarged to 200% in the browser without loss of functionality.
(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	EV does not require user hearing to operate any application or functionality. Product support is provided through email.
(d) Where audio information is important for the use of a product, at least one mode of operation and information retrieval shall be provided in an enhanced auditory fashion, or support for assistive hearing devices shall be provided.	Not applicable	There are no circumstances where audio information is important for use of the product.
(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.	Not applicable	EV does not require any speech input for operation.
(f) At least one mode of operation and information retrieval that does not	Supports with exceptions	Most of EV's controls and links are keyboard operable. Users may use their browser text enlarging tool to

<p>require fine motor control or simultaneous actions and that is operable with limited reach and strength shall be provided.</p>		<p>enlarge controls for easier clickability.</p> <p>Label tags have been applied to small controls such as checkboxes and radio buttons in some places to allow for easier selection with a mouse.</p> <p>The exceptions to the keyboard requirement are described in 1194.21(A).</p>
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<h2 style="text-align: center;">Section 1194.41 Information, documentation, and support</h2>		
Criteria	Supporting Features	Remarks
<p>(a) Product support documentation provided to end-users shall be made available in alternate formats upon request, at no additional charge.</p>	<p>Supports</p>	<p>Each function on EV is supported by HTML contextual help. There are 5 narrated and captioned EV tutorials here: https://www.youtube.com/watch?v=n4MtwjApw_A&list=P_LbChoMNceCL4zMdxGZz3xJINzGOepLI1G</p>
<p>(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.</p>	<p>Supports</p>	<p>The EV Accessibility Statement can be found at: https://www.elsevier.com/solutions/engineering-village/features/accessibility</p>
<p>(c) Support services for products shall accommodate the communication needs of end-users with disabilities.</p>	<p>Supports</p>	<p>The Elsevier Helpdesk can be reached by web page form submission found on each EV page under Contact & Support. A representative will contact users within two business days. Accessibility support team can be reached through accessibility@elsevier.com</p>

[Return to the top](#)