



Procurement Protocol for Accessible Digital Technologies

Tufts University is committed to ensuring accessibility for all individuals with disabilities in compliance with Section 504 of the Rehabilitation Act of 1973, as amended. This Act prohibits disability discrimination in any program or activity that receives Federal funds or is conducted by an executive agency.

Tufts has developed a three-pronged approach to ensuring equal access to all digital technologies and materials. This first Protocol is designed to make sure that any digital technology, or Information Communication Technology (as defined by the federal government) is evaluate for accessibility before the university enters into a purchase agreement. Tufts will also implement a Website Accessibility Protocol and a Captioning Protocol later in 2018.

The Accessible Digital Technologies Protocol intended to facilitate ongoing efforts to improve accessibility, involving the purchases the University makes in the area of Accessible Digital Technologies (ADT). ADT includes all university-sponsored websites, any information technology and equipment or interconnected system or subsystem of equipment that is used in the creation, conversion, or duplication of data or information. More specifically, ADT can include, but is not limited to telecommunications products (such as telephones), information kiosks, Automated Teller Machines (ATMs) and transaction machines, internet and intranet websites, electronic books and electronic book reading systems, search engines and databases, course management systems, classroom podiums and technology and multimedia, personal response systems ("clickers"), and office equipment such as, copiers and fax machines.

This protocol requires the University to consider the accessibility of a product during the RFP phase of product purchasing using the Federally recognized accessibility standards (Section 508 of Electronic Information and WCAG 2.1 AA for web accessibility).

While the University is committed to taking measures to promote access to ADT for all students, faculty, staff and the public with disabilities, there may be situations that call for exceptions to the protocol. If a necessary product cannot be made or acquired that fully meets these standards, the person or department desiring to purchase the product must submit a plan for equally effective alternative access of the features within the product that are inaccessible (APPENDIX 5). The purchasing person or department should consult with Student Accessibility Services on an appropriate work-around.

It should be noted that exceptions to accessible products are **unlikely** to be given for Learning Management Systems (LMSs) or web technology or software that is used for critical or important transactions (registering for classes, accessing university information on a mobile device). Any inaccessible standalone instructional support applications (apps, Kindle devices or technologies used in the classroom) may be used only if, to the extent necessary, adequate alternative accessible application, technology or user support is made available.

Steps for Completing an Accessibility Check during the RFP process:

The process for vetting ADT products for accessibility will be conducted by a team within TTS (Tufts Technology Services) that is responsible for evaluating any purchase across the university. The team has been trained by a representative from Student Accessibility Service on how to evaluate a website or EIT using the method outlined in this protocol. The team will receive up-dated training annually or as frequently as the law changes. TTS will follow the steps below to determine whether or not the vendor has sufficiently demonstrated that the product is accessible according to the Federal standards and provide next step solutions if the product is inaccessible in whole or part. TTS will then submit a report detailing their findings and recommendations to the Purchasing office for consideration prior to issuing a contract.

TTS will use the process below to confirm or deny the accessibility of a product after the vendor has issued a report:

1. All RFPs issued to vendors for bids will include accessibility language (Appendix 1).
2. All requests to purchase ADT products (of any amount or for any usage) that are made through the Purchasing office will be checked for accessibility by TTS.
3. The Purchasing office will assign each proposed purchase to a member in TTS to be checked. TTS will ask the Vendor to fill out Tufts Assessment of Product form (Appendix 2 and 3) and return it within two weeks for review. Note that there are different forms for the vendor to fill out depending on whether the product is web-based or non-web-based.
4. The Vendor will provide Tufts with a platform to test the product internally. TTS will run in-house accessibility tests with screen reading software, paying particular attention to how a member of the Tufts community will interact with the product.
5. TTS will summarize the findings in a report with regard to the WCAG and Section 508 of the Rehabilitation Act standards. TTS will submit the report with findings and recommendations to the Purchasing office (See Appendix 4).
6. The Purchasing office will then decide whether or not to purchase the product and if so, whether it requires an exemption (see Appendix 5). The Purchasing office may seek guidance from the Office of University Counsel and Student Accessibility Service.
7. The purchaser will be notified of the university's decision and provide a copy of the findings. If the university grants an exception with conditions, the vendor must produce a roadmap outlining proposed efforts towards compliance and timeline (Appendix 6).

If the purchaser asks to purchase the product even though it is inaccessible, then the purchaser must request an exception and submit it to the Chief Information Officer (CIO). The request for exception should include:

1. Demonstrate that the technology for which an exception is sought is the only option available or is used as standard common practice in the field of study, as no other options exist.

2. Include a timeline and plan for how to ensure alternate access if the request is granted and if deemed not to present an undue burden or fundamental alteration to the program that it is being purchased for.

The CIO will work with the Office of University Counsel and Student Accessibility Service to determine whether an exception is appropriate and the parameters of any such exception. The terms of the exception will be communicated to the vendor in writing prior to the university signing a purchasing agreement (see Appendix7).

APPENDIX 1

Language for all RFP's for technology related products

If the services or the deliverables are for electronic and information technology, pursuant to Section 13.1 hereof, Service Provider shall design and/or provide the deliverables consistent with W3C Web Content Accessibility Guidelines (WCAG) 2.1, level AA (by way of example only), designing the deliverables in a manner that supports assistive software or devices such as large print interfaces, text-to-speech output, voice-activated input, refreshable braille displays, alternate keyboard or pointer interfaces, and by other means to ensure that end users with disability-related impairments have an equal opportunity to use the deliverables. Service Provider shall provide to Tufts a current completed Voluntary Product Accessibility Template ("VPAT") to demonstrate the accessibility of the product measured against either the 508 or WCAG 2.1 level AA standards. If the deliverables do not meet either of these standards, Tufts reserves the right to terminate this Agreement (effective upon written notice to Service Provider) and seek redress for any harm incurred, including, but not limited to, adapting or modifying the deliverables in a manner that is consistent with these standards. In the event Service Provider provides a deliverable that fails to meet these standards, notwithstanding other provisions in the Agreement, Service Provider hereby grants (and shall cause any subcontractor or holder of any intellectual property right in the non-compliant deliverable to grant) Tufts an irrevocable royalty-free license (and right) to adapt, modify, decompile and take such other reasonable action necessary to cause such Deliverable to satisfy these standards.

APPENDIX 2
FORM FOR WEB-BASED ADT PRODUCTS

Tufts will use the Web Content Accessibility Guidelines (WCAG) 2.1 at Level AA as a guide. The following report should be filled out by the vendor in regards to the accessibility of their product.

Date: _____ Vendor name: _____

Person filling out this report: _____

Position: _____

Product name and version: _____

Please answer the following questions based on your experience with the product.

We also encourage all vendors to follow the WCAG 2.1 Success Criteria found here: https://www.access-board.gov/guidelines-and-standards/communications-and-it/about-the-ict-refresh/final-regulatory-impact-analysis#_Toc471376905

Section 1: Perceivable (Make content and controls perceivable by all users.)		
Content	Yes	No
Does the website have text alternatives for any non-text content?		
Does the website provide alternatives for time-based media? Including pre-recorded and live video and audio content.		
Does the website provide captions for live audio content?		
Does the website provide audio descriptions for all prerecorded content?		
Can information, structure, and relationships conveyed through presentation be programmatically determined or are available in text.		
When the sequence in which content is presented affects its meaning, a correct reading sequence can be programmatically determined.		
Instructions provided for understanding and operating content do not rely solely on sensory characteristics of components such as shape, size, visual location, orientation, or sound.		
Color is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.		
If any audio on a Web page plays automatically for more than 3 seconds, either a mechanism is available to pause or stop the audio, or a mechanism is available to control audio volume independently from the overall system volume level.		
The visual presentation of text and images of text has a contrast ratio of at least 4.5:1.		

Except for captions and images of text, text can be resized without assistive technology up to 200 percent without loss of content or functionality.		
If the technologies being used can achieve the visual presentation, text is used to convey information rather than images of text		
Section 2: Operable (Make content and controls operable by all users.)		
Content	Yes	No
Can all menus, links, buttons, and other controls be operated by keyboard, to make them accessible to users who are unable to use a mouse?		
Does the web page include a visible focus indicator so all users, especially those using a keyboard, can easily track their current position?		
Do features that scroll or update automatically (e.g., slideshows, carousels) have prominent accessible controls that enable users to pause or advance these features on their own?		
Do pages that have time limits include mechanisms for adjusting those limits for users who need more time?		
Have you avoided using content that flashes or flickers?		
Does the web page or document have a title that describes its topic or purpose?		
Are mechanisms in place that allow users to bypass blocks of content (e.g., a “skip to main content” link on a web page or bookmarks in a PDF)?		
Does the website include two or more ways of finding content, such as a navigation menu, search feature, or site map?		
Is link text meaningful, independent of context?		
Headings and labels describe topic or purpose.		
Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible.		
Section 3: Understandable (Make content and user interfaces understandable to all users.)		
Content	Yes	No
The default human language of each Web page can be programmatically determined.		
The human language of each passage or phrase in the content can be programmatically determined except for proper names, technical terms, words of indeterminate language, and words or phrases that have become part of the vernacular of the immediately surrounding text.		
When any component receives focus, it does not initiate a change of context.		
Changing the setting of any user interface component does not automatically cause a change of context unless the user has been advised of the behavior before using the component.		

<p>Navigational mechanisms that are repeated on multiple Web pages within a set of Web pages occur in the same relative order each time they are repeated, unless a change is initiated by the user.</p>		
<p>Components that have the same functionality within a set of Web pages are identified consistently.</p>		
<p>If an input error is automatically detected, the item that is in error is identified and the error is described to the user in text.</p>		
<p>Labels or instructions are provided when content requires user input.</p>		
<p>If an input error is automatically detected and suggestions for correction are known, then the suggestions are provided to the user, unless it would jeopardize the security or purpose of the content.</p>		
<p>For Web pages that cause legal commitments or financial transactions for the user to occur, that modify or delete user-controllable data in data storage systems, or that submit user test responses, they must be able to be reversible, checked and/or confirmed by the user.</p>		
<p>Section 4: Robust (Make content robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies.)</p>		
<p>In content implemented using markup languages, elements have complete start and end tags, elements are nested according to their specifications, elements do not contain duplicate attributes, and any IDs are unique, except where the specifications allow these features.</p>	Yes	No
<p>For all user interface components (including but not limited to: form elements, links and components generated by scripts), the name and role can be programmatically determined; states, properties, and values that can be set by the user can be programmatically set; and notification of changes to these items is available to user agents, including assistive technologies.</p>		

**APPENDIX 3
FOR NON-WEB-BASED ADT PRODUCTS**

Tufts asks that vendors fill out the Voluntary Product Accessibility Template (VPAT) and the form below before Tufts will consider purchasing the product.

Date: _____ Vendor name: _____

Person filling out this report: _____

Position: _____

Product name and version: _____

Please answer the following questions based on your experience with the product.

Section 1:

Use the Voluntary Product Accessibility Template (VPAT) found at: <https://accessibility.oit.ncsu.edu/it-accessibility-at-nc-state/developers/accessibility-handbook/overview-understanding-the-nature-of-what-is-required-to-design-accessibly/voluntary-product-accessibility-template-vpat/>

Section 2: Perceivable (Make content and controls perceivable by all users.)		
Content	Yes	No
Does the website have text alternatives for any non-text content?		
Does the website provide alternatives for time-based media? Including pre-recorded and live video and audio content.		
Does the website provide captions for live audio content?		
Does the website provide audio descriptions for all prerecorded content?		
Can information, structure, and relationships conveyed through presentation be programmatically determined or are available in text.		
When the sequence in which content is presented affects its meaning, a correct reading sequence can be programmatically determined.		
Instructions provided for understanding and operating content do not rely solely on sensory characteristics of components such as shape, size, visual location, orientation, or sound.		
Color is not used as the only visual means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.		
If any audio on a Web page plays automatically for more than 3 seconds, either a mechanism is available to pause or stop the audio, or a mechanism is available to control audio volume independently from the overall system volume level.		

The visual presentation of text and images of text has a contrast ratio of at least 4.5:1.		
Except for captions and images of text, text can be resized without assistive technology up to 200 percent without loss of content or functionality.		
If the technologies being used can achieve the visual presentation, text is used to convey information rather than images of text		
Section 3: Operable (Make content and controls operable by all users.)		
Content	Yes	No
Can all menus, links, buttons, and other controls be operated by keyboard, to make them accessible to users who are unable to use a mouse?		
Does the web page include a visible focus indicator so all users, especially those using a keyboard, can easily track their current position?		
Do features that scroll or update automatically (e.g., slideshows, carousels) have prominent accessible controls that enable users to pause or advance these features on their own?		
Do pages that have time limits include mechanisms for adjusting those limits for users who need more time?		
Have you avoided using content that flashes or flickers?		
Does the web page or document have a title that describes its topic or purpose?		
Are mechanisms in place that allow users to bypass blocks of content (e.g., a “skip to main content” link on a web page or bookmarks in a PDF)?		
Does the website include two or more ways of finding content, such as a navigation menu, search feature, or site map?		
Is link text meaningful, independent of context?		
Headings and labels describe topic or purpose.		
Any keyboard operable user interface has a mode of operation where the keyboard focus indicator is visible.		
Section 4: Understandable (Make content and user interfaces understandable to all users.)		
Content	Yes	No
The default human language of each Web page can be programmatically determined.		
The human language of each passage or phrase in the content can be programmatically determined except for proper names, technical terms, words of indeterminate language, and words or phrases that have become part of the vernacular of the immediately surrounding text.		
When any component receives focus, it does not initiate a change of context.		

Changing the setting of any user interface component does not automatically cause a change of context unless the user has been advised of the behavior before using the component.		
Navigational mechanisms that are repeated on multiple Web pages within a set of Web pages occur in the same relative order each time they are repeated, unless a change is initiated by the user.		
Components that have the same functionality within a set of Web pages are identified consistently.		
If an input error is automatically detected, the item that is in error is identified and the error is described to the user in text.		
Labels or instructions are provided when content requires user input.		
If an input error is automatically detected and suggestions for correction are known, then the suggestions are provided to the user, unless it would jeopardize the security or purpose of the content.		
For Web pages that cause legal commitments or financial transactions for the user to occur, that modify or delete user-controllable data in data storage systems, or that submit user test responses, they must be able to be reversible, checked and/or confirmed by the user.		
Section 5: Robust (Make content robust enough that it can be interpreted reliably by a wide variety of user agents, including assistive technologies.)		
In content implemented using markup languages, elements have complete start and end tags, elements are nested according to their specifications, elements do not contain duplicate attributes, and any IDs are unique, except where the specifications allow these features.	Yes	No
For all user interface components (including but not limited to: form elements, links and components generated by scripts), the name and role can be programmatically determined; states, properties, and values that can be set by the user can be programmatically set; and notification of changes to these items is available to user agents, including assistive technologies.		

Section 6: Requirements from Section 508 of the Rehabilitation Act Refresh		
Content	Yes	No
Does the product offer real-time text functionality (real-time technology transmits text in near real-time as each character is typed)?		
Are any of the following non-public facing electronic resources part of the product?		
An emergency notification?		
An initial or final decision adjudicating an administrative claim or proceeding?		
An internal or external program or policy announcement?		
A notice of benefits, program eligibility, employment opportunity, or personnel action?		

	A formal acknowledgment of receipt?		
	A survey questionnaire?		
	A template or form?		
	Educational or training materials?		
	Intranet content designed as a Web page?		
	Is the product accessible to people without assistive technology (except for headsets or other audio devices)?		
	Does the software operate with assistive technology?		
	Is there a transcript available for any audio-only content?		
	Is there text or audio description available for video-only content?		
	Are the videos captioned?		
	Are audio descriptions available for all prerecorded video content?		
	Are there captions available for all live video events?		

Submit the VPAT and this form to TTS within two weeks of the request.

APPENDIX 4
AN EXAMPLE A REPORT FROM TTS

1. **Product name:** GradesFirst Accessibility Test
2. **Vendor contact:** Mike Smith
3. **Department requesting the product:** Academic Resource Center
4. **Overview of the product:** GradesFirst is a workflow software that enables colleges and universities to identify, engage, and support at-risk students. It is a 100% web-based system that includes features such as: early alerts, progress reporting, advising center management, tutor management, appointment scheduling, a communication center for email and text messaging, assignment tracking, attendance monitoring, and reporting.
5. **Name of the Tufts University staff and/or student who tested the product:** Kristen Dabney
6. **Summary of Tufts University Testing (based on vendor report, Tufts testing and other materials as available):**
JAWs screen reader, Android’s TalkBack screen reader, and Apple’s VoiceOver screen reader were used to perform the accessibility check. The following graph reflects the findings of the accessibility check.

Content	Issue
Every Page	Bottom of every page there is a “empty container”
Main Menu Bar	Menu tab reads each link twice
Conversation Page	Messages are read as one. There is no break before the next message and no indication that you moved onto the next message
Calendar Page	Subscriptions tab is “invisible,” the screen reader reads right over it

Recommendations:

Ask the vendor to make these changes, once done, proceed with purchasing.

APPENDIX 5

POSSIBLE RESULTS FROM TTS' EVALUATIONS

Products that are compliant:

It is expected that products that are compliant will be able to meet the standards expressed in Web-based and Non-Web-Based required processes. If a product is found to be compliant by the TTS, then Tufts may proceed with purchasing this product if desired. Tufts does reserve the right to ask the vendor to demonstrate access compliance as new features or versions of a product are introduced.

Products that are not compliant:

Tufts anticipates that some products will not meet accessibility aspirations. Tufts will use the standards set forth in Section 508 of the Rehabilitation Act to determine if not purchasing the product:

1. Presents an undue burden to the University,
2. Alters the fundamental requirements of the program or school for which the product is being purchased,
3. Is essential to the mission for what it is being used for.

If TTS determines that the product meets any of these causes, they may issue an exemption to the vendor. Exemptions may include:

Exception Status for products that do not meet accessibility goals:

If the person(s) responsible for evaluating the accessibility of the product determines that it does not meet some or all of the guidelines outlined in the process, an exception *may* be granted.

For those products which are determined not to meet some or all of the University's preferred guidelines, but for which accessibility measures can be undertaken with success, a limited exception may be granted for a period of up to two years provided that the vendor:

1. Develops a roadmap to compliance (See Appendix 6);
2. Works with Tufts to identify an interim workaround solution;
3. And demonstrates a good faith effort to address the identified standards barriers.

At the end of the exception period, the University reserves the right to terminate the contract if the terms of the Exception Status are not satisfied with no penalty to the university.

Exemption Status for products unable to meet Tufts' accessibility goals:

The University will make a good faith effort to procure accessible technologies. In the event that an alternative product or workaround fundamentally alters program standards, creates an undue burden or does not coincide with the mission of the reason for purchasing the product, an exemption *may* be granted with the approval of the CIO. In some of these instances, Tufts may not obligate the vendor to undertake measures to ensure future access. For example, if a particular software is widely used in a certain field of practice, it may not be feasible to expect the vendor to revamp the product.

APPENDIX 6
SAMPLE VENDOR ACCESSIBILITY ROAD MAP

Tufts University is committed to promotes the accessibility of Information Communication Technology (ADT) that it creates or provides in conducting its activities To this end, Tufts University prefers that web based content adhere to WCAG 2.1 level AA guidelines. Consequently, Tufts University requires that all ADT purchases are reviewed to determine if the technology can be used by persons with disabilities. If an item is not fully accessible to individuals with disabilities, then Tufts University is committed to providing, with guidance from the vendor, reasonable workarounds or accommodations that may be necessary until the vendor has resolved accessibility issues, assuming such resolution is technically feasible.

Instructions for Vendors:

Tufts University encourages its vendors to create fully accessible products, even though it may be a lengthy process. This template is provided so vendors can document any accessibility issues their product currently has, and to indicate their plans for addressing these issues in future releases.

Vendor/Product Information:

Vendor Name	
Product Name & Version	
Completion Date	
Contact Name	
Contact Email or Phone	

List all accessibility issues individually (issues identified on the product's VPAT, or ascertained from other sources.)	Please use one of the following: 1. Issue resolved, 2. Remediation In progress, 3. Under investigation, 4. Issue will not be fixed, 5. Issue will be fixed according to remediation timeline.	Anticipated date when the issue will be resolved.	For impacted users, list any solutions that will allow them to work around this issue.	Provide details/description regarding the issue
Example: Does not support full keyboard access to all functions.	Issue will be fixed according to remediation timeline	Q3, 2015 release (v1.2)		The toolbars will be re-written to provide keyboard equivalents for all functions.

Additional Information:

Provide any additional information regarding accessibility plans.

APPENDIX 7
SAMPLE LANGUAGE FOR PURCHASING CONTRACTS

The vendor _____ represents and warrants that the products and services it proposes to provide pursuant to this RFP are consistent with Section 508 of the Rehabilitation Act of 1973 or the WCAG 2.1 level AA guidelines. _____ acknowledges and agrees that it will be required to promptly respond to, resolve and remediate any complaint regarding accessibility of its products or services in a timely manner and provide an updated version to Tufts at no cost. _____ further agrees to indemnify any claims arising out of its failure to comply with these guidelines. Failure to comply shall be grounds for rejection of _____'s response.

APPENDIX 8

ACCESSIBLE DIGITAL TECHNOLOGY EXEMPTION REQUEST FORM

Form in Word format available: <https://tufts.box.com/s/jnw44a1m5h2t56ws39xjk0tc4b5k8i6>

Tufts University is committed to providing a digital environment that is accessible to all, including individuals with disabilities. Digital environments include but are not limited to information technologies, web pages, web-based applications, operating system-based applications, online instructional content, services and resources.

The following circumstances may qualify as exemptions from this policy:

1. Where compliance is not technically possible or may require extraordinary measures due to the nature or intent of the information resource, application or service. Lack of sufficient funding for any particular school, department, program, or unit of the University would not be considered for an exemption.
2. Where compliance would result in a fundamental alteration of the information resource, application, or service, and not satisfy the original intent of the digital content.
3. Where, in the case that information resources, applications and services that are procured through third party vendors or contractors; and that no alternative accessible products are available from other third party vendors or contractors, procurement can be made of a non-compliant product.
4. Where the product is not currently in compliance, but efforts are underway to fix the defects by a defined date and a work around for people with disabilities has been established.

CONTACT

Name	
Department	
Email	

PRODUCT INFORMATION

Product Name	
Product version	

The product is intended for (check all that apply):

Public facing

Internal users; students, faculty and/or staff

Required usage by Tufts students

(Example: all students must use an intent-to-graduate form once in their school career.)

Required usage by Tufts faculty and/or staff

(Example: All faculty/staff must use this to report vacation time.)

Please attach to your exemption request:

1. The Vendor Accessibility Report Form from the accessibility review
2. The Enterprise Architecture Review slides

EXCEPTION REQUEST

Justification for exception: Why is this exception is needed (Include any research you've done on other options and products)?

Will the Product become compliant in the future? Please detail roadmap and timeline:

Accommodation: **What** accommodation, alternative or **equivalent means of access** will be available **for people with disabilities (Include those from the public, students and faculty/ staff)?**

EXCEPTION DECISION

Recommend granting exception?

Yes

No

Decision notes:

CIO, Tufts Technology Services

Date: