

Attachment J

The State of Maryland

Information Technology Non-visual Access Standards

All following standards should be incorporated to the fullest extent possible for Information Technology. The Non-visual Access Clause noted in COMAR 21.05.08.05 and referenced in this solicitation is the basis for the following standards that have been incorporated into the regulations.

The purpose of the standards is to: (1) Establish definitions, scope, and construction common to the Department of Budget and Management Statewide management of information technology in nonexempt units of the Executive Branch of State government; and (2) Set forth uniform standards for the procurement of non-visually accessible information technologies and the provision of non-visually accessible information technology services.

Comparison to Federal Standards

As noted in the published regulations, there is a corresponding federal standard(s) to the action, but the actions noted herein are not more restrictive or stringent.

17.06.02 Information Technology Non-visual Access Standards

*Authority: State Finance and Procurement Article, §§3-410(d) and 3-413,
Annotated Code of Maryland*

.01 Purpose.

A. The purpose of this chapter is to implement State Finance and Procurement Article, §3-410(d)(5), Annotated Code of Maryland.

B. This chapter sets forth uniform non-visual access standards to be used in the procurement of information technology and the provision of information technology services by or on behalf of agencies.

.02 Scope.

A. This chapter applies to the procurement of information technology and the provision of information technology services by or on behalf of agencies, except if:

(1) The information technology is not available with non-visual access because the essential elements of the information technology are visual and a non-visual equivalent cannot be developed; or

(2) The cost of modifying the information technology for compatibility with software and hardware for non-visual access would increase the price of the procurement by more than 5 percent.

B. This chapter does not apply to information technology that is acquired and used by a contractor:

(1) Incidental to performing under a contract with the State or any agency; and

(2) To the extent that the information technology is not transferred to the State or any agency as part of the contractor's obligations to perform or incorporated into the deliverables provided to the State or any agency under the contract.

C. The information technology products or information technology services a contractor develops, procures, maintains, or uses that are not specified as part of a contract with the State or any agency are not required to comply with this chapter.

D. Except as otherwise required to comply with other law, this chapter may not be construed to require the installation of accessibility-related software or an assistive technology device at a workstation of a State employee who is not an individual with a disability.

E. Except as otherwise required to comply with the requirements of other law, this chapter may not be construed to require agencies:

(1) To provide access to the public to information at a location other than where the electronic and information technology is ordinarily provided to the public; or

(2) To purchase products for access and use by individuals with disabilities at a location other than where the information technology is ordinarily provided to the public.

F. Section E of this regulation may not be construed to relieve any unit of State government of its obligation to provide information or data under any other requirements of the law.

.03 Application.

A. Except as provided by Regulation .02B of this chapter, information technology and information technology services procured, used, maintained, developed, and provided by or on behalf of agencies shall be non-visually accessible in accordance with the standards promulgated in this chapter.

B. Agencies shall procure information technology and information technology services that comply with the provisions in this chapter when such information technology and information technology services are available in the commercial marketplace or developed in response to a State government solicitation.

C. When procuring or using commercially available information technology, an agency may not claim that an information technology product as a whole is not commercially available because no product in the marketplace meets all the standards. If products are commercially available that meet some but not all of the standards, the agency shall procure the product that best meets the standards.

D. This chapter may not be construed to prohibit the use of designs or technologies as alternatives to those prescribed in this chapter if they result in substantially equivalent or greater access for people with visual disabilities.

.04 Software Applications and Operating Systems.

Software applications and operating systems shall be considered non-visually accessible if the products meet the requirements of 36 CFR §1194.21, which is incorporated by reference herein.

.05 Web-based Intranet and Internet Information and Applications.

Web-based intranet and internet information and applications shall be considered non-visually accessible if the products meet the requirements of 36 CFR §1194.22, which is incorporated by reference herein.

.06 Telecommunications and Interconnected Network Equipment and Services.

A. Information technology intended for use in telecommunications or other interconnected network services shall be integrated for obtaining, retrieving, and disseminating visual information by non-visual means.

B. Personal digital assistants (PDAs) and mobile phone systems shall be considered non-visually accessible if the products:

(1) Are captioned text-to-speech capable;

(2) Use a distributed speech processing architecture, where the client (device) synthesizes text-to-speech output; and

(3) Provide good quality synthesized speech capable of being understood by the average listener.

C. Technologies using encoding, signal compression, format transformation, or similar techniques shall be considered non-visually accessible if the technologies either:

(1) Do not remove information needed for non-visual access; or

(2) Restore information needed for non-visual access upon delivery to the device.

D. Telecommunications products having mechanically operated controls or keys shall be considered non-visually accessible if:

(1) Controls and keys are tactilely discernible without activating the controls or keys; and

(2) The status of all locking or toggle controls or keys is discernible either through touch or sound in addition to being visually discernible.

.07 Video and Multimedia Products.

A. All training and informational video and multimedia productions which support the agency's mission, regardless of format, that contain visual information necessary for the comprehension of the content, shall be audio described.

B. Presentation of audio descriptions may be user-selectable or permanent.

.08 Self-Contained, Closed Products.

A. Self-contained products shall be usable by people with visual disabilities without requiring an end-user to attach assistive technology to the product.

B. If a product utilizes touch screens or contact-sensitive controls, an input method shall be provided that complies with Regulation .06D(1) and (2) of this chapter.

C. If an ocular form of user identification or control is used, an alternative form of identification or activation which does not require the user to possess a particular ocular characteristic shall also be provided.

D. If a product provides auditory output, the audio signal shall be provided at a standard signal level through an industry standard connector that allows for private listening using a headset or personal speakers. The product shall provide the ability to interrupt, pause, and restart the audio at any time.

E. 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 decibels. Where the ambient noise level of the environment is above 45 decibels, a volume gain of at least 20 decibels above the ambient level shall be user selectable. A function shall be provided to automatically reset the volume to the default level after every use.

F. Color-coding may not be used as the only means of conveying information, indicating an action, prompting a response, or distinguishing a visual element.

G. If 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.

H. Products shall be designed to avoid causing the screen to flicker with a frequency greater than 2 hertz and lower than 55 hertz.

.09 Desktop and Portable Computers.

A. All mechanically operated controls and keys shall comply with Regulation .06D(1) and (2) of this chapter.

B. If a product utilizes touch screens or touch-operated controls, an input method shall be provided that complies with Regulation .06D(1) and (2) of this chapter.

C. When an ocular form of user identification or control is used, an alternative form of identification or activation, which does not require the user to possess particular ocular characteristics, shall also be provided.

.10 Functional Performance Criteria.

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.

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.

.11 Information, Documentation, and Support.

A. Product support documentation provided to end-users shall be made available in non-visually accessible alternate formats upon request, at no additional charge.

B. End-users shall have access to a description of the accessibility and compatibility features of products in non-visually accessible alternate formats or alternate methods upon request, at no additional charge.

C. Support services for products shall accommodate the communication needs of end-users with visual disabilities.

.12 Compliance Certification.

Each agency shall certify in the Agency Information Technology Master Plan submission to the Office of Information Technology that information technologies procured and services provided by or on behalf of the unit comply with the requirements in this chapter.