1. Is it Electronic Information Technology (EIT)?

Electronic and information technology includes any equipment or interconnected system or subsystem of equipment that is used in the creation, conversion, or duplication of data or information.

Some examples of EIT include, but are not limited to:

- Telecommunication devices (e.g., a telephones, cell phones, pagers)
- Multimedia and Video products (e.g., televisions, VCRs, DVD players, videotaped productions, including content on a CD or DVD or video cassette)
- Web sites (Internet and Intranet) including access to multimedia, documents, etc.
- Services
- Desktop or portable computer (e.g., laptops, PCs, PDAs)
- Software or operating system (e.g., word processing application, accounting software, authoring and document presentation tools)
- Electronic office products and equipment (e.g., photocopiers, calculators, fax machines, printers)
- Information Documentation and Support (user guides, technical support)

The following electronic and information technology items **do not** fall under Section 508 requirements:

- **Blank** flash cards (also called USB flash, disk drive or memory stick)
- External hard drives
- **Blank** disks, **blank** CDs, **blank** video tapes and **blank** DVDs (content you put on these products must be accessible)
- Cables and power cords
- Ethernet cards and hubs
- Switch boxes
- Video splitters

Don't assume that because you plug something in that it is electronic and information technology. For instance, a digital clock, an electronic label maker,

and an electronic postage scale are not considered EIT that falls under Section 508. If you have someone in your office that needs accessible versions of these products, then you will need to work with that person to find office equipment that best meets their needs (Reasonable Accommodations). When in doubt about whether something is EIT that needs to be Section 508 compliant – check the frequent questions section on the EPA Accessibility Web site - http://intranet.epa.gov/accessibility/ or contact the EPA 508 coordinators for assistance.

2. Do any Section 508 Exemptions apply?

The exemptions require approval of the delegated approving authority. This varies from office to office so check with your supervisors and find out which person has this authority in your office. It may be the branch chief, division director or other management.

There are 5 possible exemptions that may apply in this situation. The descriptions are below. Certain exemptions have specific documentation requirements.

2.1. Commercial Non-Availability

Requires attached documentation of market research.

When procuring a product, EPA shall purchase products which comply with the applicable Section 508 standards if products are available in the commercial marketplace (COTS – commercial-off-the-shelf). If there is no COTS product that meets all the applicable standards, then the Agency can claim commercial non-availability – since an accessible product does not exist at that time. It is important to note that technology advances very quickly and this exception may only apply to a product for a limited time until newer technologies that are accessible are developed.

EPA cannot claim a COTS product is commercially non-available because no product in the marketplace meets all the standards. If products are commercially available that meets some but not all of the standards, the Agency must procure the product that best meets the standards and your office's technical requirements.

Commercial non-availability cannot be applied to products that are developed in response to a Government solicitation. All the applicable standards would need to be met for such products and services.

2.2.   Fundamental Alteration

Requires justification of how the product would be fundamentally altered

 Fundamental alternation means a change in the fundamental characteristic or purpose of the product or service, not merely a cosmetic or aesthetic change. EPA is not required to fundamentally change or alter a product of service in order to meet EPA's technical requirements. For example, suppose EPA intends to procure pocket-sized pagers for field agents. Adding a large display to a small pager may fundamentally alter the device by significantly changing its size to such an extent that it no longer meets the purpose for which it was intended - to provide a communication device which fits in a shirt or jacket pocket. For some of these agents, portability of electronic equipment is a paramount concern. Generally speaking, accessibility should not change the basic purpose or characteristics of a product in a fundamental way.

2.3.   EIT located in maintenance space

This exemption is frequently called the "back office" exemption. EIT products located in spaces frequented _only_ by service personnel for maintenance, repair, or occasional monitoring of equipment are not required to comply with these standards. The back office exemption is often misused as this exemption truly only applies to areas that are visited on few occasions by service personnel. If you are going to purchase equipment that will be put in a cubicle that nobody uses or only one employee in the office is going to use it – the back office exemption cannot be used. A telephone closet is an example of a back office and would be eligible for this exception.

2.4.   Incidental to a contract

The products a contractor develops, procures, maintains, or uses which are not specified as part of a contract with EPA are not required to comply with these standards. For example, a contractor for an EPA office that produces a report is not required to procure accessible computers and word processing software to produce the report. However, if a firm is contracted to develop a Web site for EPA, the Web site created must be fully compliant with these standards, but the firm's own Web site would not be covered.

Any product or service that is expected to be turned over to EPA by a contractor must be 508 compliant.

2.5.   National Security

This exception will not apply to EPA except in rare or unusual circumstances.

These Section 508 standards do not apply to any electronic and information technology operated or used by agencies that is directly used for intelligence activities, cryptologic activities related to national security, command of and control of military forces, is an integral part of a weapon or weapons system, or is a system critical to the direct fulfillment of military or intelligence missions.

This exception does not apply to a system that is to be used for routine administrative and business applications (including payroll, finance, logistics, and personnel management applications) by agencies involved in intelligence and military activities. For example, software used for payroll, word processing software used for production of routine documents, ordinary telephones, copiers, fax machines, and web applications must still comply with the standards even if they are developed, procured, maintained, or used by an agency engaged in intelligence or military activities.

3. Will the EIT pose an Undue Burden to the Agency?

Requires documentation.

EPA does not have to comply with the Section 508 standards if it would impose an undue burden to do so in order to acquire a specific EIT product or service. "Undue burden" has been defined as "significant difficulty or expense." However, the Agency must explain why meeting the standards would pose an undue burden for a given procurement action, and must still provide people with disabilities access to the information or data that is affected. Because the Agency's resources are looked at as a whole for justifying an undue burden request, it is not used as an exception very often.

The Program Office or Region purchasing the EIT must provide an undue burden justification. The justification must be reviewed and approved by the requiring office's SIO as per EPA's Accessible Electronic and Information Technology policy (http://intranet.epa.gov/oei/imitpolicy/qic/ciopolicy/2100.1.pdf).

For the specific requirements for undue burden approval please refer to Accessible Electronic and Information Technology Standards, Procedures, and Guidance.
(http://intranet.epa.gov/oei/imitpolicy/qic/ciopolicy/eit-procedures033006.pdf)

Question 4-6 Standards B, C, and D Applicability and Compliance

Applicability of the Subparts B, C, and D

Subpart B (Each standard is described later in document)

EPA should first look at the standards in Subpart B to determine if there are specific technical provisions that apply to the EIT product or service that EPA is planning to procure. If a product or the service fully meets the standards in Subpart B, then you do not need to look at Subpart C. Products that meet the specific technical provisions in Subpart B will also meet the broader criteria in Subpart C.

Subpart C (Criteria is listed later in the document)

If EPA's procurement needs are not fully addressed by Subpart B, then EPA must look to Subpart C for applicable functional performance requirements.

Subpart D (Standards are listed later in the document)

EPA must also remember the additional considerations of Subpart D. Subpart D addresses access to all information, documentation, and support provided to end users of technologies covered by Section 508.

Compliance

Compliance is defined as meeting the requirements set forth in the Section 508 Technical Standards and Functional Performance Criteria. Proposed EIT solutions may fully comply, best meet, or not comply, as defined below:

   a. **Fully complies.** An EIT product is fully compliant if the EIT is accessible and usable by persons with disabilities and meets all the applicable Section 508 EIT Technical Standards and functional performance criteria. Such compliance may or may not be enabled by the use of assistive technology or alternate formats or methods. EIT built or created by or for EPA needs to be fully compliant.

   b. **Best meets compliance.** Best meets applies only to EIT products and services that EPA purchases (Must fully comply if the product or service is built or created by or for EPA). A product best meets compliance requirements when it does not meet all relevant standards but is the most compliant product available at the time of purchase. In that event, the organization purchasing the product would do the following:
      (1) Document the market research used to determine the appropriateness of the product to meet business requirements.
      (2) Document that the best overall choice has been made at the present time.

c. **Does not comply**. A product does not comply if it cannot achieve compliance as defined by the relevant Section 508 Technical Standards or Functional Performance Criteria. The 508 Exceptions may be the reason why the product or service does not comply. See Question 2 about the exceptions to Section 508 for more details.

4. Which standards under Subpart B - Technical categories of standards apply?

The Access Board, the Federal Agency with the responsibility to write the Section 508 standards, provides a helpful guide to each standard and its subsequent parts. For each standard below there is a link to the appropriate section of the standards guidance document from the Access Board. It will provide a full explanation for each standard.

The Access Board has not provided guidance on Section C and D but plans to do so in the future, so this document lists the components of those two standards.

4.1. Software applications and operating systems (36 CFR § 1194.21)

Most of the specifications for software pertain to usability for people with vision impairments. For example, one standard requires alternative keyboard navigation, which is essential for people with vision impairments who cannot rely on pointing devices, such as a mouse.

Access Board guidance for software applications and operating systems: http://www.access-board.gov/sec508/guide/1194.21.htm

4.2. Web-based internet and intranet information and applications (36 CFR § 1194.22)

Many of these provisions ensure access for people with vision impairments who rely on various assistive products to access computer-based information, such as screen readers, which translate what's on a computer screen into automated audible output, and refreshable Braille displays.

The standards do not prohibit the use of Web site graphics or animation. Instead, the standards aim to ensure that such information is also available in an accessible format. Generally, this means use of text labels or descriptors for graphics and certain format elements. (HTML code already provides an "Alt Text" tag for graphics which can serve as a verbal descriptor for graphics). This section also addresses the usability of multimedia presentations, image maps, style sheets, scripting languages, applets and plug-ins, and electronic forms.

The standards apply to Federal Web sites but not to private sector Web sites (unless a site is provided under contract to a Federal agency, in which case only that Web site or portion covered by the contract would have to comply). Accessible sites offer significant advantages that go beyond access. For example, those with "text-only" options provide a faster downloading alternative and can facilitate transmission of web-based data to cell phones and personal digital assistants.

Access Board guidance for web-based internet and intranet information and applications:
http://www.access-board.gov/sec508/guide/1194.22.htm

4.3.   Telecommunication products (36 CFR § 1194.23)

These standards are designed primarily to ensure access to people who are deaf or hard of hearing. This includes compatibility with hearing aids, cochlear implants, assistive listening devices, and TTYs. Other specifications address adjustable volume controls for output, product interface with hearing technologies, and the usability of keys and controls by people who may have impaired vision or limited dexterity or motor control.

Access Board guidance for telecommunication products:
http://www.access-board.gov/sec508/guide/1194.23.htm

4.4.   Video and multi-media products (36 CFR § 1194.24)

Multimedia products involve more than one media and include, but are not limited to, video programs, narrated slide production, and computer generated presentations. Provisions address caption decoder circuitry (for any system with a screen larger than 13 inches) and secondary audio channels for television tuners, including tuner cards for use in computers. The standards also require captioning and audio description for training and informational multimedia productions developed or procured by EPA.

Access Board guidance for video and multi-media products:
http://www.access-board.gov/sec508/guide/1194.24.htm

4.5.   Self-contained, closed products (36 CFR § 1194.25)

This section covers products that generally have imbedded software but are often designed in such a way that a user cannot easily attach or install assistive technology. Examples include information kiosks,

information transaction machines, copiers, printers, calculators, fax machines, and similar types of products. The standards require that access features be built into the system so users do not have to attach an assistive device to it. Other specifications address mechanisms for private listening (handset or a standard headphone jack), touchscreens, auditory output and adjustable volume controls, and location of controls in accessible reach ranges.

Access Board guidance for self-contained, closed products: http://www.access-board.gov/sec508/guide/1194.25.htm

4.6.   Desktop and portable computers (36 CFR § 1194.26)

This section focuses on keyboards and other mechanically operated controls, touch screens, use of biometric form of identification, and ports and connectors.

Access Board guidance for desktop and portable computers: http://www.access-board.gov/sec508/guide/1194.26.htm

5. Does Subpart C - Functional performance criteria apply? (Only when Subpart B does not apply)

The performance requirements of this section are intended for overall product evaluation and for technologies or components for which there is no specific requirement under the technical standards in Subpart B. These criteria are designed to ensure that the individual accessible components work together to create an accessible product. They cover operation, including input and control functions, operation of mechanical mechanisms, and access to visual and audible information. These provisions are structured to allow people with sensory or physical disabilities to locate, identify, and operate input, control and mechanical functions and to access the information provided.

§ 1194.31 Subpart C 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.

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.

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.

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.

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.

6. Does Subpart D - Information, documentation, and support apply?

The standards also address access to all information, documentation, and support provided to end users of covered technologies. This includes user guides, installation guides for end-user installable devices, and customer support and technical support communications. Such information must be available in alternate formats upon request at no additional charge. Alternate formats or methods of communication, can include Braille, large print, electronic text, TTY access, and captioning and audio description for video materials. However, the easiest solution for this requirement is to have the vendor provide EPA the information in an electronic format (e.g., CD). It is not appropriate for the vendor to say that the information is available on the vendor's Web site and for that Web site to be the only way they provide their information and support.

§ 1194.41 Subpart D Information, documentation, and support.

a) Product support documentation provided to end-users shall be made available in 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 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 disabilities.

Additional Resources to Help You

1. Access Board

   The Access Board wrote the standards and provides guidance and other resources about Section 508. In this document, we have already linked to the applicable Access Board guidance on the 508 standards for your convenience. However, there are other resources available on this Web site, so you may find the site useful. http://www.access-board.gov/508.htm

2. Buy Accessible

   Vendor information about products and services your office is planning to procure may be available on GSA's www.buyaccessible.gov site. Because Buy Accessible is based on vendor self-representations and isn't inclusive of every 508 compliant product available for purchase, you should use other methods of research such as company/product Web sites, catalog information, and customer service phone numbers. Most IT vendors are aware of Section 508 requirements and will be able to provide you with compliance information about their products at your request.

3. EPA Section 508 page http://intranet.epa.gov/accessibility

   EPA has a Web site about Section 508 that includes EPA policy and frequent questions, as well as contact information for the Section 508 coordinators. A question that you need answered may already be on the frequent questions list – so take a look.

4. FAR - Federal Acquisition Regulations

   This is a link to the Final FAR Rule for Implementing Section 508. http://www.section508.gov/index.cfm?FuseAction=Content&ID=13

5. GSA Section 508 Web site

   The General Services Administration (GSA) maintains the Federal Government's Web site which provides a variety of resources including frequent questions, training, and other guidance documents. http://www.section508.gov/