



THE OFFICE OF  
**ENTERPRISE TECHNOLOGY**  
STATE OF MINNESOTA

# IT Accessibility Implementation Guidance

JUNE 30, 2011

## Foreword

IT Accessibility has now entered a new phase where we will begin to see state agencies fully adopt the State of Minnesota's accessibility standards

This guide is designed to support agencies as accessibility is incorporated into agency development and procurement of electronic products, applications, and content.

It is important therefore that agencies function to their optimum level of accessibility and legislative responsibility. The ability for agencies to provide accessible e-government must be recognized and fully supported.

## **Purpose of this guide**

This IT accessibility implementation guide is a comprehensive toolkit that will provide a single source of information about IT accessibility for State of Minnesota agencies. The guide provides detailed information, guidelines, tools and templates to inform the planning, development and implementation of IT accessibility. It is designed to inform, guide and advise agency leadership, the accessibility planning team, and accessibility implementation team.

The guide is made up of three sections; the overview, about IT accessibility, and guidance on how to develop an accessibility implementation plan.

### **Overview**

The overview provides an introduction to e-government, including the challenges and opportunities it presents for people with disabilities. This section is designed as a prelude, introducing the essential context for each of the subsequent sections.

### **About IT Accessibility**

The information in this section provides the context to MN State IT Accessibility, what it is, and what it impacts. This section will be useful for agency leadership, the accessibility planning team, and the accessibility implementation team.

### **How to implement accessibility**

This section provides high level step-by-step guidance to agencies as they begin planning for IT accessibility. This section will be particularly useful for agency leadership and the accessibility planning team.

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## Overview

### E-government and people with disabilities

More and more, government information and services are delivered electronically. This presents both challenges and opportunities for people with disabilities.

For people with disabilities, technology creates opportunities for access to information and participation in government like never before. The internet and advancement of assistive technologies help people with disabilities live, work, and play in their communities.

There is one caveat.

When agencies design their e-government information and services, it must be designed accessibly. Without accessible design, people with disabilities cannot participate in their e-government. With accessible design, they enjoy full participation and access to their e-government.

### Users with disabilities

With an electronic environment, you never know your audience. You never know how they access, use, and share your information. This goes for colleagues at work and cyber citizens.

People with disabilities in Minnesota are a significant user group, representing approximately 20-30% of your audience. This is a low estimate of users who demand accessible design. It doesn't account for users who do not consider themselves disabled, but prefer accessible designs such as:

- Increasing text size
- color contrast
- clean and simple fonts
- minimal animation
- uncluttered presentation of information
- closed captioning
- key stroke commands
- mobile device interoperability
- speech-to-text software users i.e. voice recognition

As baby boomers age, disability statistics are expected to rise. Aging and disability statistics highlight the demand for accessible design. According to the MN State Demographic Center projections, "By 2015 there will be almost 800,000 elderly Minnesotans, and by 2025 more than 1 million."

<http://www.demography.state.mn.us/PopNotes/ElderlyMinnesotans2004.pdf>

Data from the Survey of Income and Program Participation (SIPP) of the United States Census Bureau state that "there are approximately 54 million Americans with disabilities."

<http://www.ilr.cornell.edu/edi/disabilitystatistics/faq.cfm#Q9> The Rural Institute at the University of Montana provides the following sample of citizens with disabilities in MN counties:

- 147,296 citizens in Hennepin County
- 74,372 citizens in Ramsey County
- 41,528 citizens in Dakota County
- 33,458 citizens in St. Louis County (<http://rtc.ruralinstitute.umt.edu/geography/default.htm> )

A growing disability population coupled with a growing demand for e-government information and services led to widespread advocacy supporting the adoption of Technology Accessibility legislation in 2009.

### Legislative and policy directives that require agencies to be accessible

It is in this context that the State of Minnesota passed legislation to make our e-government accessible. The aim of IT accessibility legislation is that:

- All citizens shall be able to access state government electronic information and services.
- All state employees shall be able to access electronic information, products, and applications to do their jobs.

OET and the Department of Administration have worked together to establish specific IT Accessibility policy and standards for the State of Minnesota. The Enterprise Architecture Review Board oversees and maintains MN's IT accessibility standards.

The enabling legislation became effective in July of 2009. The MN State IT accessibility standards became effective in September of 2010. State agencies are now responsible to ensure that all web sites, software applications, electronic documents, video and multimedia they buy or make are accessible.

This toolkit is designed to help agencies implement the Accessibility Standards.

## About IT Accessibility

### What IT accessibility means for the State of Minnesota

IT accessibility for MN means that all electronic information and technology (EIT) needs to be accessible for everybody. Specifically, MN has decided to adopt the following set of accessibility standards:

- Section 508 of the Rehabilitation Act from the U.S. Federal Government
- Web Content Accessibility Guidelines 2.0 'AA' from the World Wide Web Consortium

Exceptions apply. These standards only apply to Electronic Information Technology (EIT) bought or developed after September 1, 2010.

### What you need to know about exceptions

14 exceptions apply to State of MN IT accessibility standards. The legislation specifically included the pre effective-date and undue burden exceptions. You will find information on OET's website to help you:

- Understand the various types of IT that apply to accessibility
- Understand the types of exceptions that could apply
- Document exceptions

The specific documents related to exceptions are:

- ✓ The list of exceptions
- ✓ The accessibility inventory workbook
- ✓ Exceptions request form for procurements
- ✓ Exceptions request form for non-procured IT solutions and content

### The difference between accessibility and accommodation

Accessibility and accommodation are completely different concepts. Accommodations focus on individuals. Accessibility focuses on everybody. A curb cut is a way of thinking about this distinction.

In the physical world, the curb cut means accessibility. Every time a sidewalk is built, a curb cut is required at the corner of the block regardless of whether users have a disability or not. Builders don't worry about the number of people with disabilities that may, at some point in time, use the curb cut. They just build it from the beginning.

A ramp in front of a house is an accommodation. There wouldn't be a ramp if a person in the house didn't need it. Ramps are built when they are needed.

IT accessibility is like creating an "electronic" curb cut. Every time a web site, software application, electronic document, video or multi-media is developed, it needs to be designed with accessibility regardless of whether the end user has a disability or not. We don't need to worry about the various types of people with disabilities that may, at some point in time, use it. We just make it accessible from the beginning.

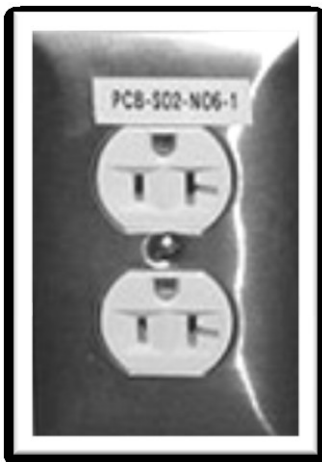
A Braille version of an electronic document posted on your web site is like a ramp in front of a house – it is an accommodation. You wouldn't print Braille copies unless an individual person needed it in Braille. Braille is an accommodation because it is only printed when it is needed.

### The difference between accessibility and usability

There is a fine line between accessibility and usability. Accessibility means meeting the State of Minnesota IT accessibility standards. Usability means accessibility and beyond. It means that not only can a user access the information, but they can use it seamlessly, intuitively, efficiently, and effectively.

### What is a technical standard?

Technical standards are essential tenants of the industrial and information age. They allow for mass production of specific products, safety, and interoperability between systems of products.



The electrical plug-and-socket system is one of the most obvious examples of how technical standards create interoperability and safety for using electrical products in any environment.

The outlet socket is a standard. When making a building, electricians build standard electrical outlets. They don't worry about the thousands of appliances that could get plugged into the outlet. They just need to make sure the standard outlet is there.

When making an appliance, manufacturers build their products with standard plug-ins. The manufacturer doesn't worry about the way the electricity has been wired throughout various types of buildings. They just need to make sure that their product includes the standard plug-in so it can get electricity.

The beauty of the standard outlet and the standard plug-in is that if the builder makes the standard outlet and the manufacturer makes the standard plug-in, the two meet and work.

Standards for accessibility work the same way.

Disability groups, IT companies and assistive technology companies have come together to establish accessibility standards.

Designing IT products and solutions is like creating the outlet socket. Designing assistive technologies is like creating the plug-in.



Our job is to design accessible outlets, such as:

- accessible web sites
- accessible software applications
- accessible documents
- accessible video and multimedia

The standards we use to design these accessible outlets come from:

- Section 508 of the Rehabilitation Act from the U.S. Federal Government
- Web Content Accessibility Guidelines 'AA' from the World Wide Web Consortium

## What your agency needs to focus on

Agencies need to focus on creating accessible outlets. This means meeting accessibility standards when you buy and build IT products, solutions, documents, video and multimedia.

Agencies do not need to think about the different types of disabilities or types of assistive technologies that may be used by consumers of information and services. Remember, just like the sidewalk curb cut, when we include the accessibility standards in our information technology, everyone benefits. We are not concerned about who may use our technology or with what assistive technology it may be accessed. The accessibility standards are best practices that have many benefits including access for individuals with disabilities.

Your accessibility planning should include these broad categories:

- Buying IT products and solutions
- Making IT applications and web sites
- Making electronic documents
- Making video, webinars, and multi-media



## **Buying IT products and solutions**

The Department of Administration has changed contract language to include IT Accessibility standards.

If your agency buys IT products from the Buy-IT standards (OET/ISRM), the products have been considered for accessibility. When you purchase a non-standard IT product, you should require the vendor to provide you a Voluntary Product Accessibility Template (VPAT) so you know how accessible the product is.

Whenever agencies contract with vendors to develop a web site or software application, accessibility language must be included in the contract.

## **Making IT applications and web sites**

When your agency develops a software application or a web site, your developers must make the application or web site accessible. This applies to applications and web pages that are both internal and public-facing.

Exceptions apply. The MN law specifically emphasizes that this policy is forward-looking, thus agencies will not be required to retrofit web pages and applications developed before September 1, 2010.

Wherever possible, we recommend that agencies bring high priority or high exposure applications and web pages up to standards. For applications and web pages that are exempt, agencies must prepare to provide an accommodation when requested.

## **Making electronic documents**

All electronic documents need to be accessible; this includes Word, PowerPoint, Excel, or PDF documents. This applies to electronic documents:

- Posted on your web site
- Posted in software applications i.e. SharePoint or FileNet
- Distributed through email

Exceptions apply, including September 1, 2010 pre-effective date exception.

Wherever possible, we recommend that agencies bring high priority or high exposure documents up to standards. Where exceptions apply, agencies must prepare to provide an accommodation when requested.

## **Making video, webinars and multi-media**

All video, webinars, podcasts, and other multi-media must be accessible. This means that:

- Videos must include closed captions, audio description, and a text-based transcript.
- Podcasts must include closed captions, audio description, and a text-based transcript.
- Webinars must include closed captions, audio description, and a text-based transcript.

Exceptions apply, including September 1, 2010 pre-effective date exceptions.

Wherever possible, we recommend that agencies bring high priority video or multi-media up to standards. Where exceptions apply, agencies must prepare to provide an accommodation when requested.

## How to implement accessibility

### 1. Designate an accessibility coordinator

The accessibility coordinator should be the designated resource to lead and coordinate the agency's accessibility efforts. The accessibility coordinator will help plan and implement accessibility. This is a resource that:

- Is fully supported by leadership.
- Effectively works with all levels of personnel.
- Is skilled at identifying and working with Subject Matter Experts.
- Has planning experience, is comfortable with ambiguity, and has excellent communication and organizational skills.
- Is knowledgeable about the electronic environment within the agency; from software applications/systems to the web site and the different types of electronic documents, video or multimedia used in the agency.

### 2. Convene an accessibility planning team

The mission of the accessibility planning team is to develop a plan for the agency to implement accessibility. Their goal is to develop the plan, but not necessarily to implement the plan.

This group should collectively analyze the present accessibility situation, develop a shared vision and key objectives for accessibility implementation at the agency, and develop transition plans that address plan objectives.

The workgroup should be composed of staff with planning experience, are comfortable with ambiguity, and should collectively represent the following areas of the agency:

- CIO's office
- Procurement
- Web site development
- Application Development
- Communications: publishing of electronic documents, video, and multi-media
- Training and organization development

The main deliverables of this group include:

- Shared vision for the future state of accessibility
- Analysis of the current state of accessibility
- Accessibility implementation plan
- Accessibility implementation Communications plan
- Accessibility training plan

### 3. Establish a shared vision for accessibility

Accessibility impacts all parts of the agency; thus it requires significant organizational change. It is helpful to approach agency accessibility implementation planning using elements of formal strategic planning.

One of the first activities undertaken by the accessibility workgroup is to define a vision for accessibility at the agency. Generally, a vision defines the way an organization or enterprise will look in the future. Vision is a long-term view, sometimes describing how the organization would like the world to be in which it operates. A vision provides a planning window by specifying a time frame. All activities defined in the plan should achieving the vision.

Agencies know themselves best, and should determine their own accessibility vision and implementation strategy. Collectively, the workgroup will determine what timeframes and changes are most feasible for your agency.

## 4. Assess your accessibility situation

The purpose of this analysis is to understand the difference between the current state of accessibility and the future state of accessibility. To help you do this, OET has developed the Accessibility Inventory Workbook. The workbook is simply a tool designed to focus data collection, identify questions that need to be considered, and document plans for future changes. Closing the gap between the current state and the desired state as defined in your vision statement is the essence of your agency's accessibility implementation planning.

The Accessibility Inventory Workbook (available on the OET web site) guides you through the types of data to collect and questions to consider while analyzing the present-state of accessibility for the following categories:

- Web site, including electronic documents, video and multi-media
- Software applications, including internal and public-facing applications
- IT products that accessibility standards apply to

The specific tools and documents that will help you with this step include:

- ✓ Instructions for Accessibility Inventory Workbook
- ✓ Accessibility Inventory Workbook
- ✓ Checklists for testing web sites, applications, documents, and multimedia
- ✓ List of exceptions

## 5. Document any exceptions

Exceptions were established both in the enabling legislation and through the IT Accessibility Standards vetting process. All agencies should document any exceptions.

At this point, the primary exception will be the "pre effective-date exception". The Accessibility Inventory Workbook helps focus the different exceptions that would likely apply for a given IT-type. The workbook also raises questions about accommodations to provide if an exception applies, including documentation of future steps for each item.

The following documents, located on the OET web site, will help you with this step:

- ✓ List of exceptions
- ✓ Exceptions form for not-procured IT products, solutions, documents, or multi-media.

## 6. Develop an accessibility implementation plan

The purpose of an accessibility implementation plan is to outline priorities, goals, and actionable steps the agency needs to take in order to become an accessible organization. The process of assessing the current state of accessibility for your agency's IT and documenting exceptions provides you with three categories:

1. IT that meets accessibility standards
2. IT that is exempted from the standards
3. IT that is not accessible and needs to be made accessible

The last category is the primary focus of the plan. However, the plan also needs to address what policies, training, processes, and communications needs to be put in place to assure that accessibility is built into your agency's IT going forward.

The following documents, located on the OET web site will help you with this step:

- ✓ Template for accessibility implementation plan
- ✓ Sample of accessibility implementation plan

## 7. Develop an accessibility communications plan

The purpose of a communications plan is to inform your staff about changes and expectations regarding accessibility. Agency leadership must effectively communicate the goal and plan to implement accessibility.

Managers and supervisors must understand that the MN Legislature passed this law, and that agencies bear risk and responsibility to comply with the IT accessibility standards. This must be known by all staff.

Failure to effectively communicate the agency's intentions and policies to all staff will increase risk for complaints or potential lawsuits. The communications plan must identify key messages and communication channels to make this known.

The following document, located on the OET web site will help you with this step:

- ✓ Sample of accessibility communications plan

## **8: Develop an accessibility training plan**

The purpose of a training plan is to identify the staff that must be trained and to outline plans to get them trained. Staff must fully understand the intentions, risk, and responsibility for compliance with IT accessibility. They must be educated and prepared to make changes.

Depending on the work unit, significant or minimal changes are needed. Accessibility trainings the agency should consider include topics about:

- How to Create Accessible Word documents
- How to Create Accessible PDF documents
- How to Create Accessible Web sites
- How to Create Accessible Applications
- How to Caption Videos
- How to Procure Accessible Technology

As a general rule, all employees who write electronic documents in Word, PowerPoint, Excel, PDF, etc. will need to be educated and prepared to create accessible documents. Other types of training will be more specific to different professionals.

The following documents, located on the OET web site will help you with this step:

- ✓ Sample of accessibility training plan

## **9. Execute the accessibility implementation plan**

Leadership must make accessibility a priority and provide the necessary support and resources to make it happen. Due to the significant short-term and long-term changes that must occur, we recommend you designate a project manager to coordinate the efforts. The project manager should work closely with the training coordinator and the communications director to ensure that managers and supervisors fully participate in accessibility efforts.

## **10. Measure progress towards accessibility goals**

Always track and monitor effectiveness of accessibility efforts, and make changes where needed.

The following documents, located on the OET web site will help you with this step:

- ✓ Sample of accessibility metrics

## Checklist for accessibility implementation process

- 1. Designate an accessibility coordinator.
- 2. Convene an accessibility planning team.
- 3. Establish a shared vision for accessibility.
- 4. Assess your present accessibility situation.
- 5. Document any exceptions.
- 6. Develop an accessibility implementation plan.
- 7. Develop an accessibility communications plan.
- 8. Develop an accessibility training plan.
- 9. Execute the accessibility implementation plan.
- 10. Measure progress towards accessibility goals.