

Technology Made **Human**



World Tour of Accessibility Standards and Policy

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Mary Jo Mueller

What is the most accessible office building in the world?

House of Disabled Persons Organizations in Denmark



Photo: Martin Schubert

This building was not only built to meet standards for accessibility but went the extra mile to be voted the most accessible building in the world. It was designed and built to show that you can make an accessible, usable and sustainable building at no extra cost. It starts with easy access to the location by public transportation. The parking lots are smooth and have plenty of accessible parking and clearly marked pathway to the entrance.

House of Disabled Persons Organizations in Denmark



This is the top view of the building. It's design is unique with four wings surrounding a pentagon shaped walkway in the center.

Reception desk accommodates wheelchair users



Photo: Martin Schubert

Once inside the building there is a multi-height reception desk with the lower level and deeper kick area to accommodate wheelchairs. A painted pathway line is also tactile to help those with visual impairments navigate. All electrical outlets have good contrast against the walls to make them easy to find.

Ramped walkway between floors



Photo: Martin Schubert

An innovative walkway was created that provides wide ramped walkways between the floors. The elevators not only has call buttons at the typical height but also has them near the floor so you can tap them with your foot or foot pedal of a wheelchair – something that building standards don't require.

There are other features in the building that also think outside of the minimum building standards.

Perforated plywood improves acoustics



This building also accommodates persons with hearing impairments. Perforated plywood was used along the outer side of the ramped walkway to serve as part of the rail and to improve the acoustics of this open area.

Brightly colored sections improve wayfinding



Photo: Martin Schubert

For persons with cognitive disabilities, the brightly colored sections make it easier to find your way. Every part of this building can be reached using just two instructions – the color of the section and the name of the room.



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You'll learn:

- Drivers for accessibility policy
- Existing accessibility laws and policies
- Technical standards used in support of those laws
- What happens when laws aren't specific?
- What's in development?
- Updated W3C resource to help you stay informed
- Trivia about accessibility around the world

UN Convention on the Rights of Persons with Disabilities

What is the UNCRPD?

A treaty addressing the rights of persons with disabilities.

What does it mean when a country signs a treaty?

As a signatory, the country agrees with the principles stated in the treaty, but is not obligated to implement it.

What does it mean when a country ratifies a treaty?

Ratifying countries accept the legal obligation to develop and adopt laws to implement what is stipulated in the treaty.

What does the convention cover?

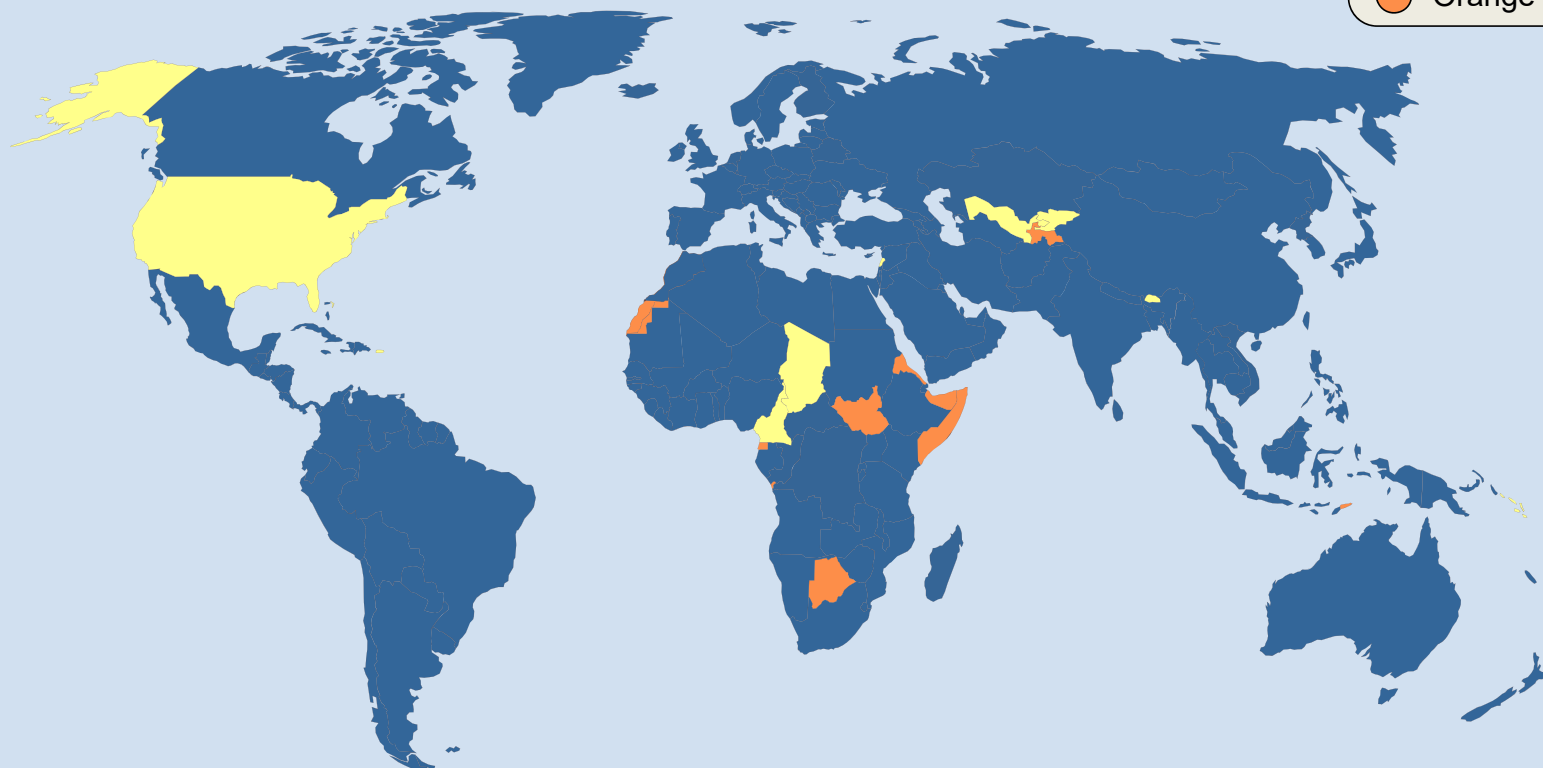
The convention is used to promote, protect and ensure the full and equal enjoyment of all human rights by persons with disabilities.



Map of UNCRPD Ratifications and Signatories

177 Ratifications

- Yellow represents signatories
- Blue represents ratifications
- Orange represents no action yet



Most countries have ratified the UN Convention on the Rights of Persons with Disabilities. Colored in orange, there are less than 10 countries that have taken no action, mostly located in Africa. There are also only 11 countries that have signed but not ratified the UN convention, colored in yellow on the map. These are mainly in Africa and Asia. The the United States has also notably signed but not ratified the UNCRPD. The rest of the countries, which as of today total 176 in all, have ratified the UNCRPD.

What are ratifying countries agreeing to?

Ratifying countries agree to:

- Develop accessibility laws and/or regulations
- Promote universal design
- Protect human rights of persons with disabilities:
 - Non-discrimination
 - Equal opportunity in the workplace
 - Full participation in all aspects of life
 - Education
 - Transportation
 - Information and communications
 - Internet
 - Electronic and emergency services



World Tour: North America



**Where was
the first
seeing eye dog
school in
North America?**



**In 1929,
Seeing Eye
was established
in Nashville, TN**



Photo credit:
Flickr / Kritzolina

Morris Frank had learned of a program that trained German shepherds to be service dogs for German war veterans. Frustrated by his own lack of mobility, Frank became so excited about this idea that he went to Europe to get paired with a seeing eye dog and learn how to bring the dog training to the United States. He established Seeing Eye in Nashville, TN. He also promoted for the right for people with guide dogs to access places open to the general public.

Photo By Kritzolina - Own work, CC BY-SA 4.0,
<https://commons.wikimedia.org/w/index.php?curid=53992001>

United States: U.S. Rehabilitation Act of 1973

First major legislative effort for persons with disabilities (PwD)

Section 501: **Affirmative action** and non-discrimination by **Federal agencies**.

Section 503: **Affirmative action** and non-discrimination by **Federal contractors**.

Section 504: Any **program or activity receiving Federal funds** (e.g., schools, colleges, etc.) **shall not exclude participation** by a PwD.

Section 508: **Government** agencies must **procure accessible Information and Communications Technology** (ICT).

PwD = Person with disabilities

ICT = Information and Communications Technology

United States: Section 508 Standards

- Technical requirements for measuring compliance to Section 508
- Covers hardware, software, web content, telecommunications, and documentation
- Used in procurement of Information and Communications Technology (ICT) by government agencies

Current version:

- [Revised 508 standards](#) (Jan. 18, 2017) + [correction](#) (Jan. 22, 2018)

United States: Revised 508 Standards Timeline

January 18, 2018

- Federal Agencies are required to meet the Revised 508 Standards

2H2018?

- Federal Acquisition Regulatory (FAR) Council deadline for updating procurement language
- Agency can begin to require the Revised 508 Standards in new bid requests

United States: Revised VPAT 2.0 ®

Voluntary Product Accessibility Template 2.x

- Developed by Information Technology Industry Council (ITI) and published on their website.
- Supports reporting of:
 - Revised Section 508 Standards
 - WCAG 2.0
 - EN 301 549
- V2.1 has been published (correction to 508 added)

United States: ...and yet more laws and policies

Americans with Disabilities Act (ADA)

- Non-discrimination law
- Covers both public, private sector
- Employment equal opportunity and non-discrimination
- Affirmative action for public entities

Section 255 of the Telecommunications Act of 1996

- Accessibility law for public & private sector
- Telecom products will soon use the Revised 508 standards

United States: ...and yet more laws and policies

Air Carrier Access Act of 1986

- Non-discrimination law for air travel
- Airline website and kiosk accessibility
- All airlines that fly to/from the United States
- WCAG 2.0 Level AA

21st Century Communications and Video Accessibility Act of 2010

- Accessibility law
- Mobile phones, browser and calling applications, captioned content availability on the internet, etc.

Canada: Accessibility Laws and Policies



Canadian Human Rights Act

- Non-discrimination law
- Covers public, private sectors
- No technical standards

Policy on Communications and Federal Identity

- Mandatory policy
- WCAG 2.0 Level AA with some exceptions

Canada: Accessibility Law ****in progress****



Federal Accessibility Law to be developed

- Initial consultation completed Feb. 2017
- Intent is to create a national accessibility law
 - Better for harmonizing requirements across provinces

Canada: Provincial Accessibility Law - Ontario

Accessibility for Ontarians with Disabilities Act, 2005

- Integrated standards that cover:
 - Information and Communications
 - Employment
 - Transportation
 - Built environment
 - Customer Service
- Public and private websites – WCAG 2.0 Level AA with some exceptions
- Penalty for non-compliance

Canada: Provincial Accessibility Law - Manitoba



Accessibility for Manitobans Act

- Accessibility Standard for Public Service
- Public consultation being held on Accessible Standard for Employment

Canada: Accessibility Law - Nova Scotia

Accessibility Act

- Passed on April 28, 2017
- Covers the following:
 - the delivery and receipt of goods and services
 - information and communication
 - public transportation and transportation infrastructure
 - employment
 - the built environment
 - education

World Tour: Europe



**What Italian museum
offers an exemplary
experience for people
who are blind?**

The Ara Pacis Museum in Rome



The Art for the Blind tour uses the latest in smart, wearable rings, portable technology, and 3-D printing. Software is also key: iPad minis feature an app specially designed for visually impaired users.

United Kingdom: Accessibility Laws and Policies

Equality Act 2010

- Non-discrimination law
- BS 8878 Web Accessibility Code of Practice
- WCAG 2.0 Level AA

European Union: Accessibility Directives

Directive 2014/24/EU on public procurement, 2014

- Procurement take into account accessibility criteria
- EN 301 549 standard developed for this directive
 - Developed under Mandate 376
 - Standard for web, hardware, software and documentation
 - Includes WCAG 2.0 Level AA for Web, non-web software and electronic documentation
- Member countries should all be implementing by now

European Union: Accessibility Directives

Web and Mobile Accessibility Directive, 2016

- Government websites and mobile applications
- To be transposed into member country laws by Dec. 2018
- Standard used: EN 301 549
 - Includes WCAG 2.0 Level AA
 - Update in development, to complete June 2018
 - Adding stable requirements from WCAG 2.1

European Union: Law in development

European Accessibility Act

- Initial draft circulated for public comment Dec. 2015
- New draft under review
 - Use of CE marking for accessible products
 - Strong market access law for in-scope products and technologies
 - Includes WCAG principles, no technical standard

Denmark: Accessibility Policy

Agreement on the use of open standards for software in the public sector

- WCAG 2.0 Level AA
- Seven sets of mandatory open standards used in:
 - Public authority websites
 - Includes procurement, development and operation of the website

Finland: Accessibility Laws and Policies

Act on Electronic Services and Communication in the Public Sector

- Government entities
- Uses JHS 190 standard for public network design and development
- WCAG 2.0 Level AA recommended

France: Accessibility Laws and Policies

Equal Rights and Opportunities, Participation and Citizenship of Persons with Disabilities - Law N 2005-012 Article 47

- Doesn't directly contain requirements for ICT accessibility or website accessibility

Germany: Accessibility Laws and Policies

Act on Equal Opportunities for Disabled Persons of 2002

- Non-discrimination law
- No standards referenced

Federal Ordinance on Barrier-Free Information Technology

- Accessibility law covers public sector web content
- WCAG 2.0 derivative

The Act on the Modernisation of Public Procurement

- Entered into force 18 April 2016
- Take accessibility into account and/or “design for all”

Ireland: Accessibility Laws and Policies

The Disability Act, 2005

- Accessibility law
- Covers access to public services of certain offices/agencies

Equal Status Acts 2000 to 2004

- Non-discrimination law
- Uses WCAG 2.0 for access to government agency websites

Employment Equality Acts 1998 and 2004

- Non-discrimination in employment

Netherlands: Accessibility Laws and Policies

Procurement Law 2012

- For government procurement
- Requires EN 301 549 standard (WCAG 2.0 Level AA)

Policy in the Netherlands, 2016

- Government & public sector ICT are covered
- Uses EN 301 549

Switzerland: Accessibility Laws and Policies



Federal Law on the Elimination of Inequalities for Persons with Disabilities, as amended

- Non-discrimination law
- Covers public, private sector
- For government websites, requires WCAG 2.0

World Tour: Australia and Oceania





**What organization won
the **Green Globe Award**
for their accessibility
programs?**

Sydney Opera House



The Sydney Opera House has developed several inclusive programs. They have given employees formal training in audio description to help describe performances on stage for persons with visual disabilities. There are also regular dance and music programs designed to include a wide range of people so that everyone can enjoy the benefits of the arts at the Opera House.

Australia: Accessibility Laws and Policies




Disability Discrimination Act, 1992

- Non-discrimination
- WCAG 2.0 Level AA used for government websites

Government Procurement voluntary policy

- Procurement recommends use of EN 301 549 standard
- Working to convert EN 301 549 to an Australian standard

New Zealand: Accessibility Laws and Policies



Human Rights Act 1993, as amended

- Non-discrimination

Government Online Practice Guidelines

- Web Accessibility Standard 1.0
- Government websites to meet WCAG 2.0 Level AA
- Some documented exceptions

World Tour: Asia



**What Tokyo park could a
traveler in a wheelchair
fully enjoy?**

Shinjuku Gyoen National Garden, Tokyo, Japan



China: Accessibility Standards and Policies



- Government websites mandated to meet China Web Accessibility Standard V 2.0.
- Based on non-finalized version of WCAG 2.0 with unique requirements
- Effort under way to address mobile accessibility and better harmonize with WCAG 2.0...and possibly WCAG 2.1

Hong Kong: Accessibility Standards and Policies

Guidelines on Dissemination of Information through Government Websites

- Mandatory policy since 1999
- Websites must meet WCAG 2.0 Level AA
- Private sector websites encouraged to voluntarily meet WCAG 2.0 Level AA

Japan: Accessibility Standards and Policies



Basic Act on the Formation of an Advanced Information and Telecommunications Network Society, 2002

- Public and private sector
- JIS X 8341-3 – which is the Japanese version of WCAG 2.0 for website accessibility is voluntary

Israel: Accessibility Laws and Policies

Equal Rights of Persons with Disabilities Law, 5758-1998, as amended

- Non-discrimination
- Affirmative Action
- Equal opportunity in employment with reasonable accommodations
- Accessible public transportation, education, **public places and services** (specific listing provided in the law)
- Requires WCAG 2.0 Level AA for covered websites

Qatar: Accessibility Laws and Policies

Decree Law No. 36 of 2004

- Established **ictQATAR** to regulate Communication and Information Technology

ictQATAR Strategy 2015

- Develop ICT-skilled population, including PwD
 - Accessible telecommunications, kiosks, digital media, and emergency services
- Public sector websites must meet WCAG 2.0 Level AA

India: Accessibility Laws and Policies

Rights of Persons with Disabilities Act, 2016 (RPD)

- Non-discrimination
- Public, private sector

Guidelines for Indian Government Websites

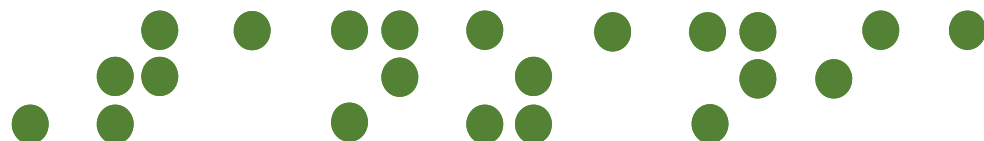
- WCAG 2.0 Level AA

World Tour: Africa



A close-up photograph of a person's finger touching a surface with Braille dots. The finger is positioned on the left side of the frame, with the tip touching the Braille. The background is a blurred surface with many Braille dots.

**What country
provided their draft
constitution in Braille
to provide equal
opportunities for blind
citizens to contribute to
the lawmaking process?**



T a n z a n i a

Jul. 2012: As part of the review process of a new Constitution 4,000 braille copies were produced.

Tanzania: Accessibility Laws

Constitution of Tanzania, 1977

- Equality and non-discrimination

Persons with Disabilities Act, 2010

- Equality and non-discrimination
- Includes provisions on healthcare, rehabilitation, education and employment
- Access to buildings, services, information and the physical environment
- Established a National Advisory Council

Ghana: Accessibility Laws

Constitution of Ghana, 1992

- Equality and non-discrimination

Persons with Disabilities Act 715, 2006

- Includes provisions on health care, education and employment
- Lacks provisions for non-discrimination, equality, voting rights, housing, accessible buildings and more.

Kenya: Accessibility Laws

- 
- Benefits/tax credits for employers of persons with disabilities
 - Established National Council for Persons with Disabilities

Malawi: Accessibility Laws



Constitution of Malawi 1994, as amended in 2010

- Non-discrimination, affirmative action, and equal opportunity

Disability Act, 2012

- Non-discrimination law
- Modeled on the requirements of the UNCRPD – access to health, education, training, social life, culture, employment, etc.
- Introduces a national sign language

Uganda: Accessibility Laws

Constitution of Uganda

- Non-discrimination, affirmative action, and equal opportunity

Persons with Disabilities Act, 2006

- Non-discrimination law
- Tax reduction for private employers who employ 10 or more PwD

Various others laws, none cover access to ICT

Zambia: Persons with Disabilities Act, 2012

- Created as result of ratification of the UNCRPD
- In effect: July 2012
- Non-discrimination law
- Provides for access to:
 - Equal opportunities
 - Health
 - Education
 - Information, communication and technology



Zimbabwe: Accessibility Laws



Constitution of Zimbabwe, 2013

- Non-discrimination against persons with any disability
- Sign language is recognized as an official language
- Right to education, health care

Disabled Persons Act, 1992

- Non-discrimination law
- Equal opportunity in employment
- Lacks provision for reasonable accommodation

Zimbabwe: Accessibility Laws ***in progress***



Persons with Disabilities Amendment Bill, 2013

- To replace the Disabled Persons Act
- Closer alignment with the UNCRPD requirements
 - Access to information and technology
 - Reasonable accommodation in employment

World Tour: South America



Image by Dave Foster

We are in the process of gathering data on accessibility laws and policies in South America and some submissions have been made to the W3C web accessibility laws and policies page that will be included shortly. If you have any further information on this, please go to that page (see resources slide) and submit an update.

Want to keep up-to-date on the latest info?

W3C Resource:

Web Accessibility Laws and Policies page

<https://www.w3.org/WAI/Policy/>

Questions?

thank you

