

Addressing Bias and Barriers When Working with Al

Dino Zuppa, CEO, Accessibility Standards Canada September 25, 2025



Accessibility is everyone's responsibility

- According to the 2022 Canadian Survey on Disability from Statistics Canada
 - o 27% of Canadians more than 8 million people identify as living with a disability
 - Persons with disabilities face double the unemployment rate
 - 42% of seniors experience four or more co-occurring disabilities
 - 64% of Canadian families care for a family member with a disability
 - o 72% of persons with disabilities experienced at least one accessibility barrier
 - The disability rate among youth (15–24) jumped by 7 percentage points since 2017





Accessibility benefits everyone

- At some point we will all encounter accessibility barriers
 - temporarily
 - permanently
 - age-related changes
 - family member or friend



Speech-to-text

Designed for people who cannot type or have hearing impairments.

Benefit: Also helpful for meeting transcription, note-taking, and capturing thoughts quickly.

Priority area: Communications.





Closed captioning

Designed for people with hearing impairments. **Benefit:** Also helpful in noisy environments, for language learners, and for watching videos in quiet settings without sound.

Priority area: Communications.



Automatic door openers

Designed for people using mobility devices.

Benefit: Also helpful for everyone. For example, someone carrying a large box that doesn't have the use of their hands.

Priority area: Built environment.



Texting

Designed for people with hearing and speech disabilities. **Benefit**: Also used globally as a primary form of communication.

Priority area: Communications.



Curb cuts and ramps

Designed for people using mobility devices.

Benefit: Also helpful for parents with strollers, people with luggage,

delivery workers.

Priority area: Built environment.



Audiobooks

Designed to assist people with visual impairments.

Benefit: Also popular for commuters, multitaskers, or those who enjoy listening to books while doing other tasks.

Priority area: Communications.



Accessible public transportation

Designed to assist people with mobility disabilities

Benefit: Also helpful for people with luggage, people carrying

heavy bags, and elderly passengers.

Priority area: Transportation.





Accessibility drives growth and innovation

- Accessibility also makes good business sense because it:
 - o drives innovation, efficiency, and inclusivity
 - reduces costs by designing accessibility from the start, avoiding expensive retrofits later
 - creates an inclusive work environments where everybody can thrive
 - helps create a welcoming space where customers can fully participate, leading to better engagement and satisfaction
- Removing and preventing barriers would create \$337.7 billion value for Canadian society (17.6% of GDP)





A mandate to advance a barrier-free Canada

- Accessibility standards
- Innovative research
- Recognized centre of expertise
- Regulatory and non-regulatory initiatives
- Unique in the world
- Accessible Canada Act

Take a tour in 3D!

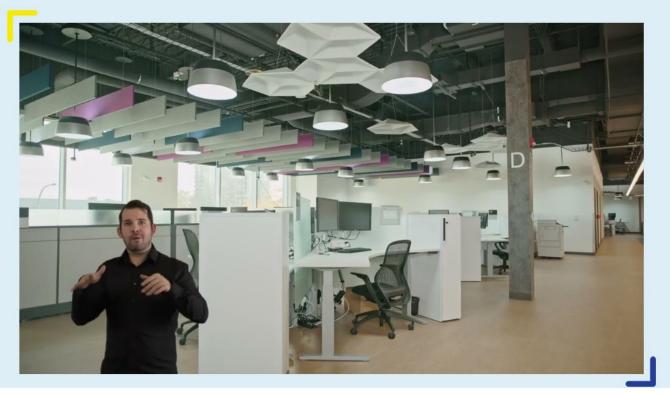
Click here to take a virtual tour of our office in 3D.

Do you communicate in sign language? During the tour, you will discover that some key locations feature videos with American Sign Language interpretation.

Note: The link above brings to an external site.

Watch a video

This video showcases our office's accessible features. Click on the video or on Play, the white triangle icon at the bottom left of the video, to explore our office!







Percentage of persons who identify as having a disability

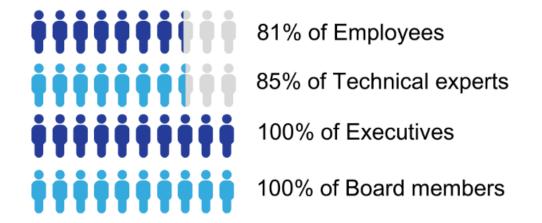
ASC is a place where...

Persons with disabilities come to work on initiatives and create impact for all Canadians.



The majority of Board of Directors are people with disabilities

Percentage of persons who identify as being part of an equity-deserving group







Our standards: Inclusive by design

- "Nothing without us" and committed to intersectionality
- Grounded in a co-design and inclusive design approach which means:
 - we fully integrate multiple disability perspectives in every step of our process
- Every accessibility standard we develop is shaped by
 - a team of people called technical committees who have lived experience and come from equity-deserving and seeking groups
 - best practices from around the world
 - o inclusive research methods





Examples of available accessibility research

- The Future of Work: Equitable Digital Systems reviews digital tools and software used in federally regulated workplaces that present barriers to employees with disabilities
- Accessible and Explainable Artificial Intelligence in Decision-Making seeks to develop best practices to integrate accessibility considerations when making decisions related to artificial intelligence
- Cybersecurity Accessibility and Inclusion Assessment Framework will make recommendations for the development of inclusive cybersecurity standards that will reduce the risks and barriers faced by people with disabilities
- Regulating the Digital Domain looks at the barriers that prevent people with disabilities from accessing digital technology and resources





Centre of Expertise

- Over 40 standards in various stages of development
- Technical guides
- Over 100 research projects
- All standards, technical guides and research are free of charge and in multiple formats



Built

environment



Information and communication technologies



Communication (other than



Procurement of goods, services, and facilities



Design and delivery of programs and services









Supporting GC initiatives

- The standards ASC develops are helping advance impactful initiatives across the Government of Canada, such as
 - the Housing Design Catalogue
 - the Employment Strategy for Canadians with Disabilities
 - the Accessible Canada Regulations for Digital Accessibility
 - the renovation of the Centre Block Project
 - the Directive on the Management of Real Property
 - Statistics Canada's Accessibility Statistics Hub
- ASC will also contribute significantly to other key government priorities, such as childcare, procurement, and Build Canada Homes





How ASC can support government departments and federally regulated entities

- ASC provides evidence-based standards and technical guidance to help government departments and federally regulated entities meet and exceed accessibility and inclusion objectives under the *Accessible Canada Act* and the *Employment Equity Act* by
 - o identifying and removing barriers revealed through consultations with persons with disabilities
 - informing the development and refinement of accessibility plans and guiding responses to feedback from interested parties
 - saving time and resources by reducing the need for additional research
- ASC's published standards, technical guides and research are being referenced in accessibility plans across Canada





ASC-6.2 Accessible and Equitable Artificial Intelligence (1)

Accessible artificial intelligence

• Ensures people with disabilities are active participants in artificial intelligence (AI) lifecycle and equitable users of AI systems.

Equitable artificial intelligence

- Ensures AI systems involved in decision-making result in fair process and equitable treatment of people with disabilities
- Requires human oversight to monitor for unintentional bias by using impact assessments that prioritize small minorities, including people with disabilities
- Ensures AI systems not negatively biased against people with disabilities due to biases in the data or algorithmic design





ASC-6.2 Accessible and Equitable Artificial Intelligence (2)

Organizational processes to support accessible and equitable AI

- Plan and justify the need for AI systems
- Design, develop, procure and/or customize AI systems
- Conduct continuous impact assessments and ethics oversight
- Train users and operators
- Provide transparency, accountability and consent mechanisms
- Provide access to alternative approaches
- Handle feedback, complaints, redress and appeals mechanisms
- Provide review, refinement and termination mechanisms





ASC-6.2 Accessible and Equitable Artificial Intelligence (3)

Accessible education and training

- Ensures participation of people with disabilities in all phases of AI lifecycle resulting in more accessible artificial systems and tools
- Guidance includes
 - Ensuring that training and education programs and materials are accessible
 - Including inclusive co-design methods with people with disabilities in training and education
 - Continuously refining AI systems based on or using data from contestations, appeals, risk reports, and requests for exceptions





Employment (1)

- This standard contains guidance for the entire employment life cycle
 - Systems, Policies, and the Employment Life Cycle ensures organizational policies support accessibility and inclusion throughout the entire life cycle
 - Recruitment ensures inclusive recruitment processes and use of plain language
 - Hiring ensures accessible notifications and equitable compensation
 - Onboarding ensures accessible orientation, training and provision of the right equipment
 - Retention ensures inclusive workplace and a dignified way to request accommodations





Employment (2)

- Career development and promotion encourages promotion based on merit, equity, and seniority, and provides career development support to enhance skills and experience
- Performance management ensures accessible and inclusive processes
- Redeployment facilitates reassignment of workers
- Compensation criteria eliminates compensation discrepancies and ensures equitable policies and procedures for job exit
- Other points including need for continual improvement and systematic change, personcentered approaches and meaningful engagement, and training in areas such as such as disability awareness and EDI for all workers, including interview panels and management





Example of support for Accessibility Plan

- Situation: You want to develop or use automated hiring tools or chatbots on your website
- What you can use: Our Technical Guide and standard on Accessible and Equitable Al Systems, to identify barriers

Result:

- Identify and mitigate bias, involve persons with disabilities in testing, and adopt inclusive tech practices
- Identify warning signs that indicate the need for human intervention
- Eliminate ongoing and cumulative unintentional bias





Design and Delivery of Accessible Programs and Services

This standard outlines requirements for policies, practices, and measures regarding accessible service delivery through any means of access in the following areas

- Communication across various formats and in different mediums
- Digital service delivery for virtual and digital platforms, service design and delivery, and requirement to comply with CAN/ASC - EN 301 549:2024 – Accessibility requirements for ICT products and services
- **Built environment** areas that directly affect the physical access to a service and the ability to obtain, use, and benefit from a service
- Support persons and support animals as related to access, admission, and proof of need
- Training specifications on who must be trained, what it must include, when it must occur
- Feedback provision





Accessibility Requirements for ICT Products and Services (1)

- Published in 2024, this standard provides requirements for 10 main topics
 - Functional performance to ensure all users can locate, identify, and operate ICT functions, access information provided about ICT functions, and have access to the full functionality of ICT regardless of physical, cognitive, or sensory abilities
 - Generic requirements that allow all users to adjust settings or install software
 - ICT with two-way voice communication for audio quality, encoding and decoding twoway voice communication, and limits for frequency ranges
 - o ICT with video capabilities for how ICT displays video with synchronized audio





Accessibility Requirements for ICT Products and Services (2)

- Hardware for the physical aspects of technology
- Web for content and systems that are provided on web pages
- Non-web documents for all documents that are not web pages and are not embedded in web pages
- Software for digital aspects of platforms, user interfaces, authoring tools, and assistive technology
- Support services related to support services including help desks, call centres, technical support, relay services, and training services
- ICT providing relay or emergency service access for relay services





Use our products and spread the word

- As you prepare to publish your revised Accessibility Plan by December 2025, we encourage you to indicate in your plan which of Accessibility Standards Canada's standards you are using
- Our free, high-quality standards, technical guides, and research projects can support you in building more inclusive workplaces, programs, and services
- We also invite you to help us expand their reach by sharing our resources within your organization and with your networks





Get involved in our work

- Participate in the standards development process and shape standards that affect industries, work and community:
 - Apply to be a member of a technical committee
 - Send us your comments and feedback about draft standards
- Submit or/and participate in a research project
- Visit our new <u>Standards and technical guides database</u> and <u>Research projects database</u>
- Subscribe to our newsletter
- Follow us on social media: X, Facebook and LinkedIn





Thank you! Questions?



