

ADVANCING ACCESSIBILITY STANDARDS FOR

DEAF, DEAF-BLIND and HARD OF HEARING CANADIANS

Canadian Association of the Deaf – Association des Sourds du Canada (CAD-ASC)

Report for Accessibility Standards Canada

October 2023

Canadian Association of the Deaf

Wyatt Scott, Project Director

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First, thanks must go to the former Executive Director of CAD-ASC, Jim roots. He is truly a hero amongst the leaders of the Deaf community in Canada. Mr. Roots recently retired after serving CAD-ASC as its Executive Director for almost 38 years. It was under his leadership that project funds were identified, the application made, the grant approved, and the staff hired.

The team included Wyatt Scott, the project director, Anna Wren, Joseph Antle, and Pavel Cherousnov, who coordinated the project.

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A final thanks to Accessibility Standards Canada for seeing the importance of consulting with the Deaf community and ensuring that the philosophy of “Nothing without us” takes place within Canada as the federal government works to remove all barriers to people with disabilities under the Accessible Canada Act by 2040.

Thank you very much, *merci beaucoup*, and *chi-miigwech*.

Richard Belzile

Executive Director,

Canadian Association of the Deaf

As the Project Director, I am pleased to present a final report to present our recommendations to remove barriers and improve the quality-of-life experience for the Deaf community.

The intent and purpose of the project is to present our findings and develop sets of recommendations from the Deaf community of all backgrounds in Canada to the federal government. Our aim was to review and strengthen the national standards including employment, emergency preparedness, built environment, Indigenous accessibility, technologies, and communications considering the passage of the Accessible Canada Act, 2019 (ACA).

The purpose is to enrich the quality of life and improve the quality of service for the Deaf community in Canada.

Wyatt Scott,

Project Director

## Introduction

Accessibility Standards Canada (ASC) is a federal department that was established under the ACA. Its mandate is to develop accessibility standards for federally regulated entities in collaboration with persons with disabilities and other stakeholders. ASC is governed by a board of directors, the majority comprising persons with disabilities. The board is responsible for setting the strategic direction for ASC, establishing its mission, vision, and values.

ASC has a technical committee for each accessibility standard that it develops. The technical committees include representatives from persons with disabilities, regulated entities, standards development organizations, governments, academics, and experts.

ASC and its technical committees consult widely on the development of accessibility standards, conduct research and analysis on accessibility issues, promote harmonization of accessibility standards across jurisdictions and sectors, and provide information and guidance on accessibility standards to regulated entities and the public.

ASC

Lastly, ASC’s strategic plan outlines its vision, mission, values, strategic objectives and expected results. Its vision is “a Canada without barriers where everyone can participate fully.” Its mission is “to lead the development of accessibility standards that support the implementation of the Accessible Canada Act.” Its values are “collaboration, excellence, innovation, inclusion and respect.” Its strategic objectives are to:

1) reflect the lived experiences of persons with disabilities;

2) foster a culture of accessibility within ASC and among its stakeholders;

3) build ASC’s reputation as a leader in accessibility standards development;

4) ensure ASC’s accountability and sustainability.

The expected results are:

1) increased awareness and understanding of accessibility standards;

2) increased compliance with accessibility standards by regulated entities;

3) increased satisfaction in the development of accessibility standards;

4) increased removal and prevention of barriers by regulated entities.

Accessibility Standards Canada funds research projects that address accessibility barriers and solutions in Canada, such as this one.

CAD-ASC is pleased to educate and break down these barriers and disseminate the research findings through its website, publications, webinars, and events to bring a more equitable society for all.

For those who are unaware, the CAD-ASC is the oldest national disability organization, having been founded in 1940, led by Deaf, Deaf-Blind and Hard of Hearing (DDDHH) people who sign. It is ideally placed to conduct research on barriers experienced by the DDBHH communities in Canada.

The project team did the initial research and literary review and then led the recruitment for the six committees that would explore the defined areas of accessibility. In 2021, three committees were created, dedicated to emergency preparedness, built environment, and employment standards and in 2022, three new committees were formed; technologies standards, information & communication, and Indigenous accessibility standards. The multitude of issues surrounding communication and technology for the Deaf community required two committees to deal with the Information and Communication Technology (ICT) standard. These committees sought to be inclusive; each member identified as Deaf or Deaf-Blind.

Each committee developed their own format on how to conduct regular meetings, communicate with the project director, and seek consultations from the Deaf community. Each chairperson was responsible for communicating with the project director. The project director was also responsible for communication with the Executive Director and the CAD-ASC board, and the Communication Liaison Officer to promote the town hall events, book interpreters, and provide accommodations.

Once each committee had gathered their findings, town halls were set up in a series of sessions across Canada, across different time zones. The main aim of the town halls was to collect input and confirmation from the audience as to their experience of accessibility barriers. In addition to the town halls, some committees sought consultations from experts with diverse backgrounds. For example, the technologies standards committee made the effort to contact with deaf Indigenous people for their perspective on technical needs to improve accessibility in remote communities. As well, outreach was made to consult people of colour, women, Indigenous people, deaf-blind people, and francophones.

## Accessible Canada Act, 2019 (ACA)

The ACA came into force in 2019 to make Canada barrier-free by January 1, 2040. It aims to identify, remove, and prevent barriers for persons with disabilities in areas under federal authority, such as employment, transportation, information and communication technologies, communication, procurement, design and delivery of programs and services, and the built environment.

The ACA builds on the existing human rights framework that supports equality for persons with disabilities in Canada, such as the Canadian Charter of Rights and Freedoms, the Canadian Human Rights Act, and Canada’s commitments under the United Nations Convention on the Rights of Persons with Disabilities (UNCRPD). The ACA recognizes sign languages (American Sign Language, Quebec Sign Language, and Indigenous Sign languages) as the primary languages for communication by deaf persons in Canada – a first for the federal government.

This law applies to Parliament, Senators, and Members of Parliament; the Government of Canada, including federal departments, Crown Corporations, and agencies; and private sector organizations that are federally regulated, such as banks, airlines, broadcasters, and telecommunication providers.

The ACA gives specific powers to some federal departments and agencies to develop and enforce accessibility standards for federally regulated entities. These include the Canadian Radio-television and Telecommunications Commission (CRTC) and the Canadian Transportation Agency (CTA). The ACA also establishes an Accessibility Commissioner to oversee compliance and complaints, a Chief Accessibility Officer to advise the Minister on systemic issues, and an Accessibility Advisory Board to provide advice to Accessibility Standards Canada and the Minister.

The law requires federally regulated organizations to prepare and publish accessibility plans showing how they identify, remove, and prevent barriers; establish feedback processes to receive comments on their accessibility; and prepare and publish progress reports on their implementation of their plans. The ACA also requires the Minister to report annually to Parliament on the implementation of the Act and its regulations.

Lastly, the ACA provides for administrative monetary penalties for non-compliance with the Act or its regulations. The maximum penalty for a single violation is $250,000. The ACA also provides a complaints process for individuals who experience physical or psychological harm, property damage or economic loss due to a violation of the Act or its regulations. The Accessibility Commissioner can order compensation or other remedies for complainants.

## Provincial Accessibility Legislation

The accessibility legislation across Canada as of October 2023 is set out below; please also refer to the information posted on the CAD-ASC website: <https://cad-asc.ca/our-work/rights-and-accessibility/>.

### Accessibility Standards in British Columbia

The *Accessible British Columbia Act* came into force in 2021. The Act aims to make the province more accessible and inclusive by 2024, by setting standards and goals for accessibility in areas such as employment, education, health care, housing, and transportation. The Act also establishes an Accessibility Commissioner to oversee compliance and enforcement of the standards, and an Accessibility Committee to advise the government on accessibility issues. The Act requires the government to consult with persons with disabilities and other stakeholders in developing and reviewing the standards. The Act also recognizes sign languages (American Sign Language and Indigenous sign languages) as the primary languages of communication for deaf people in the province. However, this Act does not apply to the private sector within that province.

### Accessibility Standards in Quebec

In 2004, Quebec proclaimed wide-ranging amendments to the *Act to secure handicapped persons in the exercise of their rights with a view to achieving social, school and workplace integration*, modifying this same law enacted in 1978. Unlike the other provincial accessibility laws discussed in this section, this law does not apply to the private sector or set accessibility timelines.

### Accessibility Standards in Ontario

The *Accessibility for Ontarians with Disabilities Act* was enacted in 2005, setting out a process for developing and enforcing accessibility standards in Ontario. It was the first province to have done so, building on the 2001 *Ontarians with Disabilities Act*. Under the law, the government is responsible to create the standards that all organizations (both public and private) must follow. The aim is to make Ontario more accessible and inclusive by the year 2025. There are five areas where the organizations must identify and remove barriers: customer service, information and communication, transportation, employment, and design of public space. The law also requires the government to make annual progress reports on development of accessibility standards.

### Accessibility Standards in Saskatchewan

Saskatchewan enabled the *Accessible Saskatchewan Act* in 2023, with seven areas for development of standards;

* Built Environment (buildings, places, and spaces)
* Information and Communications (standards that make giving and receiving information accessible for persons with disabilities).
* Employment (hiring and workplace standards)
* Transportation (buses and taxis)
* Service Animals (public education and public access)
* Procurement (buying goods and services)
* Service Delivery (getting goods, services, or programs)

Unlike some of the other provincial acts, however, Saskatchewan’s legislation is not intended to apply to the private sector. Saskatchewan has envisioned that the government and its agencies will lead the way before it considers widening the application of this Act.

The Act does recognize ASL and ISLs as the primary languages for communications by deaf persons in the province.

### Accessibility Standards in Manitoba

The *Accessibility for Manitobans Act* came into effect in 2013, incorporating five key areas: customer service, employment, information and communication, design of public spaces, and transportation.

The *Accessible Employment Standard Regulation* defined “communication support” to include sign language, captioning, and alternative communication supports. Manitoba’s law, like that in Ontario, Newfoundland and Labrador, and Nova Scotia, applies to the private sector.

### Accessibility Standards in Nova Scotia

The *Accessibility Act* was passed in 2017 to make Nova Scotia inclusive and barrier-free by 2030. That same year, the government created the Accessibility Directorate under the responsibility of the Department of Justice.

Currently, the Nova Scotia government is developing six standards. They are goods and services, information and communication, transportation, employment, education, and built environment. The government is collaborating with people with disabilities, and public and private sectors to make sure those standards meet required outcomes.

Failing to meet any of the mandatory standards could result in fines up to $250,000 for severe cases of non-compliance. This Act will apply to the private sector, not just government and its agencies.

### Accessibility Standards in Newfoundland and Labrador

In 2021, Newfoundland and Labrador enacted the *Accessibility Act*. Like that of Ontario’s, Manitoba’s, and Nova Scotia’s, this Act applies to both the private and public sectors and sets out accessibility standards. However, unlike the other comprehensive provincial accessibility acts, it does not specify a target date by which all accessibility standards must be met; rather it provides for a statutory review within five years. Like British Columbia’s Act, this legislation also recognizes sign language (American Sign Language and Indigenous sign languages).

## International Accessibility Standards

### United Nations

#### Convention on Rights of Persons with Disabilities (CRPD), 2008

The United Nations Convention on Rights of Persons with Disabilities (UNCRPD) took effect in May 2008. Canada is a signatory member along with 177 other countries. This Convention is an international treaty that supports persons with disabilities at home and around the world by providing accessible rights. Canada ratified the Convention in 2010, and acceded to its enforcement mechanism, the Optional Protocol, in 2018. The Optional Protocol allows a procedure for Canadians to make complaints directly to the United Nations Committee on the Rights of Persons with Disabilities, for some situations where they feel that Canada has not honored the Convention.

This document is particularly important to the Deaf and Deafblind community worldwide that communicate in sign language. The key articles of relevance are set out as below:

*Article 9 Accessibility*

*2(e) Provide forms of live assistance and intermediaries, including guides, readers, and professional sign language interpreters, to facilitate accessibility to buildings and other facilities open to the public;*

*Article 21 Freedom of Expression and Access to Information*

*(b) Accepting and facilitating the use of sign languages, Braille, augmentative and alternative communication, and all other accessible means, modes, and formats of communication of their choice by persons with disabilities in official interactions;*

*(e) Recognizing and promoting the use of sign* *languages.*

*Article 24 Education*

*3(b) Facilitating the learning of sign language and the promotion of the linguistic identity of the deaf community;*

*4. To help ensure the realization of this right, States Parties shall* *take appropriate measures to employ teachers, including teachers with disabilities, who are qualified in sign language and/or Braille, and to train professionals and staff who work at all levels of education. Such training shall incorporate disability awareness and the use of appropriate augmentative and alternative modes, means and formats of communication, educational techniques, and materials to support persons with disabilities.*

*Article 30 Participation in cultural life, recreation, leisure, and sport*

*4. Persons with disabilities shall be entitled, on an equal basis with others, to recognition and support of their specific cultural and linguistic identity, including sign languages and deaf culture.*

### European Union

#### Union of equality: Strategy on the rights of persons with disabilities 2021-2030

 The EU’s European Commission developed a report titled, “[Union of equality: Strategy on the rights of persons with disabilities 2021-2030 - European Union](https://ec.europa.eu/social/main.jsp?catId=1484&langId=en)”, to build on the results of the European Disability Strategy 2010-2020. It echoes the Accessible Canada Act in that it aims to create a barrier-free Europe and empower persons with disabilities with full rights and ability to participate in society in European Union. The goal of the strategy is to ensure all persons with disabilities to:

1. Enjoy their human rights,
2. Have equal opportunities, equal access to participate in society and economy,
3. Can decide where, how and with whom they live,
4. Move freely in the EU regardless of their support needs,
5. And no longer experience discrimination.

# Accessibility Standards Committees’ Reports

The section below context contains seven reports from different committees that focus on various aspects of accessibility for Deaf, Deaf-Blind and Hard of Hearing (DDBHH) Canadians and the input they received from Town Halls across the country. These reports provide recommendations on how to improve accessibility and inclusion for DDBHH Canadians in areas such as employment, emergency, communication, technology, built environment, culture, justice, health, media, elections, aviation, and international relations. The reports also highlight the challenges and opportunities for DDBHH Canadians in accessing information and services in their preferred languages: American Sign Language (ASL), Quebec Sign Language (LSQ), and Indigenous Sign Languages (ISLs).

## Emergency Standards

This report is prepared by the Emergency Standards Committee, a group of experts and representatives from the Deaf, Deaf-Blind and Hard of Hearing (DDBHH) communities in Canada. The purpose of this report is to provide recommendations for the federal government and Accessibility Standards Canada on how to improve the accessibility and inclusiveness of emergency communications and services for DDBHH Canadians.

The report is based on the information gathered from four virtual town hall sessions that were held in different regions of Canada, as well as the existing literature and research on emergency accessibility issues. The report covers four main topics: communication and information, disaster and emergency preparedness, transportation, and procurement. For each topic, the report provides background information, real life examples, town hall input, and recommendations.

The report aims to address the gaps and barriers that DDBHH (Deaf, Deaf Blind and Hard of Hearing) Canadians face in accessing timely, accurate, and reliable information and services during emergencies, such as natural disasters, human-caused crises, or public health emergencies. The report also highlights the best practices and innovative solutions that can enhance the safety and well-being of DDBHH Canadians in emergency situations.

The report is guided by the principles of the Canadian Charter of Rights and Freedoms, the Accessible Canada Act, and the United Nations Convention on the Rights of Persons with Disabilities. The report also acknowledges the diversity and complexity of the DDBHH communities and their linguistic and cultural rights.

The report is intended to be a resource for policy makers, service providers, emergency responders, and DDBHH Canadians themselves. The report hopes to contribute to the development of national standards and guidelines for emergency accessibility that are consistent, comprehensive, and respectful of human rights.

**Communication Tools in Emergency Situations**

This section focuses on the communication and information tools and methods that are available or needed for DDBHH Canadians to receive or send emergency alerts, messages, or calls. The section reviews the current technologies and services that are accessible or inaccessible for DDBHH Canadians, such as wireless public alerts (WPA), text with 9-1-1 (T9-1-1), real-time text 9-1-1 (RTT 9-1-1), video relay services (VRS), IP relay services (IP Relay), next-generation 9-1-1 (NG 9-1-1), sign language interpreters, captions, subtitles, etc. The section also examines the challenges and opportunities for improving communication and information accessibility in emergency situations.

**Background Information**

Communication and information are essential for DDBHH (Deaf, Deaf Blind and Hard of Hearing) Canadians to be aware of potential or ongoing emergencies, to take appropriate actions to protect themselves and others, to access emergency services or resources, and to communicate with family, friends, or authorities. However, communication and information accessibility is often compromised or neglected in emergency situations due to several factors, such as:

* Lack of awareness or recognition of the communication needs and preferences of DDBHH Canadians by policy makers, service providers, emergency responders, or media outlets.
* Lack of consistent or standardized use of accessible communication tools or methods across different jurisdictions, regions, or sectors.
* Lack of availability or reliability of accessible communication tools or methods due to technical issues, infrastructure limitations, cost barriers, or registration requirements.
* Lack of quality or accuracy of accessible communication tools or methods due to poor design, translation, interpretation, captioning, or subtitling.
* Lack of incidental or informal learning opportunities for DDBHH Canadians due to their reduced access to auditory information from their surroundings.

These factors can result in DDBHH Canadians being excluded from receiving critical and potentially life-saving alerts or information during emergencies. They can also prevent DDBHH Canadians from contacting or being contacted by emergency services or responders when they need help. Moreover, they can create additional stress, anxiety, or confusion for DDBHH Canadians, affecting their mental health and well-being. Furthermore, they can limit the participation and contribution of DDBHH Canadians in emergency response or recovery efforts, undermining their potential and dignity.

**Town Hall Input**

The town hall sessions revealed that communication and information accessibility is a major concern for DDBHH Canadians in emergency situations. The participants shared their experiences, challenges, suggestions, and expectations regarding various communication and information tools and methods. The following are some of the main themes that emerged from the town hall input:

**Wireless public alerts (WPA):** Many participants reported that they did not receive the WPA alerts on their cell phones or TVs or received them in a language they did not understand. Some participants suggested that WPA alerts should be more consistent, reliable, and accessible for DDBHH Canadians, such as by using visual cues, vibrations, sign language, captions, or subtitles. Some participants also expressed the need for more education and awareness on how to access and use WPA alerts.

**Text with 9-1-1 (T9-1-1):** Some participants indicated that they were registered and familiar with T9-1-1 service, while others were not aware of it or did not know how to register or use it. Some participants expressed frustration or dissatisfaction with the T9-1-1 service, such as experiencing delays, disconnections, or miscommunication. Some participants suggested that T9-1-1 service should be more widely available, accessible, and user-friendly for DDBHH Canadians, such as by using real-time text (RTT), video relay service (VRS), or automatic location detection.

**Real-time text 9-1-1 (RTT 9-1-1):** Some participants were aware of the RTT 9-1-1 service that is being developed and tested in Canada, while others were not. Some participants expressed interest or curiosity about the RTT 9-1-1 service, while others expressed skepticism or doubt about its feasibility or effectiveness. Some participants suggested that RTT 9-1-1 service should be compatible with different devices and platforms and should provide clear instructions and feedback to the users.

**IP (Internet Protocol) relay service (IP Relay):** Some participants reported that they used IP Relay occasionally for their communication needs, but preferred other methods such as VRS or T9-1-1. Some participants indicated that they encountered problems or difficulties with IP Relay service, such as delays, disconnections, or misunderstandings. Some participants suggested that the IP Relay service should be improved or replaced by more advanced technologies such as RTT or VRS.

**Next-generation 9-1-1 (NG 9-1-1):** Some participants were aware of the NG 9-1-1 initiative that is being implemented in Canada, while others were not. Some participants expressed hope or optimism about the NG 9-1-1 initiative, while others expressed concern or uncertainty about its implications or outcomes. Some participants suggested that NG 9-1-1 initiative should involve DDBHH Canadians in its design and development process and should ensure its accessibility and inclusiveness for DDBHH Canadians.

**Video relay service (VRS):** Many participants reported that they used VRS regularly for their communication needs and appreciated its convenience and quality. Some participants indicated that they used VRS to contact 9-1-1 in emergency situations and found it helpful and effective allowing a face-to-face or Video Remote Interpreting (VRI) situation with emergency personnel such as police, firefighters, and paramedics. Some participants suggested that VRS and even VRI should be more widely available to Canadians through the federal government. They suggested increasing the number of interpreters, improving the video quality, or expanding the service hours to make the service more reliable and accessible to DDBHH Canadians.

**Sign language interpreters:** Many participants reported that they relied on sign language interpreters for their communication needs, especially in face-to-face settings. Some participants indicated that they had access to sign language interpreters in emergency situations, such as at emergency shelters, community centres, or hospitals. Some participants suggested that sign language interpreters should be more available, qualified, and trained for emergency situations, such as by having a roster of certified interpreters, providing emergency-specific vocabulary and protocols, or using video remote interpreting (VRI) when in-person interpreting is not possible.

**Captions and subtitles:** Many participants reported that they used captions and subtitles for their information needs, especially for TV or online media. Some participants indicated that they had access to captions and subtitles in emergency situations, such as for WPA alerts, news broadcasts, or public announcements. Some participants suggested that captions and subtitles should be more consistent, accurate, and accessible for DDBHH Canadians, such as by using live or automated captioning, providing bilingual or multilingual options, or following the Web Content Accessibility Guidelines (WCAG).

**Other communication and information tools and methods:** Some participants mentioned other communication and information tools and methods that they used or needed in emergency situations, such as social media, websites, apps, email, chatbots, etc. Some participants suggested that these tools and methods should be more accessible and inclusive for DDBHH Canadians, such as by using plain language, visual aids, sign language, captions, and subtitles when posting on social media.

**Recommendations**

Based on the background information, real life examples, and town hall input, the Emergency Standards Committee proposes the following recommendations for improving communication and information accessibility for DDBHH Canadians in emergency situations:

* The federal government and Accessibility Standards Canada should develop and implement national standards and guidelines for communication and information accessibility in emergency situations, in consultation and collaboration with DDBHH Canadians and their organizations.
* The federal government and Accessibility Standards Canada should monitor and evaluate the compliance and effectiveness of the communication and information accessibility standards and guidelines in emergency situations, using quantitative and qualitative indicators and feedback from DDBHH Canadians and their organizations.
* The federal government and Accessibility Standards Canada should provide more funding and support for the research, development, testing, and deployment of accessible communication and information technologies and services for DDBHH Canadians especially in emergency situations.
* The federal government and Accessibility Standards Canada should provide funding and support for the training and education of policy makers, service providers, emergency responders, media outlets, sign language interpreters, captioners, subtitles, etc. on the communication needs of DDBHH Canadians including emergency situations.
* The federal government and Accessibility Standards Canada should provide funding and support for the awareness and empowerment of DDBHH Canadians and first responders on how to access and use accessible communication and information tools and methods in emergency situations.

**Communication and Information Accessibility Standards and Guidelines**

The following are some of the proposed standards and guidelines for communication and information accessibility in emergency situations, based on the recommendations and the best practices identified by the Emergency Standards Committee. These standards and guidelines are not exhaustive or definitive, but rather indicative and suggestive. They are intended to provide a framework and a reference for policy makers, service providers, emergency responders, media outlets, sign language interpreters, captioners, subtitlers, etc. to ensure that communication and information are accessible and inclusive for DDBHH Canadians in emergency situations.

**Wireless public alerts (WPA):** WPA alerts should be sent to all cell phones and TVs in the affected area, regardless of the device model, carrier, or subscription. WPA alerts should use visual cues, vibrations, sign language, captions, or subtitles to convey the alert type, message, and action. WPA alerts should be available in both official languages (English and French), as well as other languages depending on the demographics of the area. WPA alerts should be consistent with the information provided by other sources, such as news media or social media. WPA alerts should be tested regularly and updated as needed.

**Text with 9-1-1 (T9-1-1):** T9-1-1 service should be available in all regions and jurisdictions in Canada, without requiring registration or verification. T9-1-1 service should use real-time text (RTT) technology to allow simultaneous and interactive text communication between the caller and the operator. T9-1-1 service should automatically detect the location of the caller and connect them to the nearest emergency centre. T9-1-1 service should provide clear instructions and feedback to the caller, such as confirming the receipt of the text message, asking for additional information, or providing updates on the status of the emergency response.

**Real-time text 9-1-1 (RTT 9-1-1):** RTT 9-1-1 service should be compatible with different devices and platforms, such as smartphones, tablets, laptops, or desktops. RTT 9-1-1 service should use a standard protocol and format for text communication, such as RFC 4103 or RFC 5194. RTT 9-1-1 service should support different languages and character sets, such as Unicode or ASCII. RTT 9-1-1 service should have a fallback option for voice communication, such as text-to-speech or speech-to-text technology.

**Video relay service (VRS):** VRS should be available 24/7 in all regions and jurisdictions in Canada, without requiring registration or verification. VRS should use high-quality video and audio technology to enable sign language communication between the caller and the operator. VRS should automatically detect the location of the caller and connect them to the nearest emergency centre. VRS should provide clear instructions and feedback to the caller, such as confirming the receipt of the video call, asking for additional information, or providing updates on the status of the emergency response.

**IP relay service (IP Relay):** IP Relay service should be available 24/7 in all regions and jurisdictions in Canada, without requiring registration or verification. The IP Relay service should use high-speed internet connection and reliable servers to enable text communication between the caller and the operator. IP Relay service should automatically detect the location of the caller and connect them to the nearest emergency centre. IP Relay service should provide clear instructions and feedback to the caller, such as confirming the receipt of the text message, asking for more information, or providing updates on the emergency response.

## Built Environment Standards

This report summarizes the activities and processes of the Built Environment Accessibility Committee. The committee was one of the six advisory committees established by the Canadian Association of the Deaf - Association des Sourds du Canada (CAD-ASC) to inform the development of accessibility standards for federally regulated organizations under the Accessible Canada Act.

The committee consisted of members who are Deaf, Deaf-Blind, or hard of hearing, and who have expertise and experience in accessibility issues related to the built environment. The built environment refers to the human-made surroundings that provide the setting for human activity, such as buildings, spaces, transportation systems, and infrastructure. The committee’s mandate was to identify and research accessibility barriers and best practices in the built environment, and to provide recommendations for developing accessibility standards.

The committee conducted its activities from November 2021 to February 2022, using online platforms such as Zoom and Google Drive. The committee also organized four virtual town hall sessions to collect feedback and input from the Deaf, Deaf-Blind, hard of hearing, and Deaf-Disabled (DDBHHD+) communities across Canada. It organized its presentation and discussion topics, to include thefollowing headings Access, Communication, Safety and Security, and Training.

This report provides an overview of the committee’s meetings, research process, town hall planning and execution, choice of topics and format, barriers communicated by the participants, and selected resources and links and recommendations to inform future efforts to improve accessibility in the built environment for DDBHHD+ people.

**Meetings**

The Built Environment Accessibility Committee held nine Zoom video meetings from November 30, 2021, to February 20, 20221. All the meetings were recorded for team members to review at their convenience. The meetings were arranged to have two teams of interpreters to provide accessibility to the entire group. One interpreter team provided ASL-LSQ access so that the Chair could communicate in his primary language of LSQ with committee members who use ASL as their primary means of communication. The second team of hearing interpreters provided English-ASL translation so that the English-speaking hearing and hard-of-hearing people could fully participate in the meetings or national conferences.

**Research Process**

The participants had been given a list of potential topics and ideas for their research. A Google Drive folder was created for the group to share documents or links to websites or publications on topics relevant to concepts of accessibility of internal and external spaces in the built environment.

**Town Hall Planning**

There was a series of virtual town halls to collect community feedback and ideas on accessibility topics provided by the three initial committees: one on Employment Accessibility related to federal employment standards, a second on Emergency Standards, and the third on Built Environment Accessibility. The town halls were scheduled for February 21 to 24, 2022, at 6:00 pm in different time zones according to the geographical area: British Columbia and Western region on February 21; Prairies-Central region on February 22; Eastern region on February 23; and Atlantic regions on February 24.

Two alternating members of the team were the leads (presenters and feedback collectors) for each online seminar night. ASL-LSQ interpreters were booked for the four sessions as CAD-ASC provides for the required four languages mandated by the organization’s communication policy: written English and French, ASL and LSQ.

The project director provided background information on the project and focus at each session. The leads for each session followed the same process and description of topics, with participants and attendees sharing their own experiences of access barriers and making recommendations for improving access and problem-solving.

CAD-ASC staff arranged for accessibility accommodations, including interpreters and controlled the technical management of the Zoom platform, PowerPoint slides, video clips, and spotlighting, and handled the video recording and uploading to YouTube after the events.

**Choice of Topics and Format**

The committee members wanted to organize their presentation in a short, easy-to-follow format: Access / Communication / Safety & Security / Training. The concept behind this choice was the visualization of how a person would make their way to a specific location and building, enter, enquire, or look for information or an office or service, and make known what they came for. Some of the ideas and questions related to this format are as follows:

**Access** = how accessible the route to a building or space is – including how accessible it is to find the information on location, transportation to/from the area, the physical properties of the entrance and how one can safely enter (and leave) the building.

**Communication** - How easy it is to find information once in the building. Is there clear and easily readable signage? Are there different options to get directions and information? Can building personnel communicate with a DDBHHD+ customer? Would staff members be able to project positive attitudes about DDBHHD+ people and those with additional disabilities?

**Safety and Security** - Is wayfinding accessible and the environment safe for those who are DDBHHD+ and for those with multiple disabilities? Is there a sense of calmness and safety when observing how people are treated by staff and visitors? Is there a plan to direct DDBHHD+ persons to safety in an emergency? Can the evacuation or shelter-in-place plan be communicated to the visitors and customers of that office?

**Training** – How are administrators and staff members trained to greet, communicate with, and collaborate with people who are DDBHHD+. Is the training program inclusive by being delivered through persons with lived experience? Are DDBHHD+ people involved in developing training materials? Are proper terminologies and signs taught and used in the environment? Overall, how are accessibility issues included in the planning and development of on-site federal government services or the spaces of federally regulated services?

The committee discussed another critical issue, but it was not emphasized in the town halls, which was that of enforcement. How will the Government of Canada enforce the standards of accessibility in all aspects of the Accessible Canada Act, including accountability and funding appropriate infrastructure?

**Barriers Communicated by the Participants**

On the following pages, some of the barriers identified in the town halls through the session notes and narratives by persons involved, including the committee members, are presented. It is not a comprehensive list, nor are the comments indicative of barriers and potential solutions.

**British Columbia-West Session on February 21, 2022**

**Accessibility Issues:** One person said, “When I am on the ferries, there is no (electronic) signage to assist Deaf people in knowing what is happening on the ferries or explaining the rules. We need to set up disability accessibility services in all airports.” Another person explained their experience when at YVR airport. Four British Columbian Deaf-Blind people missed their flight to Winnipeg for Deaf-Blind Camp because they had been sitting at the wrong gate. No one directed them to the correct gate nor informed the gate staff of their disabilities.

**Communication Issues:** A participant shared, “My problem is I cannot read other people’s lips wearing a mask, as I am hard of hearing. This example is about getting information from a service provider or another person.” Another person asked if it is a communication barrier when a person cannot use a payphone to call a taxi at night from Via Rail train station? They explained that there are no disability support service booths at these smaller terminals. One man described his experience: He and his child were going to Montreal, then Halifax. But the train unexpectedly stopped in Kingston, Ontario due to a freight train accident on the way (to Quebec). He said, “My CODA (Child of Deaf Adult) daughter told me in sign language what happened. No wonder. So, we needed to get a cab to Montreal before getting another train to Halifax on Via Rail. As a Deaf person, I could not independently understand the details of what happened without a TV screen announcement, but my daughter heard and told me in ASL.” A Deaf-Blind participant said: “It is not very accessible for Deaf-Blind to see interpreters on a VRI screen at the hospital. It is too hard for the Deaf-Blind to see most things on a video screen, and VRI screens are too small. I prefer to have a live interpreter in person.”

**Safety and Security Issues:** One person said: “I was at the airport in Toronto, and there was an emergency announcement. I did not know what was going on. I saw people running, but I did not know why. I felt scared and confused. There was no visual alert or captioning on the screens.” Another person said: “I was at a hotel, and there was a fire alarm. I did not hear it, and no one came to my room to tell me to evacuate. I only found out later when I saw people outside. There was no flashing light or vibration device in my room to alert me.” A third person said: “I was at a bank, and there was a robbery. I did not know what was happening. I saw people lying on the floor, but I did not know why. There was no sign language interpreter or written communication with the police or the robbers.”

**Training Issues:** One person said: “I went to a government office to apply for a service. The staff did not know how to communicate with me. They did not have any sign language skills or access to video relay service (VRS). They did not have any written forms or information in plain language. They were rude and impatient with me.” Another person said: “I went to a hospital for a medical appointment. The doctor did not know anything about Deaf culture or Deaf health issues. He did not respect my communication preferences or my autonomy. He did not provide me with an interpreter or any other communication support. He did not explain the diagnosis or treatment options clearly.”

**Prairies-Central Session on February 22, 2021**

**Accessibility Issues:** One person said: “I live in a rural area, and there is no public transportation to get to the city or other places. I must rely on family or friends to drive me, which is not always possible or convenient.” Another person said: “I have a mobility disability, and many buildings are not accessible for me. They have stairs, narrow doors, heavy doors, high counters, etc. There is no ramp, elevator, automatic door opener, lowered counter, etc.”

**Communication Issues:** One person said: “I am Deaf-Blind, and I use tactile sign language to communicate. There are very few interpreters who are trained and qualified to provide this service. It is hard to find and book an interpreter when I need one.”
Another person said: “I am hard of hearing, and I use hearing aids and speechreading to communicate. Many places do not have good acoustics or sound systems. There is too much background noise or echo that makes it hard to hear and understand speech. There is no induction loop or FM system that can connect to my hearing aids.”

**Safety and Security Issues: “**One person said: I am Deaf-Blind, and I use a white cane to navigate. Many sidewalks and crosswalks are not safe for me. They have cracks, holes, bumps, etc., that can trip me or damage my cane. They do not have tactile paving or audible signals that can guide me or warn me of traffic. Another person said: I am Deaf, and I use sign language to communicate. Many police officers do not know how to interact with me. They do not have any sign language skills or access to VRS. They do not have any written forms or information in plain language. They do not respect my rights or my dignity.”

**Training Issues:** One person said: “I work for a federal government agency as an employee. The management and staff do not have any awareness or sensitivity about accessibility issues for DDBHHD+ people. They do not provide me with any accommodation or support that I need to do my job effectively. They do not include me in meetings, training sessions, social events, etc., because they think it is too difficult or expensive to arrange communication access for me.” Another person said: “I am a student at a university that receives federal funding for research projects. The professors and researchers do not have any knowledge or expertise about accessibility issues ... They do not involve me in their projects as a participant or a collaborator because they think it is too complicated or irrelevant to include me.”

**Eastern Session on February 23, 2022**

**Accessibility Issues:** One person said: “I live in an apartment building that is old and does not meet the current accessibility standards. The entrance has steps and no ramp. The elevator is small and often broken. The door handles are round and hard to turn. The fire alarm is only audible and not visual. The laundry room is in the basement and has no elevator access.” Another person said: “I travel by train frequently for work purposes (Via Rail). The train stations are not accessible for me. The ticket machines are too high and have no braille or voice output. The information screens are too small and have no captioning or sign language. The in-station announcements are only audible and not visual. The boarding platforms are not level with the train doors and have no tactile markings.”

**Communication Issues:** One person said: “I am Deaf, and I use sign language to communicate. There are two official sign languages in Canada: ASL and LSQ. However, many places and services only provide one or the other. There is no consistency or coordination among different regions or authorities. There is no recognition or respect for the linguistic rights and diversity of DDBHHD+ people.” Another person said: “I am hard of hearing, and I use speechreading and residual hearing to communicate. Many people do not know how to communicate with me effectively. They do not face me, speak clearly, or repeat or rephrase when I ask them to. They cover their mouths, mumble, or speak too fast or too softly. They get frustrated or give up when I do not understand them.”

**Safety and Security Issues:** One person said: “I am Deaf-Blind, and I use a guide dog to assist me. Many places and services do not allow me to enter with my guide dog. They do not understand that my guide dog is not a pet, but a service animal that is essential for my safety and independence. They do not follow the laws or policies that protect my right to access public spaces and services with my guide dog.” Another person said: “I am Deaf, and I use sign language to communicate. Many health care providers do not provide me with adequate communication access when I need medical attention. They do not arrange for an interpreter or use VRS when I request it. They do not explain the diagnosis, treatment, medication, or follow-up instructions clearly. They do not respect my privacy or confidentiality when they ask me to bring a family member or a friend to interpret for me.”

**Training Issues:** One person said: “I am a DDBHHD+ person with additional disabilities (physical, mental, cognitive, etc.). Many accessibility standards and guidelines do not address the intersectionality and complexity of my needs and experiences. They focus on one disability or one aspect of accessibility, but not on how they interact or overlap with each other. They do not consider the diversity and variability of DDBHHD+ people within and across diverse groups and contexts.” Another person said: “Many accessibility standards and guidelines do not reflect the cultural and social dimensions of my identity and background. They are based on Western, colonial, heteronormative, or dominant perspectives and values that may not be compatible with or relevant to my worldview and lived reality. They do not acknowledge the systemic oppression and discrimination that I face as a marginalized person in society.”

**Atlantic Session on February 24, 2022**

**Accessibility Issues:** One person said: “I live in a remote area where there are no local services or resources for Deaf, Deaf-Blind and Hard of Hearing people. I must travel long distances to access the services or resources that I need, such as education, health care, employment, social support, etc. The travel costs are high, and the travel options are limited. There is no subsidy or reimbursement program that can help me cover the travel expenses.” Another person said: “I live in an area where there are frequent power outages due to storms or other causes. The power outages affect my ability to use the devices or equipment that I rely on for communication, information, safety, etc., such as phone, internet, TV, radio, alarm clock, smoke detector, etc. There is no backup generator or battery system that can provide me with continuous power supply during the power outages.”

**Communication Issues:** One person said: “I am Deaf-Blind, and I use braille to read and write. There are very few materials or documents that are available in braille format. Most materials or documents are only available in print format that I cannot access. There is no braille printer or scanner that can convert print materials into braille materials or vice versa. There is no braille library or service that can provide me with braille materials on demand.” Another person said: “I am hard of hearing, and I use cochlear implants to hear. There are very few places or services that have compatible technology or equipment that can connect to my cochlear implants. Most places or services have outdated or incompatible technology or equipment that cannot connect to my cochlear implants. There is no technical support or maintenance service that can help me troubleshoot or fix any problems with my cochlear implants.”

**Safety and Security Issues:** One person said: “I am Deaf-Blind, and I use a support service provider (SSP) to assist me with daily activities. There are very few SSPs who are trained and qualified to provide this service. It is hard to find and book an SSP when I need one. There is no limit on the number of SSPs that I can use at one time. Sometimes I need more than one SSP for different tasks or situations.” Another person said: “I am Deaf, and I use sign language to communicate. Many legal services do not provide me with adequate communication access when I need legal assistance or representation. They do not arrange for an interpreter or use VRS when I request it. They do not explain the legal terms, processes, rights, or obligations clearly. They do not respect my consent or autonomy when they make decisions for me or without me.”

**Training Issues:** One person said: “I am a Deaf person who is also a parent of a Deaf child with special needs. Many education services do not provide me with adequate communication access when I need to communicate with my child’s school or teacher. They do not arrange for an interpreter or use VRS when I request it. They do not provide me with any written reports or information in plain language. They do not involve me in my child’s education plan or progress. Another person said: I am a Deaf person who is also a senior citizen. Many aging services do not provide me with adequate communication access when I need to access the services or resources that are available for seniors. They do not arrange for an interpreter or use VRS when I request it. They do not provide me with any written materials or information in plain language. They do not respect my preferences or needs when they offer me the services or resources.”

**Conclusion**

This report has provided a summary of the activities and processes of the Built Environment Accessibility Committee, as well as some of the barriers and recommendations identified by the DDBHHD+ community in the town hall sessions.

The committee hopes that this report will inform the future work on developing accessibility standards for the built environment for federally regulated organizations under the Accessible Canada Act. The Committee also hopes that their work will raise awareness and understanding of the accessibility needs and experiences of DDBHHD+ people among various stakeholders, such as government officials, service providers, policy makers, researchers, advocates, and others.

## Employment Standards

Deaf people are those who identify themselves as culturally and linguistically Deaf, and those who use sign languages such as American Sign Language (ASL) or Langue des Signes Québécoise (LSQ) as their primary means of communication. Deaf people are not a homogeneous group; they have diverse backgrounds, experiences, and preferences. However, they share a common history of oppression, marginalization, and discrimination by the dominant hearing society.

One of the areas where Deaf people face significant barriers and challenges is employment. According to the Canadian Association of the Deaf-Association des Sourds du Canada (CAD-ASC), the unemployment rate for Deaf people is unacceptably high, and there are few Deaf Canadians employed in the professions and in “high level” or management positions.

While additional research is required, this report aims to examine the situation of Deaf employment in Canada, based on the past information or research provided by the CAD-ASC. It will also discuss some of the viable solutions and recommendations to improve the employability and career advancement of Deaf Canadians.

**Past studies**

The CAD-ASC conducted two formal surveys of Deaf Canadians in 1998 and 2015, with one survey done under the supervision of the retired Chief Statistician of Statistics Canada. The survey collected data on various aspects of Deaf employment, such as income, education, occupation, industry, and accommodation.

Without the weight of official measurements used by Statistics Canada, the methodology and results have been criticized. However, they are repeatedly noted as Canada’s only source of data and the results of these surveys have revealed some alarming facts about the employment status and conditions of Deaf Canadians. At the very least, these numbers show the necessity of including DDBHH people's concerns in future data research on employment. Some of the key findings of these past surveys are:

* Only 20% of Deaf Canadians are fully employed; 42% are under-employed; and 38% are unemployed.
* The unemployment rate for Deaf Canadians increased from 38% in 1998 to 40% in 2015, which is approximately 32% higher than the general unemployment rate.
* The majority of Deaf Canadians are self-employed or short-term contract workers, mostly in the fields of education, social services, technology, and video productions. However, most of them receive low income from their businesses, and only 21% earn over $50,000 per year.
* The Deaf community is its own best employer, as most Deaf workers find work within the Deaf community or by running their own small enterprises. However, this also limits their exposure and career opportunities to work in a non-Deaf society.
* Deaf representation in the professions and in “high level” positions is almost non-existent. There are only a handful of Deaf lawyers, doctors, psychologists, university professors, corporate executives, and government officials in Canada.
* Most of the institutions and agencies that serve Deaf people are run by non-Deaf people who often make decisions without consulting or involving Deaf people.
* The federal government employs only 0.1 percent of its workforce as Deaf people, mostly in menial or temporary positions The bilingual imperative that requires fluency in both English and French excludes many Deaf workers who are fluent in ASL and LSQ.

**Causes and Consequences**

The CAD-ASC identifies three main factors that contribute to the high unemployment and underemployment of Deaf Canadians: hearing patronization, inappropriate educational methodology, and systemic discrimination. Today we would label this as audism.

Hearing patronization refers to the attitude and behavior of hearing people who treat Deaf people as inferior, dependent, or incapable. Hearing patronization often manifests itself in low expectations, overprotection, charity, or pity towards Deaf people. Hearing patronization denies Deaf people their autonomy, dignity, and potential.

Inappropriate educational methodology refers to the lack of recognition and respect for sign languages and Deaf culture in the educational system. Most Deaf students are educated in mainstream schools where they face linguistic and cultural barriers to access information, communication, and socialization. As shown in the recent Carter Churchill 2022 [Newfoundland and Labrador Human Rights Inquiry](https://www.carterchurchill.ca/human-rights-board-of-inquiry-2022.html), many Deaf students do not receive adequate support services such as interpreters or note-takers. Many teachers are not trained or qualified to instruct Deaf students. As a result, many Deaf students drop out of school or graduate with low academic achievement and low self-esteem.

Systemic discrimination refers to the policies and practices that exclude or disadvantage Deaf people in various domains of society. Systemic discrimination often stems from ignorance and a lack of information about Deaf people and their needs. Systemic discrimination creates barriers to communication, accommodation, participation, and inclusion for Deaf people. Systemic discrimination prevents Deaf people from accessing education, employment, health care, justice, media, culture, recreation, and other services and opportunities that are available to hearing people. Systemic discrimination also affects the promotion and career advancement of Deaf workers who face glass ceilings or sticky floors that limit their potential. It violates the human rights and dignity of Deaf people, as well as the principles of the United Nations Convention on the Rights of Persons with Disabilities, which Canada has ratified.

In Canada, and many areas around the world, systemic discrimination begins with Human Rights legislation that allows for exceptions to the guaranteed rights to people with disabilities if the cost of accommodations would cause an “undue hardship” to the landowner, the employer, or the provider of services. Since the federal government does not provide interpreting services to Deaf people who sign in areas of provincial authority or for private enterprises, Deaf people or employers must supply their own. The daily cost of interpreting ot $250 - $500/day quickly becomes a financial hardship for small and medium-sized business owners. This “legal” loophole limits the job opportunities for thousands of Deaf Canadians – who have little or no recourse when faced with a legitimate “undue hardship” argument.

This high unemployment and underemployment of Deaf Canadians have profound consequences for both the Deaf community and the Canadian society. Some of the consequences are:

* *Economic*: Deaf unemployment and underemployment result in a loss of income, productivity, and tax revenue for the individuals, the community, and the country. Deaf unemployment and underemployment also increase the dependency and poverty of Deaf people, who can only dream of home ownership, and often must rely on social assistance or charity to survive. Deaf unemployment and underemployment also waste the human capital and talent of Deaf people, who could contribute to the economic development and innovation of Canada.
* *Social*: Deaf unemployment and underemployment affect the social status, identity, and integration of Deaf people. Deaf unemployment and underemployment may lead to a loss of self-confidence, self-respect, and self-worth for Deaf people. Deaf unemployment and underemployment may also cause social isolation, alienation, or marginalization of Deaf people from both the Deaf community and the hearing society. Deaf unemployment and underemployment may also increase the risk of mental health problems, substance abuse, or criminal behavior among Deaf people.
* *Cultural*: Deaf unemployment and underemployment threaten the survival and vitality of sign languages and Deaf culture. Deaf unemployment and underemployment may reduce the opportunities and resources for Deaf people to use, learn, teach, and transmit sign languages and Deaf culture to future generations. Deaf unemployment and underemployment may also undermine the recognition and respect for sign languages and Deaf culture by the hearing society, both domestically and across the world.

**Solutions and Recommendations**

The CAD-ASC proposes some viable solutions and recommendations to improve the employment situation of Deaf Canadians. Some of these are:

* Strengthening both federal and provincial employment equity legislation to counter the effect of undue hardship on employers and employees.
* Information and research campaigns to eliminate business concerns about the cost of accommodation, i.e., the establishment of a cost-shared national Video Remote Interpreting for federal, provincial, and municipal workers.
* Funding for the Deaf community – specifically Deaf-run, Deaf-controlled organizations, and businesses – to enable it to create Deaf environments that would increase the employment experience, skill sets and economic status of Deaf people.
* Establishing a committed partnership between governments and Deaf organizations to work together to help Deaf Canadians become more employable, and especially to move more of them into professional and executive positions.
* Federal and provincial employment programs must move their emphasis away from creating training opportunities and towards creating job opportunities instead.
* The federal government must set an example by drastically increasing the percentage of its own workforce that is Deaf, especially at the executive and policy levels. This can be done by establishing quotas and establishing different criteria for Deaf people lacking experience or job-related experience.
* Most especially, Deaf people must be put in control of their own institutions, including schools and service agencies.

In addition to these recommendations by the CAD-ASC, some further actions that could be taken by various stakeholders to address the issue of Deaf employment in Canada. These are:

* Statistics Canada should collect data about unemployment figures for Deaf people who sign, as well as data about accommodation needs – not disability. This would provide more accurate and reliable information about the situation and needs of Deaf workers in Canada and the costs to government in supplying those accommodations.
* Human rights legislation should allow for discrimination only when the accommodation would cause undue hardship for employers. Since interpreting costs could be considered as undue hardship, alternative forms of accommodation should be explored, such as video remote interpreting (VRI) or communication access real-time translation (CART). The federal government should make these services available for Deaf people when they apply for or work in non-Deaf workplaces, since private enterprises continue to discriminate against Deaf people who sign, Deaf people gain no experience in the job market, compared to their hearing counterparts, besides menial and blue-collar jobs. Without valuable experience, Deaf people cannot compete for government jobs with able-bodied individuals who can gain experience accommodation-free. Therefore, more efforts should be made to create mentorship programs, internship opportunities, or career counseling services for Deaf students and graduates who aspire to enter professional or high-level fields.
* Some members during the consultations spoke of the new opportunities that were provided to Deaf, Deaf-Blind and others because of the smart phone. This “interpreter-in-a-pocket” is a new way of accommodating Deaf and Deaf-Blind employees and people into society. Some argued that this was an obligation to the federal government to provide this tool to all Deaf Canadians. Such a tool could be established nationwide on a cost-recovery and cost-sharing basis to allow smaller and medium-sized businesses to be used in a way that would not cause major financial hardship but finally make the employment inclusive.

Education is a key factor in improving the employability and career advancement of Deaf Canadians. Therefore, more resources should be invested in providing quality education for Deaf students at all levels that respects their linguistic and cultural diversity. This includes ensuring access to sign language instruction, bilingual education programs, qualified teachers, interpreters, note-takers, curriculum materials, extracurricular activities, academic support services, career guidance services, etc. Moreover, education should also promote the awareness and appreciation of sign languages and Deaf culture among hearing students, teachers, and administrators, as well as the public. This would foster a more inclusive and respectful environment for Deaf learners and workers. To that end:

* The government should explore the establishment of higher learning and post-secondary opportunities for Deaf and Deaf-Blind, as well as sign language interpreters through the establishment of post-secondary campuses that would foster Deaf environments in ASL, LSQ and ISLs.
* The government should enhance existing language training programs within the federal government to include American Sign Language, Langue des Signes Québécois, and Indigenous Sign Language. This complements the first recommendation by offering practical avenues for Deaf and Deaf-Blind Canadians to learn and use these languages in a professional setting.
* Information access should be streamlined, to develop a centralized online portal where Deaf and Deaf-Blind Canadians can easily find and access all employment-related information without the need for third-party consent. This builds on the second recommendation by providing a one-stop solution for information access.
* Vocational rehabilitation partnerships should be created. For that, the government should collaborate with existing vocational rehabilitation centers to create specialized programs tailored for Deaf and Deaf-Blind Canadians. This extends the reach and effectiveness of the Vocational Rehabilitation Program mentioned in the third recommendation.
* As part of the policy outlined previously, there should be a standardized checklist included for accommodations that can be used by both employers and employees to ensure all needs are met.
* A ministerial bi-annual review of the separate accessibility standard should be implemented to ensure it stays up to date with technological advancements and best practices.

Conclusion

Deaf employment in Canada is a complex and multifaceted issue that requires the collaboration and commitment of various stakeholders, such as governments, employers, educators, service providers, and Deaf organizations. Deaf people have the right to work and contribute to society on an equal basis with others, without facing discrimination or barriers. Deaf people also have the potential and talent to succeed and excel in various fields and positions, if given the opportunity and support. Improving the employment situation of Deaf Canadians would benefit not only the Deaf community, but also the Canadian society. Therefore, it is imperative that action is taken to address this issue as soon as possible.

## Information and Communication Standards Report

ICT (Information and Communication Technologies) are technologies that enable the creation, transmission, storage and processing of information and communication. ICT includes devices, software, applications, platforms, networks, and systems that are used for various purposes, such as education, entertainment, employment, health care, social media, etc. The report provides examples, barriers and recommendations for ICT accessibility for DDBHH consumers. The report also discusses the accessibility of technologies for employment, procurement and design and delivery of programs and services.

Some of the feedback from the participants on this topic were:

* The need for more accessibility features and standards for ICT that are compatible with the preferences and abilities of DDBHH consumers, such as captioning, sign language interpretation, visual alerts, etc.
* The need for more user testing and feedback from DDBHH consumers on ICT to ensure their usability and functionality.
* The need for more education and training on ICT (Information and Communication Technologies) for DDBHH consumers to increase their digital literacy and skills.
* The need for more accessibility policies and practices for ICT in employment settings to ensure equal opportunities and accommodations for DDBHH employees.
* The need for more accessibility requirements and incentives for ICT in procurement processes to ensure fair competition and innovation among ICT suppliers.
* The need for more accessibility principles and guidelines for ICT in design and delivery of programs and services to ensure inclusion and participation of DDBHH consumers.

**Video Relay Services (VRS) and Video Remote Interpreting (VRI)**

VRS and VRI are two accessible technologies of interpreting that use video communication to connect DDBHH individuals with hearing individuals who do not know sign language. VRS is a service that allows DDBHH individuals to make or receive phone calls through an interpreter who relays the conversation between them and the hearing person. VRI is a service that allows DDBHH individuals to access an interpreter remotely through a video device when they are in a face-to-face situation with a hearing person. The report explains the differences, benefits and challenges of these services and the recommendations for improvement.

Some of the feedback from the participants on this topic were:

* The need for more awareness and education on VRS and VRI among DDBHH consumers, hearing individuals, service providers and policy makers.
* The need for more availability, affordability, and quality of VRS and VRI in Canada, especially in rural and remote areas, during peak hours and in emergency situations.
* The need for more diversity and competency of VRS and VRI interpreters who can work with diverse groups of DDBHH consumers in various settings.
* The need for more oversight of VRS and VRI providers, by Deaf people, to ensure that they are accountable for their performance and compliant with accessibility standards and legislation.

**Accessible Telecommunications and Technologies Funding**

Accessible telecommunications and technologies funding is the financial support provided by governments or other entities to research telecommunications and broadcasting accessibility projects that benefit DDBHH consumers. Accessible telecommunications and technologies funding is essential for developing, implementing, and maintaining accessibility features and standards for technologies used by DDBHH consumers. The report highlights the need for a stable source of funding for telecommunications and broadcasting accessibility projects in Canada. The report also reviews the existing programs and initiatives by ISED (Innovation, Science and Economic Development) and CRTC and proposes new ones to address the gaps.

Some of the feedback from the participants and staff on this topic were:

* The need for more funding and resource allocation for telecommunications and broadcasting accessibility projects aligned with the needs and priorities of DDBHH consumers.
* The need for more consultation and collaboration with DDBHH consumers and organizations on funding and allocation of resources for telecommunications and broadcasting accessibility projects that are inclusive and participatory.
* The need for more innovation and research on telecommunications and broadcasting accessibility projects that are evidence-based and innovative.

The main findings and suggestions of potential projects include, but not limited to:

* The definition and importance of technology accessibility standards for people with communication disabilities, such as DDBHH individuals.
* The factors and challenges that influence technology accessibility standards, such as legislation, policy, regulation, governance, funding, innovation, research, education, training, awareness, etc.
* The comparison and analysis of technology accessibility standards across different countries, regions, sectors, domains, contexts, etc.
* The examples and interests of emerging and technologies for DDBHHD+ consumers, such as virtual wayfinding, emergency visual alerting, home kits, vibration alerts, captioned telephone services, video communications, sign language in gaming, braille technologies, interpreting technologies, and augmentative or assistive devices for communication.

The recommendations for improving technology accessibility standards in Canada based on the literature review as well as the feedback from the survey analysis.

Some of the key recommendations are:

* To create a national framework for technology accessibility standards that is consistent, comprehensive, and coordinated across various levels of government and stakeholders.
* To adopt a human rights-based approach to technology accessibility standards guided by the principles of universality, equality, non-discrimination, participation, accountability, and empowerment without limitation based on undue hardship.
* To implement the UN Convention on the Rights of Persons with Disabilities (CRPD) and the Accessible Canada Act (ACA) as the legal and policy bases for technology accessibility standards in Canada.
* To establish a national body or mechanism that is responsible for developing, implementing, and monitoring technology accessibility standards in Canada.
* To allocate adequate and sustainable funding and resources for technology accessibility standards in Canada.
* To foster innovation and research on technology accessibility standards in Canada.
* To enhance education and training on technology accessibility standards in Canada.
* To raise awareness and advocacy on technology accessibility standards in Canada.

## Technologies Standards

**Technology Accessibility Standards for Deaf, Deaf-Blind and Hard of Hearing Canadians**

This section summarizes the feedback from three virtual town hall sessions hosted by the Technologies Accessibility Standards Committee in March 2023. The sessions aimed to gather input from Deaf, Deaf-Blind and Hard of Hearing (DDBHH) individuals on the current and future technology accessibility standards in Canada. It covers eight topics that were discussed in the sessions, as well as the overall recommendations for improving technology accessibility for DDBHH Canadians.

**Diversity and Inclusion in the Deaf Community**

The Deaf community is not a homogeneous group, but a diverse and vibrant one that includes people from diverse backgrounds, cultures, languages, identities, and experiences. The report acknowledges the importance of diversity and inclusion in the Deaf community, especially for Indigenous, Black, Persons of Colour and those with other identities, such as in the 2SLGBTIQA+ community. The report also recognizes the intersectionality of oppression and discrimination that these groups face, and the need for more representation, empowerment, and support.

Some of the feedback from the participants on this topic were:

* The need for more awareness and education on diversity and inclusion in the Deaf community, both within and outside of it.
* The need for more resources and services that are culturally appropriate and accessible for diverse groups within the Deaf community, such as Indigenous sign languages, Black ASL, LSQ for Francophones, etc.
* The need for more collaboration and solidarity among diverse groups within the Deaf community and with other disability groups and allies.
* The need for more research and data on the demographics and needs of diverse groups within the Deaf community.

**Deaf-Blind as a Dual Disability**

Deaf-Blindness is a dual disability that affects both hearing and vision. Deaf-Blind individuals have varying degrees of hearing and vision loss and use different modes of communication depending on their preferences and abilities. The report highlights the challenges and solutions for communication access for Deaf-Blind individuals.

Some of the feedback from the participants on this topic were:

* The need for more recognition and respect for Deaf-Blind individuals as a distinct group with unique needs and rights.
* The need for more funding and availability of communication access services and devices for Deaf-Blind individuals, such as Communication Facilitators, Intervenors, Interpreters and Braille Devices.
* The need for more training and certification of communication access providers for Deaf-Blind individuals, such as Communication Facilitators, Intervenors, Interpreters and Braille Devices.
* The need for more accessibility features and standards for technologies that are compatible with communication access services and devices for Deaf-Blind individuals.

**Interpreter Training**

Interpreters are essential for facilitating communication between DDBHH individuals who sign and people who do not. Interpreters use different sign languages or modes of communication depending on the preferences and abilities of DDBHH individuals. The report emphasizes the need for more ASL and LSQ interpreters in Canada. and addresses the issues of cultural competency, safe space, and funding for interpreter students, especially Indigenous, Black, and Persons of Colour.

Some of the feedback from the participants on this topic were:

* The need for more interpreter training programs that are accessible, affordable, and inclusive for diverse groups of students who want to become interpreters.
* The need for more scholarships, bursaries, and grants that support interpreter students financially during their studies.
* The need for more mentorship, supervision and professional development opportunities that enhance interpreter students’ skills and confidence.
* The need for more cultural competency training that prepares interpreter students to work with diverse groups of DDBHH individuals in various settings.
* The need for more safe space policies that protect interpreter students from harassment, discrimination, and violence.

## Indigenous Accessibility Standards

This report presents the findings and recommendations of the Indigenous Accessibility Standards Committee, which was established to conduct research on the accessibility barriers that impact the deaf Indigenous community in Canada. The committee consists of deaf Indigenous people from different regions and backgrounds, who have shared their perspectives and experiences on the issues of language, culture, and accessibility.

The main goal of the research is to offer a perspective on how to implement the spirit of truth and reconciliation with the deaf Indigenous community, and to ensure that they are included and respected in the vision of an inclusive and accessible Canada. The report also aims to highlight the importance of preserving and promoting the Indigenous sign languages (ISLs), which are part of the linguistic and cultural diversity of Canada.

The report is divided into three sections:

The first section provides an overview of the legal and policy frameworks that support the rights and needs of the deaf Indigenous community, such as the Accessible Canada Act (ACA), the Indigenous Languages Act (ILA), the Truth and Reconciliation Commission of Canada – Calls to Action (TRC), and the Implementing the United Nations Declaration on the Rights of Indigenous Peoples Act (UNDRIP).

The second section summarizes the main themes and insights that emerged from the town hall session that was held with the deaf Indigenous community members on February 11, 2023. The town hall session was an opportunity for the committee to collect stories and recommendations on improving accessibility standards in the Indigenous communities in Canada. The session covered three topics: ISLs and preserving history, resources and federal government, and accessibility and Indigenous communities.

The third section presents a series of recommendations for the federal government based on the findings from the town hall session. The recommendations address various aspects of accessibility, such as language, education, health, media, internet, interpretation, participation, and legislation.

The report concludes with a call for action for the federal government to take concrete steps to improve the quality of life and accessibility for the deaf Indigenous community in Canada, and to honour its commitments to uphold their rights and dignity.

**Legal and Policy Frameworks**

The Deaf Indigenous community in Canada faces multiple and intersecting barriers that affect their access to information, services, and opportunities. These barriers are rooted in the historical and ongoing oppression, colonization, and marginalization of both Indigenous and deaf people in Canada. To address these barriers, the federal government has enacted several legal and policy frameworks that support the rights and needs of the deaf Indigenous community, such as:

* The Accessible Canada Act (ACA) aims to create a barrier-free Canada by identifying, removing, and preventing accessibility barriers in areas under federal jurisdiction, such as transportation, broadcasting, telecommunications, banking, and federal government services. The ACA also establishes the then Canadian Accessibility Standards Development Organization (CASDO), which was responsible for developing and revising accessibility standards in consultation with persons with disabilities, including deaf people.
* The Indigenous Languages Act (ILA), which received royal assent on June 21, 2019, recognizes the rights of Indigenous peoples to use and maintain their languages, and supports the efforts to reclaim, revitalize, strengthen, and maintain Indigenous languages in Canada. The ILA also establishes the Office of the Commissioner of Indigenous Languages, which is mandated to promote Indigenous languages and provide funding for language initiatives.
* The Truth and Reconciliation Commission of Canada – Calls to Action (TRC), which was released on December 15, 2015, is a document that contains 94 recommendations to redress the legacy of residential schools and advance the process of reconciliation with Indigenous peoples in Canada. The TRC calls on the federal government to implement various measures to protect and promote Indigenous languages, cultures, and rights, such as providing adequate funding for language programs, implementing the UNDRIP, and ensuring equitable access to education, health care, and justice for Indigenous peoples.
* The United Nations Declaration on the Rights of Indigenous Peoples Act (UNDRIPA), which received royal assent on June 16, 2021, affirms the UNDRIP as a universal international human rights instrument with application in Canadian law. The UNDRIP is a declaration that recognizes the rights of Indigenous peoples to self-determination, lands, territories, resources, cultures, languages, and identities. The act requires the federal government to take measures to ensure that the laws of Canada are consistent with the UNDRIP, and to develop an action plan to achieve its objectives.

These legal and policy frameworks provide a foundation for advancing the accessibility and inclusion of the deaf Indigenous community in Canada. However, they also have some limitations and challenges that need to be addressed. For example:

The ACA (Accessible Canada Act) does not explicitly recognize or include ISLs (Indigenous Sign Languages) as official languages of communication for deaf Indigenous people in Canada but does recognize them as primary languages, alongside ASL and LSQ, for communication by deaf persons in Canada. ISLs is not specifically mentioned in the ILA (Indigenous Language Act). Therefore, it will not receive adequate recognition or support from the federal government.

The ILA does not adequately address the needs and challenges of deaf Indigenous people who use ISLs as their primary or preferred language. The ILA focuses on spoken Indigenous languages and does not include any specific provisions or funding for ISLs. Moreover, the ILA does not acknowledge or address the impact of residential schools on ISLs. Many deaf Indigenous children were forcibly removed from their families and communities and sent to residential schools, where they were forbidden to use ISLs or any form of sign language. This resulted in the loss or erosion of ISLs among generations of deaf Indigenous people.

The TRC does not sufficiently address the issues of accessibility and inclusion for deaf Indigenous people in Canada. The TRC mentions deaf people only once in its calls to action (#23), which calls on the federal government to increase the number of health professionals who can provide services in ASL or LSQ. However, this does not reflect the diversity and complexity of communication needs among deaf Indigenous people who may use ISLs or other sign languages. Furthermore, the TRC does not include any specific recommendations or actions for improving accessibility standards in areas such as education, media, internet, interpretation, or participation for deaf Indigenous people.

The UNDRIP does not explicitly mention or include deaf Indigenous people or ISLs as part of its scope or objectives. The UNDRIP recognizes the rights of Indigenous peoples to use their languages as a medium of instruction in education, to access information in their languages through media, and to participate in decision-making processes that affect them. However, these rights are not explicitly extended or applied to deaf Indigenous people who use ISLs or other sign languages. Moreover, the UNDRIP does not address the specific barriers or challenges that deaf Indigenous people face in exercising their rights, such as the lack of qualified interpreters, the low literacy rates, or the limited access to technology.

These limitations and challenges indicate that there is a need for more research, consultation, and collaboration among the federal government, the deaf Indigenous community, and other stakeholders to ensure that the legal and policy frameworks are inclusive and responsive to the needs and aspirations of the deaf Indigenous community in Canada.

**Recommendations**

Based on the findings from the town hall session, the committee has developed a series of recommendations for the federal government to improve the accessibility and inclusion of the deaf Indigenous community in Canada. The recommendations are as follows:

**Language:** The federal government should recognize and include ISLs as official languages of communication for deaf Indigenous people in Canada, and provide adequate funding and support for ISLs revitalization, preservation, and promotion. The federal government should also consult with the deaf Indigenous community and the Office of the Commissioner of Indigenous Languages to develop and implement an ISLs legislation that incorporates the principles and objectives of the ACA, the ILA, the TRC, and the UNDRIP.

**Education:** The federal government should support deaf Indigenous children right to access a quality education in their own languages and through their own cultures. The federal government should meet its obligations to provide the appropriate resources and accommodations to meet their learning needs. The federal government should also support the development and delivery of ISLs programs and courses at the post-secondary level and provide access, through their communities, to scholarships and bursaries for deaf Indigenous students who wish to pursue higher education.

**Health:** The federal government should improve the accessibility and availability of health care services for deaf Indigenous people, especially in remote communities. The federal government should also provide training and awareness programs for health care professionals on how to communicate effectively with deaf Indigenous people using ISLs or other sign languages. Moreover, the federal government should ensure that deaf Indigenous residential school survivors have access to culturally appropriate and trauma-informed mental health services and supports.

**Media:** The federal government should support the creation and dissemination of media content in ISLs or other sign languages, such as news, documentaries, podcasts, and social media by and for Indigenous communities. The federal government should also ensure that all media content produced or funded by the federal government is accessible to deaf Indigenous people through captioning, interpretation, or translation. Furthermore, the federal government should facilitate the participation and representation of deaf Indigenous people in the media industry.

**Internet:** The federal government should expedite the implementation of its policy to bring high-speed internet service to all Indigenous communities in Canada, and ensure that the internet service is affordable, reliable, and secure. The federal government should also ensure that all federal government websites are accessible to deaf Indigenous people through sign language videos, plain language text, or other means. Additionally, the federal government should support the development and use of digital tools and platforms that enhance the communication and collaboration among deaf Indigenous people using sign languages.

**Interpretation:** The federal government should support the development and provision of ISLs interpretation services for deaf Indigenous people in Canada, especially in remote communities, including standards and guidelines for ISLs interpreters as well as training and certification programs for them. Moreover, the federal government should ensure that ISLs interpreters are available and accessible for deaf Indigenous people who need them in various settings, such as education, health care, justice, employment, or social services.

**Participation:** The federal government should ensure that deaf Indigenous people have equal opportunities to participate in decision-making processes that affect them at all levels of government. The federal government should also consult with the Deaf Indigenous community on matters related to accessibility, inclusion, language, culture, and rights. Furthermore, the federal government should support the empowerment and leadership of deaf Indigenous people in their communities and in society at large.

**Legislation:** The federal government should review and amend its existing legislation to ensure that it is consistent with the rights and needs of deaf Indigenous people in Canada. The federal government should also enact new legislation that addresses the specific issues and challenges that deaf Indigenous people face in Canada. Moreover, the federal government should monitor and report on its progress and compliance with its legal obligations under the ACA, the ILA, the TRC, and the UNDRIP.

These recommendations are not exhaustive or definitive, but rather indicative of some of the key areas that need attention and action from the federal government. The committee hopes that these recommendations will serve as a starting point for further dialogue and collaboration among the federal government, the Deaf Indigenous community, and other stakeholders to achieve a more accessible and inclusive Canada for all.

**Conclusion**

The Deaf Indigenous community in Canada deserves to have their languages, cultures, and rights respected and protected by the federal government. This report has shown that there are many accessibility barriers and challenges that prevent them from fully participating and benefiting in society. The report has also suggested some viable solutions and actions that the federal government can take to improve the accessibility and inclusion of the deaf Indigenous community in Canada. The committee urges the federal government to act on these recommendations and to collaborate with the deaf Indigenous community and other stakeholders to achieve a more accessible and inclusive Canada for all.

# Overall Conclusion

The three-year project was designed to explore and address key challenges in accessibility and inclusion, with a focus on the Deaf community in Canada. This report will be submitted to Accessibility Standards Canada (ASC) to inform future action plans such as the development of standards under the ACA. These plans are expected to be in line with the federal government's vision for an accessible Canada by 2040. While the project has provided valuable insights and recommendations, it is important to acknowledge that the ASC could always benefit from further research is essential for a comprehensive understanding of the issues.

One of the primary challenges or issues encountered was the level of sign language access. Although most committee members were fluent in American Sign Language (ASL) or Langue des Signes Québécoise (LSQ), there were some with limited fluency caused by language deprivation in their early educational years or other reasons. This created communication barriers but also offered different perspectives. Various methods such as fingerspelling, texting, and voice interpreting were employed to overcome these barriers. Additionally, the use of interpreters facilitated communication between ASL and LSQ signers, although this introduced logistical challenges related to scheduling.

Another challenge was the limited diversity within the committees. Despite efforts to make the recruitment process inclusive, committee members were mostly white, heterosexual, culturally Deaf, and ASL signers. To address this, the committees actively sought consultations from individuals of diverse backgrounds, including Deaf Indigenous people, persons of color, Deaf-Blind individuals, women, and members of the 2SLGBTQIA+ community. Their feedback was integrated into the reports to ensure a more comprehensive set of recommendations.

The initial timeline for the project was found to be insufficient. Initially, each committee was expected to contribute their voluntary time over four months. However, various phases of the project, from recruitment to research and report writing, required more time than initially estimated. This led to the conclusion that a more realistic time for such a project would be between six months to a year.

The final challenge was the project's limited geographic scope. Most committee members were from populous areas like Ontario and British Columbia, with little or no representation from the Atlantic and northern areas. This skewed geographic distribution limited the opportunity to gather diverse perspectives from across Canada. Future efforts should aim for broader geographic representation to ensure a more comprehensive understanding of accessibility issues.

Overall, the project was a learning experience, revealing both successes and areas for improvement. While this report serves as a valuable starting point, it should not be considered the final word on accessibility standards in Canada. Further research and consultations are needed to deepen our understanding of the issues facing the Deaf community. Through the support of Accessibility Standards Canada, it is expected that future regulations will be improved in accordance with the needs of the Deaf community and the recommendations outlined in this report will continues with the input and guidance of the Deaf, Deaf-Blind and Hard of Hearing signing communities.

“Nothing about us without us.”

# Recommendations of CAD-ASC Accessibility Standards Project

## Emergency Accessibility Standards Recommendations

1. The federal and provincial governments should align on emergency alerting systems and ensure consistent and accessible delivery of alerts to Deaf, Deaf-Blind and Hard of Hearing Canadians. This would prevent confusion, frustration, and danger for those who are left out of critical information during emergencies. This report has cited examples of how different provinces have various levels of accessibility for emergency alerts, such as Wireless Public Alerts (WPA) or Alert Ready.
2. The government should provide accessible communication options for Deaf, Deaf-Blind and Hard of Hearing Canadians to contact 9-1-1 and other emergency services. Specifically, this would include Text with 9-1-1 (T9-1-1), Real-Time Text 9-1-1 (RTT 9-1-1), Video Relay Services (VRS), IP Relay Services and TTY. The document explains how each of these options works and their advantages and disadvantages. The document also mentions the timelines for implementing RTT 9-1-1 and Next Generation 9-1-1 (NG 9-1-1) in Canada.
3. The government should ensure that data plans for sign language users are affordable and adequate for emergency situations. This would allow Deaf, Deaf-Blind and Hard of Hearing Canadians to access information and communication through videos, apps, and social media during emergencies. Sign language users consume more data than average users (due to the increase reliance on videos) and often pay more for extra data usage.
4. The government should provide accessible transportation options for Deaf, Deaf-Blind and Hard of Hearing Canadians during emergencies. This would include accessible signage, announcements, alerts and staff training for air, marine and land transportation. This report has provided real life examples of how Deaf, Deaf-Blind and Hard of Hearing Canadians face barriers and challenges when travelling during emergencies, such as ferry cancellations, flight delays or evacuations.
5. The government should ensure that procurement goods and services are accessible for Deaf, Deaf-Blind and Hard of Hearing Canadians during emergencies. This would include providing sign language interpreters, captioning, visual alarms, assistive devices and other accommodations for emergency shelters, food banks, health care facilities and other essential services.
6. The government should ensure that built environments are accessible for Deaf, Deaf-Blind and Hard of Hearing Canadians during emergencies. This would include designing buildings and spaces that are safe, inclusive, and barrier-free for people with different sensory needs.
7. The government should provide accessible education and training on disaster and emergency preparedness for Deaf, Deaf-Blind and Hard of Hearing Canadians. This would include providing information in sign language, plain language, visual formats, and other accessible formats on how to prepare for, respond to and recover from emergencies. The committee emphasized the need for culturally appropriate and community-based education and training programs that address the specific needs and experiences of Deaf, Deaf-Blind and Hard of Hearing Canadians.
8. The government should support and promote research on accessible emergency standards for Deaf, Deaf-Blind and Hard of Hearing Canadians. This would include funding innovative research projects that identify, remove, and prevent accessibility barriers during emergencies. This report recommends collaborating with national disability organizations, academic institutions, industry partners and other stakeholders in conducting research on accessible emergency standards.
9. The government should monitor and evaluate the implementation and impact of accessible emergency standards for Deaf, Deaf-Blind and Hard of Hearing Canadians. This would include collecting data, feedback and evidence on the effectiveness and outcomes of accessibility standards during emergencies including the use of VRS by Deaf people and first responders. The committee suggests using indicators such as accessibility complaints, satisfaction levels, response times, survival rates and recovery rates to measure the impact of these standards.

## Built Environment Standards Recommendations

1. The Accessibility Standards for buildings should provide access through sign language, braille, and text alert systems. This would enable Deaf, DeafBlind, Hard of Hearing, and Deaf Disabled (DDBHHD+) persons to access information and services in public buildings.
2. Federally regulated employers should give the appropriate assistive technology devices and products to employees who are DDBHHD+. This would enhance their communication and productivity in the workplace.
3. An emergency warning and alert system(s) must be installed in all federally regulated transportation hubs, especially airports and terminals. This system would ensure that DDBHHD+ persons receive crucial warnings independently and can take appropriate actions in serious situations.
4. Staff should accommodate DDBHHD+ clients in public situations by wearing clear/transparent masks to communicate efficiently. This would reduce the communication barriers caused by wearing masks that cover the mouth and facial expressions.
5. Interpreting services must be ensured to provide ASL-English interpreters for all accessibility in each area, with excellent quality and specialization for legal and medical situations. This would uphold the linguistic rights and dignity of DDBHHD+ persons who use sign language as their primary mode of communication.
6. All workplaces should have mandated regular training: at three months, six months, and annually for all hearing supervisors, coordinators, and staff about Deaf awareness, sign language lessons and employment accommodations. This would foster a more inclusive and accessible workplace environment for DDBHHD+ employees.
7. Visioguides for DDBHHD+ persons should be available to anyone who wishes to enter a museum, a monument, a parliamentary site, a scenic spot, etc. Visioguides, as opposed to audio guides, are devices that provide information and guidance in sign language with subtitles for each space to be visited.
8. The federal government should develop policies and standards for public buildings that adapt their receptions, staffing and security procedures to ensure that access to interpreters, and government staff that are Deaf and/or can communicate fluently in sign language. This would improve communication and interaction with DDBHHD+ people who visit or work in public buildings.
9. Visibly adapted pictograms should be installed at every entrance to any federal building to assist any DDBHHD+ person to orient themselves properly in Canada’s built environment to access an ASL/LSQ interpreter or staff. This would make it easier for them to find the information and services they need.
10. ASL/LSQ video clips should be included in any interactive map of every federal building, Via Rail station, international airport, public port facility, etc. This would provide visual information and directions in sign language for DDBHHD+ persons who navigate these spaces.

## Employment Standards Committee Recommendations

1. Strengthening both federal and provincial employment equity legislation to counter the effect of undue hardship on employers and employees. As well as providing information and research campaigns to eliminate business concerns about the cost of accommodation, i.e., the establishment of a cost-shared national Video Remote Interpreting for federal, provincial, and municipal workers.
2. Funding for the Deaf community – specifically Deaf-run, Deaf-controlled organizations, and businesses – to enable it to create Deaf businesses and environments that would increase the employment experience, skill sets and economic status of Deaf people.
3. Establishing a committed partnership between governments and Deaf organizations to create program and job opportunities to help Deaf Canadians become more employable, and especially to move more of them into professional and executive positions. Most importantly, Deaf people must be put in control of their own institutions, including schools and service agencies.
4. The federal government must set an example by drastically increasing the percentage of its own workforce that is Deaf, especially at the executive and policy levels. This can be done by establishing quotas and establishing different criteria for Deaf people lacking experience or job-related experience.
5. Include American Sign Language, Langue des Signes Québécois, and Indigenous Sign Language as official rather than primary languages of communications to provide Deaf and Deaf-Blind Canadians with stronger support and options within areas of federal authority.
6. Waive the third-party consent requirements to allow Deaf and Deaf-Blind persons to access vital information when communicating through VRS. This recommendation aims to remove accessibility barriers and allow Deaf and Deaf-Blind Canadians to access information that may assist them in obtaining employment and financial information through banks, credit card companies and the federal government (e.g., Canada Revenue Agency).
7. Support Deaf and Deaf-Blind Canadians in obtaining and maintaining gainful post-secondary education for full employment through full accessibility. This recommendation recognizes the need for vocational rehabilitation support throughout their educational and early career development. To achieve equitable and accessible opportunities, the government should explore the establishment of Deaf-led post-secondary educational institutions within Canada that would support further education in ASL, LSQ and ISLs, including interpreter training programs.
8. Explore the possibility of federally funded VRI services that small and medium sized employers could use at a reduced or shared cost. This recommendation emphasizes the need for policies that cover all accommodation requirements for all Canadians and would remove the burden of financial hardship and ensure the employability of Canadians rather than the legal discrimination of them.
9. Review the need for HR policy changes and staff training to support Deaf and Deaf-Blind Canadians' employability and career advancement within the federal government and its crown corporations. The review should take into consideration the barriers faced by Deaf and Deaf-Blind people while seeking educational and employment options in the private sector. These recommendations can lead to a more inclusive and equitable workplace for all federal employees, as well as all Canadians.

## Information and Communication Standards Recommendations

1. **Culture**: The Government of Canada should acknowledge and address the language deprivation and eugenic ideology that have harmed the Deaf community, and fund research and education on Deaf culture and language. This recommendation aims to promote the recognition and respect of sign languages as official languages in Canada, and to end the audist policies that deny Deaf children access to their first language.
2. **Deaf-Blind/Deaf-Plus:** The government should introduce stricter mandates for improved accuracy and adjustability of subtitles for video platforms and provide resources for improved access to communication facilitators and training on Deafness. This recommendation seeks to improve the accessibility and inclusion of Deaf-Blind and Deaf and disabled individuals, who have additional needs and challenges beyond those of the Deaf able-bodied community.
3. **Aviation**: The government should encourage EIDAR (Equity, Inclusion, Diversity, Anti-Racism) training for all stages of a person's interaction with the aviation transportation sector and provide on-site WPA (Wireless Public Alerting) for urgent announcements, change in flights or gate locations. The government should also provide video instructions in ASL/LSQ (American Sign Language/ Langue des signes Québécoise) and subtitles for pilot announcements. This recommendation aims to enhance the safety and comfort of Deaf travelers, who often face communication barriers and discrimination in airports and flights.
4. **International Travel**: The government should work with the aviation transportation sector, the CRTC, and Immigration, Refugee and Citizenship Canada to ensure that international travellers have access to sign language services while outside Canada in emergency situations. Identification and access to VRS services should be identified on a traveler's ticket or passport to alert foreign custom officers, military, police, embassy personnel or ticket agents of the availability of ASL or LSQ interpretation for our Canadian citizen worldwide.
5. **Elections**: Elections Canada should provide funds to parties for interpretation access under the ACA (Accessible Canada Act) for sign language interpreters. Elections Canada should also work with Chief election clerks to ensure accessible all candidate debates in every federal election riding and introduce video interpreting technology at “accessible” polling and advance polling station, if not each polling location during elections. This recommendation intends to increase the political participation and representation of Deaf voters as well as candidates, who have limited access to information, communication, the electors, the media, and even other candidates during the debates and elections.
6. **Media outreach:** The government should include sign language copies for all public releases in accordance with ACA's recognized languages and have a sign language interpreter standing beside them for all ministers' announcements with the media involved. Heritage Canada should revise its funding of CBC and Radio-Canada to ensure ASL and LSQ interpreting of Canadian news as well as ensure Deaf programming and content in the Canadian film and media industry. Thes recommendations strive to improve the information dissemination and transparency of the government to the public, as well as ensure access to Canadian news and information to those who rely on sign language as their primary mode of communication.
7. **Outreach platforms**: The CRTC (Canadian Radio-television and Telecommunications Commission) should require all platforms wishing to offer on-demand videos to provide accurate captioning in English and French, including the lyrics for songs played during these videos. The CRTC should also mandate improved abilities for video platforms streamed in Canada for adjustable subtitles. This recommendation aims to enhance the accessibility and quality of online video content for Deaf viewers, who depend on subtitles for comprehension.
8. **Justice**: The Government of Canada should direct the federal prison system to review accessibility issues with a focus on communications needs. This review will maintain safety concerns but include compliance with the ACA as it goals. At the very least, it should update its communication system to allow video interpreting and video communications through a secure, verified third-party provider for prisoners and their family and visitors. The Government of Canada should also provide accessibility training to correctional services staff and provincial counterparts on how Deaf suspects and prisoners are to be treated at all stages of custody. This recommendation seeks to protect the rights and dignity of Deaf individuals in the justice system, who often face discrimination, lack of counselling and rehabilitative services and enforced isolation due to communication barriers and lack of access to accessible services.
9. **International Relations:** The government should provide interpreters upon request in ASL/LSQ or International Sign language for immigration/refugee claimants. During the immigration process, Canada should consider fluency in ASL/LSQ as knowledge of an official language in Canada. The government should also provide ASL/LSQ videos on the Global Affairs website to assist Deaf people seeking to immigrate to Canada and consider expanding the settlement worker program to include Deaf workers fluent in ASL/LSQ. This recommendation intends to facilitate the integration and settlement of Deaf immigrants/refugees in Canada, who may face linguistic and cultural challenges due to their hearing loss.
10. **Health**: The government should mandate equitable access to sign language services and consider it on par with speech and other types of restorative hearing therapy. The government should fund assistive devices programs and provide ASL/LSQ interpretation upon request for health service providers. The government should also fund a National Deaf Patient Advocacy program to improve access for Deaf individuals and parents of Deaf children to receive and comprehend their medical care and options. This recommendation aims to improve the health outcomes and quality of care for Deaf patients, who often encounter communication difficulties and misunderstandings and isolationism in the health sector.
11. **Canada Revenue Agency:** The government should hire Deaf individuals to work with Deaf citizens in ASL/LSQ and modify the employment requirements for bilingualism to include knowledge of English or French and ASL or LSQ. The government should also create a website with answers to frequent questions, including fraud and fraud awareness, in ASL and LSQ. This recommendation intends to increase the financial literacy and security of Deaf taxpayers, who may face challenges in accessing and understanding tax information and services.
12. **Emergency**: Wireless Public APA should include a link to an ASL/LSQ video or interpreting service, does not impact the user’s data, and is done with a Deaf Interpreter, where possible. This recommendation strives to enhance the emergency preparedness and response for Deaf individuals, who may not receive or understand urgent alerts through conventional means.
13. **Sign Language Interpretation Service**: The government should adopt a diverse base of interpreters and initiate a drive to locate interpreters to boost diversity and expand the pool of interpreters if necessary. The government should also provide additional resources to educating and training BIPOC (Black, Indigenous, Persons of Color) interpreters, and research into methods necessary to create a safe space for them. This recommendation seeks to promote the equity and inclusion of diverse Deaf communities in Canada.
14. **Technology**: The government should periodically review technologies to determine if policies align with accessibility standards and consult with the appropriate Deaf community while doing so. The government should also widen its scope when considering the need for accessibility standards for the Deaf Community, and recognize the technological accessibility needs of the Deaf-Blind community and the Deaf-Plus community may differ from those of the Deaf community. This recommendation aims to ensure that the government keeps up with the rapid evolution of technology and its impact on the accessibility and inclusion of Deaf individuals in various domains.

## Technologies Standards Recommendations

1. **Accessibility and DDBHH Inclusion Mindset**: The report recommends that Accessibility Standards Canada, the Ministry of Heritage, the Ministry of Innovation Science and Economic Development, and the Disability Inclusion Business Council take various actions to enhance and protect the rights of DDBHH consumers in relation to accessible technologies and applications.
2. **Improving Access to Employment in ICT sector:** This means removing barriers to education and training; providing mentorship and networking programs; promoting DDBHH role models and success stories; ensuring fair hiring practices; accommodating diverse communication needs; fostering a culture of respect and inclusion; and other similar measures.Employers should measure and meet employment quotas for DDBHH staff.
3. **Accessibility Business Strategy:** Ensure that federal government procurement processes for technology goods and services are accessible and inclusive for DDBHH Canadians. The strategy should include accessibility criteria in tender documents, evaluation processes, contracts, and monitoring mechanisms. It should also involve consultation with DDBHH stakeholders and experts and training and awareness-raising for procurement officers. Creating fair opportunities and specific measures for DDBHH-owned businesses to qualify for procurement tender opportunities, such as setting aside separate tender groupings, awarding higher points or credits, and appointing ASL and LSQ business representatives.
4. **Audio and Visual Information Equity**: The report recommends that the federal government ensure equal access to all audible information for DDBHH by providing real-time text information, captions or subtitles, visual notifications, and sign language interpreters for various settings such as transportation hubs, entertainment venues, emergency broadcasts, museums, and federal websites.
5. **Enhance access to interpreters:** Create mandates or funding for sign communication access, commit to stimulus funding for interpreter training programs with greater opportunities for BIPOC students, explore the possibility of creating Deaf post-secondary institutions in ASL, LSQ and ISLs that would establish an environment that would support the preservation, promotion and learning of ASL, LSQ and ISLs.
6. **Enhance International Access to ASL, LSQ, and ISLs:** The report recommends that the federal government provide ASL, LSQ, and ISLs as language options for arriving travelers at CBSA (Canadian Border Services Agency) kiosks and booths, for service agents or park rangers at Service Canada and Parks Canada locations, for guided tours and videos at federally-run and federally-funded museums and historic sites, and for live sign language interpreters on all video screens shown on television, social media, and websites.
7. **Telecommunications Accessibility**: The report recommends that CRTC establish an Accessibility Office to oversee all telecommunications and broadcasting accessibility issues, eliminate attitudinal barriers by the telecommunications industry, create an Accessible Communication Technologies equipment distribution program, address the inaccessibility of IP-Relay, increase VRS accessibility to Deaf-Blind individuals by providing a separate accessible platform and one-to-one tech support, and provide tactile interpreters or Communication Facilitators for Deaf-Blind VRS consumers. This would follow the model of the FCC’s Disability Rights Office in the US and help ensure the rights of consumers with disabilities are protected and promoted.
8. **Accessible Technologies**: Create a National Accessible Communication Equipment Distribution Program to provide free or subsidized devices and technologies for Canadians with disabilities who need them to access information and communication services. This would be like the program in the US that is funded by a surcharge on interstate telecommunication services.
9. **Increase Funding Programs or Projects**: That support accessible technologies and telecommunications for DDBHH Canadians. This includes expanding the scope and budget of existing programs such as the ISED Accessible Technology Program, the Broadcasting Accessibility Fund (BAF), the CRTC Broadband Fund (CBF), etc. It also includes creating new funding opportunities for DDBHH-owned businesses or organizations that develop or provide accessible technologies or services. Reserve funds for DDBHH applicants as well recognize the challenges of Indigenous and rural Canadian DDBHH people in remote and Northern areas
10. **Nothing without us**: That the federal government adopt an accessibility and inclusion mindset in all aspects of information and communication technologies development and delivery for DDBHH Canadians. This means involving DDBHH stakeholders in co-designing solutions that meet their needs and preferences; applying universal design principles that benefit all users; testing accessibility features with diverse user groups; providing feedback mechanisms to address issues or complaints; ensuring compliance with web accessibility standards.

## Indigenous Accessibility Standards Recommendations

1. The federal government should invest in building more internet service towers in the north to connect the remote Indigenous communities and enable the Indigenous Deaf people to use video relay service (VRS) from home. This recommendation is based on the poor internet service in the north that makes it difficult for Indigenous Deaf people to communicate in sign language through video calls. It also addresses the issue of telecommunication companies favoring large urban centers over small and remote communities. Any installation of services and towers should take place in consultation with Indigenous people.
2. Every band council should have designated workers to find and guide the Indigenous Deaf people to safety in case of emergency. This recommendation is based on the preference of several Deaf Indigenous members to rely on social media channels for information, which may not be reliable or accessible. It also suggests that community support, consent, and registry are key factors for ensuring the safety of Indigenous Deaf people.
3. The federal government should collaborate with Deaf organizations and Indigenous Deaf people to preserve the Indigenous Sign Languages (ISLs). This recommendation is based on the diversity and richness of ISLs, such as Coast Salish Sign Language, Inuit Sign Language, Oneida Sign Language, and Plains Indian Sign Language. It also acknowledges the challenges of preserving ISLs, such as obtaining consent, developing resources, and recognizing ISLs as official languages.
4. A new project should be created to research and preserve the history of Indigenous Deaf students in residential schools. This recommendation is based on the finding that some Indigenous Deaf residential survivors attended “dumb and mute” schools and that their ethnic backgrounds were marked unknown. It also suggests that Sir James Whitney School for the Deaf in Belleville, Ontario should be a starting point for the research, as it is one of the oldest Deaf educational institutions in Canada.
5. The federal government should update the website resources of Indigenous Services Canada (ISC) and Crown-Indigenous Relations and Northern Affairs Canada (CIRNAC) to ensure they are accessible for Indigenous Deaf people. This recommendation is based on the lack of signed information on federal websites and social media channels for Indigenous Deaf people. It also suggests that CIRNAC should ensure the availability of funds to support Deaf Indigenous people. Since there is currently no national Deaf Indigenous organization, CIRNAC should work at finding and recognizing Indigenous organizations dedicated to Deaf Indigenous people and/or mandated organizations that could support Deaf Indigenous issues.
6. All Indigenous telecommunication channels should provide captions and ASL/LSQ on their screens. This recommendation is based on the observation that most channels only sometimes provide captions on social media channels, and that English and French captions are not ASL/LSQ. It also suggests that hiring Deaf Indigenous persons to sign pre-recorded videos to promote and preserve Indigenous Sign languages as well.
7. The federal government should provide incentives to promote sign language interpretation courses in the Indigenous communities. This recommendation is based on the challenges of providing sign language interpretation services in remote communities, such as distance, cost, and availability. It also suggests that sponsorship/internship programs for Indigenous interpreters or recent graduates should be done in partnership with the Indigenous Deaf person and the local tribal council.
8. Organizers of Indigenous-related events, meetings, conferences, and so forth should prioritize hiring Indigenous interpreters (voice and Deaf). This recommendation is based on the need for cultural sensitivity and competence in interpreting for Indigenous Deaf people. It also suggests that hiring Indigenous interpreters can foster inclusion and empowerment for Indigenous Deaf people.
9. Basic ASL/LSQ courses should be offered for healthcare workers, and ASL/LSQ interpreting programs should be available at northern universities and other universities that are on reserves. This recommendation is based on the need for accessible health care services for Indigenous Deaf people, especially in remote areas. It also suggests that training healthcare workers on how to use tools such as VRS in emergency situations can improve communication and health outcomes for Indigenous Deaf people.
10. The federal government should recognize access to internet service as a right, not a privilege, especially for remote and Indigenous areas with difficult access to the internet. This recommendation is based on the importance of internet service for receiving critical information for Indigenous Deaf people, such as emergency alerts, health updates, social services, etc. It also suggests that Accessible Canada Act (ACA) should include a section to ensure all remote communities have accessible information through high-quality internet service.

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