



Mr. Claude Doucet
Secretary-General
Canadian Radio-television and Telecommunications Commission (CRTC)
Ottawa, ON K1A 0N2

December 10, 2021

Call for comments – Accessibility - mobile wireless service plans that meet the needs of Canadians with various disabilities, Telecom Notice of Consultation CRTC TNC 2020-178 - CRTC Request for Information (RFI) Response to Q1-Q4 & Q8

Dear Secretary-General,

1. The DWCC et al., specifically the three organizations of Deaf Wireless Canada Consultative Committee-Comité pour les Services Sans fil des Sourds du Canada (**DWCC-CSSSC**), Canadian Association of the Deaf-Association des Sourds du Canada (**CAD-ASC**), and Canadian National Society of the Deaf-Blind (**CNSDB**) [collectively, **DWCC et al.**] participate in this critical proceeding dealing with the review of Wireless Accessibility.
2. On November 23, 2021, DWCC et al. received a procedural request for information (RFI) along with all the participating parties to review Wireless Accessibility.
3. DWCC et al. respond with answers to the RFI on the following pages.

Q1. Requiring Proof of Eligibility

Based on the record of this proceeding, it appears that some service providers require persons with disabilities to demonstrate their eligibility for accessibility plans or discounts beyond self-identification (e.g., proof of membership in a disability organization, medical certificate). Please address, with supporting rationale, whether the Commission should further clarify the way in which Wireless Service Providers may determine eligibility for accessible wireless services.

DWCC et al.'s Response:

4. CRTC is correct in that the Wireless Service Providers seem keen and motivated to have a system that verifies a person with a hearing disability. This impression comes from DWCC's recollection of the meetings with the companies in 2017 and 2018. Yet, the WSP companies do not have a consistent system of proof of verification.
5. In providing a historical context from these 2017-2018 meetings, the companies were concerned about hearing people in the general population "faking it" to benefit from the accessibility plan. During these meetings, CAD-ASC, CNSDB, and DWCC tried to find a resolution that was less reliant on an audiogram's "medical" verification because of associated costs. For example, Deaf people in the Province of British Columbia would have to pay \$80.00 to have their hearing assessed and produce an updated audiogram signed off by a legally certified audiologist. At that time, DWCC et al. held that an audiogram was **not** ideal for verification or identification.

6. The DDBHH consumer organization representatives presented that a membership requirement was the least invasive option to support the Deaf ecosystem membership to Deaf clubs and organizations. DWCC et al. wanted to ensure that our position was still valid as in 2017-2018 when our organizations had discussions with the WSP companies. DWCC held a Zoom Town Hall in an ASL & LSQ-based session on December 2, 2021, to focus on identification and verification to respond to this question.

7. Thirty-four individuals who use Sign Language participated from a variety of locations in Canada - British Columbia (Lower Mainland and North BC), Manitoba (Winnipeg), Ontario (North-Sudbury, South, East-Ottawa), Nova Scotia (several locations) and a few from Newfoundland. Attendees reached a consensus on these critical requirements that respect our cultural and linguistic identities.

8. DWCC's goal was to develop an answer consistent with Deaf Community perspectives and values. The Townhall shared the background and history of how the industry arrived at this point of the accessibility plans.

9. DWCC gave four potential verification topics to the Town Hall participants to discuss:

- a. An audiogram from an authorized audiometric testing facility
- b. Membership in a DDBHH organization, verified by letter or membership card
- c. Validation from the school system
- d. Government ID such as a driver's license, a provincial or territorial medical care card identification (also known as "service card")
- e. Privacy concerns of each option.

10. The overall consensus was that an audiogram might not be a practical choice for many because it puts the onus of paying for such testing on the customer/client. Some provincial medical service plans will not cover the cost of hearing tests unless referred by a physician or mandated by work-safety programs in the province of employment.

11. Employers may cover the cost in those cases. British Columbia is unique in requiring annual hearing evaluations for work-safety reasons. Ontario's Health Insurance Plan (OHIP)¹ will not cover hearing tests arranged by employers, school boards, WSIB (workplace safety) or DVA (veterans' affairs). Private health care insurance may cover through extended medical benefits.²

12. One proposed choice was an approved government-issued identification for those who are Deaf, Deaf-Blind, and Hard of Hearing and persons with disabilities. Their status is put on the back of a driver's license or government-issued ID card. The reader can find one example of government verification here.³ However, such an identification card would require coordinated advocacy by the Canadian Association of the Deaf - Association des Sourds du Canada (CAD-ASC) and their provincial association members. The town hall participants raised a question about the possibility of using the Canada Disability Tax Credit to verify status. Still, hard-of-hearing persons have been denied PWD status by the CRA, seemingly without a full grasp of hearing loss impacts.

¹ Does OHIP cover hearing tests? Bravo Hearing Centre Blog. (bravohearing.com) downloaded 10/12/21. <https://www.bravohearing.com/does-ohip-cover-hearing-tests/>

² Audiology in Canada. By Rebecca Rogers, 2016. Global Audiology. Downloaded 10/12/21. <https://globalaudiology.org/index.php/audiologyincanada/> and

³ Future of the EU Disability Card - <https://www.eud.eu/index.php?cID=2330>

13. At the end of this discussion and consultation phase, there was a definite consensus that the consumers control how they choose to identify accessibility. They understood the issues that were raised by DWCC et al. and by the telecom providers themselves about reliability and concerns of hearing, non-disabled persons taking advantage of the accessibility rates by 'faking it." CAD-ASC and DWCC's position is to empower the Deaf, Deaf-Blind and Hard of Hearing person's choices in self-identification. All options that are available to them must be listed on the wireless service provider websites.

14. The results of the Town Hall deliver the message to the CRTC the recommendation that the membership of ANY Deaf, Deaf-Blind, Hard of Hearing organization at national, provincial, or local levels needs to be **one of the options**. However, for the membership option, it appears that only national organizations are listed as membership options on wireless telecommunication providers' websites. DWCC et al. would like to emphasize that membership should **not** be limited to national organizations and to include local and provincial organization memberships.

15. Our previous and most recent research made evident the systematic issues and barriers. The Wireless Service Provider companies must become more organized and streamlined with staff in accessibility departments to manage the accessibility plan questions, verifications, and approvals. These accessibility departments and teams need direct phone numbers and email addresses. They should have trained personnel to educate the WSP store staff on communication and verification of DDBHH status.

16. To illustrate, one Deaf wireless client mentioned how to verify themself as a Deaf customer is to call the wireless service provider's phone number using Canada's video relay services. Such action would immediately self-certify the wireless customer as qualified for the accessibility plan. This example provides another solid rationale for improving the wireless service accessibility department to effectively reach the appropriate accessibility personnel to deal with eligibility approvals. An excellent example of this is the "Verizon Wireless National Accessibility Customer Service Center," with its direct phone number.⁴

⁴ Verizon Wireless National Accessibility Customer Service Center - [link](#)

Q2. Undue or Unreasonable Disadvantage

- (A) Some accessibility groups have submitted that persons with disabilities, particularly those who use sign language, are disadvantaged compared to other subscribers. Accessibility groups have submitted that this is for various reasons. Accessibility groups have further raised the possibility that a sign language user who has reached their data limit may be unable to call 9-1-1 using video relay service without incurring additional charges.
- (B) Please address whether other persons with disabilities are subject to a disadvantage in the provision of mobile wireless services. Include details on the nature of the disadvantage and how it may impact their experience.

DWCC et al.'s Response to Part A:

17. Deaf, Deaf-Blind and Hard of hearing Canadians almost always rely on video communications while on a wireless connection, which consumes more gigabytes of data traffic over the network. Even with unlimited built-in data access with the SRV Canada VRS application, the monthly data caps still run out.

18. Due to the current "speed pass" scheme, when a customer is trying to make a phone call using video applications for a 9-1-1 emergency, their data is either nearing its limit or running out, the video communications become blurry. The effect is dropped calls because of the ITMP network management by the wireless companies.

19. The above verifies the rationale that for accessible plans, there should be no caps or limits. There should be **actual** unlimited data for qualified and certified people to have accessibility plans to avoid barriers to 9-1-1 video communications. Unlimited data would then resolve a life-or-death situation.

20. The function of Wi-Fi within private and public spaces becomes useless because multiple users on the same network degrade the Quality of video and create dropped calls. Hence the greater reliance on more clear wireless connections for 9-1-1 calls by Deaf, Deaf-Blind and Hard of hearing customers.

21. Just as CRTC states in its RFI Appendix with this question, "an ITMP results in discrimination or preference as little as reasonably possible; any harm to the end-user (i.e., the person with a disability)..." it is also clearly stated on the first page of TRP 2009-657.⁵

22. Precisely because network management hinders video communication and causes "harm to the end-user," in this case, the Deaf, Deaf-Blind or Hard of hearing video caller; first, this network management is discriminatory. Secondly, it is considered "dangerous" to harm emergency video calls.

DWCC et al.'s Response to Part B:

23. Persons with disabilities are subject to a disadvantage using wireless services for reasons related to income security and poverty, as well as intersectionality in terms of barriers faced in Canadian society.

⁵ "Clarity: 3. ISPs must ensure that any ITMPs they employ are not unjustly discriminatory nor unduly preferential." Telecom Regulatory Policy CRTC 2009-657: Review of the Internet traffic management practices of Internet Service Providers - [link](#)

24. "Creating a barrier-free and inclusive Canada requires the identification and understanding of the barrier experiences of persons with disabilities. The findings from the **Survey on Accessibility in Federal Sector Organizations (SAFSO)** show that 73.0% of Canadians with disabilities, difficulties or long-term conditions encountered at least one type of barrier in the past two years while interacting with federal sector organizations."

25. According to the [most recent data](#), 6.2 million Canadians live with a disability. The Statistics Canada document shows that many live in poverty – as high as nearly 30 percent. Only 59.4 percent of Canadians with disabilities were employed in 2015, compared to 80.1 percent of the rest of the population.⁶

26. When they work, Canadians with disabilities tend to be in low-paying and often more dangerous jobs at risk of [disappearing due to automation](#).⁷ This shows why annual incomes were, on average, \$2,000 to \$8,000 less per year for full-time workers with disabilities. Gaps were even more significant for those in part-time work.

27. Research has shown barriers to accessing many federal sector organizations and services for Canadians with disabilities. We reference the [Canadian Survey on Disability Reports Accessibility in Federal Sector Organizations in Canada, 2021](#). The survey asked participants about specific types of barriers and the degree to which they experienced them during their interactions with federally regulated organizations or businesses. "Among those who interacted with federal sector organizations in the past two years, 73.0% of Canadians with disabilities, difficulties or long-term conditions encountered an accessibility barrier. "The proportion of people encountering a barrier varied by type with 62.5% reporting a transportation barrier, 61.5% reporting a communication barrier, and 44.6% reporting information and communication technologies barrier."

28. Following, we share the report [No Consumer Left Behind: A Canadian Affordability Framework For Communications Services In A Digital Age](#). In this 2015 report, the Public Interest Advocacy Centre sought to develop a framework for defining the "affordability" of communications services in the digital age. "Citizens need to be able to participate fully in society—and they need communication to do so. However, as communications services become increasingly central to the everyday activities of Canadians, are they affordable for low-income Canadians, or do these consumers struggle to retain service?" In their concluding page 98, the authors of PIAC's report listed five key recommendations that resonate with DDBHH and disabled consumers concerned about accessibility AND affordability.⁸ There is no doubt that persons with disabilities are disadvantaged in accessing mobile wireless services.

⁶ A demographic, employment, and income profile of Canadians with disabilities aged 15 years and over, 2017. Canadian Survey on Disability Reports. Statistics Canada. November 28, 2018.

⁷ Skills Gaps, Underemployment, and Equity of Labour-Market Opportunities for Persons with Disabilities in Canada, Public Policy Forum. January 28, 2020.

⁸ [No Consumer Left Behind: A Canadian Affordability Framework for Communications Services in A Digital Age](#). John Lawford & Alysia Lau. Public Interest Advocacy Centre. Ottawa, ON. January 2015.

Q3. Throttling Data Speed

For customers subscribing to accessibility plans with unlimited data, would requiring that service providers not throttle the data service of these customers below a specific speed threshold once an appropriate remedy has used their allotment of full-speed data?

If so, how should that speed threshold be set?

Provide an appropriate rationale for your response.

DWCC et al.'s Response:

29. DWCC et al. respond that **yes**, it is an appropriate remedy to regulatory-direct and order to require those service providers NOT to throttle the data service of these customers below a specific speed threshold once their allotment of full-speed data has been used. We believe the current practice is considered discriminatory against our accessibility consumer group of Deaf, Deaf-Blind and Hard of Hearing that utilizes data for video communication needs.

30. When DWCC et al. reviews the "big 3" wireless companies websites, we have found the following information that confirms they do apply ITMP network management to the customers' accounts to get more revenues as follows:

- a. Bell: "...beyond 20 GB, speeds are up to 512 Kbps" - [link](#)
- b. Telus: "...maximum of 512 Kilobits per second (Kbps) for downloads and uploads" - [link](#)
- c. Rogers: "...unlimited data at a reduced speed (up to 512kbps)" - [link](#)

31. Please note that from our first-hand experience, as well as the 630 survey respondents and mystery shoppers combined, the fact is that video calls **will not technically work** and succeed for effective video communications at 512kbps. Superior video quality is required for optimal communication to see facial expressions, handshapes and body movements that are linguistic feature hallmarks of Sign language communication.

32. DWCC et al. will do their best to provide information to respond to the query "**how should that speed threshold be set?**" To the best of our knowledge and awareness, the threshold reference should be based on Quality of Service (QoS) scales for Deaf, Deaf-Blind and Hard of hearing to make video communication calls.

33. To provide a background definition of this, we reference a simplistic definition courtesy of [Tech Target](#): "Quality of service (QoS) refers to any technology that manages data traffic to reduce [packet loss](#), latency and [jitter](#) on a network. QoS controls and manages network resources by setting priorities for specific types of data on the network." The definition goes on to further explain: "Enterprise networks need to [provide predictable and measurable services](#) as applications -- such as voice, video and delay-sensitive data -- to traverse a network."

34. Additionally, "Organizations use QoS to meet the traffic requirements of sensitive applications, such as real-time voice and video call, and to prevent the degradation of quality caused by packet loss, delay and jitter." ([link](#)).

35. Further, **wireless service providers** can ensure that video caller wireless customers "can reach a QoS by using certain tools and techniques, such as [jitter buffer](#) and [traffic shaping](#)." For many wireless service providers, "QoS is included in the service-level agreement ([SLA](#)) with their..." **mobile** "...network service provider to guarantee a certain level of network performance." For an alternative explanation, "the Quality of service (QoS) mechanism controls the performance, reliability and usability of a telecommunications service. Mobile cellular service providers may offer mobile QoS to customers."⁹

36. For a real-world application, in this COVID-19 era, the QoS mechanism also plays a vital role in the video experiences of family members in the hospital or care home and cannot physically be in the same room as other family members. Likewise, Deaf people need optimum video connections of sign language interpreters to appear on the video remote interpreting screens in these healthcare settings and when in isolation at home or in other locations.

37. According to the following table provided by [Tech Library](#), for Deaf, Deaf-Blind and Hard of hearing video callers, CRTC should require that the wireless service providers should have Quality of Service (QoS) assigned at 6-7 for the highest priority for video calls:

Using the priority that QoS assigned to the packet, QoS selects an outbound port queue with the same priority level, as shown in the following table:

QoS Priority Assigned to Packet	Port Queue	Priority	Order of Exit
6-7	6-7	High	1
4-5	4-5	Medium	2
0, 3	0, 3	Normal	3
1-2	1-2	Low	4

38. Currently, mobile customers are connected with 4G-LTE, LTE-A and are slowly transitioning to 5G network connections. Furthermore, with the incoming 5G networks, as emphasized by [Tmforum](#), there must be an assurance for QoS benchmarks established with the wireless service providers. "Here is a quick round-up on the promised values of the 5G QoS parameters:

- Speed/throughput of 10Gbps, and a target of 20Gbps
- End-to-end latency reduced to a range of 1-10 milliseconds and 0.5 milliseconds for the physical network
- Network availability stretched to 100%."

39. DWCC et al. want to ensure that wireless customers can have seamless video calling country-wide, as in "coast to coast to coast."

40. DWCC et al. recommend establishing a CRTC task force working group with the mandate to identify Wireless Mobile QoS levels for reliable, consistent Quality of Service levels on par with voice calls. DWCC et al. members would participate in such a working group to find solutions for Deaf, Deaf-Blind and Hard of Hearing mobile customers. Video communication must be a higher priority for accessibility.

⁹ The quality of service (QoS) mechanism controls the performance, reliability, and usability of a telecommunications service. Mobile cellular service providers may offer mobile QoS to customers just as the fixed-line PSTN services providers and Internet service providers may offer QoS. QoS mechanisms are always provided for circuit-switched services and are essential for non-elastic services, for example, streaming multimedia. It is also necessary in networks dominated by such services, which is the case in today's mobile communication networks." https://en.wikipedia.org/wiki/Mobile_QoS

Q4. Zero-rating and the Commission's Differential Pricing Practices Framework

Some parties have proposed that the Commission mandate video relay service, or other services, not to count against the data caps of customers with disabilities (i.e., that use of those services be "zero-rated"). Other parties have suggested that mandatory zero-rating of services would be inconsistent with the Commission's Differential Pricing Practices Framework.⁷

Please address these issues with supporting rationale.

DWCC et al.'s Response:

41. Historically, Videotron first and initially used the wording "zero-rating" when dealing with unlimited access to music. We understand that zero-rating is not permitted according to the CRTC's decision.

42. For clarity purposes, DWCC et al. may have used the wording "zero-rating" originally in its initial Response carried over from its participation in 2019-57. However, it no longer uses the term mainly because the preferential, clearer, and more appropriate wording now used on the wireless service provider websites is "Unlimited data built-in access to SRV Canada VRS." See below specific examples:

- a. [Telus](#) - "unlimited access to the SRV Canada VRS Video Relay Service (VRS),"
- b. [Rogers](#) - "wireless customers using VRS over the network within Canada have unlimited access to VRS."

43. DWCC et al. re-emphasize that Canada **VRS usage needs to continue not to be counted toward data caps**, of Deaf, Deaf-Blind and Hard of hearing customers wireless packages, and rather instead have unlimited access and data plans.

44. DWCC et al. would like to ensure that everyone is reminded that it is not only *SRV Canada VRS* on wireless devices used for video communications or video messages by DDBHH Canadians. The top four video communication apps most frequently used are as follows: FB Messenger Video, SRV Canada VRS, FaceTime, and Zoom, with a complete available list of video communication applications.¹⁰ The first three are the most commonly used for video communications, including 9-1-1 calls or other emergency purposes. CRTC cannot ignore this fact based on the experiences of 630 Deaf, Deaf-Blind and Hard of hearing Canadians.

45. DWCC et al. support this new wording, "unlimited data for built-in access to SRV Canada VRS," as the companies include it on their websites. As long as the phrase ****unlimited data**** is used for greater understanding by the Deaf, Deaf-Blind and Hard of Hearing customers. There need to be consistent provisions, meaning all the wireless companies provide through their wireless applications as a feature of the accessibility plans.

46. Furthermore, wireless service providers must insert ASL and LSQ videos on their websites as the languages frequently used by DDBHH Canadians and recognized in the *Accessible Canada Act*.

47. As a clarification, it would be essential for the CRTC to have its own Accessible Office (AO)

¹⁰ Pages 108 - 113 Charts and Visual Analyses: Questions 33-35 in *A Stark Reality Report* - [link](#)

to oversee this type of confusion and cater and respond to telecommunication customers who are Deaf, Deaf-Blind, Hard of hearing or with other disabilities. Such uncertainty is not new to our customer base, and it has long been an issue, evident in the number of times DWCC et al. have repeatedly made this suggestion and recommendation since the Committee's inception in 2015 in multiple CRTC telecommunications proceedings.

Q5. Forbearance

DWCC et al.'s Response:

48. DWCC et al. will respond to this question in **a separate document**.

Q8. CAD-ASC's *Technology Accessibility for Canadians with Communication Disabilities* Report

Along with your intervention, you filed the report *A Stark Reality: Wireless Accessibility Issues and Challenges for Deaf, Deaf-Blind, and Hard of Hearing Canadians*. This report further references an external report produced by CAD-ASC entitled *Technology Accessibility for Canadians with Communication Disabilities*. Please note that, if you wish for the Commission to be able to assess, and potentially rely upon, the contents of this report, it should be filed on the record of the proceeding, or a publicly and easily accessible link should be provided.

DWCC et al.'s Response:

49. In question 8, the Commission noted that the report entitled *Technology Accessibility for Canadians with Communication Disabilities* was not filed with the Commission. As this report was published by the Canadian Association of the Deaf – Association des Sourds du Canada, they have provided this reply:

50. The Canadian Association of the Deaf – Association des Sourds du Canada (CAD-ASC) is pleased to provide a copy of the report in both English and French ***Technology Accessibility for Canadians with Communication Disabilities*** to CRTC for your file.

Response to DHH Coalition Recommendation:

51. In Response to the DHH Coalition's recommendation for a Working Group similar to the current setup of the CISC Emergency Services Working Group (ESWG), the concept is appreciable. However, based on our experience, there are systematic flaws in providing the appropriate access to participate in these CISC ESWG meetings. Over the period that DWCC et al. have been included, they have requested to join with an interpreter, but such access was not provided.

52. Since then, multiple Deaf members have had to join, and they could only use Video Relay Services to participate in these meetings. This arrangement puts a burden on the VRS system, and the CAV has limited the time to join in the sessions using the relay services. DWCC et al. are aware that VRS is not a topic of this proceeding, but the above describes the unequal experience in Response to the DHH Coalition. Furthermore, the other members of these working groups all participate as part of their day jobs in their places of employment. However, this is not the case for the consultants and representatives from consumer accessibility or advocacy groups, who attend at their own time and expense.

53. DWCC et al.'s perspectives mirror those of the Accessibility Advisory Committee and Public Interest Advisory Committee concepts, presented by the BTLR Panel members as Recommendations¹¹ 15 & 88. We stress that CRTC must recognize three things. First, they are responsible for providing full accessibility at the meetings; second, along with Deaf and Hard of Hearing representatives, Deaf-Blind and Blind representatives must be invited, not left behind. All the accessibility parties to the proceeding should be included in these meetings (DWCC et al., CDGM, CNIB, and DHH Coalition). Third, consumer accessibility group representatives and consultants are at a disadvantage as they give up their paid work time to attend these meetings. Consumer group representatives must have their time compensated for any Accessibility meetings.

Concluding Remarks

54. DWCC et al. greatly appreciate the Commission's consideration of its Response. Should you have any questions, please do not hesitate to contact all of us.

Sincerest regards,

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¹¹ Broadcasting and Telecommunications Legislative Review (BTLR) Report: Canada's Communication Future: Time to Act - Pages 23 and 36, Recommendations 15 & 88 - link:
[https://www.ic.gc.ca/eic/site/110.nsf/vwapj/BTLR_Eng-V3.pdf/\\$file/BTLR_Eng-V3.pdf](https://www.ic.gc.ca/eic/site/110.nsf/vwapj/BTLR_Eng-V3.pdf/$file/BTLR_Eng-V3.pdf)