DWCC et al.'s Response to Q4 Zero Rating Replies

1. This document from DWCC et al. focuses on zero-rating coming from CRTC's RFI Question 4. While Question 7 focuses on zero-rating for VRS, this question talks about general zero-rating on the wireless network. So we now focus on our general use of video on a wireless network.

2. DWCC et al. re-affirms the importance of moving away from the wording "Zero-rating" and shifting the focus to the language the carriers have switched to using - ***unlimited built-in access to Canada's VRS application***.

3. The onus is on the carriers to provide a fully accessible wireless service on equal footing to the hearing customers. According to Telecom Decision 2018-475 in paragraph *56. The Commission encourages all wireless service providers to continue to improve their offerings to respond to consumers ' needs and expectations, including those with low household incomes and DDBHH Canadians."*[1]

4. Additionally, Deaf, Deaf-Blind or Hard of hearing consumers should never pay for services not available to them, as highlighted in DWCC et al.'s intervention. DDBHH Canadians deserve ***communication equity***.

5. Video calling is equal to voice calling for those Deaf, Deaf-Blind or Hard of hearing Canadians that use sign language. Video calling is internet-connected through wireless networks.

6. However, CRTC doesn't appear to be recognizing this fact because ***video calling*** is omitted in ***subsection 46.5(1)*** *of the* Telecommunications Act *(the Act): (i) fixed and mobile wireless broadband Internet access services, and (ii) fixed and* ***mobile wireless voice services.*** The Act needs to be updated to include modern-day telecommunications inclusive of audio-visual technology today. Thus far, the only time video calling has been recognized by the CRTC is in TRP 2016x496, but now the Act needs to reflect it.

7. In reality, DDBHH community members do not solely depend on VRS to make calls. They need to communicate with other people directly, with family members and friends, or talk directly to a signing medical or mental health professional; these are "face-to-face" via video calls. These calls occur between two or more people who communicate using sign language using data over a wireless connection, often through Video Remote Interpreting (VRI).[2] [3] DWCC et al.'s interventions list the different video communication platforms used for direct two-way video calls used with applications used by those who use sign language.[4]

8. Quality of Service (QoS) needs to be accounted for when evaluating the calculations of video quality. DWCC et al. has raised the issue, according to TRP 2016-496 paragraph 57*: "Very few parties provided their views on an acceptable level of mobile wireless broadband Internet access service…****such as the Deaf Wireless Canada Committee (DWCC****), often suggested the same criteria (i.e. speed, data allowance, and* ***quality of service)*** *that were proposed for fixed broadband Internet access service."*

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[1] Telecom Decision CRTC 2018-475 - link

[2] Provincial Health Services Authority - Med. Interpreting Zoom for BC Healthcare - link

[3] Provincial Health Services Authority - VRI, BC Ambulance Services. - YouTube - link

[4] A Stark Reality (page 63) - fix the citation and give a link

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9. In the same **TRP policy [5], in paragraph 61** : Accordingly, the availability of fixed broadband Internet access service offerings that meet certain levels of speeds, data allowance, and **quality of service** (**QoS**) will help ensure that Canadians are receiving services that meet their needs and enable them to participate in today's digital society. DWCC et al. note that they have not received assurance that they would have communication equity in this regard. In this proceeding, we hope to see that CRTC ensures this equity for all Deaf, Deaf-Blind and Hard of hearing sign language as wireless communication users.

10. First, let's focus on the other video accessibility avenue that applies to Deaf, Deaf-Blind and Hard of Hearing wireless consumers that CRTC and the wireless service providers need to keep in mind.

11. It should be noted that VRS does not allow sign language interpretation in the same room. This form of communication facilitation is called Video Remote Interpreting, or **VRI**. DWCC et al. suggest that wireless service providers use VRI in their retail stores for customer service.

12. CRTC and all the wireless service providers need to realize that it is not only the data usage of video communications with VRS and VRI about which we are concerned. Sign language users use a wide range of video communication platforms for face-to-face or three-way direct personal calls with friends, partners, spouses, and family members fluent in sign language. An additional consideration is the children of Deaf parents that use sign language to talk with their parents or the hearing parents that use sign language with the Deaf family member.

13. According to DWCC et al.'s survey in *A Stark Reality*[6], the top five video platforms used for video calling and messaging were: Messenger (Facebook), SRV Canada VRS, FaceTime, VRS and Skype. Not to forget, the two most popular video message-leaving applications are Glide and MarcoPolo. These are the applications that need to be considered for unmetered data plans for general video communications for accessibility groups.

Technical Considerations - Voice vs. Video

16. With the reliance on video for communications, it is essential to understand the difference between voice and video to understand why it is vital to have unmetered access to video communication applications.

17. DWCC et al. gave technical information in their presentation participating in TNC 2015-134[7], *"Audio vs. Video: Video has a greater bandwidth, which accumulates bytes faster than audio does during a download/upload process that would lead to an overage of the current data plans…To have the same experience as our hearing fellow Canadians, ASL and LSQ users would like to have enough download/upload speed to carry out conversations with video communication apps. ASL and LSQ users would also be able to make phone calls via video apps "on the go." Ample data capacity is required to meet the needs as a matter of "functional equivalency."* In 2021, DWCC is now transitioning to the more precise terminology presented by the Communication Services of the Deaf (CSD), preferring "communication equity."[8]

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[5] TRP CRTC 2016-496: Modern telecommunications services – The path forward for Canada's digital economy - link

[6] Pages 51-52 and 108 - 113 Charts and Visual Analyses: Questions 33-35 in *A Stark Reality Report* - *link*

[7] DWCC Presentation for TNC 2015-134- link

[8] Communication Services Deaf - link

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18. To understand the clear distinction of voice (audio) use over the wireless network, voice calls only use 0.2 MB of data per minute[9], while "most video call apps use a minimum of about 500 kbps (3.75 MB/minute) for one-way standard definition calls and a maximum of around 1.8 Mbps for one-way high-definition video. Doubling those to account for the two-way flow, that's a total of 7.25 MB/minute minimum, 27 MB/minute maximum." [10]

19. Further technical specification information is as follows; data usage depends on the technology used by the operator. It must be made clear that the wireless consumer is using GSM or UMTS, then voice calls will not be using data. If the operator has LTE/4G/5G and only uses VoLTE (Voice over LTE), then voice calls will be using data. And then, this usage will be deducting money from the subscriber account based on call duration and not per MB or so.[11] The wireless companies cannot charge for voice calls per minute while simultaneously charging data.

20. Subsequently, if a video caller is using a specific type of video resolution, the speed over a wireless network will be adjusted accordingly:
    HD 1080p, 5 Mbps. SD 480p, 1.1 Mbps.
    HD 720p, 2.5 Mbps. SD 360p, 0.7 Mbps.

21. In sum, as in paragraphs 18 and 19, all the DDBHH consumer groups are trying to drive home to the CRTC is that it is critical to remember that voice calls are not data-based. Data is used when video communications take place. Sign language users have data-heavy use on the wireless network. Therefore data buckets must be provided in ample and healthy amounts for accessibility. Unlimited data is the best course of action.

DWCC et al. Analysis

22. DWCC et al. read all the wireless service provider company responses to CRTC's RFI Question 4 (Bell, Telus, Rogers, Shaw, Sasktel, CWTA, Videotron, Sogetel) and noted that some answers were connected to the issue being queried. However, others included replies and comments related to the OTHER RFI questions, so it was challenging to sift through their written responses to categorize their answers. However, we observed common themes.

23. Bell, Telus, and mentioned that they provided zero-rating of VRS for their accessibility customers without being required to do so by the Commission. Shaw and Freedom have not included zero-rating in their service delivery to customers, as their rates are low to start. Videotron does not zero-rate at all.

24. There also appeared to be a consensus that the Commission should not mandate zero-rating of the relay service or other video-calling applications, with some providers not supporting any regulation of this area.

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[9] Google Voice calls - Link

[10] How Much Bandwidth Does Video Calling Use? - link

[11] Quora - Do phone calls use data? - link

25. In the following description, Telus showed an encouraging concern for the accessibility of particular consumers. On their Social Impact page, Telus describes how they use their world-leading technology to do good. Of interest is this section: "Let's empower Canadians with connectivity. We're ensuring that everyone can access our world-leading networks – including rural, remote and Indigenous communities and over 3 million Canadians in need." [12]

26. Rogers has also been noted to direct the development of services to areas and populations in recent years - as described in this GlobeWire article, "Throughout the pandemic, Rogers enhanced its networks in more than 250 communities across British Columbia with plans to improve connectivity in an additional 75 communities by the end of the year." Further in the article, it says, "Over the past year and a half, Rogers has lit up Canada's first, largest and most reliable 5G network1 across BC and enhanced wireless connectivity in rural and underserved communities like Abbotsford, Nanaimo, and Osoyoos, and along crucial Highways. The investments improve public safety, enable British Columbians to connect remotely and access vital services, advance next-generation technology research, and support businesses to fully participate in the digital economy.[13]

27. The above two examples show that Telus and Rogers can combine social benefits with their business activities, for the goodwill of the communities in which they provide services will reflect increased economic benefits for all.

28. The Wireless Service Providers need to be reminded that they are obligated to adhere to the Wireless Code and, with this proceeding, to think about the social benefit, the social good of providing communication equity for Deaf, Deaf-Blind and Hard of Hearing Canadian wireless consumers in consideration as a charitable benefit.

29. After all, these companies earn millions and participate in a billion-dollar industry. The companies should provide more accessibility as they have the obligation through the CRPD, the Accessible Canada Act, and the Canadian Charter of Rights and Freedoms to show that they offer and support accessibility for these consumer groups. These companies will then gain community and public recognition for providing more significant and improved wireless video communication access, just as Bell has gained people's attention through their "Let's Talk" program to promote mental health awareness and support.

30. As the Deaf community, consumer and accessibility groups argued back in the 1980s, with background and history provided in Question 5, because it took longer to type on the TTY telecommunication devices, the 50% TTY-calling discount was allocated for *communication equity.*

31. The modern-day version of this communication equity provides comprehensive and essential ***unlimited data for the sign language user's video communication over the wireless networks.***

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[12] Social Impact. Powered by Purpose - link

[13] Globe Newswire, July 7, 2021 - link