Canadian Radio-television and
Telecommunications Commission

Conseil de la radiodiffusion et des
télécommunications canadiennes

Video Relay Service Public Opinion Research

Final Report

Prepared for the Canadian Radio-television and Telecommunications Commission

For more information on this Report, please contact the CRTC at: Communication@crtc.gc.ca

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Video Relay Service Public Opinion Research

Final Report

Prepared for the Canadian Radio-television and Telecommunications Commission (CRTC) by Sage Research Corporation

June 2020

The CRTC commissioned Sage Research Corporation to conduct qualitative public opinion research with users of Canada's Video Relay Service (VRS). In 2016 when VRS was launched, the CRTC committed to reviewing the VRS regulatory framework in three years. This research will support the review by ensuring that objective insights into the views and experiences of Canadians who use VRS in Canada are on the record of the public hearing.

Sixteen online video interviews (with one or two participants) and three individual telephone interviews using VRS were conducted between March 20 and April 16, 2020, across Canada. The overall objective of the research was to collect the user experiences of registered VRS subscribers to help determine what is working well, how VRS should be improved and how the service might be extended.

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Executive Summary

The Canadian Radio-television and Telecommunications Commission (CRTC) regulates and supervises broadcasting and telecommunications in Canada. The CRTC's mandate is to ensure that both the broadcasting and telecommunications systems serve the Canadian public.

The CRTC commissioned Sage Research Corporation to conduct a qualitative public opinion research study with users of the Video Relay Service (VRS), a basic telecommunications service that enables persons who are Deaf, deafened, hard of hearing or have a speech disability who use sign languages to communicate with voice telephone users. The service is offered in American Sign Language (ASL) and Langue des signes québécoise (LSQ). The sign language user makes or receives a video call to connect to a VRS operator using Internet-based videoconferencing. The operator then connects via a voice telephone call to the other party and relays the conversation from sign language to voice and vice-versa, for example from ASL to English or from LSQ to French.

In Telecom Regulatory Policy 2014-187 Video Relay Service, issued in April 2014, the CRTC determined that Video Relay Service (VRS) must be offered in Canada. VRS was launched in Canada in September 2016 and, since November 2017, the service is available 24 hours a day, 7 days a week. VRS is implemented and overseen by the Canadian Administrator of VRS (CAV), an independent and centralized administrator.

The CRTC committed to reviewing the VRS regulatory framework three years from the launch of the service. This research will support the review by ensuring that objective insights into the views and experiences of Canadians who use VRS in Canada are on the record of a public proceeding, the timing of which has yet to be announced.

The overall objective of the research was to collect the user experiences of registered VRS subscribers to help determine what is working well, how VRS should be improved and how the service might be extended.

The specific research objectives for the study were to explore:
• Quality of service (for example, the time it takes a VRS operator to pick up the call, quality of interpretation)
• Technical quality (for example, quality of video, ease of use, data usage, platforms used to access the service)
• Education and outreach
• Customer service (for example, are questions/concerns/complaints dealt with appropriately)
• How VRS is used/purposes for which VRS is used by customers
• Suggestions for improvements
• How could/should VRS be extended
• Experience of accessing 911 services using VRS

Sixteen online video interviews with one or two participants using a video meeting/collaboration platform and three individual telephone interviews using VRS were conducted between March 20 and April 16, 2020, across Canada. The online video interviews consisted of the interviewer, a sign-language interpreter and one to two VRS users. Thirteen online interviews were completed with participants who communicate using ASL and three with participants who use LSQ. The individual telephone interviews were conducted with participants via a VRS ASL operator.

The target group was individuals who are registered with SRV Canada VRS and who registered for the CRTC's Accessibility Research List Database. This opt-in database was developed specifically to generate a sample for research that the CRTC might decide to undertake in 2020.

Twenty-six ASL and six LSQ VRS database registrants participated in the research.

This research was qualitative in nature, not quantitative. As such, the results provide an indication of participants' views about the topics explored, but cannot be statistically generalized to represent the full population of VRS users. Moreover, it may be that not all types of VRS users are represented in the research. Qualitative research does, however, produce a richness and depth of response not readily available through other methods of research. It is the insight and direction provided by qualitative research that makes it an appropriate tool for exploring participants' experiences and opinions with respect to VRS in preparation for the subsequent public proceeding.

Perceived Value of VRS

All participants said VRS is a very important service. One word often used to summarize the value of VRS was "independence." There are several dimensions to how VRS is perceived to facilitate independence:
- Wide breadth of usage
- Do not have to depend on others to make a phone call
- Clearer/more accurate communication
- Better than TTY (Teletypewriter) or IP Relay (Internet protocol relay); note that both of these are a form of Message Relay Service or MRS, and are text-based services rather than sign language services
- 24/7 availability

Devices Used

VRS is used on mobile smartphones, computers and tablets. Almost all participants, at least sometimes, use VRS on their smartphone. Reasons for using VRS on a computer or tablet included: larger image size helps with seeing the video interpreter (VI); especially when using a computer, the ease of a comfortable way of positioning the webcam; and for some participants a stronger/faster Internet connection.

Quite a few participants who use a Mac computer did not like the Waterfox browser required to run the VRS app, and expressed concerns about security and being prone to freezing up. This limited use of their computer for VRS calls, and led several not to use their computer at all for VRS calls.

Getting Information about VRS

Social media and communication within the Deaf community were very important sources for learning about VRS for all the participants, and these continue to be important for learning about new developments.

Some participants had previous experience using a VRS service in the United States and thus they were familiar with VRS. This is noteworthy because all of these participants felt that the U.S. VRS services are technologically more advanced than Canadian VRS in terms of features and functionality. They suggested Canadian VRS should look to the U.S. VRS services for ideas on how to improve Canadian VRS.

CAV Information Sessions

Those who attended CAV information sessions found them to be very helpful for learning about VRS and for installing the VRS apps.

Several participants said they believe VRS is now well-known in the Deaf community, and because of this suggested that the CAV should invest less in broadly targeted outreach activities, and more in activities specifically targeted to non-users. The latter would include those not aware of VRS – which they thought to be a small group, and those aware of VRS but who do not use it – which they thought to be the larger group.

CAV Website

Most participants do not regularly go to the CAV website. Instead, it appears that proactive communication by the CAV is better accomplished through electronic newsletters, email and the CAV's Facebook pages.

While some said the website was fine for their purposes, some others were critical. The main criticism was that they felt the website is too text-heavy, not always written in a simple way and that it needs more sign language videos. The Frequently Asked Questions section was singled out in this regard.

Customer Service

Many participants had some experience using VRS customer service, albeit typically not frequently. The majority of these participants said their experience was a good one, but some were less positive. Those with a positive experience in particular usually commented on the personal interaction: the customer service representative was helpful, understanding and patient. The minority with a less positive experience were not satisfied with the interpersonal interaction with the customer service representative. There were two main types of comments: (1) the person did not appear attentive, engaged or interested, and (2) the person was impatient or expressed frustration with the caller.

Some issues and suggestions each noted by several participants:
- In the case of complaints to customer service about perceived bugs or design issues, there does not appear to be any follow-up by the CAV to fix the issues. It was suggested the CAV needs to do better in using the learnings from customer service calls to identify and implement improvements to VRS.
- Customer service should be available during evening hours. One participant suggested it should at least be possible to leave a message after hours.

Perceptions of the Interpretation Service

Participants said that most of the video interpreters (VIs) are good, and the large majority of interpretation experiences are good. So, overall satisfaction with the interpretation service is high.

That said, there can be occasional issues with a VI or an interpretation experience. Some of these include:
- *Some VIs are less experienced or not very good*: Participants appeared generally understanding of accommodating newer VIs, but several suggested there should be stricter standards for who can be a VI.
- *Situational suitability*: This was cited in two contexts:
  - The VI may not be familiar with the general subject matter of the call, and as a result may not be adept at signing certain words or concepts.
  - The VRS user may prefer a certain gender for certain situations – this appeared mainly to involve certain sensitive medical situations. In this context, it was suggested the caller should have the option to request a female or male VI.

  A suggestion was to provide a capability to choose a VI in some circumstances.
- *Participant suggestion*: make it easier to provide feedback on a VI: Some participants said it should be made easier and quicker to provide feedback on a VI after a VRS call. To facilitate this suggestions included incorporating a feedback mechanism into the app, and making it easier to access the VI's identification number.

- *Use of American interpreters*: Several participants said that some of the VIs are American, and this can lead to problems because they may not be familiar with Canadian expressions, Canadian city names, or Canadian programs of interest to the Canadian Deaf community.

- *Use of deaf interpreters*: Some participants suggested there should be deaf interpreters available for certain VRS users. These could be VRS users who are new to Canada and not fluent in ASL or LSQ, or who are not fluent for other reasons. They said VRS does not currently appear to use any deaf interpreters.

- *Switching interpreters during a VRS call*: Some participants said that a change in interpreters during a call can be disruptive: the switch can happen in the middle of a thread in the conversation, or the new interpreter does not have important context from the conversation up until the switch. The main issue was that the switch can happen too abruptly without sufficient warning. The suggestion was to provide more advance warning, so that the ongoing conversational thread can be completed prior to the switch or so at least that the caller can prepare for the switch.

- *Wait time for an interpreter:* Generally, this was not perceived to be a problem. Two contexts that were more problematic:
  - The VRS user needs to make a call at a specific preset time, e.g. for a job interview.
  - The participants using LSQ appeared to be somewhat more dissatisfied with wait times for an interpreter.

Issues Pertaining to Using VRS

Hearing party does not accept a VRS call: All participants had experienced a hearing party not accepting a VRS call. There were two major reasons for call refusals: the hearing party is concerned over security and privacy, and the hearing party suspects the call is telemarketing or a scam of some sort. A third context was simple lack of familiarity with VRS resulting in a hang up. Participants suggested there should be a communications program to inform and educate businesses, government agencies and the public about VRS so as to reduce the incidence of hearing parties not accepting a VRS call.

VI introduction: Some participants suggested providing an option to skip the introduction the VI provides to a hearing party. Reasons included:
- This can give the VRS user more control over the call.
- It can reduce the likelihood of the hearing party perceiving the call as telemarketing or as a scam.
- The party being called may already be familiar with the caller.
- The VRS user may not want the other party to know they are deaf.

Calling 811/311: Some participants complained particularly about the inability to dial 811 using VRS. They recommended that given the importance of these 3-digit phone services, it should be possible on VRS to dial these services using the 3-digit code.

Extending ways of using VRS: The most notable suggestion was to implement a communication program to increase awareness and understanding of VRS among business and the general public, as this would substantially benefit businesses staffed with individuals who are deaf.

VRS App

A general comment about the VRS app made by quite a few participants is that while it works, it is somewhat dated in functionality and design. All participants familiar with VRS in the U.S. said the U.S. VRS services are better in terms of the app features. A general suggestion from participants was that the VRS app should be updated, and updated more often, and that U.S. VRS services provide models for how the app should be improved.

The most widely mentioned issue with the app involved notification of incoming calls. Many participants said they miss a lot of incoming calls. A comment was that "you have to be staring directly at the app" to know there is an incoming call. Participants suggested there needs to be much more prominent notification of incoming calls, such that a person knows there is an incoming call even if they are using other apps or are not looking at their device at all. It was suggested there be a flashing light and/or vibration (for a smartphone).

Data Usage

Almost all participants at least sometimes made VRS calls using their smartphone. In this context, most had data plans where they had to pay attention to their mobile data usage in order to avoid excessive overage charges. Participants were able to manage their data usage, but to varying degrees it did affect when and how they used VRS. Many participants suggested the CRTC should work with the telephone companies (telcos) to encourage – or require – them to offer data plans tailored to the needs of individuals who are deaf. Participants said that because an individual who is deaf is not using voice services, it is reasonable and equitable for telcos to offer individuals who are deaf better data pricing than is available to hearing customers.

Using VRS for 911 Calls

The majority of participants had not made a 911 call using VRS, and so could not comment on this. Two participants said they had not known that one can make a 911 call using VRS, suggesting there is still some awareness building to do. Among those who had made a 911 call, most said the call went fine, and they were connected quickly.

The main issue several participants had with their 911 experience was that the VI refused to stay on the line when the police arrived and continue interpreting because that would be a VRI service, which is not allowed on VRS. Participants suggested that VRI should be available in a 911 emergency context to ensure effective communication when first responders arrive.

Contract value: $118,744.24 including HST

Political Neutrality Certification
I hereby certify as Senior Officer of Sage Research Corporation that the deliverables fully comply with the Government of Canada political neutrality requirements outlined in the *Communications Policy* of the Government of Canada and Procedures for Planning and Contracting Public Opinion Research. Specifically, the deliverables do not include information on electoral voting intentions, political party preferences, and standings with the electorate or ratings of the performance of a political party or its leaders.

Rick Robson
Vice-President
Sage Research Corporation

Perceived Value of VRS

All participants said VRS is a very important service, and is a great improvement over TTY/IP Relay services. One word often used to summarize the value of VRS was "independence." There are several dimensions to how VRS is perceived to facilitate independence:

Wide breadth of usage: VRS can be used for virtually any type of telephone call. When participants were asked how they used VRS, a wide range of examples were given – which some summarized as "I can call anywhere." VRS was used not only for a variety of personal calls, but also for work-related calls.

> *"I think it's really important to me and to my independence. You know, I can contact anybody I need to."*

> *"I'm able to be more involved with work, more independent at work. I'm not always worried about, oh, if there's a meeting, can we get an interpreter or can I just teleconference in? I'm able to participate more and be a better employee because I'm more present."*

Do not have to depend on others to make a phone call: Many noted that with VRS they do not have to rely on others to help with making a phone call.

> *"It's something that I can do on my own. I don't need to depend on anyone else. It's a communication directly that comes from me and it offers more independence for me."*

Clearer/more accurate communication: Many participants said that with VRS they could communicate in their first language. They noted that English or French is often a second language for individuals who are deaf, and some individuals who are deaf are less proficient in this second language. In this context, communicating using sign language is more natural, and is easier to use to convey and interpret meaning. The possibility of misunderstandings on both ends of the call is reduced. Several commented that the tone, or emotion, of communication is also better conveyed, because the video interpreter (VI) can pick up on the tone and emotion of the individual who is deaf and reflect this in what they say and how they speak to the hearing individual.

> *"I feel that, you know, with an interpreted communication, I can use my language, I can express myself freely in my natural language. And I know that my message is coming across as I intended to."*

Better than TTY/IP Relay: VRS is perceived to be better in several respects:

- Faster/more direct.
- Clearer and more natural communication because the individual who is deaf can communicate directly using sign language rather than having to compose and interpret text messages in English or French.
- More convenient: Most participants at least sometimes made VRS calls away from home using their smartphone.

24/7 availability of VRS: VRS calls can be made or received any time, day or night, and on any day of the week.

Devices Used

VRS was used on smartphones, computers and tablets. Across the participants, some used just one of these devices, some used two, and some used all three. The most common scenario was to use both a smartphone and a computer and/or tablet. Some observations:

- Almost all participants, at least sometimes, used VRS on their smartphone, because this enables use of VRS away from home. This highlights the importance of the VRS mobile app.
- There were several reasons cited for using a computer or tablet at home: larger image size helps with seeing the VI; especially when using a computer, the ease of a comfortable way of positioning the webcam; and for some participants a stronger/faster Internet connection.

Some participants had a Mac computer, and said that using VRS on their computer requires using the Waterfox browser. Quite a few had issues with Waterfox, and several said this led to them using their computer for VRS less often than they would like or not at all. Several said they had decided not to install Waterfox. Concerns expressed about Waterfox included:

- It is not a mainstream or well-known browser, and is not the browser the participant normally uses.
- Associated with the above point, it is perceived to be potentially less secure. This concern is what led several not to install Waterfox.
- It is complicated/difficult to install.
- It tends to freeze up on VRS calls.

Participants suggested that for Mac computer users, they should be able to use a mainstream browser such as Chrome or Safari.

Getting Information about VRS

Social media and communication within the Deaf community were very important sources for learning about VRS for all the participants, and these continue to be important for learning about new developments.

Some participants had previous experience using a VRS service in the United States and thus they were familiar with VRS. This is noteworthy because all of these participants felt that the U.S. VRS services are technologically more advanced than Canadian VRS in terms of features and functionality. They suggested Canadian VRS should look to the U.S. VRS services for ideas on how to improve Canadian VRS.

CAV Information Sessions

Note: The Canadian Administrator of Video Relay Service (CAV) administers VRS in Canada, and this includes responsibility for the website and for disseminating information about VRS.

Among participants asked about CAV information sessions, the majority had attended a session, while several others said they had heard of the sessions but had not felt a need to attend. Those who attended a session had done so several years ago, close to the time of the 2016 launch of VRS in Canada.

Those who went to an information session said these were very helpful for learning about VRS, and particularly for learning how to install and use the VRS apps.

> "We got an opportunity to ask a lot of questions about the service and get a lot of those questions answered. So it was very informative and very beneficial."

Several participants mentioned seeing booths from time to time at events of interest to the Deaf community.

Several participants said they believe VRS is now well-known in the Deaf community, and because of this suggested that the CAV should invest less in broadly targeted outreach activities, and more in activities specifically targeted to non-users. The latter would include those not aware of VRS – which they thought to be a small group, and those aware of VRS but who do not use it – which they thought to be the larger group. The latter effort would focus on understanding why the individual has chosen not to use VRS, and if appropriate helping them to try out VRS. For example, reasons might include lack of high-speed Internet, unfamiliarity with the required technology, cannot afford the technology, or satisfaction with their current methods of communication with hearing people.

One participant suggested specifically targeting youth under 18 who are non-users, while another suggested targeting older people who are non-users.

CAV Website

Most participants do not regularly go to the CAV website. Instead, it appears that proactive communication by the CAV is better accomplished through electronic newsletters, email and the CAV's Facebook pages.

Most said they go to the CAV website either when they have a problem or question related to using VRS, or they see something in a newsletter or on Facebook that refers them to the website.

Some who had gone to the website said it was fine for their purposes. It has a lot of useful information, they found it easy to find information, and the site has some sign language videos.

However, some others were critical of the website. The main criticism was that they felt the website is too text-heavy and that it needs more sign language videos. Their view was that some individuals who are deaf are less comfortable with English or French because it is a second language, and therefore benefit from sign language videos. They said there are sections of the website that have no videos, and some specifically referred to the Frequently Asked Questions section. Some also said the text is not always written in a simple way.

> *"As a deaf individual, it would be nice to see some more videos and things like that in video format. I think the Deaf community would like to see that a little bit more because it might be easier too for the deaf to access information if It was it was video based."*

> *"The Frequently Asked Questions page, I saw it there in English, but there was no ASL translation of that. There was nothing in ASL. I found that quite odd because, I mean, you're talking about accessibility and that's part of the mandate of SRV [Canada] VRS."*

Other issues mentioned by one or several participants included:

- The website should also have videos in indigenous sign language (ISL).
- The website should also have videos in some international sign languages for the benefit of newcomers to Canada.
- The website design and appearance needs to be updated to a more modern standard and appearance, and to improve the ease of finding information.
- The instructions on how to install VRS need to be improved.
- There should be more use of pictures or illustrations to help communicate information.
- The colour scheme is not user friendly for individuals who are deafblind.

The interview agenda did not include questions about CAV's Facebook page, but one participant volunteered a specific issue with the page – namely, the page does not allow comments. The participant said that information sharing in the Deaf community is very important, and felt that the CAV should support this by allowing comments on their Facebook page.

Customer Service

Many participants had some experience using VRS customer service, albeit typically not frequently. The majority of these participants said their experience was a good one, but some were less positive.

Those with a positive experience in particular usually commented on the personal interaction: the customer service representative was helpful, understanding and patient.

> *"They are incredibly friendly, very helpful. They offer help with some tech issues. If they can't help, then they escalated to the next level."*

The minority with a less positive experience were not satisfied with the interpersonal interaction with the customer service representative. There were two types of comments: (1) the person did not appear attentive, engaged or interested, and (2) the person was impatient or expressing frustration with the caller.

> *"Maybe they are tired of being asked the same questions over and over again. And they seem frustrated sometimes and it's not as friendly maybe as it could be. Maybe they're overwhelmed with what's happening at work. I don't know. But, you know, they have to be able to be patient and problem solving and resolving any issues that individuals are calling with. I feel like sometimes there's an attitude adjustment that needs to happen with a few of them."*

The following issues were each noted by several participants:

- In the case of complaints to customer service about perceived bugs or design issues, there does not appear to be any follow-up by the CAV to fix the issues. It was suggested the CAV needs to do better in using the learnings from customer service calls to identify and implement improvements to VRS.

- Customer service should be available during evening hours. Note that currently the closing time for customer service varies by time zone, ranging from 3:00 pm in the Pacific time zone, to 7:30 pm in Newfoundland and Labrador. One participant suggested it should at least be possible to leave a message after hours.

- If the transaction requires a call-back from the customer service representative, the person often misses the call-back. This is related to a major issue with VRS discussed later, namely the difficulty of detecting incoming calls. In a customer service context, this problem reduces the efficiency of customer service and extends the amount of time required to resolve the problem.

The following were each mentioned by one participant:

- The customer service representative had difficulty understanding the caller's signing.

- The video quality of the call was poor, and an inordinate amount of time was spent by both parties asking "can you see me?"

- The participant wanted more information about the storage and use of information about users, and in particular information about negative incidents involving the user. They said that from their experience it appears that this sort of information is stored for years, and they have had this mentioned to them by customer service years after an incident. They felt that this was inappropriate, and that once an incident has been resolved it should not be brought up again.

Perceptions of the Interpretation Service

Participants said that most of the VIs are good, and the large majority of interpretation experiences are good. So, overall satisfaction with the interpretation service is high.

That said, there can be occasional issues with a VI or an interpretation experience, and some participants had suggestions to improve the interpretation service. These are listed below. It should be kept in mind, however, that participants were satisfied with the interpretation service on most of their VRS calls.

Some VIs are less experienced or are not very good: Some participants commented that sometimes the VI appears to be new and less experienced. And several said a small number are not very good. Participants appeared generally understanding of accommodating newer VIs, but several suggested there should be stricter standards for who can be a VI.

Situational suitability: Some participants said that a VI may not be well suited to a particular situation. This was noted in two contexts:

- The VI may not be familiar with the general subject matter of the call, and as a result may not be adept at signing certain words or concepts. One example mentioned was a call to a government agency about a certain government program. Another example was a call pertaining to construction and building codes. One participant suggested providing VIs with information packages on government programs most likely to be called by VRS users.
- The VRS user may prefer a certain gender for certain situations – this appeared mainly to involve certain sensitive medical situations. In this context, it was suggested the caller should have the option to request a female or male VI. One participant commented that in a U.S. VRS service they were familiar with, the caller has the option prior to placing a call to specify the gender of the VI.

Participant suggestions for options to control which VI is selected for a call: Some participants commented that currently if they are not satisfied with the VI then they hang up and call again. The following were each suggested by one or a few participants:

- Provide the option to request a different VI: A few noted they have done this in the past, but it appears not all VRS users are aware they have this right.
- Provide the ability to select from a list of available interpreters.
- Provide the ability to store a list of preferred VIs or a list of VIs the caller would prefer not to work with.

Participant suggestion – make it easier to provide feedback on a VI: Some participants said it should be made easier and quicker to provide feedback on a VI after a VRS call. There were two aspects to this:

- Currently, it appears that providing feedback on a VI involves contacting customer service, which is seen as a lengthy and rather cumbersome process. These participants were essentially suggesting that a feedback mechanism be built into the VRS app so that feedback can be sent right away from within the app.

- To provide feedback currently it is necessary to know the interpreter's ID number. However, this information is hard to get or record when using the VRS mobile apps. Some participants said that while this number is visible on the computer app, it is not visible on the mobile app. And, if the number is conveyed by means of finger spelling, it can be difficult to catch the full number and write it down. The suggestions were to make the number visible throughout the call, or to include it in the call history.

Use of American VIs: Several participants said that some of the VIs are American, and this can lead to problems because they may not be familiar with Canadian expressions, Canadian city names, or Canadian programs of interest to the Canadian Deaf community. They suggested there be greater focus on using Canadian VIs – both for quality of interpretation and to support Canadian VIs.

Use of deaf interpreters: Some participants suggested there should be deaf interpreters available for certain VRS users. These could be VRS users who are new to Canada and not fluent in ASL or LSQ, or who are not fluent for other reasons (e.g. rely more on finger spelling or use of home signs). They said VRS does not currently appear to use any deaf interpreters. One participant said they knew of a U.S. VRS service that does use deaf interpreters.

> *"There's no deaf interpreters in VRS right now. And so for deaf people, especially someone who might come from a different country, they would require a deaf interpreter, or someone who doesn't have the same sort of level of understanding of ASL. And these are all people who could really use a deaf interpreter. Especially with older people, they'll use some old fashioned signs, some older signs, and newer interpreters certainly wouldn't understand that. So again, this would be another need for a deaf interpreter. Especially the older people, they often actually won't even use signs, but they'll finger spell the words. And that's something that typically people did back in the day. And a lot of newer interpreters have a really hard time with that."*

Interpreter behaviour: The following were each mentioned by several participants:

- On a particular call, the VI displayed frustration or disapproval to the VRS user. Note, though, that these appear to have been isolated incidents.

- While on hold waiting for the other party to answer (e.g. when calling a government agency), the VI is not paying attention to the caller and may be doing something else. These participants said the VI should remain attentive to the caller during the time on hold.

- There have been occasions where the VI did not convey the emotional tone of the VRS user to the hearing party, or was perceived as negative or unfriendly by the hearing party. This emerged in subsequent communication with the hearing party. These participants emphasized that it is very important for the VI to convey their emotional tone to the hearing party because failure to do so can result in significant miscommunication. One participant said there had been instances where they felt the VI was not conveying the tone of the hearing party's communication.

Interpreter appearance: A few participants said that some VIs have long, painted fingernails, which they said resulted in more "sloppy" or "looser" signing, because the VI is evidently concerned about protecting their nails. One participant said they had seen VIs wearing patterned or multi-coloured clothes, and suggested there should be a standard requiring solid, dark clothing. Note that based on comments from other participants, the latter appears to be very much the norm.

Background behind the interpreter: A few participants said sometimes there are distracting elements on the wall behind the interpreter, such as plug receptacles or lines on the wall. A few participants said sometimes the lighting is too dark or too light, making it difficult to clearly see the interpreter or the interpreter's face.

Switching interpreters during a VRS call: Some participants said that a change in interpreters during a call can be disruptive: the switch can happen in the middle of a thread in the conversation, or the new interpreter does not have important context from the conversation up until the switch. The main issue was that the switch can happen too abruptly without sufficient warning.

> *"One thing that's annoying is I may have a conversation and the interpreters have to take a break and it might be because I'm having a longer conversation. And that's annoying because when you have an interpreter who has to switch, they don't know the background because they're just being thrown into the middle of a conversation. And I understand there has to be a balance between interpreters taking a break, but also how to meet our communication needs. I think that's one thing that needs to improve."*

The suggestion was to provide more advance warning, so that the ongoing conversational thread can be completed prior to the switch or so at least that the caller can prepare for the switch. A few participants suggested the switch be made by means of a physical seat change – i.e. the next interpreter take the seat of the first interpreter. They felt this would provide a more seamless transition than transferring the call to another VI. Other concerns expressed, each by a few participants, included:

- The switching may happen just several minutes into a call. The suggestion was not to assign a VI to a call if they are going to have to switch shortly after the call starts.
- Sometimes there is a long delay before the next VI shows up. The suggestion was that the switch should always be immediate.
- Sometimes a call gets disconnected during a switch.

Wait time for an interpreter: Participants noted that sometimes there is a queue before a VI becomes available. In the case of the ASL service, this was sometimes mildly frustrating but overall was not perceived to be a problem area, and the fact there is sometimes a queue was seen as understandable. Some participants commented that wait times have been a bit longer since the onset of the COVID-19 pandemic, presumably because of greater usage of the service. There were two contexts in which wait time could be more of an issue:

- If the caller has to make the call at a specific preset time – e.g. for a job interview – the existence of a queue can be more frustrating, there is a risk that the party being called may not remain available, and it is more difficult to know when to place the call. One participant suggested providing an option to pre-book a VI for a specified date and time.

  Sometimes if I'm supposed to be on a call at 2 o'clock, I plan ahead. And so I call a few minutes before 2 o'clock to make sure that I'm connected. But sometimes, you know, I don't know where I'm going to be in that queue. And so sometimes I could be 5th or 6th or 16th. I have no way of knowing. And so sometimes, if I'm expected on a phone meeting, those delays cause me to be late to a meeting, even though I plan ahead.

- The participants using LSQ appeared to be somewhat more dissatisfied with wait times for an interpreter, perhaps reflecting few numbers of LSQ VIs.

Other issues and participant suggestions relating to interpretation service: The following were each mentioned by one or a few participants:

- *Allow for the option of team interpreting:* It was suggested this could be helpful for certain "demanding" situations. Note also that the earlier suggestion to have some deaf interpreters would also result in team interpreting.

- *Indicate if another interpreter is present:* A few participants said there had been occasions when they thought another interpreter was present but off-camera (e.g. based on the visible VI's eye movements). They said the caller should always be notified if someone else is present.

- *The VI should not answer on behalf of the VRS user*: One participant said they had experiences where the VI went beyond interpreting and answered questions for the caller.

- Provide the VRS user with an option to provide context prior to connecting to the hearing party.

- When calling certain businesses or government agencies, the hold time before connecting with an agent can exceed 90 minutes. It was suggested that in this particular circumstance, VI presence should be allowed to continue past 90 minutes. There were two aspects to this participant suggestion: (1) they believed there is a 90-minute limit on VRS calls, and (2) they said if the hold time exceeds 90 minutes, it is necessary to call back – and if the hold time again exceeds 90 minutes then they will not be able to get through to the agency they are calling.

- *Touchtone navigation menus are difficult if the options are recited quickly:* it takes time for the interpretation and then time to decide if it is the desired option. The result is that the interpretation may fall behind, and it is necessary to call again. It is not clear there is any solution to this issue on the VRS end; it would be helpful if the organization being called offered an easy way to repeat a menu or individual menu options.

- Allow a VRS user to interrupt a conversation, in the same way hearing people can interrupt each other on the phone.

- When the VRS user is finger spelling something like an email address or a name, the VI should indicate if they prefer it be typed, and the app should make typing easy to do.

- Aim for more diversity of VI's in terms of gender and ethnicity.

Issues pertaining to use of VRS

Hearing Party Does Not Accept a VRS Call

All participants had experienced a hearing party not accepting a VRS call. There were two major reasons for call refusals: the hearing party is concerned over security and privacy, and the hearing party suspects the call is telemarketing or a scam of some sort. A third context was simple lack of familiarity with VRS resulting in a hang up. The following discusses the two major reasons in more detail.

Concern over privacy and security

Almost all participants had experienced call refusals for this reason from a financial institution – banks in particular, and also credit card companies. Some participants reported that they had experienced refusals for this reason from government agencies. Other types of entities were mentioned much less often (several LSQ participants singled out a particular telco as being a problem).

The issue is that from the hearing party's point of view, they perceive a VRS call as being a call from a third party (the VI) on behalf of the individual who is deaf, or as sharing confidential information with a third party. Viewed in this way, a VRS call violates the organization's privacy policies. They do not perceive a VRS call as being simply a direct call from the individual who is deaf with the help of an interpreter. A few participants commented on instances where even when they answered security questions correctly, the institution still ultimately refused to proceed with the call.

> *"They're concerned about privacy and they will refuse service through a third party individual, and they see the VRS as a third party individual. They don't see them as just a vehicle for communication. So as soon as the interpreter announces that this call is VRS, they stop."*

"They said, oh, well, no, we can't have a third party make changes on your account for you. But I've tried to explain that it's not a third party. It's really me. They're just conveying what I'm saying, right. It's not I'm asking them to do it for me. The interpreters are confidential. I have no concern about the confidentiality of it. So there does need to be some training on the various banks and businesses and things like that to know that the interpreter is not a third party doing it on our behalf. It is actually I'm doing it."

As noted above, financial institutions – particularly banks – were frequently mentioned. Experience with federal and provincial government agencies was more variable: sometimes the call was accepted without any opposition, sometimes it was accepted after some explanation, and sometimes it was refused. At the federal level, the Canada Revenue Agency (CRA) was the one most often mentioned, but even here the experience was variable – some had no problems calling the CRA, while others did experience problems.

Participants described the following different ways of trying to deal with a call not being accepted. The only method that always worked was the first one below, i.e. submitting a form required by the institution.

- The organization requires a particular form be signed and submitted. This deals with the problem, although it can be a time-consuming process, and there may be problems accessing the correct form.
- Call back in the hope of getting a different person who is more understanding.
- Attempt to explain over the phone what VRS is.
- Explain that it is their "legal right", or is a matter of "human rights", to conduct the transaction via VRS.
- File a formal complaint with the institution.
- Go to the location – e.g. a bank branch – to explain in-person what VRS is and why they use it.
- Send an email in advance of the call explaining that they are a VRS user.
- Request that a note be placed in their file that they are a VRS user, and that their VRS call should be accepted.

All participants suggested there should be a communications program to inform and educate businesses (particularly financial institutions), call centres, government agencies and other organizations as to what VRS is, and what are the requirements for how the organization should handle acceptance of VRS calls.

VRS call is perceived to be a telemarketing call or a scam

Participants said sometimes a hearing party does not accept a call because they believe the individual suspects it is a telemarketing call or some sort of scam. They believe this reaction sometimes occurs because of (a) the VI's introduction referring to them being from the Video Relay Service, and (b) a total lack of prior familiarity with VRS on the part of the hearing person.

> *"Often when I make a telephone call. The interpreter will say, "Hi, this is Canada VRS", and people who pick up will either hang up or ignore the call. They'll think that the interpreter is soliciting something and just hang up."*

> *"I think that it's as soon as they say, "Hi, it's Canada Video Relay service, I have a call from somebody who uses sign language." They go, what? Like we're calling a mechanic here, right, we're calling people that sometimes are newcomers to Canada. And so they just think right away, what the heck is this and what's an interpreter? And they just go nuts. And they hang up."*

There were two suggestions for how to deal with this situation:

- Many participants suggested a communications program to increase the public's awareness of, and familiarity with, VRS.

- Some suggested the option of eliminating the VI's introduction, and having the VRS caller immediately start the call. One also suggested that if it is necessary to explain the presence of the VI, that this could be done a bit later in the call after the VRS user has established a conversation with the hearing party. This suggestion was also made for other reasons, and is discussed further in the next section.

VI Introduction

When the call connects with the hearing party, the VI gives an introduction before the VRS user starts to sign. As described in the previous section, some participants requested the option to skip the VI introduction in order to avoid a hang up due to the call being perceived as telemarketing or a scam. Some other participants had other or additional reasons for wanting to have this option:

- Skipping the VI introduction gives the VRS user more control over the call, and also makes the process more equivalent to what happens when hearing people call each other.

- The party being called may already be familiar with the caller and their use of VRS, rendering the VI introduction unnecessary.

- The VRS user may not want the other party to know they are deaf – for privacy reasons, or because of a concern it will affect how the other party will treat them. One participant commented that a person who is blind calling an institution does not have to reveal the fact they are blind, and the participant felt VRS should extend the same option to sign language users.

A few participants said they had asked a VI to skip the introduction, but were told this is not allowed. One participant said they knew of a U.S. VRS service that does provide the option to skip the VI introduction.

Calling 811/311

Some participants complained particularly about the inability to dial 811 using VRS, and that instead one has to (a) know that there is an alternative full phone number for the 811 service, and then (b) find and dial the full telephone number (811 is a provincial health line service). Several participants made the same comment about 311 (a municipal service). They recommended that given the importance of these 3-digit phone services, it should be possible on VRS to dial these services using the 3-digit code.

Conference Calling

Most participants had not used VRS for a conference call and were not familiar with this option. One participant had used it for work, and found it useful.

Several participants said their impression was that conference calls are not possible or allowed using VRS. One participant said they were told by the service that conference calls are not allowed. One participant said they tried to set up a conference call involving two individuals who were deaf and one hearing party, but said that connection "froze" when they tried to connect the hearing party, and so concluded that conference calls are either difficult or impossible.

Overall, the results suggest low awareness and some confusion around the possibility of using VRS to make conference calls.

Extending Ways of Using VRS

Some participants were asked if they had any ideas for expanding or extending the ways VRS can be used, for example to assist individuals who are deaf who are starting a business. Most had no suggestions, although some noted that a communication program to increase awareness and understanding of VRS among businesses and the general public would substantially benefit businesses staffed with individuals who are deaf.

A few participants commented that it is good a person can get two VRS numbers – one for personal use and one for business use.

Suggestions made by one or a few participants included:

- Relax current limits on the number of calls that can be placed during one VRS call. The participants said the current limit is three calls, and said that a business person may often have to make calls to multiple parties as part of managing the business.

- Relax the 90-minute limit on call duration for conference calls.

- Develop technology that would allow calls to a general business line (e.g. customer service) to be seamlessly answered by either an individual who is deaf or a hearing person. This would make it much easier to incorporate individuals who are deaf into the pool of agents available to take calls.

VRS App

A general comment about the VRS app made by quite a few participants is that while it works, it is somewhat dated in functionality and design. All participants familiar with VRS in the U.S. said the U.S. VRS services are better in terms of the app features. A general suggestion from participants was that the VRS app should be updated, and updated more often, and that U.S. VRS services provide models for how the app should be improved.

> "The whole look of it is not really user friendly to me. And it's a bit dated. I feel like it's like the style of the 90s. I think that it really could use some sprucing up."

> "In my opinion, a lot of hearing people, they use a lot of apps that are always updated. And we, as a Deaf community should have access to an app that has, you know, lots of updates and bug fixes. I think that there should just be more activity on that front. And it should be an equal experience. So that's definitely one issue that I have."

Note that in another section of this Report, there was discussion of how some Mac computer users are dissatisfied with the requirement to use the Waterfox browser to run the app on their computer.

Notification of Incoming Calls

A major issue expressed by many participants was that they miss a lot of incoming calls because there is not clear or prominent notification of incoming calls. The complaint applies to both computers and mobile devices, but the frustration was particularly expressed with respect to smartphones. A comment was that "you have to be staring directly at the app" to know there is an incoming call. Participants suggested there needs to be much more prominent notification of incoming calls, such that a person knows there is an incoming call even if they are using other apps or are not looking at their device at all. It was suggested there be a flashing light and/or vibration (for a smartphone). A few participants commented they had looked at the settings to see if they could get their smartphone to vibrate, but were unable to get this to happen.

"If I'm receiving a call, I have no notification on my phone to let me know that somebody is calling me. For me, it's frustrating. But also for the person who's calling me, it's frustrating because they're trying to reach me and they keep calling and I'm not answering. There's no way for me to know that I am receiving a call unless I'm staring directly into the app. And so it would be nice if there was perhaps an external light or some form of notification."

"Sometimes it's hard to to answer because sometimes there's a call that comes in and I'm not alerted when the call comes in. And so I find that with the system currently, I have to play a lot of phone tag with people. You know, they'll call or not leave a message because I'm not answering the call, or then they leave a message and then I have to call them back. But then they don't answer when I call them back. And so one of my concerns is being advised of a call when it comes in."

"The ringing, that's a huge issue. There needs to be some sort of light or notification. We don't have anything like that, so we wouldn't ever know that the phone is actually ringing. The phone doesn't vibrate. It doesn't light up. It doesn't do anything."

Video Mail

The following were each mentioned by a few participants:

- Accessing video mail is a slow process.
- The video quality of Video Mail is poor, prone to being "choppy" and "freezing."
- It can be hard to get something like a phone number when the VI finger spells it, particularly when the video quality is poor. The suggestion was that Video Mail should include a text box for this type of information to be typed.
- Similar to more prominent notification of incoming calls, there was a suggestion to have more prominent notification of the arrival of Video Mail.

Video Quality

Participants said sometimes video quality is not very good. However, most attributed this to the Internet connection at the time, and did not see it as a problem with the app itself.

A different sort of video issue mentioned by several participants was that sometimes at the beginning of the call it takes a little while for the caller and the VI to see each other, such that there is some back and forth with the caller and the VI saying "can you see me?"

Other Issues and Participant Suggestions

The following were each mentioned by one or several participants:

- *Chat box functionality:* A few participants said sometimes the content typed into a chat box is not visible to the other party. The problem is intermittent, so they were not sure what caused the problem. One participant said on a smartphone it is awkward to switch back and forth between the video and chat box. They would like the chat box to be visible all the time.

- *Staying logged in to the VRS app:* Several participants said that VRS app shuts itself off periodically, and requested that there be an option to keep the app on all the time.

- *Occasional disconnects:* Several participants said they have a problem with calls being occasionally disconnected. They were not sure if this was due to the app, or to something on their end.

- *Video Remote Interpretation (VRI) is not allowed:* Currently, VRS cannot be used for VRI (interpretation when both parties are in the same room). Several participants suggested it would be nice if VRS could be expanded to include VRI, such that this would be integrated into the VRS app. Note that VRI was also a particular request for emergency situations, as discussed in the section of this Report on 911 service.

- *Caller ID:* A few participants suggested the app display the caller ID for incoming calls. This would extend to VRS a functionality that hearing people have for their phone calls. Related to this, there was also a suggestion to add call blocking to VRS app functionality.

- *Pasting in phone numbers:* A few participants said the app does not allow phone numbers to be pasted into the app for subsequent dialing. Adding a paste functionality would make it much easier to bring phone numbers into the app.

- *Call recording:* The suggestion was to add the ability to record a VRS call.

- *Add a bilingual option to the call settings:* A few LSQ participants said sometimes they need to call an English-only organization. They suggested adding a bilingual option so that they get a VI who can also translate between English and French.

- *Add screen sharing with VI:* It was suggested this could be useful in some situations particularly for VRS users with limited fluency in ASL or LSQ to help them convey information to the VI.

- *Colour scheme:* It was suggested the app's colour scheme is not good for VRS users who are deafblind.

- *Blocking VI access to personal information:* A few participants said they would like the option to block VI access to selected personal information, in order to allay concerns about the confidentiality of that information. An example mentioned was the VRS user's address.

- *How to make international calls:* While VRS calls can be made to Canada and the continental U.S., it is unclear how to incorporate VRS into an international call to other regions.

Data Usage

Almost all participants at least sometimes made VRS calls using their smartphone. In this context, most had data plans where they had to pay attention to their mobile data usage in order to avoid excessive overage charges. Participants were able to manage their data usage, but to varying degrees it did affect when and how they used VRS. For example:

- While on the road, some would look for free Wi-Fi hotspots. For example, for one of the interviews done for this Report, the participant pulled their car in front of a coffee shop in order to use the store's free Wi-Fi.

- Longer calls would be made at home in order to use the home Internet service rather than mobile data. Some participants limited their usage of VRS away from home in order to control mobile data usage.

- If there is a long queue for the VI while using mobile data, the caller might hang up and try again later when hopefully the wait time is shorter.

Many participants suggested the CRTC should work with the telcos to encourage – or require – them to offer data plans tailored to the needs of individuals who are deaf. One participant said their telco offered such a data plan, but none of the other participants were aware of any such plan from their telco. Some had contacted their telco to try to arrange special pricing, but were told this was not possible. Participants said that because an individual who is deaf is not using voice services, it is reasonable and equitable for telcos to offer individuals who are deaf better data plan pricing than is available to hearing customers.

> *"Data plans in Canada are ridiculously expensive, which is not fair for the deaf community who rely on data to make phone calls. So I don't know if maybe CAV can start doing something a little bit more about calling different companies on how they can reduce the rates for deaf individuals on a data plan. There needs to be some coordination with the phone companies on special rate packages for the deaf individual, because, you know, we are a unique group. We are a unique community that requires a unique amount of data."*

> *"I'm hoping that maybe CRTC can take into account the Deaf community and reduce rates and packages for the types of phone calls that we need in order to be able to have an equivalent phone system as hearing individuals."*

Perceived User Experience of Hearing Users of VRS

Participants said that as far as they know, the hearing person's experience using VRS is generally good. Several commented that they had heard from hearing users that the experience is better, easier and more natural than using TTY or IP Relay. Note that this research did not include interviews with hearing individuals who have used VRS, so the input from participants is second hand.

The major perceived issue for hearing individuals is the issue discussed elsewhere of lack of awareness of and familiarity with VRS. Many hearing people do not know that VRS exists. This can lead to refusal to accept VRS calls because it is perceived to be telemarketing, a scam, or just plain strange. Many suggested there needs to be a communication program to raise awareness and understanding of VRS.

The following were each mentioned by one or a few participants:

- If the VI has an accent, some people might have difficulty understanding them. It was suggested the hearing individual should be able to request a different interpreter if they are having trouble understanding the VI, either because of an accent or some other reason.
- Hearing individuals initiating a VRS calls may be put off by the length of time it can take for a VI to become available.

Using VRS for 911 Calls

The majority of participants had not made a 911 call using VRS, and so could not comment on this. Two participants said they had not known that one can make a 911 call using VRS, suggesting there is still some awareness building to do.

Among those who had made a 911 call, most said the call went fine, and they were connected quickly. The exceptions were:

- Two participants said the 911 call did not go through. It was not clear what caused this. One thought maybe the VRS system as a whole was down at the time.
- One participant said their call was routed to a distant 911 call centre, and it took a little while for the call to get transferred to the appropriate 911 call centre.

The main issue several participants had with their 911 experience was that the VI refused to stay on the line when the police arrived and continue interpreting because that would be a VRI service, which is not allowed on VRS. Participants suggested that VRI should be available in a 911 emergency context to ensure effective communication when first responders arrive. Note that one participant said they were able to convince the VI to stay on the line and provide VRI services, but they recognized the VI was not following the rules in doing this.

Methodology

Number, Location and Composition of Interviews

The research consisted of 16 online video interviews 45 to 90 minutes in length and three individual telephone interviews 45-60 minutes on average using VRS, conducted between March 20 and April 16, 2020. A total of 32 VRS users participated in the research, 26 who used ASL to communicate and six who were used LSQ.

The following summarizes the number of participants along several dimensions:

Region	# of participants
West (BC and ALTA)	3
Central (SK and MAN)	2
Ontario	18
Quebec	5
East (NS, NB, NFLD, PEI)	4
Gender	
Male	15
Female	17
Age*	
18-30 years	4
31-44 years	14
45-54 years	8
55-64 years	3
65 years and over	3
VRS Usage	
4-7 times per week	18
1-3 times per week	9
2-3 times per month	4
Once every 2-3 months	1

* All participants were 18 years of age or older

Qualified Participants

A qualified participant was an individual who used the VRS service provided by SRV Canada VRS and who registered for the CRTC's Accessibility Research List Database, an opt-in database developed specifically to generate a sample for research that the CRTC might decide to undertake in 2020. Notably, because individuals can decide whether or not to register for the database, registrants are not necessarily representative of all VRS users who have signed up with SRV Canada VRS. Further, the database included only a relatively small percentage of all registered VRS users.

The following exclusion applied:

- *Past participation:* Had not participated in a qualitative research session in the past six months, and had not attended five or more qualitative research sessions in the past five years.

NOTE: The database of registrants for recruiting was very limited. Because of that, we did not apply occupation exclusions.

Study Procedure

- **_Recruiting process_**: Individuals who had agreed to participate in qualitative research were randomly selected from the CRTC's Accessibility Research List Database. The following steps were then followed by _Synchro Research_ for the ASL interviews, and by _Ad hoc recherche_ for the LSQ interviews:

  Step 1 – An email was sent to those selected, notifying them that they had been selected and that they would be contacted via VRS.

  Step 2 – Individuals were contacted by VRS and the screening questionnaire was administered.

  Step 3 – Once a participant was confirmed, an email was sent confirming their participation in the interview and providing details for how to log in to the online interview or the process that would be followed for a VRS telephone interview.

- **_Online Interviewing Methodology_**: The online interviews were conducted using the itracks _Video IDI_ platform. The _Video IDI_ platform is a venue for real-time qualitative sessions and supports the use of webcams and where the interviewer and participants interact by speaking.

  Each interview consisted of an interviewer, a sign-language interpreter (either ASL or LSQ as required) and one or two participants. The interviewer asked participants questions which were communicated by the sign-language interpreter to each participant. Participants then signed their responses and these were communicated to the interviewer verbally. Sign Language Interpreting Associates Ottawa (SLIAO) provided both ASL and LSQ sign-language interpreters. The interpreters were either Translation Bureau conference-level accredited interpreters or interpreters who hold the Canadian Association of Sign Language Interpreters Certificate of Interpretation (CIO).

  Technical support was provided by itracks throughout each interview.

- **_Individual VRS Telephone Interviews_**: The individual telephone interviews were conducted with participants via a VRS ASL VI. The interviewer initiated the call using VRS at the time scheduled with the participant. As with the online interviews, the VI communicated the interviewer's questions to participants and verbally provided the interviewer with the participant's responses.

Participant Honoraria

The honorarium for all participants was $100.

Interviewers

Rick Robson conducted the ASL interviews, and Nadia Papineau-Couture conducted the LSQ Interviews.

Appendix A – Pre-screening email to Participants, Screener and Confirmation Email

Pre-screening email to participant

Subject: Accessibility Research List – A new research project

To: [Name]

Synchro, a marketing and public opinion research company, has been hired by the CRTC to invite people to an online webcam research interview on your experiences using VRS. The purpose of the research is to help determine how VRS is used, and how it could be improved.

We are contacting you because when you signed up for the CRTC's Accessibility Research List, you indicated that you might be interested in participating in an online interview or group discussion where a sign language interpreter is present.

We will contact you using VRS in the coming week to give you more information about this study, and to ask you some questions to see if you are the type of person we're looking for in this research. If there is a particular date and time in the next week on which you would like us to contact you, please let us know by replying to this email.

If you wish to be removed from the CRTC's Accessibility Research List, please click Unsubscribe.

Thank you,

[Name]
Synchro

Screener

VRS Online Interview Recruitment Screener

Transfer information from Registration

First and Last Name:	
Region:	West [ ] Central [ ] Ontario [ ] East [ ]
Province:	Alberta [ ] British Columbia [ ] Manitoba [ ] ---Saskatchewan [ ] Ontario [ ] New Brunswick [ ] Newfoundland [ ] Nova Scotia [ ] Prince Edward Island [}
VRS Number:	
Age Group:	18-30 [ ] 31-44 [ ] 45-54 [ ] 55-64 [ ] 65 and over [ ]
Email Address:	

Hello, I'm _____ of [Synchro/Ad hoc]. We recently sent you an email about a research study we are doing on behalf of the CRTC. They have hired us to invite people to an online video interview on VRS.

We are contacting you because when you signed up for the Accessibility Research List, you indicated that you might be interested in participating in an online video-based interview in which a sign language interpreter would be present.

The interviews will be with people like yourself who use VRS. The purpose of the research is to help determine how VRS is used, and how it could be improved.

The online interview will last about one hour, and as I mentioned, there will be a sign language interpreter present.

I'd like to ask you some questions to see if you would be interested in possibly taking part in this study. This will take about 10 minutes. May I continue?

Yes	1	
No	2	**Thank and end the interview**

Thank you.

Your participation is voluntary and confidential. All information collected, used and/or disclosed will be used for research purposes only and administered per the requirements of the *Privacy Act*.

The names of participants will not be provided to the Government of Canada.

Your decision to take part will not affect any dealings you may have with the Government of Canada.
May I continue?

Yes	1	
No	2	**Thank and end the interview**

I need to ask you a few questions to see if you fit the profile of the types of people we are looking for in this research.

Note to recruiter: When terminating a call because of their profile say: *Thank you for your cooperation. We already have enough participants who have a similar profile to yours, so we are unable to invite you to participate at this time.*

1) First of all, do you, or does anyone in your household, work for . . . ? **(Read list)**

	No	Yes
A magazine or newspaper	( )	( )
A radio or television station	( )	( )

2) Have you ever participated in an in-depth research interview or a group discussion involving a small group of people where people were asked to discuss different topics?

Yes	1	
No	2	**Go to Q.4a**

3a) And when was the last time you attended an interview or group discussion?

6 months ago or less	1	**Thank and end the interview**
OR more than 6 months ago	2	

3b) In the past 5 years, how many in-depth research interviews or group discussions have you attended? Would you say less than 5 in total, or would you say 5 or more?

Less than 5	1	
5 or more	2	**Thank and end the interview**

4a) Have you used VRS in the past year or so?

Yes	1	
No	2	**Go to Q.5**

4b)   On average, about how often do you use VRS? Would you say… **(read list)**

4-7 times per week	1
1-3 times per week	2
2-3 times per month	3
Once every 2 to 3 months	4
Several times a year	5
Once a year	6

Let me tell you some more about this study to see if you would like to take part.

5)   It is standard practice for the client sponsoring a research project to observe online discussions. Therefore, some people from the CRTC who have been involved in this project may observe the online session.

However, they will not take part in the discussion in any way. They will not be given your name and your name will not appear in the research report. Is this acceptable to you?

Yes	1	
No	2	**Thank and end the interview**

6)   The session will be video recorded.

These recordings are used only to help with analyzing the findings and writing the report. They will not be used for any other purpose and the CRTC will not have access to them. After the report is completed, the video recordings will be destroyed.

Is this acceptable to you?

Yes	1	
No	2	**Thank and end the interview**

Invitation

Thank you. We would like to invite you to participate in one of our online video-based interviews. There will be one or two VRS users like yourself in the interview, as well as an interviewer and a sign language interpreter.

You will be paid a $100 honorarium after the interview to thank you for your participation.

The interview will last approximately 1 hour.

The person leading the discussion will be [Rick Robson/Nadia Papineau-Couture] of Sage Research, which is a public opinion research company.

As I mentioned earlier, this is a research project being done on behalf of the CRTC.

I want to reassure you that your name will not be given to the CRTC, nor will your decision about participating affect any dealings you have with the CRTC.

Would you be willing to participate in an online video interview?

Yes	1	
No	2	**Thank and end the interview**

Thank you.

The interview will be held on **[Date]**, starting at **[Time]**.

Region		Date	Province/Local Time
West	[ ]		
	[ ]		
	[ ]		
Central	[ ]		
Ontario	[ ]		
	[ ]		
	[ ]		
	[ ]		
East	[ ]		
	[ ]		

We will email you instructions on how to log in to the online interview.

We are inviting only two VRS users to each interview. Because of this, please make every effort to attend the interview.

But, in the event you are unable to attend, let us know as soon as possible so we can find a replacement.

You can email us, or you can call us at **[Insert recruiting company phone #]** and ask for **[Insert recruiting company contact name]**.

Please also log in 10 minutes prior to the start time. **The interview will begin promptly at [Time].**

People who arrive too late to participate in the interview will not receive the honorarium.

Someone from our office will be contacting you by email to confirm these arrangements.

Thank you for agreeing to help out with this research project!

Goodbye.

Note to recruiter: Should a participant require validation that this is a legitimate research project, please refer them to the following person:

Name: Meghan Zwiers
Organization: CRTC
Phone #: 819-712-2892
Email: meghan.zwiers@crtc.gc.ca

Confirmation email to participants

Subject: Instructions for your online interview about VRS

To: (Full name)

Thank you for agreeing to participate in an online webcam interview on VRS. The purpose of the research is to help determine how VRS is used, and how it could be improved.

Interview Date & Time

Date: (Day, Date)

Time: (Time)

Please log in 10 minutes early to make sure we can start the interview on time. The interview will last up to one hour, and will be done using webcams. A sign language interpreter will be present. In addition to yourself, there will be another person participating in the interview. As a thank you, you will be sent an honorarium of $100 after completing the interview.

The online interview will be done using an online research service run by a company called *itracks*. The registration and log-in process is as follows. You can use a desktop, laptop or tablet computer, with a webcam enabled, to access the site. The *itracks* site does not work with a smartphone.

1. **Register for the webcam interview using the link below:**

   Register and Log in

   When you log in for the first time, you will be asked to create a password. The registration screen also asks for a time zone – it doesn't matter what time zone you select.

2. The next screen is about phone numbers. **Do not call the number**. Instead, click on ***Join meeting***.

3. **Download and open Adobe Connect.** The next screen will ask you to download Adobe Connect Application. Once the Application is downloaded, click on ***Launch Adobe Connect***.

   After that, a window will appear with a link, *Open Adobe Connect*. Please click that link. That will take you to the interview site.

   Adobe Connect is free software that is used to record video and connect you with the interviewer using your webcam.

4. Near the top of the screen, please click ***Start webcam***. You will see the interviewer and sign language interpreter.

Interviewer: The person conducting the interview will be Rick Robson of Sage Research Corporation**.** A sign language interpreter will also be present.

Need assistance getting logged in?
If you have any questions or problems downloading Adobe Connect or getting logged in, please email **help@itracks.com,** or go to **support.itracks.com** to connect to a support representative using text chat.

Other questions? If you have any other questions, you can email me, or you can call us at **1-877-358-1133, ext. 85** and ask for **Brigitta Hellman**.

Thanks again for agreeing to participate in this research interview on VRS!

Appendix B – Discussion Guide

1) Introduction (15 minutes)

a) **Introduce self:** Rick Robson/Nadia Papineau-Couture of Sage Research, an independent market research company. This is a research project we're doing on behalf of the Government of Canada, and specifically for the Canadian Radio-television and Telecommunications Commission, CRTC for short.

The focus of this research project is the Video Relay Service, or VRS for short. One thing that all of you have in common is that you have used VRS.

VRS was launched in 2016. At that time, there was a commitment to review the service in three years. It's now three years later, and so the CRTC is doing a review of VRS.

One part of the review is discussion groups with people who have used VRS. That's where you come in, and the other people I'm talking to. By the way, we're doing ten other online sessions like this one with VRS users in different parts of the country, and we're also doing a few in-person sessions.

The purpose of the research is to find out what VRS users think of the service. We'll talk about how you use VRS, what is good about how it works, things you don't like about how it works, and any ideas you have for how VRS could be improved or made even more useful.

The results of the research will be used to help in the CRTC's overall evaluation of VRS, and to identify ways in which VRS could be improved.

b) **Review group discussion procedures:**
   -- Role of moderator
   -- Role of participants: there are no right or wrong answers; just want everyone to participate and offer your own views; not here to get a consensus but it is of great value to the research to know each of your candid views.
   -- Confidentiality: Participation is voluntary. Your name will not appear in the report; the report will be available through Library and Archives Canada.
   -- Recording: The session is being video-recorded. The recording is for my use only to help in preparing the report on this research, and will not be provided to the CRTC. After the report is completed, the video recordings will be destroyed.

- Presence of observers from the CRTC – they are not given your name; they are here to observe the moderator and to increase their general understanding of the topics we are discussing tonight.
- Please turn off cell phones and any other electronic devices.
- Discussion to last up to 1 hour.

c) **Any questions?**

d) **Participant self-introductions:** First name only

(Note to moderator/interviewer: If a participant is from an organization, focus the discussion on personal use of VRS)

2) Education and outreach (10 minutes)

To start with, how did you first learn about the existence of VRS, and what led you to decide to try using VRS?

SRV Canada VRS, the organization that runs VRS, held some information sessions about VRS. Some were online and some were in person. Had you heard of any of these sessions? Did you attend a session?

If yes: How useful were the sessions?

Do you have any suggestions for changes to these sessions?

Did you go to the SRV Canada VRS website to learn about the service?

If yes: Was it helpful? Did you get the information you were looking for?

Did you look at the FAQ section of the website? If yes, were these helpful?

Do you have any suggestions for how the website could be improved?

3) How VRS is used (12 minutes)

On what types of devices do you use VRS - a computer? a tablet? a mobile phone? Which type of device do you use most often? Why is that?

> **Probe:** Would you want to use VRS on another type of device?

What are the ways in which you have used VRS? **[Note to Moderator: Examples of calls users make with VRS are: calling a doctor, a government agency, a family member or a friend.]**

Probe: About how often do you use VRS?

What are the most common ways you use VRS?

In what ways has VRS been useful for you? Are there any ways in which VRS has been <u>less</u> useful than you would have liked?

Have you had any problems or issues using VRS to communicate with businesses or government institutions like the Canada Revenue Agency or City Hall?

Probe: Do they accept VRS calls?

Are they aware of VRS?

4) Problems/Improvements (15 minutes)

Have you experienced any problems using VRS? Have there been any problems with the quality of the service?

> **Probe:** Time it takes for the video interpreter to pick up
>
> Quality of interpretation
>
> Quality of the video
>
> Ease of use of the VRS app
>
> Amount of data usage to use the service
>
> Conference call: Have you used it for a conference call? If yes – how well did it work? There's a 90-minute limit for conference calls – was that limit OK, or was it a problem?

Have you received any feedback from hearing people about what their experience is receiving a VRS call or making VRS calls? Do they experience any problems or frustrations using VRS to receive or make calls?

> **Probe:** Are hearing people satisfied with the introduction explaining the service when receiving a VRS call? If not, how could it be improved**?**

Do you have any suggestions for improving VRS?

> **Probe:** Do you have any suggestions for ways to attract people who don't currently use VRS?

Do you have any suggestions for extending or expanding the ways people could use VRS?

> **Probe:** Do you have any suggestions for how it could be made more useful in a business context? (For example, for a Deaf person who is starting or running a business)

5) Customer service (4 minutes)

Have you ever contacted customer service at VRS?

If yes:

- For what purpose?
- Were you satisfied? If not, why not?
- Do you have any suggestions for improving customer service?

6) 911 service (2 minutes)

Have you ever contacted 911 services using VRS?

If yes:

- Did the VRS service work well as a way to contact 911 services?
- If not, why not? Do you have any suggestions for how to improve its use for contacting 911 services?

7) **Wrap-up (2 minutes)**

We're about finished. We've covered many aspects of VRS. Is there anything else you would like the CRTC to take into consideration in their review of VRS?

Thank you for coming this evening and giving us your opinions.

The report on this project will be made public. [Method TBD]]

I'll let the person who recruited you know to send you the $100 honorarium. They will arrange with you how to send the honorarium.