

Research on Telecommunications Services in Northern Canada

Final Report

Prepared for the Canadian Radio-television and Telecommunications Commission (CRTC)

Supplier Name: Environics Research

Contract Number: 82082-210046/001/CY Contract Value: \$66,080.14 (including HST)

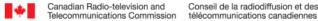
Award Date: 2020-08-06 Delivery Date: 2020-11-04

Registration Number: POR 023-20

For more information on this report, please contact CRTC at: ROP-POR@crtc.gc.ca

Ce rapport est aussi disponible en Français





Research on Telecommunications Services in Northern Canada

Prepared for the Canadian Radio-television and Telecommunications Commission

Supplier name: Environics Research

November 2020

This public opinion research report presents the results of omnibus questions and focus groups conducted by Environics Research on behalf of the Canadian Radio-television and Telecommunications Commission. The research study was conducted between September and October 2020.

Cette publication est aussi disponible en français sous le titre Recherche sur les services de télécommunication dans le Nord canadien

This publication may be reproduced for non-commercial purposes only. Prior written permission must be obtained from the Canadian Radio-television and Telecommunications Commission. For more information on this report, please contact the CRTC at: ROP-POR@crtc.gc.ca.

Canadian Radio-television and Telecommunications Commission 1, promenade du Portage Gatineau, Quebec J8X 4B1 T: 877-249-2782

Fax: 819-994-0218

Catalogue Number:

BC92-110/2020E-PDF

International Standard Book Number (ISBN):

978-0-660-36387-5

Related publications (registration number: POR 023-20):

Catalogue Number BC92-110/2020F-PDF (Final Report, French) ISBN 978-0-660-36388-2

© Her Majesty the Queen in Right of Canada, as represented by the Chairperson and CEO of the CRTC, 2020.



Table of Contents

| Exe | ecut | tive summary | i |
|-----|------|--|----|
| Int | rod | uction | 1 |
| ı. | De | etailed findings – quantitative phase | 3 |
| | | Telecommunication services in the North | |
| | В. | Satisfaction with Internet service providers | 5 |
| | C. | Impact of network outages | 7 |
| | D. | Media consumption | |
| II. | | etailed findings – qualitative phase | |
| | | Satisfaction with current telecommunication services | |
| | В. | Role of telecommunications in everyday life | 13 |
| | | Looking ahead | |
| Ар | pen | ndix A: Quantitative methodology | 18 |
| Ар | pen | ndix B: Qualitative methodology | 21 |
| Аp | pen | ndix C: Quantitative survey questions | 22 |
| Δn | nen | ndix D: Qualitative research instruments | 25 |

Executive summary

Background and objectives

The Canadian Radio-television and Telecommunications Commission (CRTC) launched a consultation to review its regulatory framework for Northwestel Inc. and the state of telecommunications services in Canada's North. Northwestel is the dominant telecommunications service provider in Canada's North, operating in 96 communities in Yukon, the Northwest Territories, Nunavut, northern British Columbia and Fort Fitzgerald, Alberta.

The CRTC collects and publishes detailed information on the state of telecommunications services in Canada in its *Communications Monitoring Report*. To expand its knowledge of the needs of those living in Canada's North, public opinion research was identified as one method for the CRTC to supplement its existing datasets, with a view to addressing potential issues with respect to the quality, availability, and affordability of telecommunications services.

This research included a set of quantitative omnibus questions placed on Environics' *North of 60° and Remote Community Monitor* and focus groups with residents in Northwestel's serving territory of Yukon, the Northwest Territories, Nunavut and northern British Columbia.

Specific objectives of the research included, but were not limited to:

- Assessing what role telecommunications services play in the lives of Canadians in Canada's North; and
- Assessing whether currently available telecommunications services meet the needs of Canadians living in Canada's North.

Methodology

Quantitative phase

Environics' syndicated *North of 60° and Remote Community Monitor* is an existing survey that covers a geographic area beyond Northwestel's serving territory. This random-probability telephone survey is conducted annually with 1,000 adult residents of Yukon, the Northwest Territories and Nunavut and the other two regions of Inuit Nunangat, Nunavik (northern Quebec) and Nunatsiavut (Labrador). The 2020 edition of the survey included six questions about telecommunication services and three questions about broadcasting services for the CRTC.

Fieldwork was conducted between September 11 and October 11, 2020, using industry-standard random-digit dialling (RDD) techniques. A survey of this size will yield results which can be considered accurate to within +/- 3.1 percentage points, 19 times out of 20. Margins of error are larger for regional and demographic subgroups of the population.

For the purposes of this public opinion research, "Canada's North" refers to Northwestel's serving territory, which includes Yukon, the Northwest Territories, and Nunavut, as well as areas in northern British Columbia and Fort Fitzgerald, Alberta.

Qualitative phase

Environics conducted seven focus groups with residents in Northwestel's serving territory. One group was conducted with Indigenous residents and one with non-Indigenous residents in each of Yukon, the Northwest Territories and Nunavut; in northern British Columbia, one group was held with both Indigenous and non-Indigenous residents. The focus groups were conducted by teleconference between October 13 and October 28, 2020 and were approximately 90 minutes in length.

Statement of limitations: Qualitative research provides insight into the range of opinions held within a population, rather than the weights of the opinions held, as measured in a quantitative study. The results of this type of research should be viewed as indicative rather than projectable to the population.

Contract value

The contract value was \$66,080.14 (including HST).

Key findings

The overarching finding of this research is that telecommunication services are central to the lives of people living in Canada's North. Most have a landline, home Internet and a cell phone. Network outages are perceived to negatively impact residents' well-being, because – as discussed in the focus groups – they use telecommunication services for everything from entertainment and communication to accessing goods and services and running their businesses.

The focus groups found residents most critical of their Internet service, compared to landline and cell phone services; they attribute the problems to a lack of competition in their region. Both the qualitative and quantitative research indicate the main concern is that prices are too high for the Internet service received, which is hampered by network outages and slow speeds.

The focus groups also revealed concerns about landline and cell phone service. For residents of Yukon, the Northwest Territories and Nunavut, the main limitation is a lack of cell service outside city limits. Moreover, while many prefer to rely on their cell phones, in these regions served by Northwestel, they indicate they must pay to maintain a landline as part of their Internet package. In northwest British Columbia, residents have no cell service in their communities, which is a safety concern.

The quantitative research found lower use of home Internet and cell phones in smaller centres and among the Indigenous peoples that comprise a higher proportion of the population in those centres. The results of the focus groups suggest there are concerns about these residents falling behind other Canadians as a result.

The key findings for each phase of the research are summarized below:

Quantitative phase

Almost all Northern residents report having a landline telephone (95%). Large majorities also have home
Internet access (86%) and a cell phone (78%), but both are less common in smaller communities, and
accordingly, less common among Indigenous people, who comprise a larger share of the population
outside main centres.

- The research confirms that Northwestel is the main provider of home Internet service for Northerners. Northwestel is almost the sole reported provider in Yukon and the Northwest Territories and is second to SSi in Nunavut. Reported method of Internet service varies by community size: cable is most prominent in capital cities, while those in smaller communities rely to a greater extent on DSL through a phone line or satellite Internet.
- Satisfaction ratings of current Internet service suggest room for improvement. Only one-third of
 Northerners with home Internet access hold positive views of their provider's efforts to meet their
 household needs for Internet, while another three in ten describe it as "average". Cost is the main factor
 that distinguishes positive and negative ratings. Satisfaction ratings do not vary significantly by Internet
 provider, but negative views are more prominent in smaller communities of less than 1,000 residents.
- Northerners believe that outages to their TV, phone or Internet service affect their personal, social and economic well-being, including almost half (48%) who say such outages have a major or moderate impact.
- Even with limitations on Internet and mobile access in the North, the main sources for local news and information are the Internet/social media (37%) and radio (30%), well ahead of television and newspapers. These are the two most popular sources among all demographic groups, although preference for the Internet skews to Northerners under 60 years of age and those with higher education and incomes. Preference for getting local news from the radio skews to older Northerners (60+), who also report more hours per week listening to the radio overall.

Qualitative phase

- Focus group participants described telecommunication services as an integral part of their everyday lives,
 affecting their ability to communicate, and to access information and goods and services not available
 locally, such as health care, education and government services. They believe these services are even
 more important in the North than in southern Canada, because of their remoteness from the rest of
 Canada and the world.
- The focus groups further confirmed that Northwestel is the largest, and in most participants' experience (outside of Nunavut), the only Internet provider in Canada's North. Participants viewed Northwestel's dominance as "monopolistic" and expressed a desire for more competitors to enter the North in hopes it would lower prices and give them the option of more reliable and faster Internet service.
- In contrast to Internet service, participants felt they have more choice in mobile phone providers and were generally satisfied with the service they receive. The main limitation in Yukon, Northwest Territories and Nunavut is the lack of cell service outside town or city limits (i.e., when they go outside their community). However, in northern British Columbia, focus group participants have no cell service even within their community and highlighted personal security concerns associated with being unable to reach emergency services when away from home.
- Affordability, reliability, and quality were the three biggest problems participants identified with their telecommunication services, especially in respect to Internet. Participants noted that the high prices of Internet made it an unaffordable service to many in their communities, which they felt, has negative consequences, especially for young people who could not participate in online learning during the COVID-19 pandemic. Unreliable Internet service and poor quality (low speeds and data caps) were also

cited as detrimental to those in the North as it limited their living standards (e.g., access to education, information and government services) compared to those in the southern Canada.

Political neutrality statement and contact information

I hereby certify as senior officer of Environics 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, standings with the electorate, or ratings of the performance of a political party or its leaders.

Sarah Roberton

Vice President, Corporate and Public Affairs

sarah.roberton@environics.ca

Tarah Roberton

613-793-2229

Supplier name: Environics Research Group PSPC contract number: 82082-210046/001/CY

Original contract date: 2020-08-06

For more information, contact the CRTC at: ROP-POR@crtc.gc.ca

Introduction

The Canadian Radio-television and Telecommunications Commission (CRTC) launched a consultation to review its regulatory framework for Northwestel Inc. and the state of telecommunications services in Canada's North. Northwestel is the dominant telecommunications service provider in Canada's North, operating in 96 communities in Yukon, the Northwest Territories, Nunavut, northern British Columbia and Fort Fitzgerald, Alberta.

The CRTC's regulatory framework for Northwestel is composed of various policies. Most notably, the CRTC regulates prices of some telecommunications services offered by Northwestel through a price cap regime. Price cap regulation applies only to an incumbent local exchange carrier's² (ILEC) tariffed (i.e., regulated) services and generally places upward constraints on prices that companies can charge their customers. The Commission's regulatory approach to Northwestel is unique in that Northwestel is the only ILEC for which the Commission regulates terrestrial retail Internet access service rates.

Objectives

The CRTC collects and publishes detailed information on the state of telecommunications services in Canada in its *Communications Monitoring Report*. To expand its knowledge of the needs of those living in Northern Canada, public opinion research was identified as one method for the CRTC to supplement its existing datasets, with a view to addressing potential issues with respect to the quality, availability, and affordability of telecommunications services.

This research included a set of quantitative omnibus questions placed on Environics' *North of 60° and Remote Community Monitor* and focus groups with residents of Yukon, the Northwest Territories, Nunavut and communities in northern British Columbia that are served by Northwestel.

Specific objectives of the research included, but were not limited to:

- Assessing what role telecommunications services play in the lives of Canadians in Canada's North; and
- Assessing whether currently available telecommunications services meet the needs of Canadians living in Canada's North.

About this report

This report begins with an executive summary outlining key findings and conclusions, followed by a detailed analysis of the survey data and of the qualitative findings. Provided under a separate cover is a detailed set of "banner tables" presenting the results for all questions by subgroup segments. These tables are referenced by the survey question in the detailed analysis.

In the quantitative section of the report, the population is referred to as "Northern residents", for brevity. However, it should be noted that the survey from which this data is drawn includes residents of Nunavik and Labrador, and thus extends beyond Northwestel's serving territory.

² Northwestel is the incumbent local exchange carrier for Canada's North.

It should also be noted that, per Census data, the proportion of Indigenous residents ranges from roughly one-quarter of Yukon, to half of the Northwest Territories, to close to nine in ten in each of Nunavut, Nunavik and Nunatsiavut. Moreover, Indigenous residents tend to make up a greater share of the population in smaller communities in the North. This is important when interpreting the data, since differences in use of and access to telecommunication services appear to be driven by location and geography rather than inherent differences in the choices made by Indigenous and non-Indigenous residents.

In this report, quantitative results are expressed as percentages unless otherwise noted. Results may not add to 100% due to rounding or multiple responses. Net results cited in the text may not exactly match individual results shown in the tables due to rounding.

Use of findings of the research. The information gained through this research will be used to inform the proceeding to review Northwestel's regulatory framework, to ensure the framework continues to align with the needs of Canadians living in the North.

Detailed findings – quantitative phase

A. Telecommunication services in the North

Services in household

Most Northern residents have landline, home Internet and cell phone services.

Almost all Northern residents (95%) report having a landline. This proportion is consistent across most regions except in Labrador (77%), where it is lower.

The large majority also have Internet access at home (86%); this is highest in Yukon (93%) and Labrador (90%).

Slightly fewer, but still a majority (78%), have a cell phone, but this is notably lower in Nunavik (26%).

Having home Internet and a cell phone is less common in smaller centres than in capital cities, and among Indigenous people (79% home Internet vs 94% non-Indigenous; 71% cell phone vs 87% non-Indigenous), who make up a greater proportion of the population outside capital cities.

Services paid for in household

| Service | Total (n=1000) | Yukon (n=275) | Northwest Territories (n=350) | Nunavut (n=275) | Nunavik (n=70) | Labrador/ Nunatsiavut (n=30) |
|-------------------------|-------------------|------------------|-------------------------------------|--------------------|-------------------|------------------------------------|
| Home telephone/landline | 95% | 96% | 95% | 93% | 94% | 77% |
| Home Internet access | 86% | 93% | 85% | 80% | 80% | 90% |
| Cell phone | 78% | 82% | 86% | 82% | 26% | 81% |

Q4 Which of the following does your household currently pay for?

Home Internet service provider

Northwestel is the main provider for those with home Internet service.

Northern residents with home Internet access (86% of the total sample) were asked which company provides their service. Northwestel is the most common provider overall (65%). Other providers serve a minority of residents (less than 10% each).

However, the main provider varies by region. Northwestel is almost the sole reported provider in Yukon (88%) and the Northwest Territories (90%). SSi is the top provider in Nunavut (39%) and Tamaani in Nunavik (51%).

Indigenous people are less likely than non-Indigenous people to have Northwestel as their Internet provider, and more likely to have another provider. However, this is because they comprise a greater share of the population in regions where other providers exist (i.e., Nunavut, Nunavik and Labrador) and a relatively smaller share of the populations in Yukon and the Northwest Territories, where Northwestel is the only provider.

Home Internet provider

Subsample: Those with home Internet access

| Source | Total (n=870) | Yukon (n=253) | Northwest Territories (n=302) | Nunavut (n=229) | Nunavik (n=59) |
|---------------------------------|------------------|------------------|-------------------------------------|--------------------|-------------------|
| Northwestel | 65% | 88% | 90% | 25% | <1% |
| SSi Micro / Qiniq / Yellowknife | 9% | <1% | <1% | 39% | 3% |
| Bell | 8% | 5% | 4% | 14% | 3% |
| Xplornet | 4% | 2% | *% | 7% | 24% |
| Tamaani | 4% | - | - | - | 51% |
| Other | 4% | 1% | 2% | 4% | 8% |
| Don't know | 5% | 3% | 3% | 11% | 12% |

Q5 Which company provides your home Internet service? BASE: those with Internet at home (n=870)

Base size is too small to report Labrador/Nunatsiavut (n=27)

Method of Internet service

Northern residents are most likely to get their Internet via either cable or DSL.

Among those with home Internet service, cable Internet (34%) and DSL (33%) are the most common methods of access, followed by satellite Internet (19%).

Method of Internet service depends upon community size: cable is most prominent in capital cities (58%), while smaller communities rely more on DSL through a phone line (43%) or satellite Internet (31%). These location-based differences then translate into differences by identity (again, due to relative population sizes) – cable is a more prominent source of Internet for non-Indigenous people, while satellite is relatively more common for Indigenous people.

Method of Internet service

Subsample: Those with selected Internet providers

| Method | Total (n=770) | Yukon (n=245) | Northwest Territories (n=290) | Nunavut (n=201) |
|------------------------------|------------------|------------------|-------------------------------------|--------------------|
| Cable Internet | 34% | 44% | 43% | 5% |
| DSL through a telephone line | 33% | 40% | 34% | 20% |
| Satellite Internet | 19% | 4% | 3% | 64% |
| Fibre Internet | 9% | 8% | 14% | 1% |
| Fixed wireless Internet | <1% | - | - | <1% |
| Don't know | 6% | 4% | 6% | 9% |

Q6 How does your (Internet provider) provide your Internet service? Do you have...? BASE: those with selected Internet providers from previous question (n=770)

Base size is too small to report Nunavik (n=18) or Labrador/Nunatsiavut (n=16)

B. Satisfaction with Internet service providers

Satisfaction with Internet service provider (ISP)

Only one-third of Northern residents with home Internet access hold positive views about their provider's efforts in meeting their household needs for Internet.

Overall, there is no consensus among Northern residents about their degree of satisfaction with their Internet service provider. Among those with home Internet access, roughly one-third each rate the service they receive excellent/good (36%), average (31%) or poor/very poor (34%).

A key finding is that negative ratings of their Internet service provider are significantly more common in smaller communities (45% with populations under 1000, vs. 30% with populations of 1000+). Negative ratings are also more common in Nunavik (49%), but do not vary among the other regions.

Ratings do not vary substantially by service provider. Average ratings are slightly more common for Northwestel (35%) compared to SSi and Bell. In turn, negative ratings are more widespread for SSi (47%), the most widely used provider in Nunavut (as shown on pages 3-4).

Satisfaction with ISP
Subsample: Those with home Internet access

| Rating | Total (n=860) | Northwestel (n=562) | SSi (n=80) | Bell (n=72) |
|----------------------|------------------|------------------------|---------------|----------------|
| Excellent/good (net) | 36% | 34% | 32% | 34% |
| Excellent | 9% | 8% | 9% | 8% |
| Good | 27% | 26% | 23% | 26% |
| Average | 31% | 35% | 22% | 26% |
| Poor | 23% | 23% | 22% | 29% |
| Very poor | 11% | 8% | 25% | 7% |
| Poor/very poor (net) | 34% | 31% | 47% | 36% |

Note: results are shown only for providers with a sufficient subsample of users (n>50).

BASE: those with Internet at home (n=860)

Q7 How good a job is your Internet service provider doing at meeting your household needs for Internet service?

Reasons for level of satisfaction with ISP (unaided)

Cost is the factor that distinguishes most between positive and negative opinions of an Internet provider; Internet speed and (lack of) reliability are also main reasons given for dissatisfaction.

Northern residents with home Internet access were asked the reasons why they rated their Internet provider as they did (unaided, without providing response options, multiple responses were accepted).

The table presents the reasons given by level of satisfaction with their ISP. Among those who hold negative opinions of their ISP (i.e., say their ISP is doing a "poor" or "very poor" job at meeting their home Internet needs), cost, network outages and slow Internet speeds are the main reasons. They are relatively less likely to criticize their monthly data cap, the customer service they receive or the lack of choice in providers.

Among those who hold positive opinions (i.e., say their ISP is doing a "good" or "excellent" job), reliability and Internet speed are the main reasons given. Relatively few mention value for money.

It is not possible to look at regional variations within each level of satisfaction, due to small sample sizes.

Reasons for level of satisfaction with ISP

Subsample: Those with home Internet access

| Reason | Very poor (n=91) | Poor (n=194) | Average (n=267) | Good (n=230) | Excellent (n=74) |
|---|---------------------|-----------------|--------------------|-----------------|---------------------|
| Cost/value for money | 52% | 44% | 39% | 17% | 11% |
| Reliability/network outages | 43% | 44% | 47% | 40% | 26% |
| Internet Speed | 41% | 45% | 32% | 25% | 30% |
| Monthly data limit/cap | 17% | 21% | 15% | 8% | 9% |
| Customer service/support | 17% | 13% | 6% | 9% | 17% |
| No choice/only option available | 17% | 16% | 6% | 9% | 2% |
| Choice of Internet packages/ bundles | 3% | 3% | 3% | 3% | - |
| Provides customized solution for local/Indigenous community | - | - | - | 1% | 4% |
| Other | - | 2% | <1% | 3% | 5% |
| Don't know | 4% | 1% | 5% | 8% | 11% |

Q8 What are the main reasons why you gave your Internet provider that rating?

BASE: those with Internet at home (n= 865)

C. Impact of network outages

Nearly half of Northern residents report that network outages majorly or moderately impact their well-being.

Northern residents hold mixed views about the impact of network outages (TV, phone or Internet) on their well-being. Half say it has a major (20%) or moderate (28%) impact on their well-being; another third (33%) say it has a minor impact. Fewer than one in five (18%) say outages have no real impact on them.

Perceived impact of network outages

| Impact | Total (n=1000) | Yukon (n=275) | Northwest Territories (n=350) | Nunavut (n=275) | Nunavik (n=70) | Labrador/ Nunatsiavut (n=30) |
|-----------------------------|-------------------|------------------|-------------------------------------|--------------------|-------------------|------------------------------------|
| Major/moderate impact (net) | 48% | 51% | 47% | 43% | 48% | 75% |
| Major impact | 20% | 24% | 18% | 16% | 16% | 42% |
| Moderate impact | 28% | 27% | 29% | 27% | 32% | 33% |
| Minor impact | 33% | 31% | 38% | 34% | 27% | 8% |
| No impact | 18% | 17% | 15% | 19% | 22% | 18% |
| Don't know | 1% | 1% | - | 4% | 2% | - |

Q9 Network outages refers to when your TV, phone or Internet goes down or stops working for a period of time. How much of an impact do network outages have on your personal, social and economic well-being?

The perception that network outages majorly or moderately impact well-being is more common among non-Indigenous people (52%, vs. 45% of Indigenous people) and those with more education (55% with a postsecondary education) or higher household incomes (54% over \$40,000). It is important to note that this is not an objective evaluation of the impact of network outages on these population segments, nor of how often they are affected. Indigenous peoples and those with lower socioeconomic status may feel less comfortable or be less willing to voice their true opinions in a phone survey environment. The qualitative research (see Section II) reveals both a certain level of acceptance about unreliable telecommunication services as well as concerns about the negative impact on Indigenous people, particularly youth.

The perception that network outages have an impact is also more widespread in Labrador (74%) and among residents aged 30-44 (54%). Although it cannot be confirmed by this research, we hypothesize that the higher concern among this age bracket reflects their typically higher rate of employment and the possibility that network outages impact their work.

D. Media consumption

Main source for local news

The Internet and social media are the most popular source of local news, followed by radio.

Northern residents identify the Internet and social media (37%) and radio (30%) as their main sources for news and information about the local community. By comparison, relatively few rely on television (12%), newspaper (8%) or word of mouth (7%).

Reliance on the Internet/social media and radio for local news is consistent across the three territories. In Nunavik, radio is a more prominent source while the Internet is less prominent; the opposite is true in Labrador.

Main local news sources are similar for Indigenous and non-Indigenous people. Main local news source varies by age and socio-economic status. Reliance on the Internet is higher among residents under 60 years of age (40%) than among older residents (20% 60+), who in turn, are more likely than others to use the radio, TV or newspaper for this purpose.

Use of the Internet for local news coverage skews to those with higher socio-economic status (43% with a post-secondary education and 42% with household incomes over \$40,000).

Main source for local news

| Source | Total (n=1000) | Yukon (n=275) | Northwest Territories (n=350) | Nunavut (n=275) | Nunavik (n=70) | Labrador/ Nunatsiavut (n=30) |
|------------------------------|-------------------|------------------|-------------------------------------|--------------------|-------------------|------------------------------------|
| Internet/social media | 37% | 31% | 40% | 42% | 18% | 69% |
| Radio | 30% | 33% | 26% | 25% | 49% | 14% |
| Television | 12% | 8% | 14% | 10% | 17% | 15% |
| Newspaper | 8% | 13% | 9% | 3% | - | - |
| Word of mouth/family/friends | 7% | 8% | 7% | 8% | 1% | 2% |
| Local newsletter | 1% | 3% | <1% | 1% | - | - |
| Other | 1% | 2% | 1% | 1% | 1 | - |
| Don't know | 5% | <1% | 2% | 10% | 14% | - |

Q1 What is your main source for news and information about your local community?

Television service source

The most common method of television reception is a satellite dish, followed by cable.

Northern residents identify satellite dish (44%), cable television (35%) and online streaming (29%) as their top three sources for television. By comparison, relatively few rely on IPTV (17%), antenna (2%), or other methods for television service. Only a small percentage (10%) do not have or watch TV.

Method of television reception varies by location rather than demographics. Satellite is the top source in Nunavut, Northwest Territories and Labrador, while cable television is the top source in Nunavik (59%). In Yukon, TV reception is almost equally divided between satellite, cable and online streaming.

Satellite reception is also much more common in smaller centres (61%) than in capital cities (22%), where cable (46%) and online streaming services (36%) are more common. Because Indigenous people make up a greater share of the population in smaller centres, they are more likely to report accessing TV through satellite (55%, vs. 32% of non-Indigenous people).

Television service source

| Television Source | Total (n=1000) | Yukon (n=275) | Northwest Territories (n=350) | Nunavut (n=275) | Nunavik (n=70) | Labrador/ Nunatsiavut (n=30) |
|--|-------------------|------------------|-------------------------------------|--------------------|-------------------|------------------------------------|
| Satellite dish | 44% | 33% | 46% | 57% | 39% | 60% |
| Cable television | 35% | 36% | 33% | 28% | 59% | 24% |
| Online streaming services like Netflix or Disney+ | 29% | 31% | 35% | 19% | 17% | 40% |
| IPTV, meaning a high- speed Internet connection | 17% | 19% | 25% | 7% | 10% | 10% |
| An antenna | 2% | <1% | 6% | 1% | 2% | - |
| Other | 1% | 1% | <1% | - | 3% | - |
| Your household doesn't have or watch TV | 10% | 17% | 6% | 10% | 2% | <1% |

Q2 How does your household get television service? Is it through...

Q3

Time spent listening to the radio

There is a wide range of radio listening habits in the North.

Northern residents report a range of radio listening habits. In a typical week, one in five listens to the radio for more than two hours per day (15+ hours per week).

Radio listening habits do not vary significantly by region or identity (Indigenous or non-Indigenous), but they do vary by age. Listening to the radio for at least 10 hours per week is more common among older residents (40% aged 60+) compared to younger residents (22% aged 18-29).

Time spent listening to the radio

| Hours Per Week | Total (n=1000) |
|----------------|----------------|
| 0 | 16% |
| 1 | 14% |
| 2-4 | 21% |
| 5-9 | 16% |
| 10-14 | 12% |
| 15-24 | 7% |
| 25+ | 12% |
| Don't know | 2% |

In a typical week, from Monday to Sunday, how many hours do you spend listening to AM/FM radio stations on any device from any location?

II. Detailed findings – qualitative phase

A. Satisfaction with current telecommunication services

Internet

Providers. Almost all focus group participants have Internet service in their home, and the few that did not, use their mobile phone data to access the Internet or have access to the Internet at work or at friends' and family's homes. Northwestel was almost exclusively cited as their home Internet provider, although some in Nunavut use Qiniq (managed by SSi) as their provider.

Provider choice/options. Participants made it clear that they had little to no choice in Internet providers – this was not a perception, but was stated as fact. They consistently expressed frustration with what they described as a "monopolistic" landscape. Participants were generally unanimous in their belief that competition from other Internet providers would drive prices down and closer to those in southern Canada. Some also felt it would motivate providers to offer faster, more reliable Internet service. Frustrations were most evident among those who have personally experienced better Internet and lower prices when living in southern Canada or have heard of their friends' and families' experiences in southern Canada.

Satisfaction/pros and cons. Of the three services discussed in the groups (Internet, landline and mobile phone), participants were least satisfied with their Internet service and provider(s).

Three main concerns were raised about Internet service in their communities:

- High prices. The price of Internet services was noted as the biggest pain point. Most participants felt they were paying far more for Internet service with less data allowance than those in southern Canada. Participants noted that unlimited Internet packages are not available in the North and it is costly to exceed your monthly data allotment. Some participants noted that Northwestel waived overage charges during the COVID-19 pandemic, but it was unclear how long this would last. Among non-Indigenous people, and a handful of Indigenous people who had children at home, there was a desire to have the option of unlimited Internet packages.
 - Participants also generally agreed the price of Internet service is prohibitive to others in their communities. A teacher in Nunavut said that, when the COVID-19 pandemic forced children to stay home from school, it became apparent that nearly half of the students in her class did not have access to Internet at home; she noted that this was likely due to their family being unable to afford the service. An Indigenous participant indicated that he felt Internet access at home was unattainable for many Indigenous youth in his community, and was very concerned they would fall behind those with Internet access.
- **Slow speeds.** Many participants were aware of the Internet speed promised by their provider and said they often tested the speed, which was typically well below the speed they pay for. Slow speeds were felt to limit their online abilities, particularly the ability to video chat (e.g., Zoom or Facetime) with friends/family, for work or for remote medical appointments. Other limitations noted by some were the inability to stream school lectures or complete government or medical forms online.
- Unreliable service. In all regions, participants have experienced consecutive days without home Internet
 access, with one participant mentioning a twelve-day outage. Perhaps because of their relative
 frequency, participants were generally philosophical about outages, considering them almost a fact of
 life in the North. Nonetheless, unreliable Internet is also a source of stress. For example, one participant
 working towards a professional designation was anxious his Internet connection would cut out while

writing the final exam, causing him to fail; due to the COVID-19 pandemic, he cannot travel to southern Canada to write the exam in-person.

The slow speed of Internet and service outages were most often noted as a frustration by non-Indigenous participants. While Indigenous participants were as likely to describe Internet access as an essential service, they were less likely to point out shortcomings about their service. One Indigenous participant noted that slow and unreliable telecommunication services are an accepted way of life among those in his community. Participants of smaller communities (i.e., outside capital cities) noted that an outage means the whole community was without Internet (including stores), and they would simply manage accordingly. However, there was a consensus that people in the North should not have to accept a poorer quality of Internet than those in southern Canada just because of their geography.

Landline

Territories. Many participants indicated they have a landline, although a few do not and instead rely entirely on their mobile phone. However, participants tend to prefer to use their mobile phones and are less likely to use their landline. In fact, it was noted that to have an Internet package with Northwestel, you also must pay for a landline. For participants in the territories, this tended to be a pain point since it is an additional cost for a service they do not necessarily want or need.

Aside from the fact that it is a mandatory add-on to their Northwestel bill, participants were generally satisfied with their landline service. One participant did note that the landline provides a sense of safety when there is a service outage for Internet or mobile.

Northern British Columbia. For participants in the northern British Columbia group, landlines are a necessity since they do not receive cell service in their communities. Northwestel is the only landline provider available in their area, and overall, participants are generally satisfied with their landline service. Two caveats are:

- The 9-1-1 emergency number is not available. Instead, they must dial a ten-digit number to reach emergency services; and,
- Lack of access to a flat long-distance rate within Canada, which is considered outdated compared to the rest of the country.

Mobile phone

Providers. Many of the focus group participants, in both the territories and northern British Columbia, have mobile phones. Within their households, there are often multiple mobile phones belonging to various family members. Participants indicated they have the most choice when it comes to choosing their mobile phone provider, including Bell, Lucky, TELUS and Virgin.³

Territories. Participants in the territories indicated they only have cell service within city limits. Again, this was presented as an understood reality of living in northern Canada. When travelling outside of city limits, participants might take a satellite phone with them, especially when going on the land (e.g., hunting), however this is an expensive alternative and is avoided unless necessary.

Northern British Columbia. Participants in northern British Columbia do not receive cell service in their communities. However, most participants still had mobile phones for accessing the Internet and apps, or for

³ Some of the providers named are flanker brands, that is, brands introduced by companies that already have established brands in the category.

travelling to southern British Columbia. Participants stressed the danger posed by having no cell service, particularly because it means they cannot reach emergency services when away from home.

Satisfaction/pros and cons. Generally, participants indicated they were satisfied with their mobile phone providers and plans.

- **Cost.** They tended to be satisfied with the cost of their plans. Some participants have retained their packages purchased in southern Canada, which are cheaper than those being offered in the North.
- Reliability. A few participants in the territories indicated they use their mobile phone as a hotspot when
 working from home or at school, as their cell service tends to be more reliable than their home Internet
 connection. (For participants in northern British Columbia, cell service is completely inaccessible in their
 communities).
- Data caps. As with capped Internet packages, some participants noted they had to be mindful of how
 much mobile phone data they use (especially if they have children who use the data) since the overage
 charges are costly.

B. Role of telecommunications in everyday life

Use of telecommunications at home

Telecommunication services were described as an integral part of everyday life in the North, including communication, entertainment, education, work, health care and household administration.

Internet. There was consensus across all seven groups that the Internet plays a central and essential role in their daily lives. The Internet is used to access a myriad of services, such as: entertainment, education, health care, banking, government services, shopping, social media and for communicating with family and friends. The Internet is also relevant to in-person shopping by powering point-of-sale terminals, so outages mean they are unable to make essential purchases such as prescriptions, food and gas by electronic payment.

An Indigenous participant noted that the Internet is beginning to play a larger role in their culture, providing a platform to share videos of cultural teachings.

Landline. Without cell phone service, the northern British Columbia group identified their landlines as essential to keeping them connected, especially to emergency services. Work is another essential use of the landline for northern British Columbia participants. Two participants are essential workers and are often on-call; without cell service, they must stay at home and close to their landline when on-call. Another participant is a business owner and requires his landline to operate the business.

As described earlier, participants in the territories are more likely to use their mobile phones and thus did not deem their landlines as essential as did those in northern British Columbia.

Mobile phone. Mobile phones in both the territories and northern British Columbia are used for communicating and accessing the Internet. Those in the territories were more likely to note that they use their mobile phones for video chatting.

Importance of telecommunication services in the North

Due to the remoteness of communities in northern Canada, participants tended to believe that Internet was even *more* important in the North than for those living in southern Canada – especially for issues of accessibility and emergencies. The Internet was described as their lifeline to the rest of Canada and to the world because it provides the following:

- **Communication.** Using the Internet to communicate with family and friends who live in other places is the most commonly mentioned use of the Internet in the North. For some, the ability to video chat with family and friends, when it works, helps them connect and feel less isolated.
- **Information.** Participants noted they do not receive national or international newspapers in the North, so the Internet is their main way to receive news and information that is not local.
- **Health care.** Some participants have health concerns that require them to seek specialized medical care beyond what is available in their community or other northern centres. As a result, several have used the Internet to video call health care providers in southern Canada.
- **Shopping.** For participants living outside of capital cities, the Internet provides access to products they cannot purchase within their communities. Reflecting the fact that "everything" is more expensive in the North, online shopping for clothing, electronics and specialty food items was identified as a way to access shopping alternatives, both in remote and in urban communities.
- **Education.** The Internet provides access to courses at education centers in southern Canada, as well as to achieve and maintain professional designations through distance learning.
- Government services. Some participants found that government services (both federal and provincial/territorial) had moved almost exclusively online. Without the Internet, they would not have access to these essential services.

Impacts of lack of access/poorer service

Participants across all seven focus groups agreed that good Internet and cell phone service is a necessity, and in their opinion, should be a basic right for all Canadians regardless of their location in Canada. Without affordable and reliable Internet service, many participants expressed the fear of an ever increasing "digital divide" where northern residents would continue to fall behind those with better access. The concern is not simply about lower technological literacy, but about the negative impacts of a lack of access (versus other Canadians) to education, health care, government services and more broadly, the benefits of participation in the digital economy.

Participants identified a range of serious consequences of unreliable and slow Internet access and/or mobile service:

• Emergencies. Due to a lack of cell service, participants, especially those in northern British Columbia, stressed the dangers of not being able to reach emergency services by mobile phone. Northern British Columbia participants also noted that, while locals are aware of the lack of cell service, visitors travelling in northern British Columbia are often taken by surprise and not prepared to lose their cell signal.

- Loss of business. Lack of affordable and reliable Internet and/or mobile service is a major problem for businesses. One business owner in the hospitality industry described how it negatively impacts the ability to attract customers (who want reliable service) as well as to retain staff in a remote location. Businesses also lose out when their point-of-sale machines cannot operate during an Internet disruption.
- Missed information/communication. Participants in smaller communities emphasized their reliance on Facebook groups to share and learn information about everything from birth and death announcements to road conditions to school closures. When there is an outage, participants noted they may have no other way of receiving important information such as a road closures caused by inclement weather.
- Compromised educational opportunities. Unreliable Internet and slow speeds affect the way in which participants access education. One participant shared that, due to slow Internet speeds, they are unable to participate in live lectures and, therefore, missed out on group discussions.

Impact of the COVID-19 pandemic

Participants indicated the COVID-19 pandemic has made them even more reliant on telecommunication services in general, and the Internet in particular. The pandemic also highlighted to many participants the disparity between those who can and cannot afford Internet at home, especially when schools moved online.

The areas in which participants said they became more reliant on the Internet during the pandemic include:

- **Education.** The COVID-19 pandemic forced schools to move to remote online learning. A few participants noted that schools in their communities quickly had to pivot from online learning to "paper package pick-ups" when it became evident that some children did not have access to Internet at home because their family could not afford it. As well, public buildings that provide free Internet in their communities were shuttered due to the pandemic, leaving some individuals with no options to access Internet outside the home.
- Communication. Participants said that their reliance on the Internet to communicate was heightened
 during the pandemic as that is how they received information about COVID-19 protocols, quarantines
 and shutdowns.
- **Entertainment.** As participants were asked to stay at home in spring 2020, they reported that they turned to the Internet for entertainment more than usual.

C. Looking ahead

Participants clearly identified affordability as the top problem with their telecommunication services, followed by reliability and quality (speed) of service. They felt these three problems put them and others in their communities at a disadvantage compared to the rest of the country.

Affordability of telecommunications

Most, if not all, focus group participants believed they are paying too much for Internet, especially compared to rates in southern Canada. They emphasized these high costs are detrimental to individuals in their communities, who are excluded from accessing education, health care and government services available to other Canadians.

It was difficult for participants to articulate what an affordable price for Internet would be. Some suggested a solution would be to remove data caps; others suggested that northern residents should pay the same rates as those in southern Canada.

Reliability of telecommunications

Participants indicated that outages were frequent, although the severity and length of the outages varied. They noted that typically outages lasted for a few hours or overnight, but they had also experienced outages that lasted up to two weeks. Participants reported that these outages were a severe inconvenience because it debilitated the community; during the outages participants noted that they were unable to access basic necessities such as prescriptions, groceries or gas as the point-of-sale machines relied on Internet to work.

Participants were generally unwilling to pay more for more reliable service, since they felt they are already paying too much.

Expectations of telecommunications

While participants noted that they do not necessarily expect an identical quality of telecommunication services as found in southern Canada, they do expect better services than they currently receive for the prices they pay, reflecting the same three themes as described throughout this report.

- Affordable. Participants expect that all Canadians should be able to afford or have access to
 telecommunication services. This is especially true for the Internet, since so many daily activities are
 moving online.
- Reliable. Due to the remoteness of the North, participants felt that it was even more important for them
 to have reliable service, because without it, they are cut off from the rest of the country. Furthermore,
 unreliable cell service creates dangerous, and potentially life-threatening situations, for residents and
 visitors.
- Quality. Participants felt that the quality of their services should be similar to that available to residents
 of southern Canada, and that they should not be excluded from opportunities such as video
 conferencing due to where they live.

Responsibility for improving telecommunications in the North

When asked who they believe is responsible for improving telecommunication services in the North, participants most often assigned this responsibility to the federal government generally or the CRTC specifically. They feel that service affordability, reliability and quality can best be improved by eliminating Northwestel's monopoly on Internet services in the territories and northern British Columbia, and that this responsibility falls to the federal government. They also feel it is the federal government's responsibility to ensure that all Canadians, regardless of income level or geography, have access to the Internet at home.

Appendix A: Quantitative methodology

Environics' syndicated *North of 60° and Remote Community Monitor* is a random-probability telephone survey conducted annually with 1,000 adult residents of Yukon, the Northwest Territories and Nunavut and the other two regions of Inuit Nunangat, Nunavik (northern Quebec) and Nunatsiavut (Labrador).

The 2020 edition was conducted between September 11 and October 11, 2020, using industry-standard random-digit dialling (RDD) techniques. A sample of this size will yield results which can be considered accurate to within +/- 3.1 percentage points, 19 times out of 20. Margins of error are larger for regional and demographic subgroups of the population.

Sample design and weighting

The sample universe is Canada's adult population (aged 18 and older) living in the three territories (Yukon, Northwest Territories and Nunavut), northern Quebec (Nunavik) and northern Labrador (Nunatsiavut). Populations excluded from the sample include households without a phone.

The sample was randomly drawn from listed telephone numbers in the most recently published directories of the five regions and supplemented with cell phone sample (3%). Interviews were conducted based on quotas for Indigenous identity within region. Data were weighted at the analysis stage by Indigenous identity, region, age and gender to be representative of the population according to the most recent Census data.

The sample was stratified by region as follows:

| Jurisdiction | Population (2016 Census) | Interview sample (n) | Margin of error (in percentage points at 95% confidence) |
|------------------------|-----------------------------|-------------------------|--|
| Yukon | 35,874 | 275 | +/- 5.9 |
| Northwest Territories | 41,786 | 350 | +/-5.2 |
| Nunavut | 35,944 | 275 | +/- 5.9 |
| Nunavik (Quebec) | 13,204 | 70 | +/-11.7 |
| Nunatsiavut (Labrador) | 2,558 | 30 | +/-17.9 |
| TOTAL | 129,366 | 1,000 | +/-3.1 |

Questionnaire design

A set of six questions about telecommunication services and three questions about broadcasting were added to the core survey. These questions were designed by Environics and CRTC representatives to address the CRTC's specific information needs. The English version of the final questions is included in Appendix C. The *North of 60*° questionnaire (in its entirety) averaged 20 minutes to deliver.

Fieldwork

Interviewing was conducted by Telepoll using Computer-Assisted Telephone Interviewing (CATI) technology. Field supervisors were present at all times to ensure accurate interviewing and recording of responses. A minimum of 10 percent of each interviewer's work was unobtrusively monitored for quality control in accordance with accepted industry standards.

Data analysts programmed the questionnaire in CATI then performed thorough testing to ensure accuracy in setup and data collection. This validation ensured that the data entry process conformed to the survey's basic logic. The CATI system handles sampling dialling, quotas and questionnaire completion (skip patterns, branching and valid ranges). The system also ensures that callbacks are conducted in a timely manner. No number is called twice in a two-hour period. Callbacks are conducted on different days of the week and at different times of the day (i.e., morning, afternoon). This system ensures all scheduled appointments are kept, maximizing the response rate and sample representativeness. Up to eight callbacks were made to reach each person selected in the sample.

Quality control

The questionnaire was programmed on a state-of-the-art Computer Assisted Telephone Interviewing (CATI) system. Telepoll's interviewing facilities permit the constant supervision of interviewers and unobtrusive monitoring of calls, with between 10 and 30 percent of all interviews monitored for quality control purposes. All respondents were offered the opportunity to complete the survey in their official language of choice. All research work was conducted in accordance with the standards established by federal government Public Opinion Research (POR) requirements, as well as applicable federal legislation (Personal Information Protection and Electronic Documents Act, or PIPEDA).

Completion results

The sample for this survey consisted of 1,000 interviews with adults living in the three territories (Yukon, Northwest Territories and Nunavut), northern Quebec (Nunavik) and northern Labrador (Nunatsiavut). The effective response rate for the survey is ten percent.⁴ This is calculated as the number of responding participants (completed interviews plus those disqualified because of survey requirements and quotas being filled), divided by unresolved numbers (e.g., busy, no answer) plus non-responding households or individuals (e.g., refusals, language barrier, missed callbacks) plus responding participants [R/(U+IS+R)]. The disposition of all contacts is presented in the following table:

⁴ This response rate calculation is based on a formula developed by MRIA in consultation with the Government of Canada (Public Works and Government Services).

Completion results

| Disposition of calls | TOTAL |
|--|--------|
| Total Numbers Attempted | 16,706 |
| Out-of-scope - Invalid | 5,281 |
| Unresolved (U) | 5,469 |
| No answer/Answering machine | 5,469 |
| In-scope - Non-responding (IS) | 4,818 |
| Language barrier | 374 |
| Incapable of completing (ill/deceased) | 147 |
| Callback (Respondent not available) | 556 |
| Total Asked | |
| Refusal | 3,690 |
| Termination | 51 |
| In-scope - Responding units (R) | 1,130 |
| Completed Interview | 1,000 |
| Non-Qualified | 0 |
| Non-Qualified - Quota Full | 130 |
| Response Rate (%) | 10% |

Appendix B: Qualitative methodology

Environics Research conducted a series of seven (7) focus groups by teleconference with adult residents of Northwestel's serving territory between October 13 and 28, 2020.

Group composition

One group was conducted with Indigenous residents and one with non-Indigenous residents in each of Yukon, the Northwest Territories and Nunavut; in northern British Columbia, one group was held with both Indigenous and non-Indigenous residents. The sessions were distributed as follows:

| Date and time | Group Location | Audience |
|---------------------------|---------------------------|--------------------------------------|
| October 13, 4:30 p.m. PDT | Yukon | Non-Indigenous |
| October 13, 6:30 p.m. PDT | Yukon | Indigenous |
| October 14, 5:30 p.m. MDT | Northwest Territories | Indigenous |
| October 14, 7:30 p.m. MDT | Northwest Territories | Non-Indigenous |
| October 15, 5:30 p.m. EDT | Nunavut | Indigenous |
| October 15, 7:30 p.m. EDT | Nunavut | Non-Indigenous |
| October 28, 8:00 p.m. PDT | Northern British Columbia | Mix of Indigenous and non-Indigenous |

Each group lasted approximately 90 minutes and consisted of between three and seven participants (out of seven people recruited for each group). All sessions were conducted in English.

Recruitment

Environics developed the recruitment screener and provided it to the CRTC for review prior to finalizing. Participants were recruited from qualitative databases and through social media (Facebook) and screened to ensure they were invited to the appropriate session. Participants were also screened to ensure the groups included a mix of gender, education, age, and location (larger and smaller communities) and that they would be comfortable voicing their opinions in front of others. Normal focus group exclusions were in place (marketing research, media and employment by telecom companies, the CRTC or Innovation, Science and Economic Development Canada, and recent related focus group attendance). Participants were offered a \$100 honorarium to encourage participation and thank them for their time commitment.

All groups were audio-recorded for use in subsequent analysis by the research team. During the recruitment process and at the start of each session, participants provided consent to such recording and were given privacy and confidentiality assurances.

All qualitative research work was conducted in accordance with professional standards and applicable government legislation (e.g., PIPEDA).

Appendix C: Quantitative survey questions

Telecom services (9 questions)

| • | ` | ۸. | ^ | | CF | ` | \sim | | _ | $\overline{}$ | ^ | $\overline{}$ | _ | | • | | _ | ٠ |
|---|-----|-----|----|---|------|----|--------|---|---|---------------|----|---------------|---|-------------|---|---|----|---|
| | - 1 | IV. | /1 | N | | 21 | | к | ĸ | , , | /\ | | | /\ \ | | ш | и- | ۰ |
| | | | | | | | | | | | | | | | | | | |

| 1. | [ASK ALL] What is your main source for news and information about your local community? |
|----|---|
| | DO NOT READ – CODE ONE ONLY |
| | 01-Radio |
| | 02-Television |
| | 03-Internet/social media (e.g., Facebook, Instagram) |
| | 04-Newspaper |
| | 05-Local newsletter |
| | 06-Community meetings (in-person) |
| | 07-Word of mouth/family/friends/texting |
| | 97–Other (SPECIFY BUT DO NOT CODE) |
| | 99-DK/NA |

CORE - BROADCASTING

| 2. | How does your household get television service? Is it through? |
|----|--|
| | READ IN ORDER SHOWN. CODE ALL THAT APPLY. |

01 - Cable television

02 – A satellite dish

03 – An antenna

04 – IPTV, meaning a high-speed Internet connection

05 - Online streaming services like Netflix or Disney+

06 – or, your household doesn't have or watch TV [SINGLE PUNCH]

VOLUNTEERED

97–Other (SPECIFY BUT DO NOT CODE) ______99–DK/NA

OMNI-CRTC BROADCASTING

3. In a typical week, from Monday to Sunday, how many hours do you spend listening to AM/FM radio stations on any device from any location?

ACCEPT AN ESTIMATE BUT NOT A RANGE

RECORD NUMBER OF HOURS _____ [RANGE 0-168 HOURS] 99-DK/NA

CORE

- 4. Which of the following does your household currently pay for?
 - **READ AND RANDOMIZE**
 - a. Home telephone, that is, a landline
 - b. Cellphone
 - c. Home Internet access
 - 01-Yes
 - 02-No
 - 99-DK/NA

OMNI-CRTC

[IF Q22c=01] Which company provides your home Internet service?DO NOT READ. CODE ONE ONLY.

01-Northwestel

02-SSi Micro / SSi Qiniq (Nunavut) / SSi Yellowknife

03-Xplornet

04-Ice Wireless

05-Bell

VOLUNTEERED

97–Other (SPECIFY BUT DO NOT CODE)

99-DK/NA

CORE

6. [IF Q5=01, 03 OR 05] How does [INSERT COMPANY] provide your Internet service? Do you have...? READ. CODE ONE ONLY.

LIST FOR 01 (NORTHWESTEL) AND 05 (BELL)

01–Cable Internet

02-DSL through a telephone line

03-Fibre Internet

04–Satellite Internet

VOLUNTEERED

99-DK/NA

LIST FOR 03 (XPLORNET)

04-Satellite Internet

05-Fixed wireless Internet

VOLUNTEERED

99-DK/NA

PROGRAMMING NOTE: Please create combined variable of Q5/6 based on total sample. Incorporate as follows:

SSi Micro=Satellite Internet (code 4)

Ice Wireless=Fixed Wireless (code 5)

OMNI-CRTC

- 7. [IF Q22c=01] How good a job is your Internet service provider doing at meeting your household needs for Internet service? READ
 - 01-Excellent
 - 02-Good
 - 03-Average
 - 04-Poor
 - 05-Very poor

VOLUNTEERED

99-DK/NA

SKIP TO Q27

OMNI-CRTC

8. [IF Q25<99] What are the main reasons why you gave your Internet provider that rating? DO NOT READ – CODE ALL THAT APPLY

01-Internet speed

02-Monthly data limit/cap

03-Reliability/Network outages

04-Customer service/support

05-Cost/value for money

06-No choice/only option available

07-Choice of Internet packages/bundles

08-Provides customized solution for local/Indigenous community

97-Other (SPECIFY BUT DO NOT CODE)

99-DK/NA

OMNI-CRTC

- 9. [ASK ALL] A network outage refers to when your TV, phone or Internet goes down or stops working for a period of time. How much of an impact do network outages have on your personal, social and economic well-being? READ
 - 01-Major impact
 - 02-Moderate impact
 - 03-Minor impact
 - 04-No impact

VOLUNTEERED

99-DK/NA

Respondent Name:

Appendix D: Qualitative research instruments

September 2020

Environics Research Group Limited

Phone Focus Groups on Role of Telecom Services in Canada's North Canadian Radio-television and Telecommunications Commission (CRTC) PN10882

Recruitment for Group Discussion

| Home #: | | | | | | | | |
|----------------------------------|-----------------|--|------------|----------------|--------------|--|--|--|
| Business #: | | | | | | | | |
| Group #: | | | | | | | | |
| Recruiter: | | | | | | | | |
| Group # | Group 1 | Group 2 | Group 3 | Group 4 | Group 5 | | | |
| Location | Yukon | Yukon | NWT | NWT | Nunavut | | | |
| Date | Tues Oct 13 | Tues Oct 13 | Wed Oct 14 | Wed Oct 14 | Thurs Oct 15 | | | |
| EDT | 7:30 p.m. | 9:30 p.m. | 7:30 p.m. | 9:30 p.m. | 5:30 p.m. | | | |
| Local Time | 4:30 p.m. | 6:30 p.m. 5:30 p.m. 7:30 p.m. 5:30 p.n | | | | | | |
| Language English English English | | | | English | English | | | |
| Demographic | Non-Indigenous | Indigenous | Indigenous | Non-Indigenous | Indigenous | | | |
| Urbanity | Mix | Mix | Mix | Mix | Mix | | | |
| Group # | Group 6 | Group 7 | | | | | | |
| Location | Nunavut | Northern BC | | | | | | |
| Date | Thurs Oct 15 | Wed Oct 28 | | | | | | |
| EDT | 7:30 p.m. | 8:00 p.m. | | | | | | |
| Local Time | 7:30 p.m. | 5:00 p.m. | | | | | | |
| Language | English English | | | | | | | |
| Demographic | | | | | | | | |
| Urbanity | Mix Mix | | | | | | | |

7 recruits per session with the intent of having 5-7 show

The intent is to recruit individuals 18+ who live in the areas listed above, who come from a mix of education, socioeconomic statuses, urbanities (urban, rural), age and gender.

Hello/Bonjour, my name is ______ from Environics Research.

Would you prefer me to continue in English or French? [Continue in language of preference or arrange call-back]

We are calling today to invite participants to attend a telephone focus group discussion we are conducting on behalf of the Canadian Radio-television and Telecommunications Commission, also known as the CRTC. The session will last a maximum of 90 minutes and you will receive a cash gift as a thank you for attending the session.

This study is a research project, not an attempt to sell or market anything. Your participation in the research is completely voluntary and your decision to participate or not will not affect any dealings you may have with the government. All information collected, used and/or disclosed will be used for research purposes only and administered as per the requirements of the Privacy Act. May I have your permission to ask you or someone else in your household some further questions to see if you/they fit in our study?

Yes **CONTINUE**

No THANK AND TERMINATE

ASK ALL

1. We have been asked to speak to participants from all different ages. So that we may do this accurately, may I have your exact age please? ______. WRITE IN [ENSURE GOOD MIX]

| Under 18 | 1 | TERMINATE |
|--------------------|---|-----------|
| 18-24 years of age | 2 | |
| 25-34 years of age | 3 | |
| 35-44 years of age | 4 | |
| 45-54 years of age | 5 | |
| 55-64 years of age | 6 | |
| 65-74 years of age | 7 | |
| 75 years or older | 8 | |

- 2. Which of the following best describes you? Are you...?
- 01 First Nations
- 02 Inuk
- 03 Métis
- 04 Non-Indigenous Person

NOTE TO RECRUITER: INDIGENOUS=01-03. INUK IS THE SINGULAR OF INUIT (INUK REFERS TO ONE PERSON/INUIT REFERS TO MANY PEOPLE)

RECRUIT 7 INDIGENOUS PEOPLE AND 7 NON-INDIGENOUS PEOPLE FOR EACH AREA WITH THE EXCEPTION OF NORTHERN BC. FOR NOTHERN BC RECRUIT A MIX OF 7 INDIGENOUS AND NON-INDIGENOUS PEOPLE.

[SKIP TO Q.4 IF PARTICIPANTS LIVE IN YUKON, NORTHWEST TERRITORIES OR NUNAVUT]

3. [If participant is from BC] We are looking to include people from specific towns in Northern British Columbia. What is the name of your community?

| 1:4. | TERMINATE IF THE COMMUNITY IS NONE OF THE COMMUNITIES LISTED BELO | . L A / T |
|-------|--|-----------|
| List: | TIERIVIINATE IE THE COIVIVIONITY IS NOME OF THE COIVIVIONITIES TISTED BELO | w |
| | | |

NOTE TO RECRUITER: NORTHERN BRITISH COLUMBIA INCLUDES THE FOLLOWING AREAS - FORT NELSON, BLUEBERRY, BOB QUINN LAKE, BUICK, BOUGIE CREEK, DEASE LAKE, FORT WARE, FRASER, GOOD HOPE LAKE, ISKUT, JADE CITY, LIARD HOT SPRINGS, LOWER POST, MOULD CREEK, MUNCHO LAKE, PINK MOUNTAIN, PROPHET RIVER, TELEGRAPH CREEK, TOAD RIVER, UPPER HALFWAY, WONOWON

4. Do you live in [YK: Whitehorse / NWT: Yellowknife / NU: Iqaluit]?

ONLY LIST THE CITY FROM WHICH TERRITORY THE INDIVIDUAL LIVES IN

Yes [Whitehorse/Yellowknife/Iqaluit] **SKIP TO Q.6** No, another community

ENSURE A MIX OF CAPITAL CITY (Whitehorse, Yellowknife, Iqaluit) AND NON-CAPITAL PARTICIPANTS. NO MORE THAN ½ OF PARTICIPANTS IN A GROUP SHOULD BE FROM A CAPITAL CITY.

| 5. [II QT-02] Does your community nave | 5. [IF Q4=02 |] Does | your | community | have. |
|--|--------------|--------|------|-----------|-------|
|--|--------------|--------|------|-----------|-------|

Year-round all-season road access; OR Is it a fly-in community?

6. With which gender do you identify? [50/50 split]

| Male | 1 |
|--------|---|
| Female | 2 |
| Other | 3 |

7. Are you or is any member of your household or your immediate family employed in:

| | <u>No</u> | Y <u>es</u> |
|--|-----------|-------------|
| A market research, communications or public relations firm, or an advertising agency | () | () |
| Media (Radio, Television, Newspapers, Magazines, etc.) | () | () |
| A telecom company (e.g., Northwestel, Bell, Rogers) | () | () |
| CRTC or Innovation, Science and Economic Development Canada | () | () |
| A federal or provincial government department or agency | () | () |
| A political party | () | () |

IF YES TO ANY OF THE ABOVE - THANK AND TERMINATE

| 3. | Including | yourself, | how many | / peopl | le live in | your | housel | าold | ? |
|----|-----------|-----------|----------|---------|------------|------|--------|------|---|
|----|-----------|-----------|----------|---------|------------|------|--------|------|---|

| | WRITE | N |
|---|--------|---|
| • | VVINIL | |

9. Which of the following categories best corresponds to the <u>total</u> combined annual income of all members of your household, before taxes? Would it be...?

READ

- 01 Under \$20,000
- 02 \$20,000 to \$39,999
- 03 \$40,000 to \$59,999
- 04 \$60,000 to \$74,999
- 05 \$75,000 to \$99,999
- 06 \$100,000 to \$149,999
- 07 \$150,000 or over

ASK ALL

10. Which of the following best describes your employment situation? Are you... [READ LIST]

Employed full-time (35 hrs. +)

Employed part-time (under 35 hrs.)

Homemaker SKIP TO Q.12
Student SKIP TO Q.12
Retired SKIP TO Q.12
Currently not working SKIP TO Q.12

11. What is your current occupation?

Type of Job Type of Company

TERMINATE IF OCCUPATION RELATES TO EXCLUSIONS IN Q.7

12. Could you please tell me what is the last level of education that you completed? [ENSURE GOOD MIX]

Some High School only 1
Completed High School 2
Trade School certificate 3
Some Post secondary 4
Completed Post secondary 5
Graduate degree 6

13. Have you ever attended a discussion group or a market research focus group?

Yes MAXIMUM 3 PER GROUP

No **SKIP TO Q.16**

14. When did you last attend one of these discussion groups?

Within the last 6 months THANK AND TERMINATE

Over 6 months ago CONTINUE

15. How many focus groups have you attended in the past 5 years?

Fewer than five **CONTINUE**

Five or more THANK AND TERMINATE

16. Have you attended a discussion group or a market research focus group about telecommunications, meaning your home phone, cell phone or Internet service, within the past two years?

Yes THANK AND TERMINATE

No CONTINUE

17. Participants in group discussions are asked to voice their opinions and thoughts, how comfortable are you in voicing your opinions in front of others? Are you...[READ LIST]

Very comfortable MIN 4 PER GROUP

Fairly comfortable

Not very comfortable **TERMINATE**Very comfortable **TERMINATE**

18. Are there any reasons, such as hearing other participants speak, that may prevent you from being able to participate in the discussion?

Yes TERMINATE
No CONTINUE

NOTE: TERMINATE IF RESPONDENT OFFERS ANY REASON SUCH AS HEARING, A WRITTEN OR VERBAL LANGUAGE PROBLEM, A CONCERN WITH NOT BEING ABLE TO COMMUNICATE EFFECTIVELY.

19. I would like to invite you to attend the focus group session by phone where you will exchange your opinions in a moderated discussion with other people from Northern Canada. The group will take place on [DATE] at [TIME]. People who attend will receive \$100 to thank them for their time. Would you be willing to participate?

Yes

No **TERMINATE**

20. The session will be audio recorded and some other members of the research team may also listen in on the session, but your participation will be anonymous. Do you consent to this?

Yes

No **TERMINATE**

21. The session is about an hour and a half (i.e. 90 minutes), but we are asking that all participants phone in to the meeting 5 minutes prior to the start of the session. Are you able to phone in about 5 minutes prior to the start?

Yes

No **TERMINATE**

- 22. The phone number to call into the session is [phone number]. Please call this number 5 minutes prior to the start of your session on [date] at [time].
- 23. Do you have an email address that we could send the date, time and telephone number to you for your convenience? This email address will not be used for anything else aside from communicating with you about the details of this session.

| Yes | ASK FOR EMAIL ADDRESS: | |
|-----|------------------------|--|
| | | |
| No | CONTINUE | |

INTERVIEWERS: Tell respondents that it is a small group and anyone who does not show or cancels at the last minute will compromise the project. Make sure they know we feel their opinions are valuable and we are serious about finding out what they have to offer.

NOTE: PLEASE TELL ALL RESPONDENTS THAT THEY WILL RECEIVE A CONFIRMATION CALL THE DAY PRIOR TO THE SESSION. IF FOR SOME REASON THEY HAVE NOT HEARD FROM US THEY SHOULD CONTACT US AT ______. IF THEIR NAME IS NOT ON THE ATTENDANCE FORM THEY WILL NOT BE ADMITTED TO THE GROUP.

Environics Research Group Limited Phone Focus Groups on Role of Telecomm Services in Canada's North Canadian Radio-television and Telecommunications Commission (CRTC) PN10882

Discussion Guide

1. Introduction to Procedures (10 minutes)

Welcome to this focus group. My name is Derek and I work for Environics Research, which is an independent market research company. This is one of a series of seven teleconference focus groups we are conducting with people living in northern Canada. We want to hear your opinions so please feel free to agree or disagree with each other.

We are conducting this research project on behalf of the CRTC (the Canadian Radio-television and Telecommunications Commission) in order to explore your views on telecommunications services in the North. **IF ASKED:** The CRTC is an arms-length agency of the Government of Canada that supervises and regulates telecommunications in the public interest.

Some observers from the research team and from the CRTC are listening to the session and we are also recording this session to help me write my report. The audio recording will only be used internally to analyse the research and will not be released to anyone else. Your identity and anything you say here will remain confidential and anonymous. Nothing you say here will be linked to you by name in any reporting we do on this project. The session should last about 90 minutes and you will receive the cash incentive we promised you sometime in the coming week or so.

Let's go around and each introduce ourselves. Tell us your first name and where you are calling in from and a little bit about yourself such as what kind of work you do (if you work outside the home) and who lives with you in your house.

2. Current telecom services (20 minutes)

As I mentioned we are going to be discussing issues around your telecommunications services. By telecommunications I mean your Internet service and your phone services – both landline and/or mobile. (**NB**: Television and radio are not our focus tonight – unless it's in the context of using the Internet to stream programming, etc.)

Let's go around the room again and could you each tell me what you have in terms of Internet and phone services (land line and/or cell/mobile)? (i.e.: do you have Internet, cell phone and landline? Who are your providers?)

IF NO HOME INTERNET SERVICE AT ALL – ASK: Is there a reason why you have no Internet at home?

PHONE SERVICE PROBES: What company do you get your phone services from? Is your landline and your cell from the same company?

IF HAS CELL PHONE: What sort of plan do you have for your cell phone?

How satisfied are you with your cell phone service and the provider? What are the pros and cons?

IF HAS LANDLINE: How satisfied are you with your phone service and the provider? What are the pros and cons?

INTERNET SERVICE PROBES: What company provides you with your home Internet service?

How would you describe your Internet service? Is it through a cable or phone line or is it by satellite?

How would you describe the package you have (i.e. speed, data, price, etc.)?

Why did you choose your current Internet provider (NB: In almost every case it will be Northwestel), or do you feel you had any choice? **POSSIBLE PROBES**: Price, data limits, speed, customer service, reliability of the network, loyalty to the company, wanting to bundle services, monopoly (no choice).

In your community, do you have any other options for Internet which are available to you? What are they?

How satisfied are you with your Internet service and the provider? What are the pros and cons?

PROBE: Is your service reliable enough or are there outages? Is it fast enough for you? What about the data cap – is it adequate for your needs? What about the price?

Is Internet service where you live improving compared to 5-10 years ago, or not? PROBE: How so?

3. Role of telecommunications in life (25 minutes)

Could you each tell us a bit about how you use telecommunications (i.e. the Internet and cell phone service) at home and what role it plays in your life? How does the Internet and your phone impact your life?

What does the Internet mean to you as someone who lives in the North? Does that make the Internet any more or less important than it might be to Canadians living in the South?

How has Internet access made a difference in your life – for better or for worse?

To what extent do you see good Internet and cell phone access as a "necessity" in life and why?

There are all kinds of things that people use the Internet and their cell phone service for – and where poor Internet/phone access could create obstacles. I'd like to explore a few of them with you.

With your telecommunications services, do you have any issues with accessing any of the following... PROBE:

- Accessing entertainment (streaming of films/TV/music etc.)
- Online banking
- Online shopping
- Social media (e.g. Facebook, etc.)
- Participate in online learning/distance education

- Access online/virtual health care services (e.g., online appointment with doctor or other HCP)
- Work from home/run a business from your home
- Access online services provided by the federal or territorial/provincial governments
- Keeping in touch with family and friends (i.e. email, video chatting, etc.)

FOR ANY ISSUES WITH ACCESS: What is the consequence for you and your family of having problems accessing these things? What are you missing out on?

Let's talk a bit about the COVID-19 pandemic and its impact. Has the pandemic made you any more or less reliant on the Internet than you were before? How so?

4. Telecom issues for the North (20 minutes)

As we've discussed, there are many issues related to telecommunications services in the north. What do you see as the biggest problem with your telecommunications services? What most needs to improve to make a difference in your life?

PROBE: Making prices/rates more affordable? Increasing Internet speed? Improving reliability (i.e., reducing downtime/outages)? Broader mobile coverage?

Let's talk more about price and affordability. In terms of telecommunication services, what does "affordable" look like for you? Is it a dollar amount, a percentage of your income, or something else?

Are your services currently "affordable" for you? Why or why not?

What about the reliability of your services. How often do you experience service outages? How long do they typically last? How does it impact your life/how inconvenient (or not)?

Would you be willing to pay a higher price for more reliable networks?

Of course, there are challenges with providing Internet service in the North with the vast geography and relatively low population – but what are your expectations when it comes to Internet services?

Whose responsibility is it to find solutions when it comes to telecommunications services in the North? **PROBE**: the federal government/CRTC? Territorial government? Service providers?

5. Wrap up (5 minutes)

We have covered many topics today and really appreciate you taking the time and energy to give your opinion. Your input is very important and insightful. Before we leave today, I wanted to ask you whether you have any last thoughts that you want to give the CRTC about today's topics.

THANK YOU FOR PARTICIPATING!