Written Submission to the House of Commons Standing Committee on Industry, Science and Technology Re: Accessibility and Affordability of Telecommunications Services

OpenMedia is a community-based organization that safeguards the possibilities of the open Internet.



INTRODUCTION

Despite asking us to stay home and use the Internet to work, study, and access services this year, the federal government is failing to meet the needs of people in Canada when it comes to affordable Internet services. While broadband access has been given welcome and long overdue government attention this year in the form of programs like the Universal Broadband Fund, a robust approach to fixing affordability is still starkly absent from the conversation.

Canada's Internet continues to be ranked among the most expensive in the world.¹ The COVID-19 crisis has magnified both the weight of this high cost, and the consequences of not being able to afford access for everyday people. According to the 2020 BDO Affordability Index, more than twice as many people in Canada are in a worse financial situation due to COVID-19 than people who are in a better financial situation (39% vs 18%).²

The burden of our unaffordable Internet falls especially heavily on some of Canada's populations most vulnerable to COVID-19, such as seniors, those with health conditions, and people with lower incomes.

"As a member of a high risk category by age, and living with a high risk spouse, the lack of affordable and reliable internet is life threatening." - Judy, rural Ontario

According to ACORN's 2016 <u>Internet for All</u> report, 83% of its membership survey respondents said the cost of home internet was "extremely high." In the same survey, 58% said, "I can't afford it, but because I need it, I take money out of my budget for other items." Some of the items most often foregone were food and rent.³

For seniors, changes in income directly impact their Internet utilization rates. Only 54% of seniors with incomes under \$20,000 use the Internet, compared with 73% and 79% for seniors with household incomes of \$60,000-\$79,999 and >\$100,000, respectively.⁴

High-speed Internet is a basic service that is increasingly necessary to participate in modern Canadian society, like electricity and water, and the government must do more

¹ MobileSyrup (2019). *Canada among top five highest costs for 100Mbps internet speed*. Source: <u>https://mobilesyrup.com/2019/12/18/canada-top-five-highest-costs-100mbps-internet/</u>

² BDO (2020). BDO Affordability Index 2020. Source: https://debtsolutions.bdo.ca/our-people/bdo-in-the-news/bdo-affordability-index-2020/

³ ACORN Canada (2016). Internet for All: Internet Use and Accessibility for Low-Income Canadians. Source: https://acorncanada.org/resource/internet-all

⁴ Statistics Canada (2019). *Study: Evolving Internet Use Among Canadian Seniors*. Source: <u>https://www150.statcan.gc.ca/n1/daily-guotidien/190710/dg190710d-eng.htm</u>

to ensure it is accessible to everyone in Canada. As OpenMedia testified during our in-person appearance in November: without ensuring service that is affordable at every income level, the government's \$1.75 billion effort to close the Digital Divide will come up significantly short. To help us all get through this crisis and build a better, stronger post-pandemic Canada, we need our government to take immediate action to address the lack of competition in our telecom market that is keeping Internet prices unaffordable.

URBAN INTERNET AFFORDABILITY

Telecommunications services today are fundamental needs, like water or electricity. That means making sure a range of services are available to everyone at any income level, and bridging gaps that cannot be addressed by temporary stopgaps for some people, some of the time.

Connecting Families, and Other Low-income Internet Programs

OpenMedia does not believe eligibility criteria based programs can adequately cover Canada's gap in affordable Internet services. According to ACORN, the Connecting Families program has an uptake of less than 2% amongst the 3.4 million people in Canada who would likely benefit from the affordability support program — the number of people below the official poverty line in 2017.⁵ From this, we can see how many people in Canada are not being properly served by our existing piecemeal programs like Connecting Families.

"I live on a very low income because of an autoimmune illness. No one asks to be ill. No one asks to be low income. The world is going forward because of the Internet and I can not afford WiFi. I can only afford the minimal gig that comes with the phone. It is not enough to keep up." - Siobhan, GTA

In the short term, we welcome strengthening and expanding criteria based eligibility programs to close some of this gap. But any eligibility program, whether based on subsidized housing use, child tax benefits, or another criteria, will still leave millions of people falling through the cracks.

When affordability programs only target families receiving the child tax benefit, for example, they exclude other lower income families without children, single people, and

⁵ ACORN Canada (2020). Trudeau Government Fails to Regulate Internet Affordability. Source: <u>https://acorncanada.org/take-action/trudeau-government-fails-regulate-internet-affordability</u>

seniors. But even many eligible people will fail to benefit from opt-in affordability programs like these, simply because they have not been made aware of the opportunity. Existing affordable Internet programs are also limited in their impact, as they are not mandatory for providers to participate in, and not available in every community.⁶

Ultimately, we take the view that a program-based approach to affordable Internet is another limited, stopgap solution, and fails to solve the structural issues that are causing Canada's world-leading high prices in the first place. The root issue, as people in Canada have been saying for years, is our dysfunctional telecommunications market that allows incumbent ISPs to price gouge, coercively raise rates with few market consequences, and shut out competitors at every turn. Until the government meaningfully addresses competition in the telecom market, large numbers of people in Canada will struggle to access affordable Internet to the level that meets their basic connectivity needs.

RURAL INTERNET AFFORDABILITY

Concerns Regarding the Universal Broadband Fund (UBF)

People in Canada have been pushing for the release of the UBF for nearly 2 years and an end to the Digital Divide for much, much longer. While the problem of rural Internet in Canada is sometimes thought of primarily as inadequate speed and access to service, it is equally a problem of unaffordable prices that place existing service out of reach for many in rural communities.

Millions of people in rural Canada currently cannot access broadband that meets the service standards outlined by the federal government.⁷ But these traditionally underserved communities are also plagued with affordability problems that prohibit residents from accessing broadband, even if it is already technically available to them. For example, according to the CRTC's 2020 Communications Monitoring Report, Saskatchewan's rural communities had the most expensive Internet in Canada, with plans starting at \$90 and ranging up to \$140 per month.⁸

OpenMedia had high hopes that UBF would address these rural cost and access concerns head-on, and in tandem. However, it is becoming increasingly clear that the

⁶ ACORN Canada (2020). Trudeau Government Fails to Regulate Internet Affordability. Source: <u>https://acorncanada.org/take-action/trudeau-government-fails-regulate-internet-affordability</u>

⁷ Canadian Radio-Television and Telecommunications Commission (2020). *Communications Monitoring Report 2020*. Source: <u>https://crtc.gc.ca/pubs/cmr2020-en.pdf</u>

⁸ Canadian Radio-Television and Telecommunications Commission (2020). *Communications Monitoring Report 2020.* Source: <u>https://crtc.gc.ca/pubs/cmr2020-en.pdf</u>

program has flaws that may significantly undermine affordability goals in its quest for increased availability.

Fundamentally, UBF has yet to prove it has learned from the mistakes of its predecessors with regards to promoting affordability, choice, and competition:

- Selection criteria is heavily stacked in favour of incumbent ISPs (e.g. favouring of applicants who demonstrate broadband technical development experience).⁹
- Eligibility and selection criteria shuts out communities who wish to start their own community broadband networks and ISPs. Instead, UBF structurally pressures communities to reinforce the market power of incumbents in the area through contractual partnerships with said incumbents, and fails to clearly inform applicants of alternative paths, such as partnerships with small providers, resellers, or ISPs that do not currently service the area.¹⁰
- UBF's applicant support service, Pathfinder, is almost entirely self-serve; it does not provide comprehensive, structured assistance to community applicants who are already at a disadvantage in the process. Pathfinder relies on communities to know what questions to ask, and when to ask them, rather than proactively seeking to promote and empower community-based applications.¹¹

"Where I used to live, Bell provided DSL Internet service for only \$80 per month and competitors were available. Here, only 57 km away, Bell is the only provider available. The service is by mobile phone technology, and data usage is a tiered system, very restrictive, and extremely slow (5 mbps download & 0.32 mbps upload). On average, I now pay \$300 per month — an increase of 375%!" - OpenMedia community member, rural British Columbia

"We run a small Maple Syrup business to supplement our modest income. We are hampered by erratic and inadequate internet connectivity. Our calls to our internet supplier, Bell, revealed that we are at the optimum speed and connectivity for our rural area. Their only solution was an increased fee, which still would not guarantee improved internet speed or connectivity." - Cameron, rural Ontario

Rural communities and residents need more consumer choice, better service, and lower

⁹ Innovation, Science and Economic Development Canada (2020). *Universal Broadband Fund Application Guide*. Source: <u>https://www.ic.gc.ca/eic/site/139.nsf/vwapj/00010-e.pdf/</u>\$FILE/00010-e.pdf

¹⁰ Innovation, Science and Economic Development Canada (2020). *Universal Broadband Fund Application Guide*. Source: <u>https://www.ic.gc.ca/eic/site/139.nsf/vwapj/00010-e.pdf/\$FILE/00010-e.pdf</u>

¹¹ Innovation, Science and Economic Development Canada (2020). *Universal Broadband Fund: For applicants*. Source: <u>https://www.ic.gc.ca/eic/site/139.nsf/eng/00016.html</u>

prices — not greater market power for incumbents that have failed to deliver for decades. If these flaws in the program are not addressed in ways that empower communities at the bargaining table and encourage greater local rural competition, we believe the rollout of UBF will redouble the longstanding oligopolies enjoyed by incumbents that have, at every turn, resulted in underserved rural communities, poor service quality, and extremely high prices. This will worsen rural Internet affordability across the board and ultimately hinder the net impact of the government's major \$1.75 billion investment.

Satellite Broadband: Shortcomings and Unanswered Questions

Some coverage has raised expectations that satellite broadband will be a miracle cure for the problems of rural connectivity, magicking away the access and affordability problems that have bedeviled rural wired Internet. While helpful, we see non-wired broadband technologies like traditional satellites — and now, LEO satellites — as stopgaps and band-aids for basic Internet access, not a permanent solution. While it is good to see the investment in broadband happening in rural and remote Canada by groups like Telesat, the affordability, sustainability, and service scalability of all satellite Internet technologies remains a serious concern.

Today, areas served only by satellite Internet tend to have just a single provider in the region — most often Xplornet. Rural members of the OpenMedia community have spoken out against this lack of choice for years, as it contributes to the extremely expensive prices of satellite Internet plans.

"Between satellite and mobile data, \$400 a month is spent on Internet in our house right now for 2 people. There's something wrong with that." - Brittany, rural Manitoba

"Our only choice is [satellite] internet at \$100 per month. At this price, on top of the high price of propane, I cannot afford the Internet or to get my gas stove connected." - Gale, rural Ontario

For direct-to-consumer LEO alternatives, such as Starlink, the early indicators are that high upfront costs and a substantial monthly price point are cost prohibitive for many users. Currently in beta, Starlink costs customers \$649 CAD plus tax to initially purchase the equipment, and \$129 per month for the service.¹²

¹² Manitoulin Expositor (2020). *Elon Musk's Starlink internet beta testing program reaches Manitoulin Island users*. Source: <u>https://www.manitoulin.com/elon-musks-starlink-internet-beta-testing-program-reaches-manitoulin-island-users/</u>

Service quality is also a major concern for many current rural satellite customers. Common issues can include:

- Slow speeds (<5/1 Mbps), with no other service options available without taking on the personal cost of constructing a nearby tower.¹³
- Unreliable connections that drop during bad weather or at peak times of the day, making them unsuitable for business or study purposes.¹⁴
- Because of the nature of the infrastructure, the transfer of data from the home to the satellite results in greater lag than on wired connections.¹⁵
- Satellite connections require a clear view of the sky, which for many rural customers would mean removing trees from their property at their own cost.¹⁶

A serious cause for concern for potential government investment and subsidization is the much shorter lifespan of satellite technology compared to other connections. Current LEO satellite technology can last for a few years,¹⁷ while fibre has been known to last for 70. If the government is seeking to make a smart, sustainable investment in broadband infrastructure — one which will not require billions more public dollars to be spent less than a decade down the road — satellite broadband is a poor choice of technology to subsidize.

Additionally, the built-in scalability of satellite technologies is far more limited than fibre connections, making guarantees of future service improvements unlikely without additional infrastructure upgrades at added cost.

Future-proofing our broadband technologies should be the gold standard. Fibre is still the most scalable and reliable long-term solution for closing the Digital Divide in Canada, and should be explicitly prioritized.¹⁸ Satellite internet, LEO tech in particular, is not the long-term sustainable, affordable, high-quality solution rural and remote communities in Canada need.

While we appreciate the role Telesat may play in connecting some people in Canada in the mid-term, there are still many vital questions left unanswered about the Telesat LEO approach to connecting Canada to affordable, high-quality broadband:

¹³ OpenMedia (2015). A day in the life of dial-up or: Why we need affordable, world-class service for 100% of Canadians. Source: <u>https://openmedia.org/article/item/day-life-dial-or-why-we-need-affordable-world-class-service-100-canadians</u>

¹⁴ Broadband Now (2019). *Pros And Cons Of Satellite Internet.* Source: https://broadbandnow.com/guides/satellite-internet-pros-and-cons

¹⁵ Broadband Now (2019). *Pros And Cons Of Satellite Internet*. Source: https://broadbandnow.com/guides/satellite-internet-pros-and-cons

¹⁶ OpenMedia (2015). A day in the life of dial-up or: Why we need affordable, world-class service for 100% of Canadians. Source: https://openmedia.org/article/item/day-life-dial-or-why-we-need-affordable-world-class-service-100-canadians

¹⁷ McKinsey & Company (2020). Large LEO satellite constellations: Will it be different this time? Source: <u>https://www.mckinsey.com/industries/aerospace-and-defense/our-insights/large-leo-satellite-constellations-will-it-be-different-this-tim</u> <u>e#</u>

¹⁸ Electronic Frontier Foundation (2019). Why Fiber is Vastly Superior to Cable and 5G. Source: <u>https://www.eff.org/deeplinks/2019/10/why-fiber-vastly-superior-cable-and-5g</u>

- What retail rates should customers expect to pay from resellers of Telesat's infrastructure?
- What is Telesat's plan for when their LEO satellite technology reaches the end of its short lifespan?
- Will the Telesat model deliver an adequate level of choice and competition in rural markets, should ISP resellers not be abundant in the area, or will it reinforce a 1-provider market?
- How will Telesat deliver on the service scalability goals of UBF, due to the limitations of satellite technology in comparison to fibre?