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September 26, 2017

VIA EMAIL: indu@parl.gc.ca

Standing Committee on Industry, Science and Technology
Sixth Floor, 131 Queen Street
House of Commons
Ottawa ON K1A 0A6
Canada

Attention: Danielle Widmer, Clerk of the Committee

Dear Ms. Widmer,

Subject: **CCSA Submission for Consideration in the Committee's study on broadband connectivity in rural regions**

1) Please find attached a brief from the Canadian Cable Systems Alliance, Inc. in relation to the Committee's study on broadband connectivity in rural regions.

2) As a representative of more than 125 independent communications distribution companies who serve Canadians from sea to sea to sea, CCSA is delighted to see the Committee studying this important issue.

3) CCSA offers it comments in a spirit of constructive assistance and will be pleased to assist, in any way it can, as the Committee considers this matter.

Executive Summary

4) Our comments in the brief that follows, support the following broad themes and recommendations:

   • Broadband service must now be viewed as <u>critical infrastructure</u> that is at least as important as water, electricity and roads;

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- The unique challenges posed by what, in the legacy telephone world, are called <u>High-Cost Serving Areas</u> must be understood and addressed;

- Solutions must be driven, developed and implemented at <u>the local level</u> using the knowledge, expertise and resources that best understand and can respond to local needs. Governments can assist most effectively by helping to "de-risk" projects that local communities, ISPs and private investors seek to launch; and

- It is crucial that networks, once built, be sustainable. Capital project funding, in many cases, is not a full answer. There must be <u>ongoing support for network operation</u> and upgrading where the local economics, at least for now, cannot justify the cost of the networks.

5) CCSA has provided a summary of recommendations in the attached brief.

6) CCSA would welcome the opportunity to provide in-person testimony to the Committee at the Committee's convenience.

7) CCSA thanks the Committee for the opportunity to offer these comments.
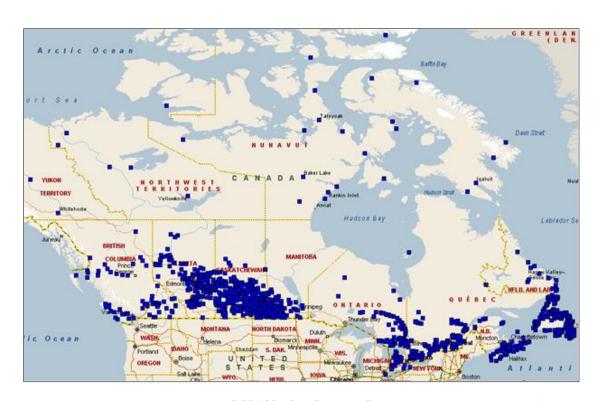
Sincerely,

Christopher J. Edwards
Vice-President, Regulatory Affairs

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CANADIAN CABLE SYSTEMS ALLIANCE INC.

Submission for Consideration

in the

Standing Committee on Industry, Science and Technology's

Study on Broadband Connectivity in Rural Regions

CCSA Member Company Systems

September 26, 2017

Introduction

1. As a representative of more than 125 independent communications distribution companies who serve Canadians from sea to sea to sea, CCSA is delighted to see the Committee recognizes the important issue of broadband connectivity in rural regions. At bottom, this issue is about social and economic development. As a recent Intelligent Communities Forum ("ICF") paper puts it:

    > The broadband economy is the product of the buildout of the 21st century's low-cost, high-speed communications and information technology on both the global and local levels. This has resulted in societies acquiring innovative and sustainable ways of working and living. There is growing collaboration and cooperation across time zones and cultures that creates open markets, boosts productivity, improves efficiency, promotes sharing of limited resources, generates employment, and improves living standards.[1]

2. In contrast to that promise, we see the current reality of many Canadian communities where manufacturing and "bricks and mortar" commerce have retreated but full transition to today's information technology economy has not yet occurred. A recent CARTT.ca article about the town of Chatham, Ontario said:

    > Independent ISP TekSavvy's home is one of those working class towns that "used to" have a lot of things. It used to have a Rockwell International factory. It used to have a Campbell's Soup plant. There used to be a window manufacturing company.
    > . . . .
    >
    > TekSavvy, however, used to be small and has become a huge success story in the city of about 40,000. Now with over 600 employees (most of whom work in that former soup factory that TekSavvy renovated, with others also in Toronto and Montreal), the company is now the second-largest private employer in Chatham, behind Union Gas.[2]

3. However, in thousands of smaller, more rural and remote communities, such changes are anxiously sought but have not yet begun. Such communities are seeing their local businesses struggle and close and their populations dwindle. It is that "digital divide" that Canada must address. The objective must be that all Canadians stand to benefit from the new "innovative and sustainable ways of working and living" that the ICF describes and that are taking hold in countries all around the world.

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[1] ICF Canada, "Broadband: the essential utility", Draft Final – Approved, accessed at https://d3n8a8pro7vhmx.cloudfront.net/icf/pages/391/attachments/original/1482476784/Broadband_Utility_ICF_Canada_Position_Paper_FINAL.pdf?1482476784 [hereinafter *ICF Canada Paper*] on August 18, 2017 at page 3.
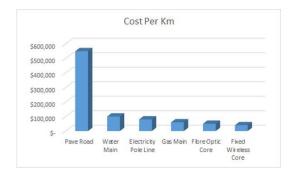[2] CARTT.ca, "THE INDEPENDENTS: TekSavvy - a grassroots success story", February 9, 2017, accessed at https://cartt.ca/article/independents-teksavvy-grassroots-success-story on September 20, 2017.

4. The question of how Canada is to meet those objectives raises a few key themes:

   - Broadband service must now be viewed as <u>critical infrastructure</u> that is at least as important as water, electricity and roads;

   - The unique challenges posed by what, in the legacy telephone world, are called "<u>high-cost serving areas</u>" must be understood and addressed;

   - Solutions must be driven, developed and implemented at <u>the local level</u> by "de-risking" private investment and using the knowledge, expertise and resources that best understand and can respond to local needs; and

   - There must be <u>ongoing support for network operation</u> and upgrading where the local economics cannot justify the cost of the networks.

<u>Broadband as Critical Infrastructure</u>

5. The ICF paper offers a chart[3] that dramatically illustrates the relative cost of different infrastructure elements, in this case, for the city of Kingston, Ontario:

6. The chart illustrates that, while the overall dollar amounts required to fibre the country may be daunting,[4] the required investment is, in fact, relatively modest in comparison to, for example, building new roads. In that context, it is an eminently justifiable and relatively inexpensive infrastructure spend.

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[3] *ICF Paper* at page 3.
[4] *ICF Canada Paper* at page 7 estimates "the total funding to fibre wire Canada is about $40 - $60 billion or $1,422 per person or $3,754 per occupied private dwelling".

7. However, the idea of "broadband as infrastructure" comes with its own baggage. Foremost is the idea that national infrastructure spends require governments to create national funding programs, complete with complex administrative apparatus.

8. Blanket eligibility criteria for programs designed at a national level can result in automatic exclusion of small, localized projects. For instance, the CRTC's proposed criteria for its funding program exclude any "hexagons" any part of which have 50 Mbps service or any service areas within 2 km of an existing fibre Point of Presence.

9. Such criteria may effectively deny funding opportunities for extension of last-mile "fiber to the barn" services in hamlets that are close to larger urban markets but, nonetheless, lack any form of modern broadband service. As the former C.E.O. of Execulink Telecom, Inc., a CCSA member and SILEC based in Woodstock, Ontario said, "If somebody lives 10 kilometres outside of Tilbury, for example, they might as well be in the northwest Territories . . . and our big challenge is making sure that people in Ottawa understand that."[5]

10. Funding programs must account for the reality that it is not only remote areas that require support: many sparsely-populated communities close to the major centres also require subsidized facilities.

11. Both the CRTC and ISED funding programs have extensive application processes and forms that, by themselves, are daunting to smaller, locally based companies.

12. We agree with the recommendation of the British Columbia Broadband Association, in response to the CRTC request for comments on design of its funding program, that:

> A simplified application and reporting process should be considered for small funding awards (for example, funding awards of under $100,000 capital expense). This would permit small local service providers to conduct individual projects without investing in expanding their corporate capacity.[6]

13. Rather than requiring recipients of smaller funding amounts to enter into contribution contracts that entail substantial progress measurement and reporting requirements, government could also consider a much simpler system of grants for worthwhile projects that can be performed under a given funding threshold.

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[5] Keith Stevens, as quoted in CARTT.ca article "THE INDEPENDENTS: Execulink serves customers any way it can", March 14, 2017.

[6] British Columbia Broadband Association. "Re: BC Broadband Association's Comments on Telecom Notice of Consultation CRTC 2017-112 – Call for comments: Development of Commission's broadband funding regime (File No. 1011-NOC2017-0112)", June 28, 2017 [hereinafter *BCBA*] at para. 71.

<u>The Challenge of High-Cost Serving Areas</u>

14. CCSA member companies serve over 1,500 communities across Canada. The vast majority of those are rural and remote communities. There is a reason those small companies serve those areas.

15. The Coop de Câblodistribution de l'Arrière Pays is based in Quebec City and provides TV, internet and landline telephone service to over 17,000 subscribers in the Laurentian foothills. The territory is "very mountainous and spreadout".[7] Says the General Manager, Stéphane Arseneau:

> In the city, you think about clients per pole, but out here it's poles per client . . . . That's the challenge. When a major company comes to a territory like ours, they'll say, the houses are too spread out, it's not profitable, and they won't go any further. <u>That's why the co-op was formed in the beginning</u>.[8]

16. Mr. Arseneau's comments reflect the experience of most CCSA member companies. The basic challenge in the areas they serve is low population density. It simply takes far more physical plant to serve a customer in such areas than it does in densely populated urban markets. Aside from the increased initial capital cost to build networks in such areas, the combination of spread out facilities and, often, rough terrain, make maintenance of the facilities more expensive.

17. Dery Telecom, based in LaBaie, Quebec, has become the province's largest independent operator and serves a vast geographic area. Says one of the company's owners, Nathalie Gagnon:

> The average population of the villages we serve is around 600 . . . . Other companies don't always go into those communities. Going into those communities requires more investment— more buildings and more infrastructure. But we have no choice, particularly if we want to stay close to people in rural communities.[9]

18. Quadro Communications, a 3,100-member telecom co-op headquartered in Kirkton, Ont., "has already deployed fibre to the home to every farmhouse, barn and business in its four exchanges which sit in in parts of Perth, Huron, Middlesex and Oxford counties

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[7] Maryna Carré, as quoted in CARTT.ca article, "THE INDEPENDENTS: CCAP - "In the city, you think about clients per pole, but out here it's poles per client.", March 9, 2017.

[8] Stéphane Arseneau, *Ibid.*[emphasis added].

[9] Nathalie Gagnon, as quoted in CARTT.ca article, "THE INDEPENDENTS: Quebec's rural specialists – DéryTelecom", August 14, 2017.

in southwestern Ontario farm country about 45 kms north of London, Ontario."[10] As a recent CARTT.ca article notes about Quadro's investment:

> . . . folks living in places like Wartburg . . . , Woodham, and Sebringville have had access to Gigabit internet since the summer when the company completed an eight-year, $20-million fibre build. It wasn't just to new, greenfield areas or to its more densely populated areas. Quadro has built fibre to everyone down every single county road in its territory.[11]

19. Such investments are fundamentally uneconomic. So why do these companies do it? As John Alderman of Quadro put it, "There are areas and there are roads that make no economic sense to run the cable except there was a promise to all of our members to do it."[12]

20. Another Ontario CCSA member company, Cable Cable, Inc., based in Fenelon Falls has made similar investment decisions. In 2016:

> The company told [CRTC] commissioners during that hearing about a new extension of its fibre optic broadband network to a community of about 300 homes which is situated just under nine kilometres from its existing wired plant. Cable Cable currently fills gaps to communities like that with its fixed wireless network but would prefer fibre. Assuming normal take rates for services in this village, payback on investment will be about 12 years, the CCSA and Cable Cable's CEO Mike Fiorini told commissioners, who didn't quite seem to believe what they were hearing. At that time in the proceeding, they were talking about potential subsidies to get broadband to rural communities like this in Canada, even though this one is less than a two hour drive from Toronto.[13]

21. CARTT.ca's editor added this note:

> We had one executive from one of the big three carriers tell us, upon hearing about this exchange: "If someone came to a meeting of ours and proposed something like that, even anything further than five years for payback, they'd be laughed out of the room – or fired."[14]

22. With respect to the building and extension of the last-mile networks they create, such smaller operators require access to funding to make the economic case work. The key

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[10] CARTT.ca article, "THE INDEPENDENTS: Fibre to every last farmhouse, barn and business", December 20, 2016.
[11] *Ibid.*
[12] John Alderman, *Ibid.*
[13] CARTT.ca article, "THE INDEPENDENTS: Confounding commissioners (and others) for over 30 years", June 1, 2017.
[14] *Ibid.*

here is to ensure that the application processes and eligibility criteria do not foreclose the smaller, independent network operators from access to funding.

23. The independent network operators provide TV, telephone and Internet services in many areas that, under the legacy telephone regulation, are known as "High-Cost Serving Areas". Provision of telephone service to such areas is subsidized because the service cannot economically be provided in the areas.

24. The operational challenges that arise in such areas, include; operating and upgrading networks over long distances and through rough terrain, the high cost of ongoing access to broadband transport capacity, and the rapidly increasing cost of access to hydro poles and conduit.

25. To date, the federal funding initiatives have subsidized only direct capital outlay on building projects. However, it makes no sense to fund such projects unless the resulting networks are sustainable. Funding programs should recognize and defray the ongoing cost of network operation and upgrading in "high-cost serving areas", just as the existing telecommunications subsidy supports ongoing provision of telephone service in such areas today.

26. CCSA's members are very pleased to see that ISED's "Connect to Innovate" program has been focused on the build-out of new transport facilities to remote communities. However, broadband backhaul or transport service through existing networks must also be available to smaller last-mile network operators at reasonable, affordable rates.

27. Today, wholesale access to such capacity is not mandated. Neither are the wholesale rates for such access controlled. As a result, the incumbents can deny access and are free to charge the prices they like. Consideration should be given to whether the CRTC's forbearance from regulation of terms for provision of transport services should be maintained. We submit that a federal broadband strategy must include regulation of such access and rates.

28. We also note recent, alarming increases to the rates the provincial hydro utilities are permitted to charge for attachment to their poles and other structures. In Ontario, the OEB has recently approved increases to the rates that the utilities can charge to attaching communications companies in the order of over 100%.[15]

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[15] Recent OEB Rate decisions for Hydro One, Hydro Toronto and Hydro Ottawa have approved increases of average pole attachment rates from $22 to $45.

29. This is a trend that runs directly counter to government's objectives for its broadband funding programs. For the smaller communications companies that serve low-density areas – where there are substantially more poles between customers than in urban areas – such increases have a disproportionate negative impact. They create a situation whereby, even with capital funding support, the increased operational costs may foreclose a smaller company's ability to build a sustainable network.

30. The costs of access to support structures, such as hydro poles, should be recognized as operational costs eligible for subsidy under any broadband funding regime.

"De-Risking" Private Investment – Local Solutions Work

31. In its comments on the CRTC's proposed funding program, the AAMDC said:

> . . . in rural Alberta, large ISPs with the financial capacity to pursue large capital projects are often not interested in rural areas because they see a greater return on investment in more densely populated urban areas. As a result, many small ISPs partner with rural municipalities in rural areas.[16]

32. The British Columbia Broadband Association echoed those comments, as follows:

> In general, the funding programs administered by Network BC, and by local governments such as Regional Districts, have been very effective in bringing service to un-connected areas. These levels of government have access to very accurate information about gaps in service coverage, and they are well equipped to follow up on service commitments made by funding recipients.[17]

33. Those comments align with the experience of CCSA's members. Those companies are accustomed to working closely with the municipal authorities in the areas they serve. Dery Telecom's Nathalie Gagnon says:

> We work with municipalities, co-ops and small distributors. In 30 villages, we work with local co-ops to keep service running. . . . They pay a fee, we give them our expertise and access to our equipment, and when there are technical issues we send out our technicians.[18]

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[16] Alberta Association of Municipal Districts and Counties, "CRTC 2017-112: Development of the Commission's Broadband Funding Regime", June 12, 2017 at para. 30.
[17] *BCBA* at para. 25.
[18] Nathalie Gagnon, as quoted in CARTT.ca article, "THE INDEPENDENTS: Quebec's rural specialists – DéryTelecom", August 14, 2017.

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34. The locally-driven models take many forms. In Olds, Alberta, the Olds Institute organized funding that resulted in the creation of O-Net, a highly successful venture that delivers modern broadband services to the Town of Olds and, more recently, has been extending that service into adjacent communities.

35. In Winkler, Manitoba, a city of 15,000:

> The city, which grew by 18 per cent in the last census, is paying telecommunications firm Valley Fiber $500,000 to hook up every civic building and donating about 1.5 acres to build the company a headquarters and data centre. The money will come from the city's reserve funds and will not mean a tax hike.
>
> In return, the company will provide free installation for every house and building in Winkler not owned by the city.[19]

36. These models share the characteristics of being locally-driven, involving cooperation among local ISPs and governments and the simple fact that they work. A key element of such initiatives is reliance on the expertise and resources of locally-based ISPs while, at the same time, "de-risking" those ISPs with an infusion of government funding. As in the Winkler example, often, the private investment will follow only once an initial public funding commitment has been made.

37. A highly effective way for governments to make funding dollars go far, then, is to think not in terms of national infrastructure funds with their complex eligibility criteria and application processes but, rather, to direct their resources to enabling local initiatives.

Summary of Recommendations

1. Broadband service should be viewed as critical infrastructure that is at least as important as water, electricity and roads.
2. Funding programs should recognize and, to the extent possible, defray the ongoing cost of network operation and upgrading in "high-cost serving areas", just as the existing telecommunications subsidy supports ongoing provision of telephone service in such areas today.
3. Solutions should be driven, developed and implemented at the local level using the

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[19] Bill Redekop, "Winkler to have fastest Internet in country", in Winnipeg Free Press, March 7, 2017, accessed on-line at https://www.winnipegfreepress.com/local/winkler-to-have-fastest-internet-in-country-415616004.html on August 24, 2017.

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	knowledge, expertise and resources that best understand and can respond to local needs. Government programs should include support for initiatives driven by local communities and ISPs
4.	Governments should assist by helping to "de-risk" projects that local communities, ISPs and private investors seek to launch.
5.	Funding programs should account for the reality that it is not only remote areas that require support: many sparsely-populated communities close to the major centres also require subsidized facilities.
6.	Simplified application and reporting processes should be considered for small funding awards (for example, funding awards of under $100,000 capital expense).
7.	Government should consider a much simpler system of grants for worthwhile projects that can be performed under a given funding threshold.
8.	Government should ensure that the cost of backhaul or transport service is available to smaller last-mile network operators at reasonable, affordable rates. Consideration should be given to whether the CRTC's forbearance from regulation of terms for provision of transport services should be maintained.
9.	The costs of access to support structures, such as hydro poles, should be recognized as operational costs eligible for subsidy under any broadband funding regime.

About the CCSA

38. The CCSA is an industry association and buying group that was created by its members to represent independent communications companies. Incorporated in 1993, it has grown from a dozen founding members to about 125 companies today.

39. CCSA's members include cable operators, telephone companies and pure Internet Protocol TV (IPTV) operators. They are also wireline and wireless-based Internet Service Providers (ISPs). Almost all are smaller cable operators, telephone companies and ISPs that deliver television and communications services to citizens in secondary markets, small towns and rural and remote areas of the country. Many of CCSA's members are municipalities, community-owned cooperatives and First Nations. A fair number are actually volunteer organizations.

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