



Canadian
Electricity
Association

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Mr. Claude Doucet, Secretary General
Canadian Radio-television and Telecommunications Commission
Les Terrasses de la Chaudière
1 Promenade du Portage
Gatineau, Québec J8X 4B1

7 May 2020

RE: Call for comments regarding potential barriers to the deployment of broadband-capable networks in underserved areas in Canada, Telecom Notice of Consultation CRTC 2019-406

Dear Mr. Doucet,

The Canadian Electricity Association (CEA) hereby wishes to be added as an intervener to this proceeding. The CEA also wishes to reserve the right to file reply comments should any of the filed submissions be of particular interest to it, as well as to participate in person, in any future public hearing that the Commission may decide to convene.

1. The CEA is the national voice of more than 40 Canadian electrical utilities based in every Canadian province and territory. Our members generate, transmit and distribute electricity to industrial, commercial, and residential customers across Canada. Electricity is a key economic, environmental, and social enabler that is essential to Canadian prosperity and Canada's transition to a clean energy future.
2. CEA's position is and remains that CEA members are enthusiastic partners in the rollout of telecommunications services so long as the integrity of the electrical grid is not adversely affected, and electricity customers do not cross subsidize telecom customers. Working under these guiding principles, CEA members look forward to continuing our work with Canada telecommunications companies (telecoms) to improve the lives of rural & remote Canadians through safe, reliable, and affordable power as well as connectivity.

The Commission invites all parties to provide comments, as follows:

Identify barriers that service providers and communities face in building new facilities, or interconnecting to or accessing existing facilities, to extend networks into underserved areas in order to offer universal service objective-level services. These barriers could include, but may not be limited to, access to affordable transport services and efficient use of support structures (e.g. concerns with space reserved for future use, and the costs and timeliness of gaining access to these support structures).

3. CEA members have identified the following three barriers to rural & remote broadband deployment:

Barrier 1: How to create a positive business case for the provision of broadband service to rural and remote areas of Canada?

Barrier 2: Space for new telecommunications equipment.

Barrier 3: Regulatory barriers created by existing CRTC rules.





4. CEA reiterates **that our Electric Utility members are not a barrier to rural & remote community broadband**. CEA has observed through previous public submissions to the Canadian Radio-Television & Telecommunications Commission (CRTC or Commission) as well as the Broadcasting and Telecommunications Review panel (BTLR panel) that some parties have stated that regional specifications for telecommunication equipment attachments on electrical support structures are a barrier to the timely and efficient deployment of telecommunications. CEA respectfully disagrees.
5. The timely and efficient rollout of any telecommunications network requires the co-operation of many players. Incumbent local exchange carriers (ILECs), competitive local exchange carriers (CLECs), electric utilities, property owners, municipalities, the provincial governments, and federal regulators (both the CRTC and the Ministry of Industry, Science, Innovation and Development or ISED) are the key and influential groups. Electrical support structures are important parts of these deployments since they support many wireline and forthcoming wireless attachments. But the primary purpose of the electrical support structures is the safe, reliable and affordable delivery of electricity and as such the regulations that govern them are formed by the confluence of many different bodies including the local road authority, the county/municipality, and the province/territory.
6. The confluence of provincial regulations affecting electrical support structures which result in local specifications can look like a barrier at face value but there are valid reasons for these local specifications. Picking two Canadian jurisdictions at random (for illustrative purposes), Nova Scotia is not the same as Saskatchewan. They have different geography, climate, and customer needs.
7. Each province and territory is different but there is already a strong system in place that ensures the correct level of standardization for telecommunications equipment attachment across our nation. Canada-wide standards are created by the Canadian Standards Association (CSA) in collaborative working groups that comprise both telecoms, electrical utilities and regulators. All Canadian jurisdictions use CSA standards as the basis for their specifications and then **tailor those CSA requirements to meet local needs and challenges**. No company can ignore Canada's regional differences because it is a vast and diverse country, but the current system where a national basis is set collaboratively and then regions adjust to their needs is a good system because it equitably balances national standardization with regional needs.
8. Regional differences in applicable construction standards can have direct benefits to telecoms as well. For example, in Newfoundland, provincial legislation¹ requires the outer 5 feet of a publicly maintained road rights-of-way to be reserved for utility use. This legislation was negotiated with the province many years ago and it provides for an efficient pole installation process in rural areas as utilities (both electrical and telecommunications) do not need to compensate, obtain permissions, easements, or surveys with private land owners. This allows local electrical utilities a great deal of flexibility to work with Telecoms on electrical support structure issues and thus improves access.
9. The Newfoundland legislation also includes a provision that requires a minimum vertical clearance of 18 feet above provincial and municipally maintained roads where the CSA minimum standard is only 14½ feet.

¹ AN ACT RESPECTING PUBLIC WORKS, SERVICES AND TRANSPORT, Article 29.
<https://www.assembly.nl.ca/legislation/sr/statutes/w12.htm#29>





The same piece of legislation has elements that improve access to rights-of-way but in exchange requires greater care be given to ensure the safety of these rights-of-way. **The Newfoundland case is an example of where and why there are “tradeoffs” in telecommunications accessing electrical support structures.** And tradeoffs like these that ensure the safe, reliable, and affordable delivery of electricity are not barriers; they protect the electrical and communications workers and the public, and therefore all Canadians.

10. If the telecoms are interested in constructive relationships with the support structure owners on which they wish to attach, they should endeavor to work with the requirements of local electrical utilities and municipalities because those standards exist to protect the primary purpose of electrical support structures: the safe, reliable, and affordable delivery of electricity to Canadians.
11. In the spirit of finding ways for telecoms and CEA members to build constructive relationships, CEA members have suggested the following list of corrective actions to problematic commonplace telecom practices which consistently cause operational challenges for CEA members throughout Canada. If telecoms were to adopt the suggestions below, it would improve the relationship between telecoms and CEA members, which could in turn speed rural & remote broadband deployment by lowering the operational risk that CEA members bear when a telecom attaches to the CEA member electrical utility infrastructure. Operational risk is of paramount concern for CEA members because it directly affects their ability to serve their customers.
 - a. Relocate telecommunication equipment as and when required to avoid delayed transfers to new poles and removals of the old poles. This might include a shot clock process to transfer/remove telecom attachments from these older poles. This will allow the pole owner to better manage its maintenance and rebuild programs, minimize safety issues and reduce costs, as well as provide space for others.
 - b. Regular removal of not-in-use (a.k.a. NIU) and/or unused telecommunication attachments from support structures. This could also include moving the last few grandfathered telecommunication customers off of old telecommunication lines onto their new systems so that the old telecommunication lines can be removed to free up support structure capacity for others.
 - c. Respond to support structure emergencies in a timely manner. This includes responding to calls respecting broken poles or downed cables quickly, to safeguard electric utility staff who must perform essential tasks such as ensuring that all electrical equipment has been made safe and restoring power, among other things.
 - d. Provide clear design plans with their attachment permit applications. This also assists with a quicker response from the support structure owner and others. An example of typical technical and safety design requirements are in the on-line Ontario Electrical Safety Authority's *Guideline for Third Party Attachments* at https://esasafe.com/assets/files/esasafe/pdf/Utilities/Guideline_for_Third_Party_Attachments.pdf





- e. Clearly tag/label ownership of attachments so coordination between parties can be quick and simple. Although a requirement in virtually all support structure agreements, it is not practiced by the telecoms in all cases, resulting in delays in requested work.
- f. Where municipalities require all utilities' equipment to be placed underground in new builds or rebuild situations, the telecoms should start installing sufficient ducts rather than direct burying their cables or endeavoring to gain access to ducts owned by others.

Describe how and to what extent these barriers are preventing parties from extending transport networks and offering universal service objective-level services in underserved regions of Canada.

Barrier 1: How to create a positive business case for the provision of broadband service to rural and remote areas of Canada?

12. The CEA does not have the ability to comment on many of the telecommunications business practices, but we do find it noteworthy that even with a near zero incremental cost for broadband service, some telecoms still do not serve many rural customers. An example of that can be found in this CBC article <https://www.cbc.ca/news/canada/nova-scotia/high-speed-internet-upper-branch-1.5370947>. This suggests the true barrier could be the ability of the Telecoms to establish a positive business case.
13. Telecoms offering new or competitive products are not like Canada Post, for example. They do not have a duty to serve nor have franchise areas and mandated rates which allow cost recovery. For them to enter a new market, in this case expanding services into underserved parts of Canada, requires a minimally positive business case (where the business is expected to turn a profit in the competitive market) for these new or existing telecoms. The question thus moves from how to improve service in areas, to improving the business case which will in turn incentivize better service. CEA's recommendation provided in paragraph 22, below, identifies a way in which the telecom business case can be assisted with market mechanisms.

Barrier 2: Space for new telecommunications equipment

14. In rural & remote areas of Canada, the electrical support structures (poles) that may be able to support telecommunications attachments are often shorter and have less load bearing strength than those found in urban areas. Essentially there is less space for the safe attachment of telecommunications equipment. There are many examples where these "rural poles" have had no communications attachments and therefore there was no requirement initially to install a taller or stronger pole at extra cost to electricity ratepayers.
15. "Make Ready" work, that is, the replacement and/or upgrading of poles prior to the end of their useful life in order to safely accept new/additional telecom attachments is usually needed and thus the cost of rural deployments can often be underestimated by telecoms. Because the cost of Make Ready work, which can be substantial, would not be incurred in the absence of a telecom attachment the cost must be borne by telecoms and their customers, not by electricity customers – a fact not often understood by the applicant requesting the work.
16. Additionally, CEA notes that while electrical support structures host many pieces of telecommunications infrastructure, large purpose-built telecommunications towers are also options to help telecoms connect to their customers and build their networks. Wireless connectivity through tower installations, instead of wired





connections could be a good last-mile solution to serve remote customers which are not otherwise economical to connect.

17. The placement of the equipment, both wireline and wireless, that will enable broadband for underserved parts of Canada can experience challenges. CEA in this submission (paragraphs 23-26) identifies ways that new access can be created in a fair and swift manner without risking discriminatory access.

Barrier 3: Regulatory barriers created by existing CRTC rules

18. CEA members in their experience working with telecoms large and small, have seen that many telecoms are apt to use regulations where they can for competitive advantage. Within the competitive market of telecommunications, some existing telecoms can deny, delay, or block their competitors from installing equipment, which in turn could provide the existing telecom significant competitive advantages.
19. CEA has observed two significant and commonplace areas where current rules seem to enable anti-competitive behaviour between telecoms. The first is that, ILECs are mandated to provide access through processes such as over-lashing, whereas CLECs are not similarly obliged. This discrepancy creates situations where new entrants are not able to access areas where a CLEC is present. And secondly, ILECs are not required to allow CLECs' wireless equipment on their support structures, which creates a barrier for all other parties.
20. **CEA members work with all telecoms to avoid barriers to access but corrective regulatory measures from the CRTC to address the two issues stated in paragraph 19 above could help to minimize this issue. The CEA believes that the CRTC already holds significant authority to reduce anti-competitive behaviour amongst telecoms access.**

Propose potential regulatory measures that are within the Commission's jurisdiction, to address the identified barriers.

21. The following recommendations made by CEA are both realistic and feasible because they are within the CRTC's existing regulatory jurisdiction.

Barrier 1: How to create a positive business case for the provision of broadband service to rural and remote areas of Canada?

22. As identified in the CEA's submissions to the CRTC 2019-57 consultation², the CEA's private virtual network operator (PVNO) proposal has a unique ability to incent small & regional mobile network operators (MNOs) through stable contracts with large anchor customer(s). The evolution of the rural telecom market that we proposed in our May 15th 2019 submission as well as subsequent submissions and our Feb 28th 2020 hearing appearance before the Commission will support rural & remote broadband through a market-based mechanism that rewards small and/or new operators with significant enterprise customer(s) without requiring them to have service offerings comparable to the big three telecoms. As such, **CEA recommends that the CRTC direct the Canadian Steering Committee on Numbering to amend the Canadian IMSI**

² <https://crtc.gc.ca/eng/archive/2019/2019-57.htm> (specifically, the CEA's May 15, 2019 submission and its presentation to the CRTC Public Hearing, Feb.28, 2020).



Assignment Guideline to allow Critical Infrastructure Operators to acquire mobile network codes (MNCs) – a regulatory change which will unlock the numerous benefits of the proposed PVNO.

Barrier 2: Space for new telecommunications equipment

23. To allow more pole space for telecommunications equipment, **CEA recommends that the Commission continue providing financial support for new Telecom entrants, especially First Nations, who will build in remote and rural areas. Importantly, CEA urges the CRTC to ensure that funding for applicants' business case includes 'make-ready' costs if upgrades to electrical utilities' infrastructure are required.** This will ensure viable solutions with no cross-subsidization by the electrical ratepayers.
24. One nuance of the funding program CEA wishes to draw the Commission's attention to is that should a telecom use CRTC funding for the cost of Make-Ready work it appears this might be **in contradiction to the principle of non-discriminatory access** where the telecommunication party entering into a partnership/joint venture/consortium with the local municipality etc., would have preferential access to the support structure.
25. Non-discriminatory access was highlighted several times by the BTLR panel in their final report as a barrier to the deployment of networks, and as such, it is our understanding that the CRTC wishes to avoid discriminatory access agreements. **A potential solution to inadvertently creating discriminatory access agreements is that should support structure upgrades be required that they be sized for additional telecom attachments should other telecoms wish to attach at some later time.**
26. Also related to creating space for telecommunications equipment, since the last-mile connectivity can be difficult to create a positive business case, **CEA strongly recommends the CRTC, working with ISED, examine the potential for large telecommunication tower installations to wirelessly serve sizable areas centrally.** The federal government could build these towers and then charge nominal or cost recovery rates for companies to attach their telecommunications equipment. This would also free new entrants from potentially getting denied access to incumbent's tower installations.

Barrier 3: Regulatory barriers created by existing CRTC rules

27. For the telecommunications market to avoid the anti-competitive behaviour that CEA members have observed (described above), **CEA asks that the CRTC review its rules and procedures as they pertain to different requirements and privileges assigned to telecoms, both ILECs and CLECs, and make changes as necessary to promote improved access into new markets.**
28. In that review CEA notes that for significant barriers to rural and remote community broadband to be removed it is critical that:
 - CLECs be required to allow other Telcoms access to overlash existing support strand the same way the ILECs are required to; and
 - ILECs be required to allow the installation of CLECs' wireless equipment on ILEC infrastructure.

Any other related issue within the scope of the proceeding.



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29. CEA urges the Commission to work closely with ISED to develop an industrial internet of things (IIoT) roadmap, as industry connectivity in rural & remote areas is important but one that is not necessarily served by the traditional consumer market the same way.
30. IIoT will unlock economic growth in rural & remote parts of Canada, and as such, should be considered part of the increased connectivity needs of Canada. A key component of IIoT should be private 3GPP technology, including 5G & LTE. CEA is generally in favour of regulatory systems that support local licensing. We look forward to working with the CRTC and ISED on the IIoT file as it develops.

Conclusion

31. To conclude, CEA appreciates the opportunity to participate in this consultative process. Again, CEA members look forward to working with the Commission and our telecommunication partners with a view to assisting the expansion of broadband networks into underserved regions of Canada and thereby better serving both telecommunications and electricity customers in a fair and equitable manner. CEA also thanks the Commission for granting our extension request as it has allowed a fulsome engagement by CEA members in this consultation.

Sincerely,

Jeff Pinkowski C.E.T.
Joint Use Administrator, Manitoba Hydro

Justin Crewson
Director, Transmission and Distribution Policy, CEA

Chair, CEA Joint Use Practice and Policy Committee

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