

AAMDC Intervention

CRTC 2015-134: Review of Basic Telecommunications Services



Prepared by the Alberta Association of Municipal Districts and Counties

2015

The Alberta Association of Municipal Districts and Counties (AAMDC) appreciates the opportunity to submit an intervention into Phase 1 of the CRTC's review of basic telecommunications services in Canada. As this submission effectively summarizes the AAMDC's position on the importance of broadband service in rural areas of Canada, it will not be necessary for the AAMDC to appear at the public hearing.

Who We Are

The AAMDC is an independent association comprising Alberta's 64 incorporated counties and municipal districts, four incorporated specialized municipalities and the Special Areas Board. Since 1909, we have helped Alberta's rural municipalities achieve strong, effective local government.

The AAMDC is led by a board of directors consisting of a president and vice-president selected at-large from the association's membership, as well as five directors representing different geographic districts of Alberta. All board members are municipal elected officials.

The AAMDC advocates on behalf of its members to the provincial and federal levels of government, other stakeholders, and the general public. As Alberta's rural municipalities comprise large areas with relatively small populations, the AAMDC strives to ensure that our members' perspectives, challenges, and ideas are given the same consideration by policymakers as those of larger urban centres. Rural Alberta is home to both vibrant communities and the resources that drive Alberta's and Canada's economy. As such, providing a unified rural municipal voice is a responsibility that the AAMDC takes very seriously.

The AAMDC appreciates the CRTC's goal "to ensure that all Canadians have access to a world-class communications system and that they are able to participate in the digital economy." There is no question that Canadians living in rural areas face distinct and significant challenges in accessing reliable, high-quality telecommunications infrastructure, and the AAMDC's submission will identify specific challenges experienced in rural Alberta as well as potential solutions to improve participation in the digital economy for rural Albertans and rural Canadians more broadly.

AAMDC Input into Phase 1 of CRTC 2015-134

It is the AAMDC's understanding that during phase 1 of the CRTC's review of basic telecommunications services, stakeholders are to provide input by responding to the questions in the CRTC's notice of consultation. During phase 2 of the review, stakeholders will have an opportunity to provide broad opinions on the future of Canada's telecommunications system. As such, this response will be formatted to provide the AAMDC's answers to the questions in Appendix B of the Notice of Consultation. The AAMDC is not a telecommunications service provider or an advocacy organization focused specifically on telecommunications policy. Therefore, the AAMDC's responses will be based more on policy than a technical examination of telecommunications technology and infrastructure. Some questions, particularly those not applicable to rural areas or requiring technical knowledge, will not be responded to as they are either beyond the AAMDC's expertise or not relevant to Alberta's rural municipalities.

Canadians' evolving needs for telecommunications services

1. *Canadians are using telecommunications services to fulfill many social, economic, and cultural needs in today's digital economy.*

a. *Explain how telecommunications services are used to meet these needs. For example, uses may include e-commerce (i.e. the online purchase and trade of products or services), e-banking and/or telephone banking, e-health or telehealth services, telework, and distance education. Which of these uses of telecommunications services are the most important to ensure that Canadians meaningfully participate in the digital economy?*

AAMDC response: In rural areas, all of the services listed in the question are important for meaningful participation in the digital economy, and their importance grows each day. A prime example of a telecommunication use with potentially transformative impacts on rural Canada is distance education. Historically, a lack of post-secondary education opportunities were a prime factor in rural depopulation, as young adults raised in rural areas would relocate to urban centres to attend college or university, and in many cases, they would not return to rural areas. This has proven to be both a social and economic detriment in rural areas, as it harms the ability of existing rural businesses to attract qualified employees and limits the diversification of the rural economy as those with innovative ideas are less likely to return to rural areas due to a lack of supporting infrastructure.

Distance education allows young adults to participate in post-secondary education while remaining in rural communities. This allows for the community itself to see the economic and social benefits of retaining their young adult population, and it also enriches post-secondary institutions by providing a greater wealth of perspectives and experiences within programs. Distance education also provides an excellent opportunity for those with established rural businesses to upgrade their skills and form connections without leaving their communities, which further strengthens and diversifies the rural economy.

Distance education is only one example of the potentially transformative uses that telecommunications services can have in rural areas. Any technology that allows rural residents to remain in place while interacting with those from other areas of the province, country, or world will benefit not only rural communities, but Canada as a whole. In other words, the economic, social, and cultural impacts of many uses is both local and national.

b. *Explain which telecommunications services are most important to support these needs and uses. What characteristics (e.g. capacity, mobility, high speed, and low latency) should these telecommunications services have?*

AAMDC response: As telecommunications technology is constantly evolving, it is challenging to identify what specific services are most important to support the uses outlined in the question above. That being said, at this point in time, along with continued landline phone service, access to reliable broadband internet service is the top priority in rural Alberta. While both the federal and provincial governments have taken action in recent years to improve rural broadband service in Alberta, many areas still struggle with capacity, speed, and reliability.

Because many rural areas are isolated, it is very difficult to use traditional wired infrastructure to provide broadband access, therefore fixed wireless access (FWA), mobile wireless access and satellite are common means for rural connectivity. Many AAMDC members have expressed

concerns with all of these delivery methods. FWA is typically effective, but in some areas, connection speed is a challenge and it is typically unavailable in more isolated areas. The AAMDC is also concerned about the long-term possibility of Industry Canada reallocating 3500MHz spectrum for urban mobile broadband use, and the adverse impacts it may have for rural residents who rely on FWA for internet access. Mobile wireless access is not ideal for use as a primary means of connectivity, but in some areas of rural Alberta, this is the only available option. The speed, capacity, and reliability of mobile wireless internet, especially in rural areas, is a concern. In many isolated areas of rural Alberta, satellite is the only means of broadband access. Satellite is often very expensive in rural Alberta, and those using it often have no other options.

Ideally, all broadband access, regardless of the method of transmission, should have similar levels of speed, reliability and affordability in both urban and rural areas. The primary concern of AAMDC members is that these three attributes are generally lagging in rural areas.

- c. Identify and explain the barriers that limit or prevent Canadians from meaningfully participating in the digital economy (e.g. availability, price, digital literacy, and concerns related to privacy and security). Identify which segments of the Canadian population are experiencing such barriers.*

AAMDC response: This question is similar to that above. Depending on the location, service type, method of transmission, and demographic being served, all of the barriers listed in the question likely prevent some Canadians from meaningfully participating in the digital economy. In rural Alberta, availability and price are the most common challenges.

- **Availability:** As mentioned, Alberta's rural communities are often reliant on FWA, mobile wireless access, or satellite to receive broadband internet service. All of these methods have short- and long-term issues that impact their availability and reliability for rural residents. The Government of Canada's reliance on private ISPs to develop rural broadband networks has resulted in availability limitations, particularly in isolated areas of the country. If developing broadband access to a particular community does not have a financial benefit for a service provider, it is unlikely to occur. While the *Connecting Canadians* program may assist in further developing rural broadband infrastructure, it still relies on ISPs to identify project priorities, which means that financially rewarding projects will likely be prioritized, potentially hindering the availability of broadband in isolated rural areas.
- **Price:** Due to the high costs of building infrastructure to service rural areas, prices for broadband may be quite high compared to those paid in urban areas. This is particularly true in areas that rely on satellite for broadband access. Although the Government of Canada has decided to follow a market-based approach in improving rural broadband coverage, in some cases direct subsidization of expansion may be necessary to keep costs manageable for consumers.

- d. Identify and explain any enablers that allow Canadians to meaningfully participate in the digital economy (e.g. connected devices and applications).*

AAMDC response: Efforts made by all levels of government have led to rapid improvement in the availability of broadband in rural Alberta. In some cases, rural municipalities have invested directly

in infrastructure to provide broadband service. The Government of Alberta's Supernet initiative has ensured that all public institutions across the province have access to broadband, and the Government of Canada has provided support for accessibility through the *Connecting Canadians* program. That being said, greater effort must be made by the provincial and federal governments to assist broadband development in areas where it may not be economically viable to be provided by the private sector.

- e. *As Canada's digital economy continues to grow and evolve during the next 5 to 10 years, which telecommunications services are Canadians expected to need to participate meaningfully? Specify how your responses to parts a) through d) above would change based on your answer.*

AAMDC response: As the response to this point has emphasized rural broadband, elaborating on this question is unnecessary.

2. *The commission's current target speeds for broadband Internet access service are a minimum of 5 Mbps download and 1Mbps upload, based on uses that consumers should reasonably expect to make of the Internet. Are these target speeds sufficient to meet the minimum needs of Canadians today? If not, what should new targets be and what time frame would be reasonable to achieve these new targets?*

AAMDC response: The AAMDC lacks the technical knowledge to recommend a specific target speed. However, it is disappointing that the CRTC's initial 2011 target to provide 5 Mbps download and 1 Mbps upload speeds to all Canadian households by the end of 2015 will not be met, and that the 2014 *Digital Canada 150* strategy did not set more ambitious targets. Clearly, Canada's geography presents challenges in providing uniform standards to all households, but the 5 Mbps/1 Mbps target is significantly slower than targets set in countries such as the United States (100 Mbps by 2020), Australia (25 Mbps by 2016), Argentina (10 Mbps by 2015), and the European Union (30 Mbps by 2020) (although in fairness, none of those countries have committed to provide these speeds to *all* residents, but rather most).

Ideally, Canada should set targets that place it among world leaders in connectivity speeds. One approach to achieve this is to set a standard review period for targets, in which infrastructure and technology evolution is evaluated and targets are raised as needed. A review every one to three years is realistic to ensure that targets are reflective of advances in the field, yet achievable.

In addition to setting more ambitious targets, the CRTC or the Government of Canada must play a more active role in ensuring that ISPs strive to meet them. Without adequate incentive to meet the targets, or meaningful consequences if targets are not met, ISPs are only likely to meet targets if it provides a direct business benefit, not because it is what is best for rural Canadians.

The Commission's role regarding access to basic telecommunications services

3. *Which services should be considered by the Commission as basic telecommunications services necessary for Canadians to be able to meaningfully participate in the digital economy? Explain why.*

AAMDC response: In addition to landline telephone service, broadband access should be considered a basic telecommunications service. As mentioned above, the growing importance of reliable internet access in being socially and economically engaged in broader society

necessitates a basic service definition. To this point, the free market approach complimented by selective government funding has not provided uniform access to broadband, so defining broadband as a basic service is necessary.

- a. *Explain whether the underlying technology (e.g. cable, digital subscriber line, fibre, fixed wireless, mobile wireless, and satellite technology) should be a factor in defining whether a telecommunications service should be a basic service.*

AAMDC response: In terms of rural broadband, the technology used is a product of the difficulties in using traditional wired means to provide the service in rural areas. If an expensive or unreliable technology is used, it is presumably because a superior option is unavailable or impractical. Therefore the technology *used* should not define whether a service is defined as basic, but rather the technology options realistically available in the area being served. Otherwise, an ISP could conceivably implement an expensive technology in an area where a cheaper, more reliable option is available simply to receive subsidization associated with being defined as a basic service.

- b. *Identify, with supporting rationale, the terms, conditions, and service characteristics under which basic telecommunications services should be provided. Should any obligations be placed on the provider(s) of these services? If so, what obligations and on which service provider(s)?*

AAMDC response: Ideally, service levels should be uniform across the country. For each service level, a minimum service threshold should apply. If service providers in certain areas (i.e. rural areas) are unable to meet these standards due to prohibitive costs, the Government of Canada should be in a position to assist through subsidization of that service. This could occur through a direct subsidy or through a mechanism similar to that used for the Local Service Subsidy Regime, in which service providers in regulated high-cost service areas provide subsidies through a fund in which telecommunications companies with annual revenues of \$10 million or more contribute.

Obviously, there are complexities that would have to be addressed in defining a high-cost service area for broadband provision, as multiple technologies exist to provide broadband, and all have their pros and cons, as well as different levels of up-front cost, long-term operating cost, reliability, etc. However, the important point is that a system in which subsidization exists for telephone service but not broadband service runs contrary to the CRTC's acknowledgement in the Notice of Consultation document that broadband service is becoming extremely important to the lives of all Canadians, while the importance of telephone service is decreasing.

- c. *What should be the prices for basic telecommunications services and how should these prices be determined? Provide rationale to support your answer.*

AAMDC response: The AAMDC does not have the technical knowledge of Canada's telecommunications retail landscape to provide a specific answer to this question. Generally speaking, Canadians should have access to similar levels of telecommunications services at similar prices regardless of where in the country they live.

4. *Can market forces and government funding be relied on to ensure that all Canadians have access to basic telecommunications services? What are the roles of the private sector and the various levels of government (federal, provincial, territorial, and municipal) in ensuring that investment in telecommunications infrastructure results in the availability of modern telecommunications services to all Canadians?*

AAMDC response: The recent inability of ISPs to meet the CRTC's goal of all Canadians having access to 5 Mbps download and 1 Mbps upload speeds by the end of 2015 is evidence that market forces and strategic government funding is not adequate in providing all Canadians with quality telecommunications services in a timeframe that meets consumer and government expectations.

In a country as large and geographically diverse as Canada, it is unrealistic to expect that for-profit ISPs will provide service to all rural and remote areas without subsidization. Recently in Alberta, both the provincial government and some municipal governments have provided financial assistance to ISPs through grant programs or functioned as an ISP to improve rural broadband service. This indicates that market forces are insufficient to develop full coverage, even in Alberta, where levels of broadband access are relatively high compared to other provinces and territories.

As mentioned above, it is the federal government's responsibility to ensure that rural internet access is protected in a fashion similar to telephone access, with the introduction of a local service subsidy regime in high-cost service areas. It is also important that the federal government ensure that technologies that are effective in providing rural residents with broadband access are not taken over for other uses (such as enhancing service in urban areas) unless a better alternative is provided (e.g. proposed 3500 MHz reallocation).

Both provincial and municipal governments should be encouraged to prioritize the development of telecommunications infrastructure within their jurisdictions as they see fit. This may occur through partnership with the private sector to improve speed and/or reliability of telecommunications systems (Alberta Supernet) or through the direct provision of telecommunications services and/or construction of telecommunications infrastructure (Parkland County).

Additionally, the federal government should work closely with municipal governments to identify underserved areas. ISPs may have a vested interest in not focusing on these areas in which the costs of providing infrastructure are high, so relying on municipalities to represent their residents' needs may provide a fuller, more accurate picture of service levels in rural or isolated areas.

5. *What should be the Commission's role in ensuring the availability of basic telecommunications services to all Canadians? What action, if any, should the Commission take where Canadians do not have access to telecommunications services that are considered to be basic services?*

AAMDC response: As one pillar of the CRTC's mission is "ensuring Canadians can connect to quality and innovative communication services at affordable prices," the AAMDC would expect the CRTC to intervene in some way if a certain segment of the population was not receiving quality telecommunications services. As mentioned above, the CRTC should take action in ensuring that a subsidization system is in place for areas of the country where developing telecommunications infrastructure is not profitable. Relying on market forces in these situations is unrealistic and will lead to a two-tiered telecommunications system, in which Canadians living in rural and isolated areas lack the ability of other Canadians to be connected to the digital economy.

6. *In Telecom Regulatory Policy 2011-291, the Commission stated that it would closely monitor developments in the industry regarding the achievement of its broadband Internet target speeds to determine whether regulatory intervention may be needed. What action, if any,*

should the Commission take in cases where its target speeds will not be achieved by the end of 2015?

AAMDC response: The AAMDC's position on this issue has been provided in previous questions. Additionally, the CRTC should work closely with provincial and municipal governments to better identify underserved or unserved areas. This will allow any regulatory intervention to be as efficient and effective as possible. In fact, many municipalities have undertaken local service gap analyses, and would likely be willing to share that information with the CRTC and Government of Canada if it will improve broadband access for their residents.

7. *In Telecom Regulatory Policy 2013-711, the Commission stated its intention to establish a mechanism, as required, in Northwestel's operating territory to support the provision of modern telecommunications services. Such a mechanism would fund capital infrastructure investment in transport facilities (e.g. fibre, microwave, and satellite), as well as the cost of maintaining and enhancing these facilities. The Commission considered that this mechanism should complement, and not replace, other investments from the private sector and government, including public-private partnerships.*

a. *Explain, with supporting rationale, whether there is a need for the Commission to establish such a mechanism in Northwestel's operating territory. As well, explain whether there is a need for such a mechanism in other regions of Canada.*

AAMDC response: This question lacks the necessary detail to answer. Some mechanisms may be preferable to others. For example, the *Connecting Canadians* program could be considered such a mechanism, and may yet be successful in providing proper telecommunications services to previously underserved areas. However, the AAMDC is concerned that the over-reliance on ISPs (who have a vested interest in identifying financially lucrative projects) may undermine the program's purpose by excluding isolated areas from those identified as expansion possibilities by ISPs. A mechanism that identifies and provides assistance in developing telecommunications capacity in underserved areas regardless of financial potential would be helpful, and could potentially be designed in such a way that it could be deployed in specific situations in which market forces are not meeting the needs of Canadians, so that a blanket mechanism will not harm the ability of private service providers to have the first opportunity to serve a given market. To proceed without the option of deploying such a mechanism is a disservice to Canadians living in rural and isolated areas.

b. *What impact would the establishment of such a mechanism have on private sector investment and government programs to fund the provision of modern telecommunications services?*

AAMDC response: If the mechanism is properly designed and deployed only when it is evident that the private sector is not serving the needs of a given community, it should not have any impacts on private sector investment and government programs. Regardless of whether a government mechanism to subsidize telecommunications in some areas exists, the private sector will only make an investment in infrastructure if it makes business sense. If a subsidization mechanism is used as a last resort rather than entering the market a competitive service provider, it should not distort the market or negatively impact existing government programs to incentivize private sector investment in rural and isolated areas.

Regulatory measures for basic telecommunications services

8. *What changes, if any, should be made to the obligation to serve and the basic service objective?*

AAMDC response: As regulatory tools, the obligation to serve and the basic service objective are both effective. However, the basic service objective should be updated to include high-speed broadband internet access.

9. *Should broadband Internet service be defined as a basic telecommunications service? What other services, if any, would be required to the existing regulatory framework?*

AAMDC response: Broadband internet should be defined as a basic telecommunications service.

10. *What changes, if any, should be made to the existing local service subsidy regime? What resulting changes, if any, would be required to the existing regulatory frameworks (e.g. price cap regimes)?*

AAMDC response: The spirit of the local service subsidy regime is effective in ensuring rural residents receive telecommunications services. The regime should be expanded to include high speed broadband internet service. It is important that expanding the regime be accompanied by an expansion of price cap regulations to apply to broadband service in areas where the local service subsidy regime is applied.

11. *What changes, if any, should be made to the contribution collection mechanism? Your response should address, with supporting rationale, which TSPs should be required to contribute to the NCF, which revenues should be contribution-eligible and which revenues, if any, should be excluded from the calculation of contribution-eligible revenues.*

AAMDC response: The AAMDC lacks the technical knowledge to respond to this question.

12. *Should some or all services that are considered to be basic telecommunications services be subsidized? Explain, with supporting details, what services should be subsidized and under what circumstances?*

AAMDC response: As mentioned in previous questions, basic services should be subsidized in situations where geography prevents the private sector from developing the necessary infrastructure. The local service subsidy regime provides an example of how subsidization can be targeted to a specific geographic region without corrupting the market basis for telecommunications development in the majority of the country.

13. *If there is a need to establish a new funding mechanism to support the provision of modern telecommunications services, describe how this mechanism would operate. Your response should address the mechanism described in Telecom Regulatory Policy 2013-711 for transport services and/or any other mechanism necessary to support modern telecommunications services across Canada. Your response should also address, but not necessarily be limited to, the following questions:*

a. *What types of infrastructure and/or services should be funded?*

AAMDC response: Infrastructure necessary to provide residents in rural or isolated areas with telecommunications services that are comparable to those in more populated areas should be funded. This could be determined on a case-by-case basis through collaboration between the CRTC and the service provider(s) operating in the area.

b. In which regions of Canada should funding be provided?

AAMDC response: As mentioned, all regions of Canada contain rural and isolated areas where the costs of providing telecommunications services are prohibitive to private sector investment. Target areas in which a subsidization mechanism is available should be determined through collaboration by the CRTC, provincial and municipal government, and service providers.

c. Which service providers should be eligible to receive funding, and how should eligibility for funding be determined (e.g. only one service provider per area, all service providers that meet certain conditions, wireless services providers, or service providers that win a competitive bidding process)?

AAMDC response: Identifying a way to maintain a competitive atmosphere, even in cases where subsidization is required, while also meeting the need to ensure service providers are willing to undertake projects in rural and isolated areas is a complex issue without a clear solution. Any subsidization mechanism should ensure that the service provider is not unfairly benefitting from providing service, but rather that the service provider is making a similar return on investment to those operating in other areas of Canada. Ideally, the CRTC could set a service expectation and maximum subsidization amount for a given isolated or rural area, and undertake a competitive bidding process to determine which service provider will meet the service expectation for the lowest subsidization amount. The details of such a mechanism should be subject to a separate consultation.

Priority should be given to ISPs with a pre-existing presence in rural areas, as they have shown a willingness to provide some level of service to residents living in difficult to access areas. The CRTC would be making a mistake if it required the largest telecommunications providers to provide service in rural areas, as many of these providers have shown an unwillingness to expand to rural areas previously. Utilizing those with a pre-existing understanding of the challenges inherent in providing rural broadband service would not only allow these smaller companies to remain viable, but would likely result in better reliability and service than rural residents may receive if the largest telecommunications companies are required to provide service that they are not interested in providing.

d. How should the amount of funding be determined (e.g. based on costs to provide service or a competitive bidding process)?

AAMDC response: Ideally, a combination of the two approaches could be used in which the CRTC sets a maximum subsidization amount they will provide to assist in the provision of the service, and the service providers bid competitively as to the portion of that subsidization they would require.

e. What is the appropriate mechanism for distributing funding? For example, should this funding be (i) paid to the service provider based on revenues and costs, or (ii) awarded based on a competitive bidding process?

AAMDC response: Ideally, it should be awarded through a competitive bidding process. In situations where the costs of providing services would be so high that this is not realistic, other means that more directly compensate a willing service provider should be considered.