



December 5, 2017

House of Commons Standing Committee on Industry, Science and Technology
INDU@parl.gc.ca

Dear House of Commons Standing Committee on Industry, Science and Technology:

Re: Rural Broadband

The Saskatchewan Association of Rural Municipalities (SARM) is the independent association that represents all 296 rural municipalities in Saskatchewan. SARM is the principle advocate in representing the RMs before senior levels of government. The Association takes direction from its members and forms its policy accordingly. This direction is primarily driven by member resolutions passed at conventions and through consultation with members. SARM was incorporated in 1905 and continues to be the voice of rural Saskatchewan over a century later.

Both broadband and cellular service are longstanding issues for SARM's members. Our members report that areas across the province have received poor service and/or no connectivity at all. As a result of poor broadband and cellular access, rural families, communities, and businesses are all at a disadvantage when compared to their urban counterparts located in centres with strong and reliable internet services. Reliable and affordable connectivity ensure that those living and working in rural areas are able to fully participate in the Canadian economy.

Today, participation in the Canadian economy and society requires reliable internet access. More and more services rely on use of the internet. Examples include but are not limited to conducting financial transactions, data storage in the cloud, accessing markets, finding sellers and buyers (i.e. commerce), finding employment, accessing entertainment, accessing government services, health care, and educational institutions. Being unable to perform these tasks immediately puts one at a disadvantage. The continual trend of services and information being offered online means that it is imperative that rural areas are afforded the same opportunities and same services in order to participate in the Canadian economy.

As a result of this disadvantage, SARM members have passed two resolutions expressing the need for improved broadband and cellular services in rural Saskatchewan. Please see Appendix A to view these resolutions and their responses. With these two active resolutions, SARM has a clear

mandate from its members to advocate for improved service. SARM believes that this should provide the members of the House of Commons Standing committee on Industry, Science and Technology (INDU) with an understanding of who SARM is and why SARM is providing comments for the broadband connectivity in rural Canada study.

On October 25, 2017, the Lieutenant Governor of Saskatchewan delivered the Speech from the Throne. Included in the speech was the announcement that funding has been allocated for improving broadband and cellular service in rural Saskatchewan. It was announced that \$1.1 billion would be invested over the next four years, starting with just over \$300 million in the 2017-18 provincial budget. That investment is intended to increase and upgrade wireless and wireline networks, improve customer service through network growth and modernization.

Also, the Government of Saskatchewan has begun gathering information on areas of poor service. This work is being led by Warren Kaeding, the Legislative Secretary to the Minister Responsible for SaskTel. Kaeding is focusing on expanding fast, reliable cellular and internet coverage to parts of rural Saskatchewan where there is low level service or no service at all. SARM made use of its communication channels with its members to assist in the gathering of information. SARM has learned from Kaeding that, to date, over 200 RMs have identified shortfalls in coverage so far. In Appendix B, SARM has provided a list of RMs that copied SARM on their submissions to Kaeding. This list does not include the over 200 RMs that submitted information as not all members copied SARM. SARM will continue to monitor the progress on this initiative and provide assistance to the Government of Saskatchewan where it may be needed.

In October 2017, SARM was in Ottawa for its annual advocacy days where a wide range of issues was discussed with Ministers, MPs, Senators, and departmental staff. A key priority that SARM discussed was broadband and cellular access. SARM had a productive meeting with Susan Hart, Director General, Connecting Canadians Branch at Innovation, Science and Economic Development Canada. At this meeting, SARM learned that the service area maps used by the federal government are compiled using information received from Natural Resources Canada and Internet Service Providers (ISPs). While the maps help with the visualization of the data and showing the areas of poor service, they do not show all the underserved areas. SARM believes that the information being gathered by the Government of Saskatchewan initiative would be valuable for federal service maps as the information received from SARM members indicate that there are additional areas of poor service than what is shown on the Connecting Canadians map. It is recommended that the federal government work together with the provincial and territorial governments, and other stakeholders, to gather more accurate data so that broadband and cellular services may be improved.

SARM has encountered an issue regarding the definition of rural that is used. To SARM's knowledge, the federal government uses Statistics Canada's definition of rural. That is to

say that areas with populations of 30,000 and less are considered rural. While this definition may be suitable for other uses and in other provinces, SARM believes that a more accurate description of rural is areas with populations of 4,999 and less. This definition better reflects the realities of Saskatchewan's populations and geography. Federal funding criteria that follows this definition would ensure that the rural areas that apply for funding would do so in competition with each other and not with large urban centres that already have acceptable service levels. The use of accurate definitions becomes very important when considering the financial challenges of implementing high-speed services. SARM recognizes the fiscal challenges of expanding services to rural areas as the capital costs are intensive and Saskatchewan's geography poses unique challenges. That is why it is important that all levels of government and industry work together to expand services. This process would be made easier with appropriate definitions. Therefore, it is recommended that the federal government implement a rural definition of populations of 4,999 and less when creating programs for broadband funding.

Federal programs such as Connect to Innovate and Connecting Canadians have been successful in providing funding to improve services. However, SARM has heard from some of its members that the application process is overly complex. Given the technical nature of broadband and cellular as well as the size of the projects, the application process is complex for many communities. Application assistance from the federal government, such as Innovation, Science and Economic Development Canada, would go a long way in ensuring that applications are completed correctly and that more applications are received. SARM recommends that the federal government does its best to ensure that the application process is not too onerous and assistance is available.

In terms of download and upload speeds, SARM believes that the federal government should do all that it can to meet the CRTC's new targets of download speeds of 50 megabits per second (Mbps) and upload speeds of at least 10 Mbps. Many urban centres will already have achieved these goals or will over the next few years. The real challenge will be meeting these goals in the rural areas. This will take time as investments continue over the next several years and services are expanded.

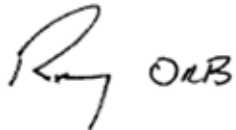
SARM is hopeful that the INDU report will lead to better programs and decisions that will benefit broadband and cellular service in rural areas in not just Saskatchewan but across Canada. These services are paramount to integrating into the Canadian economy and society. To improve rural broadband and cellular services, SARM summarizes the following recommendations:

1. SARM recommends that the federal government work more closely with provincial and territorial governments to gather more accurate data to ensure that all underserved areas are targeted

2. SARM recommends that the federal government use a rural definition of populations of 4,999 and less for Saskatchewan in their criteria for federal programs related to broadband and cellular funding.
3. SARM recommends that the federal government endeavour to ensure that the application process is not overly onerous or complicated and that assistance is available to those submitting applications.
4. SARM supports the CRTC's target goals for download and upload speeds. These should be available in rural areas as well.

Thank you for your consideration of SARM's comments. SARM looks forward to reviewing the report compiled by INDU.

Sincerely,

A handwritten signature in black ink, appearing to read 'Ray Orb'.

Ray Orb
President



Appendix A – SARM Resolutions

Resolution 34-16M: Cell Phone Coverage

Year: 2016

WHEREAS cell phone coverage and internet access in rural Saskatchewan are nonexistent or unreliable at best;

WHEREAS municipalities all over the province are losing business because of poor coverage;

WHEREAS businesses and individuals in Canada are losing revenues because they are having to pay U.S. roaming charges;

BE IT RESOLVED that SARM lobby the provincial and federal governments to improve cell phone and internet service access across Saskatchewan as quickly as possible;

BE IT FURTHER RESOLVED that these services be available to municipalities and rural residents at a reasonable cost.

Response from Ron Styles, President & CEO of SaskTel:

SaskTel's 4G network and internet services cover over 99 percent of the population of Saskatchewan. Although there are generally no plans to expand cellular coverage further, SaskTel is upgrading the 4G wireless network to increase capacity across the province to meet our customers' needs.

The 4G network is compatible with approximately 80 percent of all networks across the world. International roaming customers are able to use their SaskTel 4G phone on 4G networks in locations where SaskTel has established roaming agreements.

SaskTel continues to deploy LTE (Long Term Evolution) and plans to rollout 4G LTE to all rural towers in Saskatchewan throughout 2016 as well as Micro Cell deployment where data capacity is required to meet our customers' needs. Development of VoLTE (Voice Over LTE) continues and it is anticipated it will be deployed in 2017.

SaskTel's internet services are based on the different technologies used to provide the service, each of which have their own sets of limitations and bear different costs for installation and maintenance.

SaskTel provides internet services through a combination of DSL (Digital Subscriber Line), Fibre, Fusion and wireless technologies.

DSL internet service is a distance sensitive technology. As a result, SaskTel is only able to provide basic High-Speed Internet service to a maximum distance of four kilometers from the nearest distribution point. Distance is not measured "as the crow flies"; rather, it is calculated as the length the cable travels as it loops from the distribution point



individual customers. Since 2013, SaskTel has expanded DSL service to 77 communities and DSL service available in 429 communities. Since 2013, SaskTel has also upgraded the DSL internet speeds in 295 rural communities.

SaskTel's Fibre to the Premises (FTTP) program, branded infiNET in the market, was announced in 2010 to upgrade the broadband network in the residential areas of Saskatoon, Regina, Moose Jaw, Prince Albert, Weyburn, Estevan, Swift Current, Yorkton and North Battleford. SaskTel infiNET is currently available in Regina, Saskatoon, Prince Albert, Moose Jaw, Swift Current, Weyburn and Estevan.

In 2014, SaskTel launched SaskTel High Speed Fusion interNET service, a new fixed wireless LTE-TDD service. There are 59 towers that have been equipped with Fusion and the service is available in 714 communities.

Our 4G LTE wireless network also allows customers to access the internet using a mobile internet stick, smartphone or other internet enabled wireless capable device, where service is available.

Since 2013, SaskTel has invested \$29.3 million to improve its Rural Ethernet Transport network that carries wireless and wireline traffic. This will also ensure the availability of higher speeds and more capacity throughout rural Saskatchewan. The budget for the entire improvement program that is scheduled to be completed in 2020 is \$65 million.

SaskTel also offers a Community Participation Program. This program is designed for Saskatchewan communities that do not have adequate access to cellular or internet services and do not meet SaskTel's criteria for service expansion. Through it, customers or communities will pay a portion or all of the required capital costs as determined by SaskTel on a case by case basis. This allows SaskTel to responsibly and sustainability expand our network in their area.

Resolution 25-14M: SaskTel Cellular Coverage and Internet Services **Year: 2014**

WHEREAS cellular coverage and internet service in rural Saskatchewan is unreliable and often inaccessible.

BE IT RESOLVED that SARM lobby SaskTel for better internet and cellular coverage for residents of Rural Saskatchewan.

Response from the Honourable Kevin Doherty, Minister Responsible for SaskTel:

SaskTel understands the importance of providing communications services in rural areas. However, SaskTel faces a unique challenge in providing these services to one of the most geographically dispersed populations in the country. As Saskatchewan has the fewest customers per square kilometre of any Canadian province, SaskTel incurs significant costs to deliver service to rural locations.



While SaskTel's wireless network does extend to 98 per cent of Saskatchewan's population, there are locations where coverage is either poor or not available.

The range and quality of wireless service always depends upon a number of factors, including but not limited to: weather conditions, terrain, geological and man-made obstructions, distance from wireless towers and hardware device selection. Taking into consideration all of these variables, SaskTel cannot guarantee in-building service.

SaskTel does provide high speed Internet to 100 per cent of Saskatchewan's population through different technologies, which maintain their own sets of limitations and bear different costs for installation and maintenance for each of the types of networks.

Digital Subscriber Line (DSL) Internet service is a distance sensitive technology. As a result, SaskTel is only able to provide SaskTel Basic High-Speed Internet Service to a maximum distance of four kilometres from the nearest SaskTel central distribution office (COO). This distance is not measured "as the crow flies"; rather, it is calculated as the actual length the cable travels through the ground as it loops from the COO to individual customers.

SaskTel Satellite Internet and SaskTel High Throughput Satellite (HTS) Internet Service powered by Xplornet are SaskTel's solutions for customers where DSL is not an effective option. SaskTel made the decision to focus on satellite connections due to the overall cost per customer and the ability to reach most parts of the Saskatchewan population.

SaskTel also offers Internet access via a wireless data stick using cellular technology for those areas where cellular service provides a strong enough signal. Wireless Internet via cellular has the same limitations as regular cellular service.

In 2014, SaskTel launched High Speed Fusion Internet service, a new Long-Term Evolution (LTE) fixed-wireless product for rural broadband, replacing SaskTel's Wireless Broadband Internet Service (WBBI) on 55 rural towers.

SaskTel is currently working on a number of other initiatives to enhance communications in rural Saskatchewan. These include:

- A \$57 million initiative from 2013 to 2020 for the installation of new fibre and equipment to upgrade rural transport capacity to accommodate rural growth of fixed and mobile, voice, video, and data services, as well as provide better reliability and survivability for the existing network.
- Installation of a fibre backbone for N011h Eastern Saskatchewan

- Increasing available wireline broadband speeds and services to rural communities. SaskTel will upgrade speeds in 220 existing DSL communities from 2013-2014, as well as expand DSL to 54 more rural communities.
- Improving cellular locations and speeds with LTE: SaskTel has deployed 4G LTE in Regina, Saskatoon, Balgonie, Clavet, Dundurn, Langham, Lumsden, Martensville, Osler, Pense, Vanscoy, Warman, and White City, Dalmeny, Estevan, Moose Jaw, North Battleford, Prince Albert, Swift Current, Weyburn and Yorkton.

On November 14, 2014, SaskTel announced it will be adding additional capacity by the end of 2014 to its 4G wireless network in 111 communities in rural Saskatchewan. Another seven communities were announced on December 3, 2014.

Communities may wish to review SaskTel's Shared Model Program. The Shared Model Program is designed for Saskatchewan communities that do not have or currently have inadequate service in their area and are not scheduled to receive service under SaskTel's standard selection process and current expansion plan.

Customers or communities pay a portion or all of the required capital costs as determined by SaskTel on a case by case basis. If a community is interested in this option, please contact Bob Hersche, Director of Strategic Business Development, at 306-777-5346.

The Federal Government's imposition of a new regulatory framework for roaming has reduced SaskTel's revenues from other companies roaming on its networks in Saskatchewan by over 90 per cent. This has created a significant revenue shortfall for SaskTel. This shortfall has created further challenges to improve coverage and capacity in Saskatchewan.



Appendix B – List of RMs that copied SARM RE underserved areas

- RM of Antelope
- RM of Big River
- RM of Brokenshell
- RM of Calder
- RM of Canaan
- RM Clayton
- RM of Coalfields
- RM of Colonsay
- RM of Coteau
- RM of Coulee
- RM of Douglas
- RM of Dufferin
- RM of Emerald
- RM of Excelsior
- RM of Flett's Spring
- RM of Garry
- RM of Grandviews
- RM of Grayson
- RM of Gull Lake
- RM of Hazelwood
- RM of Insinger
- RM of Kinistino
- RM of Lake Alma
- RM of Laurier
- RM of Lawtonia
- RM of Loreburn
- RM of Lost River
- RM of Maple Creek
- RM of Meeting Lake
- RM of Milton
- RM of Montrose
- RM of Parkdale
- RM of Pittville
- RM of Porcupine
- RM of Reciprocity
- RM of Reno
- RM of Spy Hill
- RM of St. Louis
- RM of Victory
- RM of Wood Creek