

# SaskTel Response to:

## Reply comments: Consultation on a Framework to Auction Spectrum in the 2 GHz Range including Advanced Wireless Services

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Submission Document

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## Executive Summary:

Saskatchewan Telecommunications (“SaskTel”) believes that the framework for the upcoming auction spectrum must strike an appropriate balance between the use of market forces and the need to ensure that small, regionally based wireless providers can continue to grow and build on current successes.

SaskTel and other regional wireless companies who have a proven track record in terms of spectrum usage and a commitment to providing services must be given consideration in order to balance the advantages held by national service providers.

This consideration is particularly important in light of reported further consolidation of the wireless industry, the historical distribution of scarce spectrum resources and the potential for spectrum-based services in the future, particularly in less populated regions of Canada. SaskTel respectfully submits that an unfettered spectrum auction would not favour the future development of a strong, healthy wireless marketplace throughout Canada nor would it ensure that all people of Canada reap the benefits of the “wireless revolution”.

In this second round of consultations for the AWS spectrum auction SaskTel has argued that :

- Although SaskTel is an incumbent wireline company it has never been dominant in the national or regional wireless market. Given the dichotomy between SaskTel and the size of the major wireless service providers in Canada, any market dominance restrictions placed within the AWS auction should not apply to small companies such as SaskTel nor to companies wishing to serve outside of their existing serving areas;
- The AWS auction must allow for the separation of Tier I, Tier II and Tier III communities. No single service provider should be allowed to dominate access to spectrum. As a result SaskTel proposes a system of spectrum caps and regional division of spectrum blocks to ensure diversity.

- As companies expand services there is a need for roaming and use of existing facilities to ensure a functioning market. SaskTel believes that any roaming and tower sharing rules must balance the needs of those who have invested in facilities and those who are now entering the marketplace.

SaskTel has proven that it can operate within a highly competitive marketplace against significantly larger players. Within the AWS spectrum auction, SaskTel is now asking for a fair and equitable system in which it can continue to compete and grow.

## Introduction:

Pursuant to Notice No. DGTP – 002-07, SaskTel is pleased to participate in the second round of general comments related to the upcoming AWS auction. SaskTel having reviewed the submissions presented to Industry Canada in the first round finds itself in a unique position as a small incumbent telephone company. The first consultation round has led to a deep polarization of views; between those advocating a full “set aside” for the creation of a fourth cellular competitor versus the views of the three existing national players wanting the unfettered use of market forces. It is our belief that neither of these positions as outlined and debated in the first round of consultations will result in meeting the enabling guidelines in Canada’s new spectrum policy.<sup>1</sup>

Since the completion of the first round of submissions SaskTel also believes that the long term outlook of the competitive landscape for wireless services has changed providing the specter of further concentration in the delivery of wireless services. Accordingly there may be a need for both Industry Canada and the telecommunications industry to re-evaluate their approach to the AWS competitive landscape to ensure sufficient flexibility and growth.

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<sup>1</sup> **Spectrum Policy Framework for Canada**, Spectrum Management and Telecommunications, Industry Canada, DGTP-002-07, June, 2007

SaskTel is fully supportive of the *Spectrum Policy Framework for Canada* released in June, 2007 which states that “Market forces should be relied upon to the maximum extent possible”. This implies that spectrum allocation must account for:

- The impact allocations would have on existing services;
- The need to encourage the maximum deployment of scarce spectrum resources;
- The need to ensure, where possible, that all residents of Canada, urban and rural will benefit from the services that can operate over that spectrum; and finally
- The need for diversity in the marketplace.

Within these guidelines SaskTel submits that in order to ensure the health of the wireless market in Canada the upcoming AWS auction must ensure that:

- Those companies such as SaskTel who do not have significant national or regional market power are given an opportunity to have access to spectrum as a scarce public resource in order to continue to meet current and future needs;
- Consideration is given to those companies who have demonstrated their desire and ability to deploy networks especially in areas with higher degrees of risk such as Tier II and Tier III communities; and,
- Companies are encouraged to work together to use all of their resources to ensure that the people of Canada can have access to a range of new wireless services.

Regardless of the outcome of the auction, companies should be rewarded for utilization of spectrum. Mechanisms must be developed to ensure that spectrum holdings are reviewed periodically to ensure maximization of this resource.

## **II: The Right Balance – Ensuring New Services in Small Urban, Rural and Remote Areas**

SaskTel believes that the framework for the upcoming auction spectrum must strike an appropriate balance between the use of market forces and efforts to manage spectrum resources in the public interest.

While SaskTel has supported a greater reliance on market forces wherever feasible during this consultation, we also believe that spectrum policies should not undercut the ability of wireless innovators such as SaskTel to get access to new or unused spectrum. In short, while market forces should be promoted, since spectrum is a finite public resource, we must also ensure that smaller industry players who have a proven track record in providing concrete results in terms of spectrum usage are provided the opportunity to build on those successes, particularly in less populated regions of the country where larger, national entities are less inclined to operate.

Indeed, the Spectrum Policy Framework states that “this decision to rely to a greater extent on market forces must be tempered by the continued need for the management of the resource” and recognized “that there will also be a need to make spectrum available for a range of services that are in the public interest, but may not be driven by market forces.”<sup>2</sup> In our view, ensuring that spectrum is dedicated to the provision of advanced services in small communities and rural areas of Canada clearly falls within those guidelines.

As a publicly owned entity, SaskTel has been directed by successive Saskatchewan governments to provide leading edge services to as many residents as possible within its fiscal capabilities. Saskatchewan, using SaskTel as a vehicle, has led the way in providing the most advanced communications services and solutions to our small, local and marginal markets, by providing the most extensive cellular coverage in Saskatchewan and using wireless technology to provide access to high speed internet service that is unparalleled in other rural and remote parts of Canada.

SaskTel firmly believes that broadband is the key to economic growth in the new digital information age. It is a key that can open the door to educational and economic opportunities to communities across Canada, enriching people’s lives. Interestingly, the Model Telecommunications Act released at the 2007 Canadian Telecom Summit contains a provision that would enshrine in legislation the principle that all Canadians should have access to “advanced telecommunications services” (i.e. broadband). As CRTC Chairman

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<sup>2</sup> Ibid., page 8.

Konrad von Finckenstein remarked, “this amounts to legislative recognition that broadband is seen as fundamental to our way of life today as conventional telephone services were in an earlier time.”<sup>3</sup>

One of the best options for promoting broadband, particularly in rural and less populated areas, and for providing new competition across the country, is maximizing the potential of spectrum-based services. It is critical that we use these spectrum-based services to make advanced communications opportunities available to more consumers and companies in order to improve our productivity, innovativeness and competitiveness. For example, the Conference Board of Canada recently reported that Canada is not keeping up with the top performers in the new global economy – in particular, because Canadians as a whole are not innovative enough.<sup>4</sup>

Some have suggested that one of the reasons for Canada’s uneven socio-economic performance and broadband penetration in global rankings is that we are a more rural country than others. If that is the case, we need to strengthen our efforts to address this rural challenge.

Consequently, SaskTel was encouraged by the recent Industry Canada Spectrum Policy Framework which has adopted one spectrum-specific general objective “to maximize the economic and social benefits that Canadians derive from the use of the radio frequency spectrum resource.”<sup>5</sup> Moreover, the Spectrum Policy Framework indicated that during the review of Canadian spectrum policies, there was “considerable support for the use of flexible spectrum management tools which would facilitate the deployment of communications in rural areas.”<sup>6</sup>

SaskTel has made a commitment to delivering advanced communication services on a timely basis to the residents of Saskatchewan. SaskTel is fully prepared and committed to using the spectrum in the 2 GHz range including AWS to provide new services and,

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<sup>3</sup> Speech, Konrad von Finckenstein

<sup>4</sup> Conference Board of Canada, *How Canada Performs: A Report Card on Canada*, June 2007.

<sup>5</sup> Industry Canada, Spectrum Management and Telecommunications, *Spectrum Policy Framework for Canada*, June 2007, page 8.

<sup>6</sup> *Ibid.*, page 6.

more importantly, of using the spectrum to fulfil our goal of increasing broadband penetration to residents throughout Saskatchewan.

Over the years SaskTel has learned how to serve Tier II and III communities in an economic manner with leading edge services. We strongly believe that small companies, such as SaskTel, should not be denied the opportunity to apply this experience by allowing large companies, whose real focus remains concentrated in specific areas of urban Canada, to acquire scarce spectrum and utilize it for deploying networks in Tier I cities only. Allowing a few large companies to dominate the spectrum auction will substantially delay the flow of capital and access to advanced services to small urban and rural centres throughout Canada.

Regional wireless companies who have a track record and commitment to providing services in these areas must be given consideration equal to that of national service providers.

### **III. SaskTel Not a Dominant Player in Wireless**

SaskTel remains one of the smallest wireless service providers in Canada by many orders of magnitude. Bell, Rogers and Telus as comparables are eight to seventeen times larger than SaskTel. The closest comparable is MTS Allstream which is only twice the size of SaskTel. All of these larger companies have some presence in the Saskatchewan marketplace. As a consequence, although SaskTel has retained a large market share in Saskatchewan the wireless market has remained very competitive. SaskTel's need to compete in Saskatchewan with significantly larger players has resulted in a situation in which Saskatchewan has lower average wireless user prices than larger markets such as Toronto.<sup>7</sup> SaskTel as a small company cannot dominate large national players even in its traditional marketplace. Accordingly, SaskTel would ask that it not be further disadvantaged by being denied access to the spectrum it needs to compete.

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<sup>7</sup> Grant, IGB & K Restivo, *Lament for a Wireless Nation: A Cross-National Survey of Wireless Service Prices: Canada, the United States and Europe*, Seaboard Group, 2007, pg. 18.

Traditionally the CRTC and the Government of Canada have treated SaskTel as a large incumbent for convenience of regulation. In this instance however the type of service being delivered is relatively new and SaskTel has no national market dominance. SaskTel would question the reasonableness of classifying our company as a large player given the significant differences in our size, ownership structure and geographic reach from any other national wireless service provider in Canada.

It is our belief that this classification is important in regards to the various options being considered within the upcoming AWS auction. MTSAllstream has suggested that Industry Canada distinguish entrants versus incumbents on the basis of national market share as being those with less than 10% of total Canadian subscribers.<sup>8</sup> Under this definition SaskTel should be considered as a new entrant or player.

This classification becomes extremely important if, as the President of Telus has suggested, “that new wireless spectrum should be set aside for new entrants.”<sup>9</sup> SaskTel did not promote the use of “set aside” provisions in the first round of consultations. However, if a set aside is enacted, SaskTel as an experienced telephone company should not be unduly hampered in its options to grow, expand and to provide new services outside of its current serving areas just because of traditional convenience in regulatory treatments.

SaskTel believes that Industry Canada must consider the manner in which the national wireless market has developed in the past, who holds access to scarce spectrum resources, the composition of the current players in that market and recent trends in that market. We believe that given these considerations, a totally unfettered auction process is inconsistent with either the new spectrum policy or the interests of developing a healthy diversified market.

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<sup>8</sup> **Advanced Wireless Services consultation DGTP-002-07, comments of MTS Allstream Inc.**, 25 May 2007, Para 95.

<sup>9</sup> **Telus turns 180 degrees on spectrum; TO GIVE RIVALS A TOEHOLD**, National Post, Fri 22 Jun 2007 ,Page: FP1, Byline: Carrie Tait

## IV. Mechanisms to Promote Diversity in the Provision of Canadian Wireless Services

In order to promote diversity in the industry, while using market forces to the maximum extent possible, SaskTel is proposing that Industry Canada re-examine:

- The basic bidding blocks for the AWS auction; and
- The use of spectrum aggregation limits.

SaskTel supports that portion of the Radio Advisory Board of Canada (RABC) response to AWS Consultation when it stated that: "In the event Industry Canada elects to intervene in the market, the RABC believes that an AWS auction spectrum aggregation limit is less harmful than other options. If aggregation limits are imposed, they should be applied equally to all participants and as such would at least be fair to everyone."<sup>10</sup>

### a) **Bidding Blocks**

After consideration of the comments provided by various parties responding to the Industry Canada consultation, SaskTel remains convinced that the most effective method of providing service providers with the flexibility to offer services in both urban and rural markets is through the availability of a mixture of Tier 2, 3, and 4 licences as originally proposed by SaskTel. We continue to recommend the implementation of the band plan and block sizes in harmonization with the FCC band plan and block sizes. With the availability of six blocks in the AWS band, this allows the best opportunity for bidders to acquire spectrum, and to tailor their services and service areas as per business requirements.

With the flexibility offered by the different block sizes, wireless service providers will be allowed to deploy networks to serve Tier I, Tier II, and/or Tier III communities as they so desire, without being dominated by large wireless service providers that have acquired Tier 2 or even Tier 1 licences, but will likely only provide service to lucrative Tier I cities.

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<sup>10</sup> Radio Advisory Board of Canada (RABC) response to AWS Consultation, May 25, 2007

For clarity, our proposed block sizes and service areas are shown below.

<b>Block Licences</b>	<b>Pairing</b>	<b>Amount of Spectrum</b>	<b>Proposed Tiers</b>	<b>Number of Licences</b>
A	1710-1720 MHz and 2110-2120 MHz	2 x 10 MHz	4	172
B	1720-1730 MHz and 2120-2130 MHz	2 x 10 MHz	3	59
C	1730-1735 MHz and 2130-2135 MHz	2 x 5 MHz	3	59
D	1735-1740 MHz and 2135-2140 MHz	2 x 5 MHz	2	14
E	1740-1745 MHz and 2140-2145 MHz	2 x 5 MHz	2	14
F	1745-1755 MHz and 2145-2155 MHz	2 x 10 MHz	2	14

Further to the goal of encouraging service deployment to rural areas, SaskTel notes with interest the submission of Barrett Xplore, specifically their proposal to split large metropolitan areas from the surrounding rural areas. A company like SaskTel, which has a history of serving rural communities, would be hindered from serving the rural areas surrounding a major metropolitan city due to the high demand for, and subsequently the high cost of the spectrum licence for the entire region.

Therefore, SaskTel agrees with the idea submitted by Barrett Xplore. Furthermore, SaskTel proposes that the Tier 3 and Tier 4 spectrum licences that include cities greater than 300,000 population be split between the metropolitan city and the surrounding licence service area. SaskTel proposes that the split be based on metropolitan census areas (as defined by Statistics Canada 2006 Census data) with a census population greater than 300,000.

With separate licences for the metropolitan area and the rural area, potential bidders would then be able to bid on the spectrum licence for the rural service area, at a potentially lower cost, allowing a greater likelihood that service would be provided to these rural communities.

#### **b) Aggregation Limits**

It is quite clear from the consultation submissions, and the various market studies and data provided, that the Canadian wireless industry is heavily dominated by three large players. As a small incumbent player without significant national or regional market power, SaskTel would recommend that the Department take measures to promote diversity in the provision and choice of wireless services in Canada. This diversity becomes particularly important in light of recent discussions (as of the date of writing) concerning a potential merger between Bell and Telus. Should this merger be allowed to proceed, the Canadian wireless industry would be dominated by two very large service providers, with very large spectrum holdings in comparison to existing operators and potential new entrants.

Being a small incumbent operator, SaskTel is concerned about our ability to acquire additional spectrum in a fair and equitable manner. SaskTel firmly believes that efforts must be made by Industry Canada to level the playing field, and to avoid issues with market dominance, and potential spectrum hoarding and blocking by dominant players.

SaskTel recommends that a spectrum aggregation limit of 85 MHz be applied to wireless service providers and their affiliates, which would include all new and existing AWS and PCS spectrum, as well as 800 MHz cellular licences in the licence service areas. Since spectrum is a very scarce resource, this limit would serve as an incentive for existing wireless service providers to utilize their spectrum more efficiently, and allow precious spectrum to be acquired by new market entrants.

Furthermore, because of the potentially high demand for the spectrum, and to allow a fair and equitable distribution of spectrum amongst bidders, SaskTel would also recommend a spectrum acquisition limit of 20 MHz of AWS and PCS spectrum in the planned

spectrum auction. No single bidding entity would be allowed to acquire more than 20 MHz of spectrum during the auction in any given service area. It should be noted that this differs from SaskTel's original submission in that we are now proposing a limit of 20 MHz, whereas previously we were recommending a limit of 30 MHz. This change comes after a review of the other submissions, as well as a closer review of future wireless technology, future services, and their bandwidth requirements.

Together, the spectrum aggregation limit of 85 MHz and the acquisition limit of 20 MHz will both serve as effective tools to provide a more level playing field in the wireless industry, and allow market forces to operate during the spectrum auction.

## V. Recognizing the Need for Companies to Work Together: Roaming

As a small wireless service provider SaskTel has read, with interest, the submissions of a number of contributors who argue that the Department must mandate roaming agreements and tower sharing in order to allow competition to flourish. SaskTel continues to believe that widespread facilities based competition provides the best means of ensuring that rural residents have access to the same high quality mobile networks as urban residents. SaskTel concedes, however, that there is a need for tower sharing and roaming agreements in order to help the establishment of new entrants and ease their eventual transition to becoming facilities-based carriers.

The President of Telus recently stated that: "We would also agree to certain other areas of support ... to ensure that any emerging third player within the wireless industry was allowed to gain access to some of our tower infrastructure and was allowed to roam on favourable conditions."<sup>11</sup> SaskTel agrees that emerging players must be allowed access. However, SaskTel would contend that the Department must resist the suggestions of those who suggest that tower access and roaming should be provided at preferential rates. Industry Canada must balance the need to promote the growth of new wireless

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<sup>11</sup> **Telus turns 180 degrees on spectrum; TO GIVE RIVALS A TOEHOLD**, National Post, Fri 22 Jun 2007, Page: FPI, Byline: Carrie Tait

players with the need to protect network investments. Allowing others to access established networks at rates which do not compensate the builder of those networks appropriately could bring an immediate halt to any expansion of facilities-based competition.

SaskTel notes that voluntary tower sharing and roaming is occurring today. However, to ensure that these arrangements continue regardless of the evolving competitive environment, the Department should establish principles and safeguards to ensure that this continues. These principles should encourage carriers to negotiate roaming agreements and to share towers where sufficient space exists.

Tower sharing must be negotiated on commercial rates and terms, allowing actual tower and antenna, construction and maintenance costs to be recovered. Roaming should also be negotiated on commercial terms. A fundamental component of any arrangement must be that facilities-based carriers who have made the investment in creating physical networks are allowed to recoup that investment.

A voluntary approach in developing commercial roaming and tower sharing arrangements between carriers with minimal government or regulatory intervention is the most desirable method of implementation. However, the Department should continue to encourage and monitor the implementation of such services in order to ensure that regional/rural wireless networks continue to be integrated with larger wireless networks.

## VI. Conclusion

SaskTel continues to support the basic premise of the Government of Canada's new spectrum policy, i.e. that "market forces should be relied upon to the maximum extent feasible" and "regulatory measures, when required, should be minimally intrusive."<sup>12</sup>

However in consideration of the possible consolidation of the wireless industry, the historical distribution of scarce spectrum resources and forecasted trends in this industry,

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<sup>12</sup> "The Coming Wireless Revolution", Honourable Maxime Bernier, Ministry of Industry, 2007 Canadian Telecom Summit, June 13, 2007

SaskTel is recommending that Industry Canada cannot use a totally unfettered auction. An unfettered auction would not favour the future development of a strong, healthy wireless marketplace throughout Canada nor would it ensure that all people of Canada reap the benefits of the “wireless revolution”.

Within this context SaskTel is recommending that:

- The needs of regional wireless companies and potential new entrants must be given full consideration;
- The AWS auction must allow for the separation of spectrum blocks for Tier I, Tier II and Tier III communities. With the use of the spectrum blocks outlined by SaskTel no one service provider would be allowed to dominate access to spectrum.
- Aggregation limits or spectrum caps be implemented to account for the historical distribution of spectrum to existing players, as well as ensure diversity in the future wireless market.
- Industry Canada continue to encourage the use of roaming and sharing of existing facilities to ensure a functioning market. These principles for roaming and tower sharing must balance the needs of those who have invested in facilities and those who are now entering the marketplace.

SaskTel, as a small, regional wireless provider, has worked and thrived in a competitive environment from the initial introduction of its wireless services. This competitive environment has led to lower prices in Saskatchewan and more choice for our consumers. At the same time that SaskTel was competing with national service providers it also fulfilled its mandate of expanding new wireless services to its rural and remote population. It has also made maximum use of the spectrum provided to it by Industry Canada by providing leading edge services.

SaskTel has proven that it can work within an active marketplace against significantly larger players. Within the AWS auction it is now asking for a fair and equitable system in which SaskTel can continue to compete and grow. A healthy national marketplace must have a diversity of service providers.