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Filed Electronically

Director, Spectrum Management Operations
Radiocommunications and Broadcasting
Regulatory Branch
Industry Canada
300 Slater Street
Ottawa, ON K1A 0C8

Dear Sir/Madam:

Re: Gazette Notice No. DGRB-005-09 – Consultation on Transition to Broadband
Radio Service (BRS) in the Band 2500-2690 MHz

1. Attached are the comments of Saskatchewan Telecommunications (SaskTel), in response to the *Canada Gazette* Part 1 notice regarding the above referenced consultation, published March 14, 2009. SaskTel thanks the Department for this opportunity to provide comments and input into the consultation process.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. Hersche". The signature is fluid and cursive, with the first letter of the first name being a large, stylized capital 'R'.

Robert Hersche
Director of Regulatory Affairs
AM/nb

Attachment

SaskTel Comments:

Canada Gazette Notice DGRB-005-09

Consultation on Transition to
Broadband Radio Service (BRS)
in the Band 2500-2690 MHz

June 15, 2009

INTRODUCTION

Saskatchewan Telecommunications ("SaskTel" or "the Company") is pleased to provide this response to Gazette Notice DGRB-005-09 "*Consultation on Transition to Broadband Radio Service (BRS) in the Band 2500-2690 MHz*", dated March 14, 2009 ("the Consultation").

SaskTel commends Industry Canada ("the Department") for providing an opportunity for the telecommunications industry to submit comments on the questions raised in the consultation. Incumbent 2.5 GHz MCS operators such as SaskTel have made very large infrastructure investments building networks operating in this spectrum, and it is important to receive and consider input and comments from all affected parties.

SaskTel uses the MCS spectrum (2500-2596 MHz) extensively in rural areas to provide economical wireless broadband services to customers that are beyond the reach of wireline DSL technology. To date SaskTel operates 58 hub sites, serving 247 communities, many with populations smaller than 100 people, with wireless high speed Internet services. In addition, residential dwellings located on farms and acreages, and small to medium sized business operations located outside of these communities can also benefit from wireless broadband services.

As part of a government commitment, SaskTel will continue to focus on serving all SaskTel residents (100%) with broadband service, and up to 98% of the population with wireless service. An example of this commitment is our recent announcement of SaskTel's plans to invest \$220M in our Saskatchewan network, of which a large portion is dedicated to providing wireless and high speed Internet service to rural customers¹. Often, SaskTel is the only service provider offering service in these communities.

There are typically very marginal business cases to provide these services in rural areas due to the low population densities of rural Saskatchewan. SaskTel must be prudent in selecting the most economical choice of technology for a given region in order to reduce costs. Wireless broadband technologies and the 2.5 GHz spectrum will continue to be

¹ SaskTel News Release, May 5, 2009 "SaskTel to invest \$220 million in its Saskatchewan network", <http://www.sasktel.com/about-us/news/current-news-releases/sasktel-invest-220million-in-network.html>

critical elements to providing broadband service to rural residents under this program. SaskTel is currently planning the addition of 29 new rural wireless hub sites to help reach the goal of offering broadband services to 100% of the population.

SaskTel recognizes the importance of wireless broadband telecommunications as a key enabler for economic growth, especially in rural areas, and the increasing significance of Internet connectivity to business and residential users. Businesses, especially those in rural areas, need reliable broadband Internet access to survive in today's marketplace. Enhanced Internet connectivity is also having enormous social benefits in rural areas, including providing opportunities for advanced education and allowing more and more rural residents to become more connected to their communities.

SaskTel participated in the creation of and fully supports the submission made by the Radio Advisory Board of Canada (RABC) in response to this same Gazette notice. The SaskTel response will provide further clarification of SaskTel's position on the questions raised in the consultation.

Below SaskTel offers our responses to the specific questions raised by the Department in the consultation. The numbering of the document corresponds to the numbering of the consultation paper.

SASKTEL RESPONSE TO REQUEST FOR PUBLIC COMMENTS ON TRANSITION TO BROADBAND RADIO SERVICE (BRS) IN THE 2.5 GHz BAND

3. Consultation of a Firm Transition Date

The Department is seeking comments on its proposal to adopt a firm transition date to BRS rather than renew MCS and MDS licences.

Should a firm transition to BRS be adopted, the Department is proposing March 31, 2011, as the transition date to BRS, as it coincides with the end of licence term for the current MCS licences.

SaskTel understands the requirement for a firm transition date, and agrees that a firm transition date is necessary to allow the orderly and effective implementation of future mobile services in this spectrum.

However, SaskTel is very concerned about the length of time required for incumbent licensees to transition to BRS and the new proposed band plan. SaskTel requests that the Department provide flexibility on the implementation and transition schedule to allow for operational concerns of the incumbents. In some cases, executing a proper transition to a new band plan, without disrupting existing services and/or interfering with other incumbents, may be a complex undertaking and require an extended period of time.

In the province of Saskatchewan, both the MCS licence holder (SaskTel) and the MDS licence holder (YourLink Inc.) have extensive network infrastructures in place, providing wireless broadband Internet (and in the case of YourLink, broadcast video) services to rural Saskatchewan residents. In discussions with YourLink, they have indicated to SaskTel that they are operating their network over the entire MDS spectrum, making transition planning more difficult.

SaskTel foresees that the planning and implementation of this transition may not be possible by March 31, 2011, the suggested firm transition date based on licence expiry dates. This is based on the fact that the Department has not yet issued a public consultation on technical issues such as the proposed new band plan. SaskTel cannot make commitments to begin network evolution and transition until these technical details are finalized. Even assuming an accelerated public consultation and decision making process, SaskTel believes there could be less than a year to complete planning and implementation of a complex network transition process, involving 58 hub sites and thousands of subscribers, should the Department set March 31, 2011 as the firm date for the completion of this process.

In order to minimize undue financial harm to the incumbents, SaskTel strongly encourages the Department to consider the required timelines for transition to BRS services by the incumbents when setting a firm transition date. SaskTel suggests that the Department could potentially consider different transition dates for different regions, based on the transition requirements of the incumbents in each region.

SaskTel also recommends that incumbent operations in the band should only be displaced when necessary. Transition should only be initiated when a new BRS spectrum licence holder discloses firm plans to launch service in a given area, and that the incumbent operations will block introduction of the new BRS service. Because of the

marginal business cases involved in providing wireless broadband services in rural areas, it is critical that SaskTel reduce operational and capital expenses as much as possible. The existing DOCSIS based 2.5 GHz equipment currently being used by SaskTel still has useful life, and in order to protect its investment, SaskTel wishes to keep using this infrastructure for as long as possible. To reduce financial harm to SaskTel and other incumbent operators, it is important that unnecessary and/or premature displacement and transition be avoided as much as possible.

4. Consultation on Criteria to be Used when Issuing BRS Licences

4.2.3 CRTC-Licensed MDS Broadcasting Stations

Industry Canada invites comments on which component(s) (i.e. CRTC Decision, Industry Canada broadcasting certificate, and CRTC licence) should be required for licensed MDS in order to qualify for conversion to BRS in a given area.

Should MDS stations that do not meet the eligibility criteria be protected through a transition policy (notification period prior to displacement) in the event that a firm transition date to BRS is adopted?

SaskTel believes that in order for licensed MDS stations to be eligible for conversion to BRS licences, the MDS licence holder should have in place all three components, namely:

- a) a CRTC Decision
- b) an Industry Canada broadcast certificate, and
- c) a CRTC broadcasting licence.

SaskTel understands that there may be discrepancies between the service areas identified by the broadcast certificates and the market areas defined by the CRTC. SaskTel suggests that Industry Canada resolve these differences on a case by case basis. Eligibility for BRS conversion should be based on the MDS licence holder providing service, or being authorized to provide service (i.e. in possession of all three components listed above), in a given area.

In the event that a firm transition date to BRS is adopted, any MDS station not meeting the eligibility criteria listed above should be protected through the provision of a notification period prior to displacement. This will allow the MDS operator to either take steps to allow the station to become eligible for BRS conversion, or to gracefully move

existing customers to other service providers, thus avoiding the abrupt loss of video and/or Internet service to consumers.

4.3 Geographic Service Areas

4.3.2 MDS Authorizations

Industry Canada seeks comments on whether Tier 3 or Tier 4 licence areas are the most appropriate for the conversion of site-specific MCS licences to BRS spectrum licences, where applicable, and for conversion of MDS authorizations, including Industry Canada spectrum licences issued in the 2596-2690 MHz band.

SaskTel believes that Tier 3 licence areas are the most appropriate for the conversion of MDS authorizations and site specific MCS licences. The smaller number of licences will be easier to administer by the Department and the licensees. Tier 3 licences will make any upcoming spectrum auctions of unassigned spectrum much easier to administer, will be consistent with the Tier 3 service areas utilized in the recent AWS spectrum auction, and are a practical size for coordination efforts between different licence holders.

6. Licence Conditions

Industry Canada seeks comments on these licence conditions proposed for voluntarily converted BRS licences.

6.1 Licence Term

SaskTel believes that the BRS licences issued through the conversion process should have a minimum licence term of 10 years. SaskTel notes that spectrum regulators in other jurisdictions are issuing and renewing spectrum licences for 15 and 20 year terms. In the case of the BRS conversions, the 2.5 GHz spectrum is well developed, with extensive deployments and impending plans to evolve these networks to future high bandwidth technologies. Therefore a longer licence term is warranted, and SaskTel recommends that the Department consider a term such as 15 or 20 years. The longer term will allow the established operators greater certainty and more flexibility in long term planning for technology evolution and continued network expansion. SaskTel notes that even with a longer licence term the Minister would still retain the power to revoke or modify a licence for just cause such as contravention of licence conditions.

SaskTel notes that the issue of the length of licence terms is also being raised as part of the public consultation DGRB-001-09 “*Consultation on Revisions to the Framework for Spectrum Auctions in Canada.*” SaskTel urges the Department to apply any decisions resulting from DGRB-001-09 to the BRS spectrum licences.

6.2 Licence Transferability and Divisibility and Subordinate Licences

SaskTel agrees with the proposed licence conditions.

6.3 Eligibility Criteria

SaskTel agrees with the proposed licence conditions.

6.4 Displacement of Incumbents

SaskTel agrees with the proposed licence conditions.

6.5 Radio Station Installations

SaskTel agrees with the proposed licence conditions.

6.6 Provision of Technical Information

SaskTel agrees with the proposed licence conditions.

6.7 Compliance with Legislation, Regulations, and other Obligations

SaskTel agrees with the proposed licence conditions.

6.8 Technical Considerations

SaskTel agrees with the proposed licence conditions.

6.9 International and Domestic Coordination

SaskTel agrees with the proposed licence conditions.

6.10 Lawful Interception

SaskTel agrees with the proposed licence conditions.

6.11 Research and Development (R&D)

SaskTel notes that the Department has requested comments on the continued need for the requirement to invest 2% of wireless revenues into eligible Research and Development (R&D) activity in Gazette Notice DGRB-001-09 “*Consultation on Revisions to the Framework for Spectrum Auctions in Canada.*” SaskTel will be offering comments on this issue in our response to DGRB-001-09. As noted in that response, SaskTel firmly believes that the R&D requirement is no longer necessary. The wireless industry in Canada is flourishing, and exhibiting strong growth. Wireless services have become an integral part of everyday personal and business life.

The wireless industry has become extremely competitive. Consumers are no longer expecting simple wireless network connectivity; they are demanding new applications and services. Service providers such as SaskTel are under increasing pressure to provide these new applications and services, and research and development efforts are becoming more and more vital to remain competitive in the industry.

SaskTel notes that the major industry players have, in many cases, actually spent more than the minimum 2% requirement on research and development work, and will continue to make these R&D investments even if the R&D licence condition is removed. In addition, there is a high administrative burden of tracking and reporting these R&D expenditures on an annual basis to the Department. SaskTel also notes that no other administration or spectrum regulator imposes a similar licence condition on spectrum licence holders.

Therefore, for the reasons listed above, SaskTel believes there is no longer a need for the R&D licence condition in the well developed and growing wireless industry in Canada, and that this licence condition should be rescinded.

6.12 Implementation of Spectrum Usage

SaskTel agrees with the proposed licence conditions.

6.13 Mandatory Antenna Tower and Site Sharing

SaskTel agrees with the proposed licence conditions.

6.14 Annual Reporting

SaskTel notes that the primary reason for the annual report requirement is to provide information to the Department regarding compliance with spectrum implementation and usage and R&D licence conditions. As noted in 6.11 above, SaskTel is recommending that the R&D licence condition be removed. Furthermore, although SaskTel does understand the need for annual reports while a licensee is deploying a new network, there will be many cases, particularly amongst the incumbents, where spectrum implementation requirements have been met early in the licence term.

Therefore, should the Department decide to rescind the R&D licence condition, and in cases where the licence holder has met spectrum implementation requirements, SaskTel is recommending that the Department exempt the licence holder from the requirement to submit annual reports.

6.15 Amendments

SaskTel agrees with the proposed licence conditions.

8. Stakeholder Proposal Development on a Band Plan for BRS

As an incumbent operator, SaskTel has a heavy investment in the MCS spectrum, including an extensive network infrastructure providing wireless broadband services to many areas of rural Saskatchewan. The 2.5 GHz band is critical for SaskTel's provision of wireless broadband services to isolated rural areas. As broadband demands grow from our customers and technology continues to evolve, it is critical that SaskTel evolve our existing network to meet future customer needs.

SaskTel notes that in the consultation the Department has discussed two potential new band plans for BRS services. One option is the ITU IMT-2000 band plan adopted not only by the ITU, but by the European Commission, and many administrations globally. The other option is the band plan adopted by the Federal Communications Commission (FCC) in the United States. Although the FCC band plan may appear to be similar and compatible with the ITU band plan, a closer examination of the details of the FCC band plan show that it is in fact not compatible with the globally adopted ITU band plan.

As with all industry players, SaskTel is actively investigating and planning for future technology deployments to support long term growth and evolution of the SaskTel network. We believe the future technology of choice for the 2.5 GHz band will be FDD based LTE systems. Although TDD WiMAX systems are being deployed now in the 2.5 GHz band, we believe that the adoption of LTE based systems by numerous global industry players will make LTE the dominant technology in the long term.

The ITU band plan is better suited for LTE deployments, for both TDD and FDD based systems. In addition, the 5 MHz channel blocks in the ITU band plan will allow for the efficient deployment of both LTE and WiMAX systems, with both TDD and FDD duplexing supported. Using multiple contiguous channel blocks will also allow operators to fully utilize the efficiencies of wideband LTE systems. By allowing up to 4 x 5 MHz contiguous and paired channel blocks, an operator can exploit the full capabilities and benefits of LTE, and future LTE Advanced systems.

Although the 2006 policy decision adopted the US FCC band plan for this spectrum, SaskTel recommends that the Department revisit this policy, and **SaskTel strongly recommends that the Department implement the ITU band plan in the 2.5 GHz spectrum.** The FCC band plan is very spectrally inefficient, and SaskTel sees no other viable alternative. The ITU band plan is the most effective choice for efficient development and evolution of the 2.5 GHz spectrum and would allow operators to effectively deploy either new LTE technology, which is expected to dominate globally, or WiMAX.

9. Additional Consultations

SaskTel notes the additional consultations on technical issues, further policy issues, and licence fees. We look forward to participating in these upcoming consultations.

CONCLUSION

SaskTel is pleased to have had the opportunity to provide comments to the consultation. We agree with the need for a firm transition date to allow an orderly and properly planned transition to BRS services. However, SaskTel is concerned about disruptions to services being provided to existing customers, and cautions the Department to provide sufficient time for incumbent operators to properly transition to the new band plan.

SaskTel has provided the Department input into proposed licence conditions, and proposed BRS transition policies. SaskTel has also provided our recommendation to implement the ITU band plan for BRS services in this spectrum, as it has been shown to be the most efficient plan for future deployments, and has been adopted by most administrations and regulators globally.

SaskTel believes that the comments and positions presented here will allow for the most effective transition to BRS services in the 2.5 GHz band, with the least amount of financial harm to incumbent operators.