

SaskTel Reply Comments:

Gazette Notice SLPB-002-17

Consultation on a Licence Renewal
Process for Advanced Wireless Services
and other Spectrum

August 14, 2017

SASKTEL REPLY COMMENTS

1. The following are Saskatchewan Telecommunications' (SaskTel's) Reply Comments in response to public comments submitted regarding SLPB-002-17, *Consultation on a Licence Renewal Process for Advanced Wireless Services and other Spectrum* ("the Consultation").
2. SaskTel has reviewed the comments on this Gazette Notice as posted on the Innovation, Science and Economic Development (ISED) website¹. Comments were submitted by Bell Mobility, Bragg Communication Inc., the Canadian Wireless Telecommunications Association (CWTA), ECOTEL Inc., Québecor Média Inc., Rogers Communications Canada Inc., Shaw Communications Inc., TELUS, and Xplornet Communications Inc., as well as by SaskTel.
3. Failure to address any particular issue or item, or the Comments made by any other party, should not be construed as agreement with those Comments where such agreement is not in the interests of SaskTel.

Licence Renewals:

4. All respondents were in favour of the Department renewing the AWS-1, PCS G, and I Block licences where licensees have met all of their conditions of licence.
5. SaskTel strongly agrees with the ISED proposal to renew AWS-1, PCS G, and I Block licences where the licensee can demonstrate that they are in compliance with all licence conditions, including all deployment requirements. SaskTel also agrees with the statement made by the Department in paragraph 18 of the Consultation:

It is proposed that deployment will be considered met where the licensee can demonstrate that they are actively providing commercial mobile wireless services with their licence to at least the levels set out in appendix C of the Licensing Framework. Licences with deployment below that level will not be eligible for a new long-term spectrum licence under the renewal process.

¹ Reply comments are posted at <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11315.html>

6. Licence holders that have not deployed their spectrum and have no actionable plan to do so in the near term should not have an expectation that their licences will be renewed.
7. Most respondents commented on the complete lack of industry development and standardization of the I Block spectrum, and the resulting absence of any device ecosystem for this spectrum. Although licence renewal can be offered to current I Block licence holders, SaskTel does not see how any I Block licence holder could possibly meet deployment requirements and their conditions of licence, and we expect that none of the I Block licenses will be eligible for renewal.

I Block Spectrum:

8. A couple of respondents briefly discussed some work at the 3GPP forum regarding the I Block spectrum. In paragraph 13 of the TELUS comments, they state:

To date, efforts to introduce the I Block within 3GPP have been confined to a study phase...

and TELUS concludes that:

Thus the development of an ecosystem which supports mobile technology deployment in the I Block remains highly unlikely in the near future.

9. SaskTel agrees with the assessment on the I Block by TELUS, and we do not believe it is appropriate to renew or issue any of the I Block licences at this time. As we have stated in our original comments, and will state in our comments on the Consultation on the Licensing Framework for Residual Spectrum Licences², SaskTel recommends that all of the I Block licences be retained and held by the Department in reserve until the industry direction on the I Block spectrum becomes clear.

Opportunistic Spectrum Access:

10. Most respondents that commented on the question posed by the Department regarding the timeframe for availability of equipment capable of providing access to

² Gazette Notice SLPB-003-17 "Consultation on a Licensing Framework for Residual Spectrum Licences in the 700 MHz, 2500 MHz, 2300 MHz, PCS and 1670-1675 MHz Bands", July 2017

licensed spectrum on an opportunistic basis were of the opinion that research and development in this area was at a very embryonic stage. Much more development and testing work needs to be completed either in a closed lab environment or on vacant spectrum. Only then can trials be conducted to determine the impact on existing networks in occupied spectrum.

11. SaskTel recognizes that opportunistic spectrum access will in the future likely become one major tool to maximize the efficient use of spectrum and therefore reduce spectrum congestion issues. However, it is very premature to make any policy decisions regarding opportunistic spectrum access technologies in licensed spectrum bands. SaskTel recommends a full and thorough study and public consultation be initiated by the Department before making any changes to spectrum management policies or conditions of licence to accommodate future opportunistic access to licensed spectrum.
12. Wireless service providers were almost universal in highlighting the potential impacts of opportunistic spectrum access not only on network performance and quality of service, but also on business and investment models. The Department is cautioned to fully consider all of these potential impacts from the introduction of opportunistic spectrum access devices in licensed spectrum.

Conditions of Licence for New Licences Issued under the Renewal Process:

Licence Term:

13. All respondents agreed that 20 year terms were appropriate for the renewed AWS-1 and PCS G spectrum licences.

Deployment Requirements:

14. There were a range of responses regarding the proposed deployment requirements for the renewed AWS-1, PCS G, and I Block spectrum licences. Some favoured the eight-year Tier 3 based deployment requirements given in Annex B of the Consultation, while others favoured the eight-year Tier 4 based deployment requirements given in Annex C of the Consultation.

15. In order to renew the AWS-1 and PCS G spectrum licences the licensee must meet all conditions of licence, including deployment requirements. Therefore, for each spectrum licence the licensee must have deployed their spectrum to at least the Tier 3 based deployment requirements listed in Appendix C of the Licensing Framework.³
16. Therefore SaskTel still believes that the eight-year Tier 4 based deployment requirements given in Annex C of the Consultation are appropriate and achievable, if the modifications for rural Tier 4 service areas as proposed by SaskTel are included.
17. SaskTel is recommending a modified deployment requirement for rural-based Tier 4 service areas that do not include a population centre of at least 10,000 people. SaskTel recommends that for these rural Tier 4 service areas AWS-1 and PCS G licence holders be required to provide service to the deployment requirements given in Annex C of the Consultation, using the type and amount of spectrum of their choice.
18. The AWS-1 and PCS G spectrum is more suited for urban deployments, and therefore low band spectrum would be far more appropriate for rural areas. In addition, the low population densities of these rural Tier 4 service areas would not require the full deployment of every AWS-1 and PCS G spectrum block. These sparsely populated rural Tier 4 service areas do not require the full deployment of the entire AWS-1 band, which would be an overkill for capacity.
19. By being able to select the optimum amount and type of spectrum to deploy in these rural Tier 4 service areas, the challenging business cases for these rural deployments can be met, but more importantly rural residents will benefit from a high quality wireless broadband service.
20. In Saskatchewan, neither the Watrous (4-126) nor the Northern Saskatchewan (4-130) Tier 4 service areas include a major population centre over 10,000 residents.
21. More details on SaskTel's proposal for deployment in rural Tier 4 service areas can be found in our initial comments on the Consultation.

³ Gazette Notice DGRB-011-07 "Licensing Framework for the Auction for Spectrum Licences for Advanced Wireless Services and other Spectrum in the 2 GHz Range", December 2007, Appendix C

Other Conditions of Licence:

22. SaskTel agrees with the comments made by the CWTA, Bell, TELUS, and Rogers regarding the annual Research and Development (R&D) investment condition of licence. The 2% R&D condition of licence has served its purpose. The wireless industry is advanced, highly competitive, and presently making large R&D investments to quickly develop advanced wireless technologies such as LTE Advanced and 5G. Therefore, the mandatory 2% R&D investment requirement is no longer needed.

23. SaskTel agrees with the comments made by Bell and TELUS regarding the condition of licence on mandatory roaming. With the recent decisions made by the CRTC on regulating mandatory roaming, SaskTel believes the mandatory roaming conditions of licence in ISED document CPC-2-0-17 should be reviewed by the Department.