SaskTel Comments:

Gazette Notice SLPB-002-15

Consultation on a Licensing Framework for Residual Spectrum Licences in the 700 MHz and AWS-3 Bands

May 25, 2015
EXECUTIVE SUMMARY

1. The following represents a summary of SaskTel’s Comments in response to SLPB-002-15, Consultation on a Licensing Framework for Residual Spectrum Licences in the 700 MHz and AWS-3 Bands.

2. SaskTel continues to urge Industry Canada to re-examine its spectrum policy to allow the most effective and efficient use of spectrum for consumers, especially in rural areas.

3. SaskTel also urges Industry Canada to adopt the CRTC’s differentiation between small and national carriers in terms of market power when assessing the promotion of competition in the wireless industry. The focus on the term “new entrants” to refer to companies who have been in existence for almost a decade and are now larger than many of the regional carriers would seem inappropriate. SaskTel would suggest that the evidence within Telecom Regulatory Policy CRTC 2015-177 shows that small carriers, which includes regional carriers, require a framework which will allow them to compete for this scarce resource.

4. The tendency of larger carriers to dominate these auctions is amply demonstrated by the first round of the AWS-3 auction where one national carrier was able to obtain all of the spectrum available within Saskatchewan.

5. SaskTel continues to suggest that at the very least Industry Canada place a cap of 20 MHz on the amount of spectrum any one carrier can obtain within the overall AWS-3 spectrum band. This is especially important in Saskatchewan where only two carriers have any cellular infrastructure in the province and where one carrier, namely SaskTel, will bear the network costs of carrying most of the traffic due to Industry Canada’s Mandatory Roaming rules - a regional carrier service obligation that calls for spectrum and Industry Canada’s support. Allowing a third company to purchase spectrum which will join its other spectrum holdings laying fallow does a dis-service for all cellular customers in Saskatchewan. Industry Canada has imposed Mandatory Roaming obligations, it must also ensure that those entities with those obligations are given reasonable access to the spectrum necessary to provide that roaming.
INTRODUCTION

6. The following represent Saskatchewan Telecommunications’ (SaskTel’s) Comments in response to SLPB-002-015, Consultation on a Licensing Framework for Residual Spectrum Licences in the 700 MHz and AWS-3 Bands.

7. The section numbering of the remainder of this document corresponds to the numbering of the consultation paper released by the Department. 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.

SASKTEL RESPONSE TO THE CONSULTATION

Section 4 – Changes Proposed from Previous Licensing Processes

4.3 Available Licences

P1 — Industry Canada is seeking comments on its proposals to:
   a. license the northern 700 MHz and AWS-3 licences on a Tier 4 basis; and
   b. disaggregate block GHI into three separate blocks of 5 + 5 MHz each for all of the AWS-3 spectrum licences being offered through this auction process (Saskatchewan, Manitoba and the North).

8. SaskTel agrees with the proposal to license the northern 700 MHz and AWS-3 licences on a Tier 4 basis. Using Tier 4 would potentially allow operators to focus deployment efforts in each Tier 4 region.

9. SaskTel reluctantly agrees with the proposal by the Department to disaggregate the AWS-3 GHI block into three separate 5 + 5 MHz blocks, along with the ability to allow bidders to aggregate blocks through package bidding on combinations of blocks. Although the purpose of this disaggregation is to allow access to the spectrum by multiple operators, which would allow for the flexibility by operators to realize the potential of larger bandwidths we do not see how this auction will result in that outcome.

10. As the CRTC outlined in their 5 May 2015 decision on wholesale roaming, smaller companies (including regional carriers such as SaskTel) must have access to both spectrum and the ability to roam on a national network in order to ensure competition
in the wireless market. The original AWS-3 auction was to ensure that both the larger national companies and new entrants would have access to spectrum. The result in Saskatchewan was that one company, with national market power and resources well beyond those of smaller carriers was able to purchase all of the available spectrum even though they had no network in Saskatchewan to use that spectrum.

11. The companies, defined by Industry Canada as new entrants, did not operate in Saskatchewan therefore the remaining 30 MHz of AWS-3 went unclaimed. SaskTel would suggest that the CRTC’s division between small carriers (including SaskTel) and national carriers should be recognized by Industry Canada in spectrum auctions.

12. SaskTel is very concerned that given the current outline of the rules governing the AWS-3 auction, there is a distinct possibility that all 50 MHz of AWS-3 spectrum in Saskatchewan will be bought by one party. The possibility that one company, which owns no infrastructure in Saskatchewan but runs on SaskTel’s infrastructure, would obtain all 50 MHz of this valuable resource would not be in the best interests of the residents of Saskatchewan.

13. Currently, all carriers are using SaskTel’s spectrum to roam while their overall volume of spectrum grows. SaskTel is concerned about the business practices behind this spectrum accumulation given the unlikelihood of any other carrier building network outside of our major cities.

4.4 Competitive Measures

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<th>P2 — Industry Canada is seeking comments on its proposals to:</th>
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<td>a. eliminate the competitive measure which set aside block GHI for operating new entrants for all of the AWS-3 licences available in this process; and</td>
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<td>b. maintain the spectrum caps on the 700 MHz licences.</td>
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14. SaskTel does not agree with Industry Canada’s proposal to eliminate the competitive measure which previously set-aside block GHI for new entrants with operating networks in the licence service areas. SaskTel would recommend that this GHI block be set-aside for small carriers without national power as defined by the CRTC in Telecom Regulatory Policy CRTC 2015-177.

15. Market forces, lower population densities, and the implementation of mandatory roaming at lower rates are all factors heavily working against any business to ever
build networks in rural areas. It is a safe bet that if the proposed rules are not changed, one national company will hold all 50 MHz of spectrum with no intention of building in rural areas.

16. The spectrum blocks will be needed, however, by other network operators in these service areas to meet the increasing customer data bandwidth demands while still providing bandwidth to roaming customers from all other carriers.

17. SaskTel also recommends that a spectrum cap of 20 MHz be imposed on the overall AWS-3 band, limiting any operator to a total of 20 MHz including both the residual licences being auctioned as well as the licences awarded in the initial AWS-3 auction process. Because a sealed bid single round auction format that does not allow any price discovery is being proposed, the spectrum cap would provide the best opportunity for multiple operators to utilize the spectrum.

18. In the first round of the AWS-3 auction one national carrier was able to purchase all of the spectrum available in the unrestricted J1 and J2 blocks in almost every Tier 2 service area. The imposition of a spectrum set-aside in the initial auction limited the ability of any single operator to acquire all of the AWS-3 spectrum being auctioned. With the removal of the set-aside restrictions in the residual auction, there will be no controls or measures in place to ensure one national carrier does not acquire the entire AWS-3 spectrum band in Saskatchewan or Manitoba. Based on the results seen in the initial auction, this scenario is very likely to occur. Spectrum limits must be established to ensure that smaller operators with a network should be able to purchase a portion of this resource to serve their customers.

19. SaskTel agrees with maintaining the spectrum caps on the 700 MHz spectrum licences.

4.5 Deployment Requirements

P3 — Industry Canada is seeking comments on its proposals to:

a. reduce the deployment requirements for the AWS-3 licences in the North to 20% of the Tier 4 service areas;
b. reduce the timelines to reach the deployment levels in Saskatchewan and Manitoba from eight years to five years;
c. apply the current 20% deployment levels for the 700 MHz licence to each of the Tier 4 licence areas.
20. SaskTel agrees that the timelines for deployment of the AWS-3 should be reduced. The reduced timelines as proposed in the Consultation are reasonable given the progress of the AWS-3 auction licensing process in the United States, and the expected time frames for development of equipment and availability of devices covering this spectrum.

21. SaskTel, as most other companies in Canada, are seeing rates of data growth to be upwards of 50% per year. With this constant pressure from customers, spectrum cannot be allowed to lie fallow. A five year period before deployment, in this era of substantial growth, is a very significant length of time.

22. Based on the wording of the proposed conditions of licence and deployment requirements for the residual AWS-3 licences (Annex B, Section 11 and Annex C of the Consultation) it is quite clear that the reduced deployment timeline of 5 years is only applicable to the residual AWS-3 licences being auctioned, and that there will be no change to the eight year deployment requirement imposed on the Saskatchewan and Manitoba AWS-3 J1 and J2 spectrum licences auctioned off in March. It would border on ludicrous to impose different deployment conditions on adjacent spectrum blocks in the same band auctioned in the same year. The different rules and timelines would create a seriously biased advantage to the J1 and J2 licence holders by the Department.

23. Therefore, SaskTel recommends that the five year deployment requirements as given in Annex C of the Consultation be applied equally to both the GHI blocks as well as the J1 and J2 blocks in Manitoba and Saskatchewan.

**Section 5 – Conditions of Licence**

24. SaskTel agrees with the proposed conditions of licence as given in Annexes B and C of the Consultation.

25. As stated above, SaskTel recommends that the same licence conditions be equally applied to both the residual licences (GHI block) as well as the J1 and J2 licences in both Saskatchewan and Manitoba. In particular, the five year deployment
requirements proposed in Annex C of the Consultation should be equally applied to all AWS-3 licences.

**Section 6 – Auction Format and Rules**

**6.1 Auction Format and Timing**

P4 — Industry Canada is seeking comments on its proposal to use the sealed-bid auction format for the auction of residual licences in the 700 MHz and AWS-3 bands and on the timelines proposed in the Proposed Table of Key Dates.

26. SaskTel does not agree with the sealed bid auction format. With spectrum in short supply it is important that every step is taken to ensure all spectrum is auctioned off in the most effective manner.

27. While SaskTel understands the desirability of the simplicity of the sealed bid auction format, the lack of price discovery makes for an inefficient mechanism to auction these spectrum licences.

28. One reason for choosing a sealed bid auction format for the initial AWS-3 auction was the objective of concluding the initial AWS-3 auction process prior to commencing the 2500 MHz spectrum auction. Now that the 2500 MHz spectrum auction has concluded, the time frame restriction no longer exists. There is no rush to award the residual licences, and time can now be taken to ensure the auction is conducted fairly and openly.

29. Therefore, SaskTel is recommending that a Simultaneous Multiple Round Auction (SMRA) auction format be used for the residual AWS-3 and 700 MHz spectrum licences. The SMRA format allows for full price discovery, and bidders can most effectively express their value of the spectrum. For the Department, the SMRA format allows the highest bid payment prices to be realized.

30. As noted previously in section 4.4 of this document, SaskTel believes that along with the SMRA auction format, a spectrum cap needs to be imposed in the AWS-3 band that would limit any one operator from acquiring more than a total of 20 MHz of spectrum including both the initial AWS-3 spectrum licences as well as the residual AWS-3 licences being auctioned.
31. The imposition of a spectrum cap would allow multiple operators to utilize the total AWS-3 band and enhance competition, which is clearly a policy goal of the Federal Government.

32. Again, the Government of Canada recognized in the first round of the AWS-3 auction that smaller players should have access to a portion of this spectrum in order to enhance competition. The absence of any recognition of this fact in this auction round certainly neglects the intent of the public policy thrust of the Government.

33. SaskTel agrees with the time lines proposed in the Table of Key Dates, if the decision is made by the Department to proceed with a sealed bid auction format. SaskTel understands that it will take longer to implement an SMRA auction process, but still recommends that the time be taken to establish an SMRA auction format for the residual 700 MHz and AWS-3 spectrum licences. It will take some time for AWS-3 compatible devices to become available, so there should be time to conduct an SMRA auction for these licences without causing a delay in deployment.

### 6.2 Package Bidding for AWS-3 Licences

**P5** — For the AWS-3 licences, Industry Canada is seeking comments on its proposal to allow package bidding for blocks G, H and I within each service area, with the exception of packages containing the blocks G and I as a combination.

34. Should Industry Canada choose not to use an SMRA auction format, SaskTel agrees with the theory of the proposal to allow package bidding for AWS-3 blocks G, H and I within each service area. This would allow bidders the opportunity to express their value for combinations of blocks in addition to individual blocks.

35. The challenge of this approach is that one company can place a bid for all three blocks which supercedes a bid for only one block. This would allow one company to purchase all of the blocks in the AWS-3 auction which should not be permitted.

### 6.3 Second Price Rule

**P6** — Industry Canada is seeking comments on its proposal to use a second-price rule, including bidder-optimal core prices and use of the “nearest Vickery” approach, for the auction of residual licences in the 700 MHz and AWS-3 bands.

36. SaskTel agrees with the proposal to use the second price rule, including bidder optimal core prices and the “nearest Vickery” approach, as described in the
Consultation, for the residual 700 MHz and AWS-3 spectrum auction in the event the SMRA auction format as recommended by SaskTel is not adopted.

### 6.4 Opening Bids

P7 — Industry Canada is seeking comments on the proposed opening bids as presented in tables 4 and 5.

37. SaskTel agrees with the proposed opening bids presented in tables 4 and 5 of the Consultation.

### Section 7 – Bidder Participation – Affiliated and Associated Entities

7.1 Affiliated Entities

7.2 Associated Entities

P8 — Industry Canada is seeking comments on its proposed rules regarding Affiliated and Associated Entities, which would apply to applicants and bidders in the upcoming auction of residual spectrum licences in the 700 MHz and AWS-3 bands.

38. SaskTel agrees with the proposed rules regarding Affiliated and Associated Entities for the residual 700 MHz and AWS-3 spectrum auction.

7.3 Prohibition of Collusion

P9 — Industry Canada is seeking comments on the rules prohibiting collusion, which would apply to bidders in the upcoming auction of residual spectrum licences in the 700 MHz and AWS-3 bands.

39. SaskTel agrees with the proposed rules prohibiting collusion to apply to bidders in the residual 700 MHz and AWS-3 spectrum auction, as laid out in the Consultation.

### Section 8 – Auction Process

P10 — Industry Canada is seeking comments on the proposed auction process for the auction of residual licences in the 700 MHz and AWS-3 bands.

40. As noted previously, SaskTel recommends that an SMRA auction format be used for the residual 700 MHz and AWS-3 spectrum licences. The SMRA format allows for price discovery and the most effective method for bidders to express the value of the
spectrum. The SMRA format also allows for bidders to acquire multiple licences. The SMRA format would result in the highest auction proceeds for the Department.

41. Should the Department still choose to implement a sealed bid auction format, SaskTel agrees with the auction process as outlined in Section 8 of the Consultation.

Section 10 – Licence Renewal Process

P11 — Industry Canada is seeking comments on the proposed renewal process for spectrum licences in the 700 MHz and AWS-3 bands.

42. SaskTel agrees with the proposed renewal process for the 700 MHz and AWS-3 spectrum licences.

CONCLUSION

43. SaskTel understands that a spectrum auction has two purposes: obtaining value for this public resource and ensuring that Canadians will have access to the benefits of the spectrum itself. There must however be an appropriate balance between these two objectives.

44. In the first round of the AWS-3 auction, one company was able to dominate the auction. This maximized the funds going to public coffers but given that this company has no infrastructure in Saskatchewan, nor if infrastructure were to be built would it be in rural areas, most of this spectrum will therefore lay fallow for some time.

45. SaskTel has provided a number of suggestions to address this imbalance between funding and usage and avoid the distinct possibility that one entity acquires all of the AWS-3 spectrum in Saskatchewan.

46. In particular we are suggesting a cap of 20 MHz to any one company within the overall AWS-3 band and more reasonable deployment requirements to ensure that this spectrum is used to the benefit of residents in a timely fashion. SaskTel is also urging Industry Canada to refine its competition policy from the outdated references to “new entrants” to recognize the needs of small carriers, including regional carriers, versus carriers with national market power. After a decade of operations a single carrier can no longer be classified as “new” but rather all small carriers have need of
access to spectrum and national roaming. In that regard, SaskTel has fewer cellular customers than Wind Mobile.

47. SaskTel thanks the Department for the opportunity to provide input into these crucial matters. It is our hope that our comments will assist in a fuller view of the requirements for this spectrum in all regions of Canada.