SaskTel Comments:

Gazette Notice SMSE-011-14

Consultation on a Policy, Technical and Licensing Framework for Use of the Bands 2000-2020 MHz and 2180-2200 MHz

June 23, 2014
EXECUTIVE SUMMARY

1. The following represents a summary of SaskTel's Comments in response to SMSE-011-14, Consultation on a Policy, Technical and Licensing Framework for Use of the Bands 2000-2020 MHz and 2180-2200 MHz.

2. SaskTel continues to urge Industry Canada to consider the spectrum needs of rural and remote areas. In Saskatchewan, the vast majority of spectrum owned by large companies other than SaskTel remains unused. SaskTel continues to ask that Industry Canada consider regional market conditions as well as national and international markets when developing conditions of licence. SaskTel also continues to urge Industry Canada to adopt a “use it or share it” principle with all spectrum resources laying fallow.

3. Mobile satellite could be very valuable to consumers in isolated areas where providers such as SaskTel cannot reach with terrestrial networks.

4. SaskTel agrees with the requirement of mobile satellite service (MSS) spectrum holders in the 2000-2020 MHz and 2180-2200 MHz bands to deploy an MSS service covering Canada, in particular the isolated portions of the country that cannot be served by terrestrial networks, as a mandatory condition of licence. In the event that DISH networks does not launch an MSS service in the United States, and/or the Canadian MSS licence holders do not launch a satellite service in Canada, SaskTel strongly believes this spectrum will be unused and fallow in Saskatchewan. At that point we would ask Industry Canada to consider alternatives which would allow for the use of this increasingly scarce resource.

5. Industry Canada should keep all options open in the event that an MSS satellite service is not launched in five years, and remove the restriction that this spectrum cannot be allowed to be transferred or acquired or used by alternative service providers. SaskTel strongly believes that in this case, the spectrum will not be used in Saskatchewan by any small wireless service provider, new entrant, or the MSS licensees if a satellite service is not launched. This being the case, SaskTel would
ask that Industry Canada replicate the rules of the recent AWS auction which would allow operators with less than 10% of the national market to obtain access to this spectrum.

6. Additionally, in the absence of an MSS satellite service being launched SaskTel would ask that the PCS H block be made available to supplement its service offerings where required. SaskTel continues to advocate a “use it or share it model” for spectrum in low density population areas such as Saskatchewan. Far too much spectrum remains needed but unused in low population density areas.

7. SaskTel recognizes the dependency of the proposed licence conditions on developments in the United States. SaskTel agrees primarily with the approach being taken by Industry Canada in accommodating these developments. However should these services fail to materialize or alternative types of services develop in the next 5 years, SaskTel would ask that Industry Canada develop a more made in Canada solution which allows us to use the resources available to us.
INTRODUCTION

8. The following represent Saskatchewan Telecommunications’ (SaskTel’s) Comments in response to SMSE-011-014, Consultation on a Policy, Technical and Licensing Framework for Use of the Bands 2000-2020 MHz and 2180-2200 MHz.

9. 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

Part A  Band Plan

4. Band Plan and Block Pairing

A-1 Industry Canada proposes to adopt the 2 GHz band plan and the block pairing shown in Figure 2 [of the consultation]

Comments are being sought on these proposals. In providing responses, include supporting arguments for or against these proposals.

10. SaskTel agrees with the proposed band plan and block pairing shown in Figure 2 of the consultation. As noted in the consultation, the band plan and block pairing is in alignment with the band plan and pairing currently used in the United States, and follows recent FCC decisions. SaskTel believes it is in the best interest of the Canadian wireless industry to be aligned with the FCC band plan and 3GPP band classes in order to take advantage of economies of scale in the device ecosystem.

11. SaskTel notes that the FCC has reserved a decision on the band 2020-2025 MHz (labelled as “J block” in Figure 2 of the consultation) until after DISH Networks in the United States informs the FCC of their decision to use the adjacent 2000-2020 MHz band for either uplink or downlink. SaskTel recommends that Industry Canada also reserve any decision on utilization of the J Block until after a decision has been made on whether the 2000-2020 MHz band will be used for uplink or downlink in Canada.
Part B  Spectrum Policy Considerations

5. Spectrum Policy Changes Regarding MSS/ATC

B-1 Industry Canada proposes to maintain the provision of MSS in this band.
Comments are being sought on these proposals. In providing responses, include supporting arguments for or against these proposals.

12. SaskTel agrees with the proposal to maintain the provision of MSS in this band.
   SaskTel believes mobile broadband satellite technology can play an important role in providing service to persons in isolated regions that are too remote for service providers such as SaskTel to serve. SaskTel agrees with the proposal by Industry Canada to make the ongoing provision of MSS service a mandatory requirement to use this spectrum.

B-2 Industry Canada proposes to remove the dual-mode requirement in the 2 GHz band, and to modify RP-023 and RSS-170 accordingly.
Comments are being sought on these proposals. In providing responses, include supporting arguments for or against these proposals.

13. SaskTel has no comment on this proposal.

B-3 Industry Canada proposes to modify the spectrum and licensing policy principles on the implementation of ATC mobile services in RP-023 with regard to the 2 GHz band.
Comments are being sought on these proposals. In providing responses, include supporting arguments for or against these proposals.

14. The consultation paper did not provide any details of the proposed changes to RP-023. SaskTel therefore cannot comment on the proposed changes since details were not provided by the Department in the consultation. SaskTel recommends that Industry Canada issue a future public consultation with the details of the proposed changes to document RP-023.
Industry Canada proposes that the deployment of ATC service not constrain the deployment of MSS.

Comments are being sought on these proposals. In providing responses, include supporting arguments for or against these proposals.

15. SaskTel believes that the MSS service is an important technology to provide mobile broadband services to isolated regions that cannot economically be served with terrestrial networks, and therefore has a higher priority over any ATC service. Therefore, SaskTel agrees that the MSS service deployment should not be constrained by the ATC service.

Part C Licensing

6. Licensing Considerations

6.3 Licensing Approach

Industry Canada proposes to extend the spectrum assigned in existing 2 GHz MSS licences and ATC authorization to 2000-2020 MHz and 2180-2200 MHz.

Comments are being sought on these proposals. In providing responses, include supporting arguments for or against these proposals.

16. SaskTel has no objections to this proposal. However, SaskTel recommends that, in the event that an MSS service is not launched in Canada in the prescribed time frame, Industry Canada re-consider all options for potential utilization of the spectrum by service providers that are in a position to invest in deploying this spectrum to serve Canadians. It is important not to allow this spectrum to become fallow in regions such as Saskatchewan where few operators have any interest in deploying.

Industry Canada proposes to issue new spectrum licences to incumbent 2 GHz licensees, with terms commencing on April 1, 2015, that reflect the proposed revisions to the band plan and new conditions of licence if a letter indicating interest is received from both incumbents.

Comments are being sought on these proposals. In providing responses, include supporting arguments for or against these proposals.

17. SaskTel has no objections to this proposal. However, SaskTel recommends that, in the event that no qualified expressions of interest are received by the Department in
the prescribed time frame, Industry Canada re-consider all options for potential utilization of the spectrum by service providers that are in a position to invest in deploying this spectrum to serve Canadians. It is important not to allow this spectrum to become fallow in regions such as Saskatchewan where few operators have any interest in deploying.

C-3 Industry Canada proposes that the ATC licensee be allowed to decide if the use of the band 2000-2020 MHz will be for uplink or downlink operations and notify Industry Canada by May 20, 2016; and further proposes that the decision apply to all of Canada and for the rest of the licence term.

Comments are being sought on these proposals. In providing responses, include supporting arguments for or against these proposals.

18. SaskTel has no objections to this proposal. However, SaskTel notes that the choice of uplink or downlink operation in the 2000-2020 MHz band by the MSS licensees will have impacts on utilization of the adjacent PCS H block as well as the J block. In addition, any potential policy or technical rule changes that might be made by the FCC could also impact future use of the PCS H and J blocks.

19. Should a firm decision be made by DISH Networks and/or the FCC in the United States on uplink or downlink direction prior to the May 20, 2016 deadline, then SaskTel recommends that Industry Canada move the deadline earlier to avoid delays in decisions on utilization of the adjacent PCS H and J blocks.

6.4 Licence Service Areas

C-4 Industry Canada proposes a Tier 1 Service Area for the MSS and ATC spectrum licences.

Comments are being sought on this proposal. In providing responses, include supporting arguments for or against this proposal.

20. SaskTel agrees that a Tier 1 service area is appropriate for an MSS spectrum licence.

21. However, SaskTel believes a Tier 2 service area would be more appropriate for the ATC spectrum licences. Based on past history of wireless network deployments in Canada, it is clear that ATC network deployments will not occur at the same pace in
all areas of the country, with the more densely populated urban areas receiving service first, while less densely populated areas receiving service later, if at all.

22. SaskTel recommends that the ATC spectrum licences be issued for Tier 2 service areas. Should the ATC licensee not meet deployment requirements in a given Tier 2 service area, then the Tier 2 ATC spectrum licence for that area can be reassigned to a service provider that is willing to invest and deploy network infrastructure in that Tier 2 region. This avoids the ATC spectrum becoming unused and fallow in some parts of the country, and would be in the best interests of Canadians everywhere.

6.5 Conditions of Licence

C-5 Industry Canada proposes that spectrum licences in the 2 GHz band have a licence term of 20 years.

Comments are being sought on these proposals and on the proposed conditions of licence in annexes A and B, as well as the deployment requirements proposed in Annex C. In providing responses, include supporting arguments for or against these proposals.

23. SaskTel agrees with the proposed 20 year licence term. The long licence term will provide greater incentives for long term industry investments and network infrastructure development.

C-6 Industry Canada proposes that the licensees not be permitted to transfer any of the ATC spectrum to a large wireless service provider for the term of the licence. For any other transaction, the transferability and divisibility provisions outlined in Section 5.6.4 of CPC-2-1-23 will apply to any ATC spectrum transfers.

Comments are being sought on these proposals and on the proposed conditions of licence in annexes A and B, as well as the deployment requirements proposed in Annex C. In providing responses, include supporting arguments for or against these proposals.

24. SaskTel believes that the recent decision by the FCC to remove the requirement for DISH Networks to deploy an MSS service using this spectrum has left the deployment of the MSS service by DISH Networks in doubt. There is speculation that DISH Networks may only deploy a terrestrial network using this spectrum. The chances of an MSS service being deployed in Canada without a US counterpart MSS would be very low.
25. The proposed conditions of licence will only allow deployment of ATC spectrum if an MSS service is deployed and in operation serving all of Canada.

26. SaskTel recommends that, in the event that an MSS service is not launched in Canada in the prescribed time frame, Industry Canada re-consider all options for potential utilization of the ATC spectrum by service providers that are in a position to invest in deploying this spectrum to serve Canadians. This should also include large service providers because in many cases only smaller incumbent service providers such as SaskTel are willing to deploy network infrastructure in non-urban areas of the country. It is important not to allow this spectrum to become fallow in regions such as Saskatchewan where few operators have any interest in deploying.

C-7 Industry Canada is proposing deployment obligations for MSS licensees, within 5 years, to ensure that MSS is available and being offered throughout Canada.

Comments are being sought on these proposals and on the proposed conditions of licence in annexes A and B, as well as the deployment requirements proposed in Annex C. In providing responses, include supporting arguments for or against these proposals.

27. SaskTel agrees with the proposed mandatory obligation to deploy an MSS service throughout Canada within 5 years. SaskTel agrees with the Department that MSS is very important to further the goal of the government to extend broadband services to all Canadians. There are a significant number of people and communities that are simply too isolated to be served by terrestrial service providers such as SaskTel, and it is important that an MSS service be developed and deployed in Canada.

C-8 In case of an emergency leading to the lack of availability of the satellite for the provision of the MSS, Industry Canada proposes to give the satellite operator 48 months to replace the satellite in order to continue MSS operations.

Comments are being sought on these proposals and on the proposed conditions of licence in annexes A and B, as well as the deployment requirements proposed in Annex C. In providing responses, include supporting arguments for or against these proposals.

28. SaskTel has no objections to this proposal.
C-9 Industry Canada proposes that the ATC licensee be required to demonstrate that, within 5 years, MSS is available and being offered in the Tier 1 area; this condition would apply for the term of the licence provided that the EchoStar T1 satellite or its replacement is operational.

Comments are being sought on these proposals and on the proposed conditions of licence in annexes A and B, as well as the deployment requirements proposed in Annex C. In providing responses, include supporting arguments for or against these proposals.

29. SaskTel agrees with this proposal.

C-10 Industry Canada is proposing deployment obligations for ATC licensees, within 5 years and 10 years, as specified in Annex C.

Comments are being sought on these proposals and on the proposed conditions of licence in annexes A and B, as well as the deployment requirements proposed in Annex C. In providing responses, include supporting arguments for or against these proposals.

30. SaskTel agrees with the proposed ATC deployment obligations for ATC licensees as given in Annex C of the consultation.

31. As stated earlier, SaskTel believes that ATC spectrum licences should be issued based on Tier 2 service areas. Because the 10 year deployment requirements given in Annex C are based on Tier 2 service areas, it would make enforcement of the deployment requirements more equitable. As noted earlier, it is quite apparent that ATC systems will not be deployed in all areas of the country in the same time frame, and in many less densely populated areas they may never be economically deployed. Utilizing Tier 2 service areas for the ATC spectrum licences will allow the Tier 2 ATC spectrum licences for under deployed areas to be easily reassigned to another service provider that is willing to deploy network infrastructure in less densely populated areas. This will avoid spectrum remaining unused in these areas.

C-11 Industry Canada proposes that an interim site licensing procedure be used for radio stations operated by the ATC licensees until a spectrum licence fee is finalized.

Comments are being sought on these proposals and on the proposed conditions of licence in annexes A and B, as well as the deployment requirements proposed in Annex C. In providing responses, include supporting arguments for or against these proposals.
32. SaskTel agrees with the proposal to use an interim site licensing procedure for stations operated by ATC licensees until an ATC spectrum licence fee is finalized.

33. SaskTel agrees with the intent of the Department to issue a separate consultation on ATC spectrum licence fees, and agrees with the proposal from Industry Canada to align the ATC spectrum licence fees with spectrum licence fees in other commercial mobile spectrum bands.

34. SaskTel agrees with the proposed conditions of licence for MSS and ATC spectrum licences given in Annexes A and B, as well as the proposed deployment requirements in Annex C.

35. However, in the event that an MSS service is not launched in Canada for whatever reason, SaskTel recommends that Industry Canada explore all options to ensure this spectrum does not go unused, in particular in less densely populated regions of the country where few, if any, service providers have any interest in deploying spectrum. In these areas, often only the large service providers have any intention of deploying network infrastructure.

36. If an MSS service is not launched in Canada in a timely fashion, SaskTel recommends that Industry Canada review the proposed spectrum licence conditions and make appropriate modifications to ensure the spectrum is utilized effectively in all areas of the country.

### Part D  Technical Rules

#### 7. Technical Rules for the 2 GHz Band

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<th>D-1</th>
<th>Industry Canada proposes to develop technical rules for the 2 GHz band, harmonizing with the U.S. rules to the extent feasible and to issue the applicable SRSP and RSS.</th>
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Comments are being sought on this proposal and the proposed technical rules in Annex D. In providing responses, include supporting arguments for or against this proposal.

37. SaskTel agrees with the proposal to harmonize the 2 GHz technical rules with the U.S. FCC rules. Harmonization with FCC technical rules will allow for a common
Canada US device ecosystem, and service providers can take advantage of the resulting economies of scale.

38. SaskTel notes that technical requirements for this band will be documented in a new Standard Radio System Plan (SRSP), and modifications will be made to the existing Radio Standards Specification RSS-170 document. SaskTel also notes that Industry Canada intends to conduct a stakeholder consultation on these technical requirements, including a consultation with the Radio Advisory Board of Canada (RABC). SaskTel believes a review of the technical rules by the RABC would be quite beneficial.

39. SaskTel agrees with the proposed technical rules as given in Annex D of the consultation, which are based on current FCC technical rules.

40. SaskTel also recommends that Industry Canada incorporate any future technical rule changes that might be made by the FCC into the Canadian technical requirements for this band.

CONCLUSION

41. SaskTel is in general agreement with the licence conditions as outlined by Industry Canada. SaskTel’s agreement is based on the recognition of the dependency of these conditions on developments in the United States. Should the environment in the U.S. develop in a different or unexpected manner, SaskTel would recommend that Industry Canada re-examine these conditions.

42. In the seemingly likely event that an MSS service is not launched in Canada, Industry Canada should examine options to ensure the 2 GHz spectrum can be utilized effectively. In specific, emphasis should be placed on how this spectrum could be used in less densely populated areas.

43. In any re-examination of licence conditions, SaskTel would suggest that Industry Canada allow smaller, primarily rural-based providers such as SaskTel, MTS or TbayTel (companies with less than 10% of the national market) access to this spectrum where necessary to serve customers.
44. Given the high likelihood that a Canadian MSS service will not be forthcoming for some considerable amount of time, SaskTel would also ask Industry Canada to invoke the principle of “use it or share it” in the licence conditions to provide some opportunity to utilize this scarce resource.

45. Overall SaskTel continues to believe that an MSS service would be of great value to rural and northern residents. SaskTel supports Industry Canada’s initiative to develop the licensing criteria to support the development of this service.

46. SaskTel would ask that Industry Canada continue to monitor the development of these types of services and adjust its spectrum licencing criteria accordingly.

47. SaskTel thanks the Department for the opportunity to provide input into these crucial matters.