Submission to Industry Canada by

SSI GROUP OF COMPANIES

In Response to

Canada Gazette Notice DGSO-002-12

“Consultation on a Licensing Framework for Mobile Broadband Services (MBS) – 700 MHz Band”

June 25, 2012
A. Introduction and Context

1. The SSi Group of Companies (“SSi”) is pleased to submit these comments to Canada’s Minister of Industry (“Industry Canada” or the “Department”) in response to Canada Gazette Notice DGSO-002-12, posted on the Industry Canada website on April 25, 2012, “Consultation on a Licensing Framework for Mobile Broadband Services (“MBS”) – 700 MHz Band”, as clarified on June 18, 2012 (the “Consultation”).

2. SSi is the licensee of BRS (formerly known as MCS) spectrum in the 2500 MHz band in Nunavut and the Northwest Territories, as well as a licensee of PCS spectrum in the 1900 MHz band in all three Northern Territories. We have extensively deployed satellite and terrestrial wireless facilities across Canada’s North, and we have every intention to continue deployment and expanding our operations. As such, we have an interest in the Consultation and we appreciate the opportunity to provide these comments.

3. Our comments, for the most part, are prepared as direct responses to the questions posed by the Department in the Consultation.

4. On February 28, 2011 SSi submitted comments and on April 6, 2011 SSi submitted reply comments in response to Canada Gazette Notice No. SMSE-018-10, the Department’s “Consultation on a Policy and Technical Framework for the 700 MHz Band and Aspects Related to Commercial Mobile Spectrum” (the “2011 700 MHz Consultation”).

B. Background on SSi

5. SSi is a leader in the field of remote and rural connectivity. Headquartered in Yellowknife, Northwest Territories, we specialize in the design, deployment and operation of communications networks to support the needs of communities that have limited or no access to terrestrial transport and interconnection to the outside world. Our networks deliver broadband Internet via advanced satellite delivery platforms, and we provide local distribution of communications services within communities using terrestrial wireless and broadband technologies.

6. One of the first Internet service providers in the Northern Canada, SSi is proud to have deployed and to operate broadband wireless networks using 2500 MHz spectrum in 56 of the communities within Nunavut and the Northwest Territories. These two territories account for one-third of Canada’s landmass, yet have a total population of fewer than 80,000 people.
7. As a wireless network operator providing service in some of the harshest climates and remote locations on earth, we understand first-hand and in detail the challenges faced in providing effective and affordable communications services to remote and outlying areas, and in providing a competitive alternative to incumbent operators in small and remote markets.

8. With the goal of giving all northern residents equal access to quality communications services, SSI has deployed infrastructure in even the smallest of hamlets, some of which have as few as 55 residents.

9. There are many facets to remote area connectivity, and we are constantly evaluating and developing new technologies and integrating these to ensure our offerings remain attractive and competitive. We are very encouraged by the promise the 700 MHz band holds for effective deployment in remote areas of the country.

C. Specific Comments on the Consultation

10. Set out below are SSI’s responses to each of the questions raised by the Department, in the order and with the numbering used in the Consultation document.

11. As detailed below, SSI has particular concerns with item 7.2, the proposed opening bids as presented in Table 4, and item 7.4, the proposed pre-auction deposits.

3.1 Industry Canada is seeking comments on whether or not the service area boundary for licences in the 700 MHz band should deviate from the provincial boundary around the City of Lloydminster, (Alberta/Saskatchewan).

12. SSI Comments: SSI has no comments on this item.

4.2 Industry Canada is seeking comments on its proposal to use the CCA format, as well as the general attributes outlined above, including:

   · the categories of generic licences;

13. SSI Comments: SSI has no comments at this point on the categories of generic licences.

   · the guarantee of contiguity across blocks A and B in the lower 700 MHz band in a specific service area;

14. SSI Comments: SSI supports measures to encourage contiguity of spectrum holdings at 700 MHz
· the combined eligibility point and revealed preference activity rule in the clock rounds, and the revealed preference limit in the supplementary round;

15. **Ssi Comments:** Ssi has no comments on this item

· the use of a second-price rule;

16. **Ssi Comments:** Ssi has no comments on this item

· the information to be disclosed during, and post-auction.

17. **Ssi Comments:** Ssi has no comments on this item

5.0 Industry Canada is seeking comments on its proposed changes to the definition and rules related to associated entities. Specifically, comments are sought on:

- the types of agreements that should be captured under the definition of associated entities;
- the level of information to be disclosed to the public;
- the provision that typical roaming and tower sharing be specifically excluded from the revised definition of associated entities and whether other types of agreements such as the purchase of backhaul capacity should be deemed excluded;
- the proposal that entities that are deemed associated entities may apply to be treated as separate entities for participation in the auction;
- the proposal that associated entities may request to have the spectrum caps apply to them separately, based on an analysis of their association and of whether they intend to compete in the same licence service area;
- the criteria to be considered in determining whether the entities are competing; and
- the proposal that no changes be made to the affiliated entities rule.

18. **Ssi Comments:**

19. The Department has to be vigilant to ensure that entities which should be considered “associated” are not allowed to avoid or sidestep legitimate bidding restrictions in the 700 MHz auction.

20. For example, Ssi is concerned that there may not be adequate definition and description in the Consultation document to allow parties to determine what constitutes a “typical” roaming and tower sharing arrangement from an “atypical” arrangement leading to entities to be “associated”.

21. If there are roaming and tower sharing arrangements in place in Canada today that the Department considers “atypical” and leading to entities to be “associated”, or hypothetical
examples of such arrangements that could be used as illustration, these should be disclosed in advance to ensure parties know who is and is not “associated” prior to the auction, and to ensure that parties do not enter into the auction off-side the rules.

5.1 Industry Canada is seeking comments on the rules prohibiting collusion that would apply to bidders in the 700 MHz auction.

22. SSi Comments: SSi agrees with the rules prohibiting collusion.

6.0 Industry Canada is seeking comments on its proposal to issue spectrum licences in the 700 MHz band with a 20-year licence term.

23. SSi Comments:

24. SSi agrees with issuing spectrum licences with a 20-year licence term.

25. However, SSi disagrees with how a 20-year licence term has been used as a factor in the rationale and equation for developing opening bids for the smaller service areas. As described below at item 7.2, SSi is very concerned that the Department has proposed extremely elevated and as a result inappropriate opening bids for smaller licence areas, in particular in Canada’s North, as presented in Table 4 of the Consultation.

- Industry Canada is seeking comments on the proposed wording of the condition of licence related to the spectrum aggregation limits.

26. SSi Comments: SSi agrees with the proposed wording.

- Industry Canada is seeking comments on the proposed wording of the condition of licence related to transferability and divisibility.

27. SSi Comments: SSi agrees with the proposed wording.

- Industry Canada is seeking comments on the proposed wording of the condition of licence related to eligibility criteria.

28. SSi Comments: SSi agrees with the proposed wording.

- Industry Canada is seeking comments on the proposed wording of the condition of licence related to the treatment of existing spectrum users.
29. **SSI Comments:** SSI agrees with the proposed wording.

- **Industry Canada is seeking comments on the proposed wording of the condition of licence related to radio station installations.**

30. **SSI Comments:** SSI agrees with the proposed wording.

- **Industry Canada is seeking comments on the proposed wording of the condition of licence related to the provision of technical information.**

31. **SSI Comments:** SSI agrees with the proposed wording.

- **Industry Canada is seeking comments on its proposed condition of licence related to compliance with legislation, regulation and other obligations.**

32. **SSI Comments:** SSI agrees with the proposed condition of licence.

- **Industry Canada is seeking comments on the proposed condition of licence related to technical considerations, and international and domestic coordination.**

33. **SSI Comments:** SSI agrees with the proposed condition of licence.

- **Industry Canada is seeking comments on the proposed wording of the condition of licence related to lawful intercept requirements.**

34. **SSI Comments:** SSI agrees with the proposed wording.

- **Industry Canada is seeking comments on the proposed condition of licence related to the research and development requirement.**

35. **SSI Comments:** SSI has no comments on the R&D requirement at this time.

- **Industry Canada is seeking comments on the application of the proposed wording of the licence condition related to rural deployment requirements. Specifically, comments are sought on the assessment of “access to two or more paired blocks of spectrum” for the purposes of this condition of licence.**

36. **SSI Comments:**
37. In SSi’s comments submitted as part of the 2011 700 MHz Consultation, we detailed suggested measures we believed could assist deployment in remote and rural areas of the country.

38. Speaking frankly, we do not understand how those parts of the country that have no mobile wireless service today, or are underserved or have no HSPA deployment, will have gained anything through the proposed wording of the licence condition related to rural deployment requirements.

- **Industry Canada is seeking comments on the application of the general deployment condition of licence as stated above. Specifically, comments are sought on: the population coverage, as specified in Table 3, for each licence service area; and the time frame proposed whereby the requirement must be met.**

39. **SSi Comments:** SSi has no comments on the general deployment condition of licence.

- **Industry Canada is seeking comments on the proposed wording of the condition of licence related to mandatory antenna tower and site sharing. Comments on the specifics of the requirements should be submitted through the process announced through Canada Gazette notice DGSO-001-12.**

40. **SSi Comments:**

41. SSi agrees with the Department’s proposed wording of the condition of licence relating to mandatory antenna tower and site sharing.

42. SSi has also submitted comments on this issue as part of the process initiated through Canada Gazette notice DGSO-001-12, and we will not repeat those comments in detail here.

- **Industry Canada is seeking comments on the proposed wording of the condition of licence related to mandatory roaming. Comments on the specifics of the requirements should be submitted through the process announced in Canada Gazette notice DGSO-001-12.**

43. **SSi Comments:**

44. SSi very strongly agrees with the Department’s proposed wording of the condition of licence relating to mandatory roaming.

45. SSi has also submitted comments on this issue as part of the process initiated through Canada Gazette notice DGSO-001-12, and we will not repeat those comments in detail here.
- Industry Canada is seeking comments on the proposed condition of licence related to the requirement for annual reporting.

46. SSi Comments:

47. SSi agrees with the proposed condition of licence, with the qualification that there should be recognition in the condition that existing financial statements to be filed by a licensee need not necessarily be audited.

48. As the Department knows, an annual audit can be a large expense for smaller licensees, and unnecessary for the Department to meet the objectives behind requiring annual reports.

7.2 Industry Canada is seeking comments on the proposed opening bids as presented in Table 4.

Table 4 – Proposed Opening Bid Prices

<table>
<thead>
<tr>
<th>Service Area #</th>
<th>Service Area Name</th>
<th>700 MHz Opening Bids</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Paired Blocks</td>
<td></td>
<td>Unpaired Blocks</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>A, B, C, C1 and C2</td>
<td></td>
<td>D and E</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>$/MHz/pop</td>
<td>Opening bid (S)</td>
<td>$/MHz/pop</td>
<td>Opening bid (S)</td>
</tr>
<tr>
<td>2-01</td>
<td>Newfoundland and Labrador</td>
<td>0.265</td>
<td>$1,364,000</td>
<td>0.265</td>
<td>$682,000</td>
</tr>
<tr>
<td>2-02</td>
<td>Nova Scotia and P.E.I.</td>
<td>0.265</td>
<td>2,814,000</td>
<td>0.265</td>
<td>1,407,000</td>
</tr>
<tr>
<td>2-03</td>
<td>New Brunswick</td>
<td>0.265</td>
<td>1,987,000</td>
<td>0.265</td>
<td>994,000</td>
</tr>
<tr>
<td>2-04</td>
<td>Eastern Quebec</td>
<td>0.265</td>
<td>4,421,000</td>
<td>0.265</td>
<td>2,211,000</td>
</tr>
<tr>
<td>2-05</td>
<td>Southern Quebec</td>
<td>0.687</td>
<td>39,042,000</td>
<td>0.265</td>
<td>7,530,000</td>
</tr>
<tr>
<td>2-06</td>
<td>Eastern Ontario and N.W.T.</td>
<td>0.327</td>
<td>7,677,000</td>
<td>0.265</td>
<td>3,111,000</td>
</tr>
<tr>
<td>2-07</td>
<td>Northern Ontario</td>
<td>0.265</td>
<td>505,000</td>
<td>0.265</td>
<td>253,000</td>
</tr>
<tr>
<td>2-08</td>
<td>Southern Ontario</td>
<td>0.687</td>
<td>69,324,000</td>
<td>0.265</td>
<td>13,370,000</td>
</tr>
<tr>
<td>2-09</td>
<td>Northern Ontario</td>
<td>0.265</td>
<td>2,053,000</td>
<td>0.265</td>
<td>1,027,000</td>
</tr>
<tr>
<td>2-10</td>
<td>Manitoba</td>
<td>0.265</td>
<td>3,198,000</td>
<td>0.265</td>
<td>1,599,000</td>
</tr>
<tr>
<td>2-11</td>
<td>Saskatchewan</td>
<td>0.265</td>
<td>2,729,000</td>
<td>0.265</td>
<td>1,365,000</td>
</tr>
<tr>
<td>2-12</td>
<td>Alberta</td>
<td>0.327</td>
<td>11,936,000</td>
<td>0.265</td>
<td>4,836,000</td>
</tr>
<tr>
<td>2-13</td>
<td>British Columbia</td>
<td>0.327</td>
<td>14,388,000</td>
<td>0.265</td>
<td>5,830,000</td>
</tr>
<tr>
<td>2-14</td>
<td>Yukon, N.W.T. and Nunavut</td>
<td>0.265</td>
<td>284,000</td>
<td>0.265</td>
<td>142,000</td>
</tr>
<tr>
<td></td>
<td>Total per block</td>
<td></td>
<td>$161,722,000</td>
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<td>$44,357,000</td>
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<tr>
<td></td>
<td>Total all blocks</td>
<td></td>
<td></td>
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<td>$897,324,000</td>
</tr>
</tbody>
</table>

Note: Opening bids have been calculated based on paired blocks of 5+5 MHz and unpaired blocks of 5 MHz, irrespective of whether the paired block size is 5+5 MHz or 6+6 MHz, or that the unpaired block size is of 5 MHz.
49. **SSI Comments:**

50. SSI is very concerned that the Department has proposed extremely elevated opening bids for smaller licence areas, in particular Service Area 2-14, Canada’s Northern Territories, as presented in Table 4 of the Consultation.

51. In the 2011 700 MHz Consultation, the Department asked:

   *Question 8-2 - Is there a need for further regulatory measures or changes to existing regulatory rules (e.g. RP-19) to facilitate service deployments in rural and remote areas that remain unserved and/or underserved?*

52. SSI responded in the affirmative, and proposed a number of incentives to encourage deployment and improvement of mobile broadband service in remote and underserved areas. These incentives included rebates from the amounts paid at auction for spectrum for licensees who actually deploy in unserved and underserved areas, and the reduction of licence fees (for spectrum that was licensed outside of an auction) for licensees who actually deploy in unserved and underserved areas.

53. Industry Canada has consistently stated that, with respect to spectrum auction design, the goal for the government should be efficiency, not revenue maximization, and the focus should be on ensuring that those who can put the spectrum to its highest use actually receive that spectrum.

54. If the opening bids are set too high in an auction, the stated goal of an efficient auction will not be met, as otherwise interested bidders will not participate, and the focus of putting the spectrum to its highest use will be lost.

55. Paragraph 134 of the Consultation document provides:

   "The determination of the proposed 700 MHz opening bid prices takes into account the results of past Canadian auctions and reflects the relative value of the licences in the different service areas. As a minimum accepted price, the existing Cellular and PCS annual fees, adjusted to account for a licence term of 20 years using a 14% discount rate, is used. The opening bid prices are rounded to the nearest thousand dollars."

56. SSI strongly believes that by selecting as:

   “... a minimum accepted price, the existing Cellular and PCS annual fees, adjusted to account for a licence term of 20 years using a 14% discount rate”,

the Department has set opening bids for the smaller licence areas, in particular service area # 2-14, that do NOT take:
“... into account the results of past Canadian auctions and reflects the relative value of the licences in the different service areas.”

57. If the Department is to look to market-based valuations for mobile spectrum in order to benchmark reasonable opening bids for 700 MHz spectrum, it makes sense to take into account the results of past spectrum auctions, but not to set floor prices for opening bids by referencing annual fees for Cellular and PCS licences.

58. As a simple observation, the existing Cellular and PCS annual fees are not a reflection of market value for those licences. The annual fees are a creation of the Department; the market through, for example, an auction process has not set the fees. The annual fees have also been subject to regular and ongoing statements of concern by licensees who believe that the rates as currently set are too high.

59. In this regard, in the 2001 auction of PCS spectrum at 1900 MHz, all 40 MHz available at auction remained unsold in Northern Quebec (area 2-07) and the Northern Territories (area 2-14), indicating that the minimum bids were set too high for the spectrum, and/or the market value of the spectrum was low to zero.

60. In the 2008 AWS auction, the one new entrant to buy spectrum, Globalive, paid a total of $184,000 for the 20 MHz AWS B Block, with a ten year licence. And it is highly possible that the amounts bid by auction participants for AWS spectrum in the Northern service area 2-14 were artificially inflated due to the benefits of a “national new entrant” AWS licensee, which would include a licensee holding spectrum in the North, gaining ten year roaming rights rather than five year roaming rights for non-national licensees (see the Roaming conditions set out in Industry Canada’s November 2007 2 GHz spectrum auction policy framework).

61. In the Consultation document, the opening bid for 20 MHz of spectrum in Northern Canada (service area 2-14) is set at $568,000 ($284,000 + $284,000). This compares to $184,000 as the final bid paid by Globalive for the 20 MHz B Block in service area 2-14 in the 2008 AWS auction, and the $0 for unsold 1900 MHz spectrum following the 2001 PCS auction.

62. While one might argue that auction participants should be willing to pay more for a twenty year spectrum licence than a ten year licence, it is an extremely inexact and we would respectfully submit inaccurate science to try to determine “how much more?” by benchmarking the value of a twenty year licence against the annual PCS and cellular licence fees, and by applying a 14% discount rate to such annual fees.

63. As mentioned, the PCS and cellular annual fees have not been market set, and the licences can be remitted during the licence term, thus not only saving the payment of any future fees by the licensee, but allowing another party who may be interested to be licensed put the spectrum to better use at a later date.
64. SSI believes the Department should set the opening bids for the 700 MHz spectrum in the North (service area 2-14) and Northern Quebec (service area 2-07) at no more than $0.05/MHz/pop.

65. We believe SSI’s proposed lower price for opening bids in Northern Canada is not only a closer benchmark to market value, taking into account past spectrum auctions, but it will also assist the establishment of an efficient auction and one where spectrum is purchased by those who place it at its highest value. Should the final bids remain close to the opening bids this will demonstrate the ongoing challenges for wireless deployment in the North.

66. Again, the goal should not be revenue maximization and the focus should be to ensure that those who can put the spectrum to its highest use are able to do so.

7.3 Industry Canada is seeking comments on the proposed eligibility points for spectrum licences in the 700 MHz band, as outlined in Table 5 above.

67. SSI Comments: SSI has no comments at this time on the proposed eligibility points.

7.4 Industry Canada is seeking comments on the proposed pre-auction deposits as outlined above.

68. SSI Comments:

69. For the same reasons expressed at item 7.4 above, SSI believes the amount for pre-auction deposits is far too high for the smaller licence areas, in particular the Northern Territories (service area 2-14) and Northern Quebec (service area 2-07).

70. If deposit amounts are so high that they serve as deterrents for otherwise eligible and interested auction participants, such a deterrent would run counter to the objective of putting the spectrum to its most effective use.

10.0 Industry Canada is seeking comments on the proposed renewal process for spectrum licences in the 700 MHz band.

71. SSI Comments: SSI agrees with the proposed renewal process.
Additional comments of SSi on the supplementary round concept:

72. SSi has the following additional comments concerning the supplementary round concept proposed as part of the combinatorial clock auction (CCA) format described in the Consultation.

73. Annex B, paragraph 40 describes the supplementary round as

“... a single round process, in which bidders have the opportunity to place additional bids for packages, subject to constraints that are based on the bids that they placed in the clock rounds (Section 10 of Annex B). These additional bids could be used to improve bids on packages previously submitted in the clock rounds and/or to submit bids for which they were eligible to bid on, but unable to in the clock rounds.”

74. We refer the Department to Annex B.:  
   a. Paragraph 6 concerning “other packages” available in the supplementary round;  
   b. Paragraph 17 (which was modified on June 18) describing how bidders might expand their licence package in the supplementary round;  
   c. Paragraphs 41 to 43 (par. 42 was also modified on June 18) concerning how the supplementary round provides bidders with an opportunity to submit bids on multiple packages that they were willing and eligible to bid on in the clock rounds, but did not necessarily bid on;  
   d. Paragraph 45 concerning supplementary round bidding eligibility;  
   e. Paragraph 46 and 47 indicating all licences are available for bidding in the supplementary round so that bidders can improve on bids submitted during the clock rounds, or submit bids for packages of licences not expressed in the clock rounds.

75. We also refer to Annex C, paragraph 26 (also modified on June 18) concerning ways to guarantee winning a final clock package.

76. SSi’s concern is quite simple, and it has more to do with the advantages and ways to create multi-licence “packages” than it has to do with the supplementary round mechanics.

77. We strongly believe that the licences for the North (service area 2-14) and Northern Quebec (service area 2-07) should be removed from any of the packages made possible in the CCA format proposed in the Consultation. This exception is necessary because:  
   a. the size of the service areas 2-07 and 2-14 are much smaller than any other service areas; and  
   b. there is a constant history of spectrum in Canada’s north going unused when it is packaged as part of a larger national (eg, tier 1) or an “almost national” licence grouping.
78. Again, the objective should be for the 700 MHz spectrum to be allocated to those who value it most, but also who will make effective use of same.

79. While SSi must do further analysis and modelling of the CCA, the June 18 modifications and the overall auction design, we are concerned that smaller bidders, such as SSi wishing to focus on Canada’s north, will be punished or excluded from larger bidders who put together a package, either in the supplementary round or from the outset, that includes the North. Compared to the price paid for larger spectrum areas, service areas 2-07 and 2-14 are negligible in value. Not so for those smaller players, such as SSi, who wish to focus only on the North.

80. For example, we are truly uncertain of, but are concerned about, the ramifications of a provision such as that at paragraph 40 of Annex B that allows:

“... additional bids [to] be used to improve bids on packages previously submitted in the clock rounds and/or to submit bids for which they were eligible to bid on, but unable to in the clock rounds”.

81. SSi remains uncertain how the auction process is either efficient or fair if someone who was eligible to bid on a licence in the initial "clock rounds“ but chooses not to do so, or chooses not to continue bidding, but is allowed to resubmit bids in the supplementary round.

82. Similarly, if there are unallocated licences at the end of the clock rounds, for SSi that indicates that not only were the opening bids set too high for those unallocated licences, but because they were set too high, otherwise interested bidders did not participate in the auction process. The “barrier to bid” was too high.

83. If there are unallocated licences at the end of the clock rounds, SSi believes that those licences should be subject to a new auction at a later date, with reduced opening bids. It seems neither efficient nor achieving the objective of licensing spectrum to those who value it most if a licence is purchased merely because the participant had the financial wherewithal to place a large deposit for adequate bidding credits to purchase spectrum that the bidder would otherwise have no interest in.

84. SSi appreciates the opportunity to provide these comments to the Department.

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