



May 16, 2011

By email ([Spectrum.Engineering@ic.gc.ca](mailto:Spectrum.Engineering@ic.gc.ca))

Manager, Mobile Technology and Services  
Engineering, Planning and Standard Branch  
Industry Canada  
300 Slater Street  
Ottawa, Ontario  
K1A 0C8

**RE: Reply Comments to Canada Gazette Part I, Notice No. SMSE-005-11, Gazette Notice SMSE-006-11 — “Decisions on a Band Plan for Broadband Radio Service (BRS) and Consultation on a Policy and Technical Framework to License Spectrum in the Band 2500-2690 MHz” and Gazette Notice SMSE-006-11 — “Extension to the Comment Period for Part B of the Document Decisions on a Band Plan for Broadband Radio Service (BRS) and Consultation on a Policy and Technical Framework to License Spectrum in the Band 2500-2690 MHz” (collectively, the “2500 MHz Consultation”)**

Dear Sir / Madam;

1. SSi Micro Ltd. is pleased to submit this reply to comments provided by other parties in response to the 2500 MHz Consultation.  
  
*- Reaffirmation of Earlier Submissions*
2. In an effort to keep our reply brief, we can affirm that SSi has reviewed no comments from any other parties filed as a part of the 2500 MHz Consultation that would have us modify our April 19 comments.
3. As they are relevant to the 2500 MHz Consultation, SSi also reaffirms the content of the submissions we made as part of the related “700 MHz Consultation”, being comments with the Department on February 28, 2011 and reply comments filed on April 6, 2011.
4. For any intervention filed by another party to which we have not replied expressly, that should not be considered our approval or acceptance of same. Rather, as stated, we continue to adhere to the views expressed in our earlier comments.
5. We do wish to highlight in this reply two particular points that came through in the comments of other parties: i) a reaffirmation of the important role that the 700 MHz spectrum band (in particular vis-à-vis the 2500 MHz band) can play to extend broadband coverage into Canada’s more



outlying areas; and ii) the importance for Industry Canada to mandate roaming for all mobile operators across all spectrum bands.

- *The Attractiveness of the 700 MHz Band to Extend Remote Area Coverage*

6. On the first point, we agree with Eastlink' s comments:

*"[...] that the low-frequency 700 MHz band was well suited to providing rural areas with mobile wireless services due to its strong propagation characteristics. EastLink stands by our earlier comments and notes that, just as the 700 MHz was ideal for EastLink's rural deployment, the 2500 MHz band is ideal for boosting capacity in high-traffic areas."*

7. And, on a point that is very directly relevant for the Department as it determines the rules for the allotment of 700 and 2500 MHz spectrum, Quebecor notes in their April 19 comments, in a point with which SSi fully agrees:

*"QMI reiterates that the best way for the Department to protect the broadband connectivity interests of rural Canadians is through a 700 MHz auction framework that ensures an equitable distribution of low frequency spectrum among multiple competitors, coupled with stringent deployment requirements."*

8. Similarly, we agree with the various parties who emphasized in their April 19 comments that 2500 MHz spectrum is not a substitute but rather a complement for 700 MHz spectrum. Barrett Xplore stated this point well:

*"The 700 MHz spectrum is ideal for rural-focused ISPs requirement to expand their coverage in an economical manner across large, rugged geographic areas. The 2500 MHz plays an important role in permitting rural-focused ISPs to build the bandwidth capacity needed to accommodate the burgeoning demand for broadband services."*

9. Going further, we note that appended to their comments, Bell Mobility provided the Department with a study prepared by the Communications Research Centre comparing the propagation characteristics of the 700 and 2500 MHz bands. Not surprisingly, this study once again confirms that, in terms of covering greater distances with fewer cell sites (and SSi notes that a farther reach onto the land and onto the sea is particularly relevant for Canada's North), the 700 MHz band has very favourable characteristics. The CRC report:

*"[...] shows that the propagation characteristics of 700 MHz and 2500 MHz are significantly different. The report examines five propagation scenarios representing various rural and*



*urban/suburban environments. Their analysis shows that "the lower path loss at 700 MHz offers the potential for increased coverage area per base station," which means that "fewer base stations would be required at 700 MHz than at 2,500 MHz."*

10. Finally, as stated simply by the RABC: "[...] the 2500 MHz band is suited for relatively short range coverage while the 700 MHz band is suited for longer range coverage."

- *The Importance of Mandated Roaming*

11. On the second point, we again agree with the comments of those parties, including Eastlink and Shaw, who underscored the importance of mandated roaming. Eastlink's commented "[...] that seamless roaming should be mandated," while Shaw stated that it "[...] supports initiatives to establish more robust and effective rules for mandatory roaming [...] that can be applied across the board to all holders of commercial mobile spectrum."

- *Conclusions*

12. This letter is in Adobe pdf. The original version is in Microsoft Word 97-2004, and the operating system of the computer used to create the pdf file is Mac OS X 10.6.6.

13. We appreciate the opportunity to participate in this Consultation, the outcome of which, along with the 700 MHz Consultation, can have very significant and positive ramifications for the expansion of broadband and new services and technologies in Canada's northern and remote areas. We thank the Department for considering our comments and reply.

Respectfully yours,  
SSI MICRO LTD.

[SGD – DEAN PROCTOR]

Dean Proctor,  
Chief Development Officer,  
The SSi Group of Companies