



CHRISTINE J. PRUDHAM  
EXECUTIVE VICE PRESIDENT, GENERAL COUNSEL/SECRETARY  
DIRECT LINE: 905-944-7952  
E-MAIL: [cj.prudham@corp.xplornet.com](mailto:cj.prudham@corp.xplornet.com)

October 2, 2014

**BY ELECTRONIC MAIL**

**spectrum.engineering@ic.gc.ca**

Senior Director  
Spectrum Planning and Engineering  
Engineering, Planning and Standards Branch  
Industry Canada  
300 Slater Street  
Ottawa, ON K1A 0H5

Dear Sir/Madam,

**Canada Gazette Part 1, July 28, 2014, SLPB-004-14,  
Consultation on the Technical, Policy and Licensing Framework for Advanced  
Wireless Services in the Bands 1755-1780 MHz and 2155-2180 MHz (AWS-3)**

Pursuant to the procedures set forth in the above-referenced notice of consultation, please find attached the reply comments of Xplornet Communications Inc. and Xplornet Broadband Inc.

Yours truly,

CJP/  
Enclosure

Christine J. Prudham

**Canada Gazette, Part 1, July 28, 2014**

**SLPB-004-14**

**Consultation on the Technical, Policy and Licensing Framework for Advanced  
Wireless Services in the Bands 1755-1780 MHz and 2155-2180 MHz (AWS-3)**

**Reply Comments of**

**Xplornet Communications Inc. and Xplornet Broadband Inc.**

**October 2, 2014**

**INTRODUCTION**

1. These reply comments are submitted by Xplornet Communications Inc. and Xplornet Broadband Inc. (collectively, "Xplornet") pursuant to the directions on procedure set forth in the Department's *Consultation on the Technical Policy and Licensing Framework for Advanced Wireless Services in the Bands 1755-1780 MHz and 2155-2180 MHz* (Consultation Paper), dated July 28, 2014.
2. As stated in its initial comments, Xplornet welcomes additional spectrum being made available by Industry Canada for use in wireless telecommunications services and agrees that additional spectrum is required for a competitive wireless telecommunications marketplace to provide more choices to consumers.
3. In its initial comments, Xplornet agreed with most of the proposals put forth by Industry Canada in the Consultation Paper in respect of the AWS-3 band but proposed a few modifications to better achieve Industry Canada's objective of using spectrum for the benefit of all Canadians.
4. The changes proposed by Xplornet included:
  - Use of Tier 3 rather than Tier 2 geographic areas;
  - Expanding eligibility to bid on the 15 + 15 MHz set-aside block to all new entrants rather than just existing "new entrants" as defined by Industry Canada;
  - Reducing the term of the licences from 20 to 10 years to permit Industry Canada to assess the best use the spectrum on a more timely basis;
  - Strengthening deployment obligations in the conditions of licence;

- Requiring the winner to pay the highest bid amount, rather than the second highest bid; and
  - Requiring “Associated Entities” to bid as a single bidder.
5. Although Xplornet originally supported the band plan proposed by Industry Canada and the 30 MHz set-aside of spectrum for new entrants, it is persuaded by the reasoning of TELUS in its initial comments that a different approach is warranted in this case. TELUS has proposed that instead of dividing the available spectrum into one block of 15 + 15 MHz set aside for new entrants and one block of 10 + 10 MHz for general bidding by any party, it makes more sense to divide the spectrum into 5 blocks of 10 MHz (5 + 5 MHz), set aside two blocks of 10 MHz for new entrants, and place a 10 MHz cap on any large incumbent carrier (LWSP). This would make the spectrum available to more carriers while still ensuring that new entrants can acquire at least two blocks of 10 MHz. Xplornet is supportive of this approach.
  6. Xplornet also believes that Industry Canada should consider implementing an overall cap for mobile spectrum in different bands that is interchangeable in its functionality. While concentration of mobile spectrum is considered in the context of spectrum transfers, it is not generally considered (except in relation to new entrants versus incumbents) in the spectrum licensing process. Since it is the auction processes that, in part, permit carriers to acquire more spectrum regardless of their current holdings in the same or other interchangeable bands, the auction frameworks should become part of the solution to spectrum concentration, rather than continue to contribute to the problem. For this reason, Xplornet urges Industry Canada to extend the proposal of TELUS to consider developing an overall cap that restricts carriers from acquiring more than 25% of all interchangeable mobile spectrum.
  7. In these reply comments, Xplornet will address these issues.
  8. **A-1 Band Plan**

As mentioned above, Xplornet has been persuaded by TELUS' initial comments on the proposed band plan. Xplornet agrees with TELUS that it makes more sense to auction 5 blocks of 5 + 5 MHz, rather than a single block of 15 + 15 and one block of 10 + 10 MHz. Given the demand for spectrum and the fact that new entrants do not have the customer base to justify an additional 30 MHz of AWS spectrum, it will make this spectrum available to a larger number of carriers if 5 blocks are auctioned, rather than just 2 blocks.

## **A-2 Appropriate Tier**

9. Industry Canada should continue to make strategic entry possible, even on a regional scale, by licensing smaller Tier 3 areas to potential new entrants. This allows a provider to address the areas in which it may see a business opportunity without being forced to make a capital commitment for an entire province or significant region. Further, it allows a provider to specifically serve areas that have historically been underserved, such as rural areas, without the financial commitment of being required to deploy first in the large urban centres in order to fulfill the population coverage licence requirements at a Tier 2 level.
10. Licensing at the Tier 2 level discourages new entrants, with more modest capital, who may be willing to fill in the gaps outside of large cities because it forces such new entrants to purchase the entire Tier 2 areas, including the large cities.
11. In its comments, TELUS has distinguished between set-aside spectrum and spectrum subject to unrestricted bidding. While it has accepted Industry Canada's proposal to use Tier 2 for both restricted and unrestricted spectrum to permit expansion beyond top urban markets as their networks mature, it has also asserted that Industry Canada "either add teeth to its deployment requirements or revisit whether Tier 3 licences be used for the restricted spectrum - both from an auctioning perspective and an eligibility perspective."<sup>1</sup>
12. Xplornet would go further than TELUS and recommends that the new entrant spectrum be auctioned in Tier 3 geographic areas. This would enable new entrants to serve specific areas of a province without serving the whole thing.
13. Licensing at the Tier 3 level would also allow existing providers to acquire the specific areas they need to augment their AWS-1 holdings, which are licensed at the Tier 3 level. For example, if Tier 3 is used, a provider would not need to buy all of Alberta, potentially duplicating its Calgary holdings, just to acquire spectrum in Edmonton. At a Tier 2 level, the duplicated Calgary holdings would go unused.
14. Further, as indicated by TELUS and others, there is value in aggregating the AWS-3 spectrum with the AWS-1 spectrum. Given the AWS-1 spectrum is licensed at a Tier 3 level, it would be easier to engage in regional aggregation if the same size Tier is used for licensing purposes.
15. Xplornet agrees with Cogeco's comments respecting the competitive outcome that larger Tiers will generate:

"While Cogeco recognizes that the Department must juggle several competing interests and policy objectives in the design of any auction, there is no question that the tier sizes that it selects for its auctions have a

---

<sup>1</sup> TELUS Comments, at paragraph 57.

tremendous influence on the types of parties that participate in its auctions and, hence, auction outcomes. To be sure, the adoption of smaller tier sizes, such as Tier 4 serving areas, will encourage auction participation by both regional players and national competitors, whereas the adoption of larger tier sizes such as Tier 2 and even Tier 3 serving areas will encourage participation mostly by large national players or by very large regional competitors.

...if the Department decides to adopt larger tier sizes for a given spectrum auction, it must recognize that these rules will, by design, “engineer” certain auction outcomes. In particular, the adoption of larger tier sizes will effectively foreclose participation in the auction by smaller, regional players. It will also reduce the number of parties that participate in the auction overall and, therefore, auction revenues.”<sup>2</sup>

16. ABC Communications has proposed use of Tier 4 areas which it says will spur innovation and growth in non-urban areas:

“ABC notes that, of the new entrants to the mobile market that arose from the 2008 AWS auction, none have made any significant deployment outside of the greater Vancouver and Victoria areas in BC. The spectrum held by these companies is unused in rural and northern BC. By using Tier-4 service areas, Industry Canada will increase the utilization of the auctioned spectrum, and foster healthy and competitive regional markets across Canada.”<sup>3</sup>

17. The Independent Telecommunications Providers Association has also urged Industry Canada to use Tiers that are smaller than Tier 2:

“5. Nowhere is this bias toward large companies more evident than in Industry Canada’s proposal to use Tier 2 licence areas for this spectrum. Industry Canada’s map of Tier 2 Service Areas in Canada (see Figure A1 of the Consultation Document) indicates that the province of Ontario is comprised of only three Service Areas and the entire province of British Columbia is a single Service Area.

6. Industry Canada’s proposal to use Tier 2 Service areas instantly eliminates ITPA members, and likely other interested, smaller service providers, from participating in this auction despite the policy objectives promulgated in the Consultation Document.

7. Far smaller, focussed and rural-centric tiers are required by ITPA members if they have any hope of competing in auctions such as these

---

<sup>2</sup> Cogeco Comments, at paragraphs 17 and 18.

<sup>3</sup> ABC Comments at paragraph 13.

against the large wireless services providers who dominate the market in Canada.”

18. Given the concerns expressed by all of these parties, Xplornet urges Industry Canada to use smaller licensing areas such as the Tier 3 or Tier 4 licence areas, at least for the set-aside spectrum.

### **A-3 Pro-competitive Measures**

19. Although Xplornet originally supported the 30 MHz set-aside of spectrum for new entrants, it is persuaded by the reasoning in TELUS’ initial comments that a different approach is warranted in this case. TELUS has proposed that instead of setting aside 30 MHz of spectrum for new entrants, 20 MHz be set aside. It has also recommended that an auction spectrum cap of 10 MHz be placed on any large incumbent carrier (LWSP). This would make the spectrum available to up to 5 carriers, while still ensuring that one or more new entrants can acquire at least two blocks of 10 MHz.
20. Xplornet believes TELUS’ proposal to be a more pro-competitive approach than a set aside and therefore more likely to encourage competition. An auction cap is warranted in this case since it will ensure the wider distribution of spectrum among LWSPs. A 20 MHz set-aside, consisting of two blocks of 10 MHz is preferable to a 30 MHz allocation to a single carrier due to the relatively low volumes of customers served by new entrants and the considerable new spectrum that has and will be made available to them in pending auctions. TELUS’ approach will result in more carriers having access to this spectrum, including potentially new entrants that are not currently in the market. There is no justification for awarding a 30 MHz block of AWS spectrum to a single carrier.
21. Xplornet also recommends that Industry Canada consider implementing an overall cap for mobile spectrum in different bands but interchangeable in functionality. The approach taken in the 2500 MHz auction to limit the total amount of spectrum held by a single party was a positive step in this direction. Ultimately, Industry Canada should consider moving to a form of spectrum cap that includes all fungible spectrum. That approach is lacking in this auction framework. An overall cap on mobile spectrum would ensure that no single carrier is capable of acquiring too high a concentration of mobile spectrum. As equipment ecosystems become increasingly capable of handling a multitude of spectrum bands and spectrum aggregation is implemented, it becomes more necessary to look at overall mobile spectrum holdings of a carrier and not just the holdings within a band.
22. While concentration of mobile spectrum is considered in the context of spectrum transfers, it is not generally considered (except within a band in the case of 2500 MHz) in the spectrum licensing process. Since it is the auction processes that permit carriers to acquire more spectrum regardless of their current holdings in

the same or other interchangeable bands, the auction frameworks should become part of the solution to spectrum concentration, rather than continue to contribute to the problem. For this reason, Xplornet urges Industry Canada to consider developing an overall cap that restricts carriers from acquiring more than 35% of all mobile spectrum that is functionally interchangeable or can be aggregated.

23. In suggesting that one entity should be capped at holding licences for not more than 35% of all mobile spectrum, Xplornet is taking guidance from the principles in the Merger Enforcement Guidelines (the “MEGs”)<sup>4</sup> issued by the Competition Bureau and the *Competition Act*. Just like in a merger review, if the proposed licensee would have less than 35% of the mobile spectrum, a detailed review of a transfer should not be required and the licensee should be eligible to acquire new spectrum in an auction. If the licensee has more than 35% of all mobile spectrum, no divestiture is required but such licensee could not participate in future auctions of mobile spectrum unless enough spectrum was divested to allow the licensee to acquire the new spectrum and still be under the cap of 35% of all mobile spectrum. This figure is consistent with encouraging at least three or four participants in any given market and the goal of promoting competition in the mobile telecommunications market.

#### **A-4 Eligibility to Bid for Set-aside Spectrum**

24. In its Consultation Paper, Industry Canada sought public comment on its proposal to offer set-aside spectrum only to new entrants that have existing operations. Industry Canada reasoned that “Current new entrants that have launched services could especially benefit from additional spectrum, in order to support the provision of the latest advanced wireless services and to meet the wireless traffic demands of their growing subscribership”.
25. Xplornet disagrees with Industry Canada’s approach. In Xplornet’s view, this restriction will actually reduce the potential for the competitive wireless marketplace that Industry Canada is trying to produce.
26. If Industry Canada is concerned about a party potentially purchasing spectrum for speculative purposes, this can be addressed through enforcement of conditions of licence and tougher rollout requirements.
27. PIAC has also commented on the proposed restriction of set-aside spectrum to existing new entrants:

---

<sup>4</sup> Competition Bureau, *Merger Enforcement Guidelines* (Ottawa: Supply and Services Canada, October 2011), available at [http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/vwapj/cb-meg-2011-e.pdf/\\$FILE/cb-meg-2011-e.pdf](http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/vwapj/cb-meg-2011-e.pdf/$FILE/cb-meg-2011-e.pdf).

“64. PIAC notes that one possible consequence of the operating requirement is that potential bidders who may help further the policy objectives may be excluded from entry. In one sense, the term “new entrant” is no longer appropriate, given 2008 was six years ago, and given that the AWS-3 Consultation Document does not seem to contemplate “new” entry.

65. This begs the question, why would the Department not, again, allow greenfield wireless entry in Canada, unless the answer is that the Department wishes to elicit a potential consolidation, either from amongst the AWS-1 new entrants, or from outside, through the incentive of the set-aside. It may very well be unlikely that a “new” (in the literal sense of the term) entrant could be interested in a pure play spectrum acquisition and network build. Unless there is an implicit design to the Department’s proposals, then PIAC questions whether requiring an “outsider” interested in competing in Canada now to purchase one of more of the original new entrants, is a suitable policy decision.

66. As PIAC noted in respect of the AWS-4 consultation, where the Department proposed essentially issuing expanded licences to the current incumbents, PIAC generally considers opening up the AWS-4 licensing process to other interested competitors to be reasonable.”

28. Cogeco is also critical of this approach:

“...no one should be operating under the illusion that this auction is intended to promote additional entry in the market or intense bidding for set-aside spectrum. The auction outcomes, especially for the set-aside spectrum, are essentially pre-determined – which begs the question as to whether it even makes sense to hold an auction. If the Department is intent on awarding spectrum to existing licence holders, it could use other mechanisms to do so.”<sup>5</sup>

29. Xplornet respectfully submits that Industry Canada should open up the “new entrant” criteria to include actual new entrants. If Industry Canada is concerned about a party potentially purchasing the spectrum for speculative purposes, this can be addressed by adding an additional licence condition that requires the new entrant to actually commence operation within two years of acquiring the spectrum. This would permit adequate time to develop network plans once the spectrum has been acquired, raise appropriate operating capital, source necessary equipment and launch a service to the Canadian consumers.

30. For these reasons, Xplornet believes that, to maximize the potential for competition that will benefit consumers, an eligible “new entrant” should include

---

<sup>5</sup> Cogeco Comments, paragraph 28.

any entity by an entity that is not a large wireless service provider (LWSP) and should not be restricted to just existing mobile service providers.

### **B-1 Term**

31. While most parties have supported a 20-year term for the licences to be issued as a result of this process, Xplornet believes that a 10-year term is more appropriate.
32. The past of technological change is very fast with new wireless ecosystems being developed on a regular and increasingly frequent basis. Ten years is a much more reasonable timeframe in which to review the most appropriate use of the spectrum and the extent to which the proposed use has in fact materialized. It also provides a more reasonable period of time to review the extent to which the stated policy objectives for the spectrum have been realized.
33. ABC Communications also takes the view that a 10-year renewal term, contingent upon meeting the deployment requirements, provides the business certainty required to support a substantial investment into the construction of a network. At the same time, ABC points out that fixed wireless licences have been issued for 10-year, rather than 20-year periods:

“ABC notes that the 3500 MHz band was only issued as a 10-year licence term, and that these licences are proposed to be reallocated in the near future. This disparity in the treatment of fixed wireless operators versus mobile operators is harmful to the competitive provision of connectivity services across Canada.”<sup>6</sup>

34. Drs. McNally, Taylor and Middleton also point out that future policy options will be hampered with a 20-year licence term:

“20 years is too long a time for the valuable spectrum to be reserved for private exclusive use, with little chance of reappraisal of the public value. The FCC plan for the AWS-3 spectrum has determined 12-year licences are appropriate. The licences for AWS spectrum auctioned in Canada in 2008 are for 10 year terms. Why does Canada require longer terms for the AWS-3 band?

We believe the August 2014 Consultation on Policy Changes in the 3500 MHz Band (3475-3650 MHz) and a New Licensing Process in Rural Areas offers a clear example of the necessity of shorter licence terms. The reason that Industry Canada was able to make the required changes in these frequencies is that the 2003 ten-year licences had expired. Changes

---

<sup>6</sup> ABC Communications Comments, paragraph 19.

had happened in the industry and in technology over the previous decade that called for a reassessment of this public resource and Industry Canada was able to give notice to those using the spectrum that their licences would not be renewed. Reallocation will be required in such a volatile industry and we do not believe Canada should have its policy options hampered by 20-year contracts.”<sup>7</sup>

35. Given the potential for changes in technology and how spectrum is used (such as developments in spectrum aggregation), Xplornet believes it would be more prudent to consider a 10 year licence term that allows Industry Canada to review all aspects of the use of the spectrum and to make adjustments to the licensing requirements as needed to insure the spectrum continues to be optimally used for the greater good of all Canadians.

### **B-3 Strengthening Deployment Obligations**

36. In its initial Comments, Xplornet expressed the view that the proposed deployment conditions for AWS-3 spectrum is woefully inadequate.
37. If the situation is as dire as Industry Canada has suggested, it is not appropriate to allow more than 50% of the spectrum to be effectively un-deployed. Xplornet proposed that (a) the first use requirement should be assessed four years after the licences are issued and should require not less than 60% of the population in the licence area be covered, and (b) the second use requirement should be assessed seven years after the licences are issued and should require not less than 90% of the population in the licence area be covered.
38. Other parties have expressed concerns about the inadequacy of the roll-out conditions. For example, SaskTel has proposed both a shorter initial roll-out period and strengthening the conditions for the 10-year period:
- The spectrum purchased in this auction should be deployed as quickly as possible given the growing demand for bandwidth by Canadians. It is our belief that given readiness of the deployment environment the proposed 5 years is too long a period for this spectrum to lie fallow. A 3-year deployment window is appropriate given that all qualified bidders should already have facilities in place.
  - In order to ensure all major population centres within the Tier 3 service area are covered in the 10-year deployment timeframe, SaskTel suggests higher minimum population coverage requirements be imposed for the 10-

year deployment requirement for the Saskatchewan Tier 3 service areas, as well as the other Tier 3 areas across the country.<sup>8</sup>

39. In its comments, PIAC has pointed out that the proposed deployment obligations effectively allow compliance through urban deployment:

“As structured, the 5-year deployment obligations still effectively allow compliance through urban deployment. While this would be to the benefit of urban residents, it does not benefit Canadians who live in rural areas. A 10% deployment obligation for a population of 100,000 Canadians leaves 90,000 Canadians unable to use services provided by the spectrum; a substantial imbalance between those who can be connected and those who cannot.”<sup>9</sup>

40. PIAC goes on to recommend tightening up the deployment requirements:

“PIAC therefore recommends that the 10-year, Tier 3 deployment requirements be adjusted upward significantly, by 2.0 times in “urban”<sup>65</sup> areas, and at least 1.5 times in non-urban areas. This increased deployment obligation (up to 100% in urban areas) reflects the fact that the deployment economics improve with population density, while at the same time placing an important requirement on licensees to deploy deeper into their service areas to serve more Canadians than just 1 or 2 out of 10.”<sup>10</sup>

41. Drs. McNally, Taylor and Middleton also recommend that the deployment obligations be strengthened and note the criticism of similar deployment conditions in the 2500 MHz auction framework consultation:

“4. The deployment requirements are similar to previous auctions including both the Tier 2 and Tier 3 targets from the 2008 AWS auction, and the Tier 3 targets from the upcoming 2500 MHz auction. However, unlike the 2008 AWS auction, where both the Tier 2 and 3 targets were five-year targets, the Tier 3 requirements from the AWS-3 auction need only be met after 10 years. While the same 10 year, Tier 3 targets are being proposed for the AWS-3 auction as the upcoming 2500 MHz auction, Industry Canada should note the criticisms from the 2500 MHz consultation which included TELUS suggesting the targets were unambitious, MTS Allstream and Xplornet desiring a five year deployment time frame, and most importantly the comments from the Kativik Regional Government that noted that the Tier 3-17 targets could leave the entire area of Nunavik unserved. It should be further noted that in considering short time frames for the 2500 MHz auction, Industry Canada noted that

---

<sup>8</sup> SaskTel Comments, paragraph 6.

<sup>9</sup> PIAC Comments, paragraph 83.

<sup>10</sup> Ibid., paragraph 86.

such time frames would have no impact on incumbent licensees. Given that the proposed AWS-3 auction is geared toward “operating new entrants” the concerns about infrastructure costs for new entrants should be mollified to a degree.

5. In order to strengthen the AWS-3 targets we propose two options. One option would be to retain the five-year Tier 2 targets, but to also make the Tier 3 targets five-year targets as well. This change would result in the AWS-3 and 2008 AWS auctions having the same deployment requirements.

6. A second option would be to increase the 10 year Tier 3 rollout requirements so that licensees are required to service a greater percentage of the population in each of the Tiers. The proposed targets were originally set in 2007 when mobile usage was very low. There is now room for significantly more aggressive deployment requirements as there is significantly greater demand for coverage. Furthermore the original targets were for coverage in 2013, but the proposed targets would be requirements for 2025. Is it not reasonable that deployment targets for 2025 should be stronger than 10, 15 or 20 percent of the population in several tiers?”

42. Given the concerns of these parties, assuming there is a pressing need for mobile spectrum, Xplornet recommends that Industry Canada (a) increase the first deployment requirements at the 3 or 4 year mark to be at least 60% of the population, (b) significantly increase the second deployment requirements at the 7 year mark to 90% or more, and (c) align the policy of objective of covering more geographic area to reach more Canadians with the licence coverage requirement by licensing at the Tier 3 level and setting all of the deployment requirements based on the Tier 3 licence area populations.
43. Xplornet therefore urges Industry Canada to continue its policy of “use it or lose it”, set serious benchmarks for usage and enforce compliance.
44. Xplornet thanks Industry Canada for considering these comments.

\*\*\* end \*\*\*