

**Reply Comments of Shaw Communications Inc.**

**Consultation on a Licensing Framework for Residual Spectrum Licences in the 700 MHz, 2500 MHz, 2300 MHz, PCS and 1670-1675 MHz Bands**

***Canada Gazette*, Part I, July 15, 2017, Notice No. SLPB-003-17**

**September 5, 2017**

## I. INTRODUCTION

1. The following constitutes the reply comments of Shaw Communications Inc. (“Shaw”), on behalf of itself and its wholly-owned subsidiary, Freedom Mobile Inc., to Innovation, Science and Economic Development Canada (the “Department”) in connection with the proceeding initiated by *Consultation on a Licensing Framework for Residual Spectrum Licences in the 700 MHz, 2500 MHz, 2300 MHz, PCS and 1670-1675 MHz Bands*, Notice No. SLPB-003-17 (the “Consultation Document”). We note that any failure by Shaw to respond to any specific comments or issues raised by other parties in this proceeding does not necessarily constitute Shaw’s agreement with or acceptance of those comments or issues.
2. As indicated in the Consultation Document, the Department has established the following objectives for the allocation of residual licences:
  - To foster innovation and investment
  - To support sustained competition, so that consumers and businesses benefit from greater choice
  - To facilitate deployment and timely availability of services across the country, including rural areas.<sup>1</sup>
3. As a new competitor in the wireless market, Shaw fully endorses these objectives, particularly the need to promote and support sustained competition so that consumers and businesses benefit from greater choice. In Shaw’s view, real and sustained facilities-based competition is crucial to achieving this objective and the Government’s innovation and economic growth agenda.
4. Shaw has worked to establish Freedom Mobile as a strong source of competition and as an alternative to the incumbent wireless carriers. Shaw continues to make substantial investments in our network infrastructure. These and other future investments are essential to our ability to provide consumers with a strong alternative to the incumbent wireless carriers. However, our ability to make further inroads in our operating areas is fundamentally constrained by the relative quantity and lack of diversity of our spectrum portfolio as compared to that of the incumbents.
5. This residual auction is an opportunity for the Government to take an incremental step toward a more-level spectrum playing field. It is important that ISED set appropriate rules and an auction

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<sup>1</sup> Consultation Document, para. 5.

format that will serve to maximize facilities-based competition and choice in the mobile wireless segment of the telecommunications market.

6. Shaw generally supports the Department's proposed licensing framework as presented in the Consultation Document. As described in our initial comments, and as elaborated upon below, in particular, Shaw supports the proposed maintenance of the in-band spectrum aggregation limits that were initially established for the 2500 MHz and 700 MHz bands and the proposed auction format as set out in Sections 6.2 and 6.3 of the Consultation Document. These proposed measures will further the Department's objectives and the parties in this proceeding have not provided compelling reasons to deviate from these proposals. As such, in Shaw's view, they should be retained as a key part of the framework for the upcoming residual auction.

## **II. SPECTRUM AGGREGATION LIMITS**

7. Shaw continues to support the Department's proposal to maintain the in-band spectrum aggregation limits that were initially established for the 2500 MHz and 700 MHz bands. These measures are critical to promoting sustainable competition in Canada's mobile wireless market for the benefit of Canadians.
8. As described in our initial comments, the market conditions and policy considerations that led to the establishment of the spectrum aggregation limits are still present. The incumbents continue to control the vast majority of mobile terrestrial spectrum capacity across all bands, and there is still a need to level the playing field. Notwithstanding Bell's assertion that some new entrants "have now secured both low band... and higher-band spectrum,"<sup>2</sup> new competitors remain at a considerable disadvantage relative to the incumbents with respect to spectral capacity and diversity. In Toronto, Calgary, Edmonton and Vancouver, for example, Shaw holds a maximum of 80 MHz of mobile terrestrial spectrum, while Rogers holds close to or more than 200 MHz in each of these markets, while Bell and Telus together control close to or above 300 MHz in each of these markets. This hinders our ability to compete in many ways, including our ability to expand and upgrade our network as efficiently and cost-effectively as may be possible for the wireless incumbents, particularly outside of populated urban centers. This ultimately hurts competition and in turn hurts Canadian consumers and businesses.
9. Shaw reiterates that maintaining the spectrum aggregation limits is critical to attaining a more equitable distribution of spectrum holdings, avoiding further concentration of spectrum in the

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<sup>2</sup> Bell Initial Comments, para. 11.

hands of the incumbent wireless carriers, and to achieving the Department's objectives of the enhancement of the availability of next-generation wireless services to more Canadians and the promotion of sustainable facilities-based competition.<sup>3</sup> As detailed in our initial comments, competition drives innovation and investment, which drives lower prices,<sup>4</sup> better services, and more choice for Canadian consumers.

10. The above is consistent with the submissions of several parties in this proceeding including those of Xplornet, Eastlink and CCI Wireless, which have supported the Department's proposal to maintain the spectrum aggregation limits. For example, Shaw agrees with the views of Xplornet's view of market conditions and the incumbent wireless carriers' incentive to attempt to foreclose competition in the residual auction:

"This spectrum is prime mobile wireless spectrum and there is still a need in Canada to permit new entrants to acquire additional spectrum to compete effectively with Bell, TELUS and Rogers. These incumbent carriers hold vast amounts of spectrum in most parts of Canada. As a new mobile wireless entrant, Xplornet believes that absent a spectrum aggregation limit, these entrenched wireless providers would use the auction process to secure most or all of the spectrum available."<sup>5</sup>

11. Removal of the spectrum aggregation limits in the 2500 MHz band, as suggested by some parties in this proceeding such as SaskTel, would undermine the Department's objectives. For example, SaskTel states that the aggregation limits have "served their purpose [given that] the entire band is almost fully licenced" and that, as an alternative, the 2500 MHz blocks available in this proceeding should not count toward the overall aggregation limits, which would allow more entities to bid..."<sup>6</sup>
12. Shaw respectfully disagrees with SaskTel's rationale, as it misconstrues the intention of the spectrum aggregation limits. Rather, spectrum aggregation limits are established to promote competition in the wireless industry and to guard against spectrum concentration. As stated previously, the market conditions and policy considerations that led to the establishment of the spectrum aggregation limits remain present and therefore, must be addressed as part of the policy framework for the upcoming residual auction.

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<sup>3</sup> Consultation Document, para. 5.

<sup>4</sup> Indeed, as outlined in our initial comments, the Competition Bureau has found that in areas where the incumbents face competition from a strong regional competitor, prices are substantially lower.

<sup>5</sup> Xplornet Initial Comments at page 2.

<sup>6</sup> SaskTel Initial Comments, para. 8.

13. The Department should maintain the spectrum aggregation limits in order to promote sustainable competition, the benefits of which include lower prices, better services, and more choice for Canadian consumers.

### **III. AUCTION FORMAT**

14. As discussed in our initial comments, Shaw generally supports the proposed use of a single-round sealed-bid auction in combination with a second-price rule and the Vickrey price determination mechanism. We also noted that in the case of the 2500 MHz spectrum licences, Shaw's support for the single-round sealed-bid auction format and Vickrey second-price rule is conditional on maintaining the proposed package bidding rules as set out in Sections 6.2 and 6.3 of the Consultation Document.
15. In Shaw's view, the parties in this proceeding have not presented any compelling alternatives or reason to deviate from the Department's proposals that would justify a more complicated auction design. The Department's proposals are well-suited for the types and amount of spectrum to be assigned in the residual auction while furthering the Department's objectives. Below we provide our responses to some of the arguments raised in this proceeding relating to price discovery, package bidding and opening bid prices.

#### ***Sealed-Bid Format and Price Discovery***

16. In Shaw's view, a single-round sealed-bid format is appropriate in the case of this residual auction. Some parties were critical of the proposed sealed-bid format on grounds that price discovery is needed and that this format allegedly inhibits price discovery. For example, Telus stated that "an auction of the residual 2500 MHz spectrum... will be competitive and require price discovery."<sup>7</sup>
17. By way of reply, Shaw notes that price discovery is the process of information gathering so that bidders can infer common value information from market activity. A lack of price discovery becomes a concern where there is significant asymmetric information about value, regardless of the level of competition. Such concerns regarding highly asymmetric information are very unlikely to be present in the 2500 MHz band. The 2015 auction was a combinatorial clock auction ("CCA") that provided price discovery to interested parties, and those results are publicly available. Additionally, the 2500 MHz band has already been deployed in many nations worldwide (including Canada), which should already provide all potential auction participants with adequate information to make an informed bid or series of bids. Indeed, winners of Canada's 2500 MHz

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<sup>7</sup> Telus Initial Comments, para. 48.

licences, including Telus, which won the greatest number of licences in the 2015 auction, have had the time since that auction to understand the value of this spectrum from first-hand experience.

18. Similarly, Xplornet argues for a CCA in respect of the 2500 MHz spectrum on the basis that it “enables more complete price discovery,” which is required in Xplornet’s view to help Xplornet “fill gaps in coverage.”<sup>8</sup>
19. By way of reply and as noted above, in Shaw’s view, there has already been substantial price discovery in the 2500 MHz band. Xplornet won forty-two 2500 MHz licences in the 2015 auction. This, combined with its experience operating in the band, should give Xplornet sufficient information to determine the value of licences that would fill coverage gaps. Accordingly, in Shaw’s view, asymmetric information is not cause for concern in a auction for the residual 2500 MHz licenses. Therefore, price discover arguments cannot justify deviation from the Department’s proposed sealed-bid format.

### **Package Bidding**

20. Some parties in this proceeding have raised concerns regarding the use of package bidding for the 2500 MHz spectrum. For example, in its initial comments, Xplornet noted that the package bidding approach “...works against non-incumbent carriers... that have some geographic coverage but have gaps in coverage” and that packaging would render it impossible to augment one’s spectrum because “[t]he inclusion of more than one large metropolitan area in a package may make it prohibitively expensive for a party that already has a licence to serve one of them but not the other”. Similarly, CCI’s initial comments state that package bidding would “dissuade regional telecommunications operators from bidding on licenses as the process would require bidding across multiple jurisdictions”.<sup>9</sup>
21. By way of reply, Shaw notes that under the Department’s proposed 2500 MHz Groups and proposed package bidding rules, bids for individual licences to fill coverage gaps, or bids for only those geographic areas where an operator wishes to provide service, are valid package bids – bidders will not be required to bid on any licences other than the ones they wish to win. Operators are not compelled to bid on all licences within a Group of 2500 MHz licences as an indivisible package in order to acquire any licence. Instead, the Department’s proposed approach only establishes which licences (*i.e.*, those in different Groups) may not be included in the same

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<sup>8</sup> Xplornet Initial Comments at page 4.

<sup>9</sup> CCI Initial Comments at page 4.

package bid.<sup>10</sup> If we are correct in this interpretation, CCI's and Xplornet's arguments are not valid.

### **Opening Bid Prices**

22. In its initial comments, Telus noted that opening bid prices for the 2500 MHz licences should be increased to 2015 auction clearing prices for fear that these licences sell at little more than the reserve price.<sup>11</sup> Telus stated that opening bid prices should be increased to 2015 auction clearing prices and that "...the sealed bid auction format only makes sense when there is little competition and hence, often the second price is the reserve price".<sup>12</sup> In Shaw's view, this conflicts with Telus' position that the 2500 MHz auction "will be competitive".<sup>13</sup> In any event, in Shaw's view, the 2015 auction prices are inappropriate for use as opening bid prices for several reasons, including that the residual auction is for licences that did not sell in 2015.

## **IV. OTHER ISSUES**

23. Shaw also wishes to reply to other issues raised in this proceeding. Firstly, we note Bell's claim that ISED's condition of licence ("COL") relating to wholesale roaming services is redundant and should be removed in light of the CRTC's decision to regulate GSM-based wholesale roaming.<sup>14</sup> We also note Telus' claim that the ISED roaming COL should be reconsidered to eliminate the in-territory roaming service because it is leading to "adverse incentives" among new wireless carriers to obtain roaming rather than invest in infrastructure and must therefore be eliminated in order to remain true to the policy of facilities based competition.<sup>15</sup>
24. Shaw respectfully disagrees for the following reasons. The mandatory roaming rules apply to all holders of commercial mobile spectrum license, not just those that provide GSM-based roaming services. As alluded to by Rogers in its initial comments, the scope of the Department's mandatory roaming COL is not limited to the GSM-based roaming arrangements that have been mandated by the CRTC – they apply to all roaming arrangements that may employ other standards or technologies. Additionally, there is no inconsistency between the rules for mandated GSM-based roaming that were established by the CRTC and the Department's

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<sup>10</sup> See Table 6 of the Consultation Document.

<sup>11</sup> Telus Initial Comments, para. 54.

<sup>12</sup> Telus Initial Comments at para 54.

<sup>13</sup> *Supra*, note 7.

<sup>14</sup> Bell Initial Comments, para. 29.

<sup>15</sup> Telus Initial Comments, para. 42.

mandated roaming COL. The CRTC has mandated only one type of roaming service, namely the wholesale GSM-based roaming services of the incumbents. It is evident, therefore, that when parties offer and/or subscribe to these services, they are subject to the regulatory regime that was established by the CRTC for these services. However, all other roaming arrangements remain subject to the Department's rules and regulatory framework for mandatory roaming. Finally, regarding the implication that the COL deters network expansion and augmentation and that new carriers such as Shaw are not investing in infrastructure is false. We are investing heavily in our network infrastructure and will continue to do so.

25. Additionally, in response to British Columbia Broadband Association's ("BCBA") claim that new wireless carriers have demonstrated no interest in deploying in rural areas,<sup>16</sup> this reflects a blinkered view or limited understanding of mobile terrestrial deployment. Shaw acknowledges that all Canadians, including those in smaller communities and rural and remote areas, deserve to be served with choice and competition between competing wireless service providers. Shaw is interested in deploying in these areas. However, as detailed in its submissions in the Department's *Consultation on a Licence Renewal Process for Advanced Wireless Services and Other Spectrum*, SLPB-002-17,<sup>17</sup> we currently face significant hurdles in doing so, in large part due to Shaw's lack of low-frequency spectrum, which has a profound impact on our relative costs of deployment in less densely populated areas. Even with our recent acquisition of limited 700 MHz spectrum, prior to which Shaw had no low-frequency spectrum, we still have significantly less low-frequency spectrum across our operating territory as compared to the wireless incumbents. In other words, in Shaw's case, the issue cited by BCBA is more attributable to spectrum constraints than it is to a lack of interest in deploying in rural areas.
26. We also note the assertions of Xplornet, ECOTEL, SaskTel and the BCBA that these parties need the 2500 MHz blocks or PCS G block to deploy fixed wireless facilities in rural areas, that the 2500 MHz Groups should be re-organized, that the spectrum should be auctioned in smaller hexagons in rural areas, or set aside or excluded from the auction and assigned to smaller players so that they can carry out their fixed wireless plans. Shaw notes that this spectrum is allocated to mobile terrestrial use and being auctioned as such. In addition, the Department has proposed to auction the 2500 MHz spectrum using the same Tier 3 and Tier 4 areas that were used in the original 2500 MHz spectrum auction. Maintaining the current tier area structure would be consistent with all other spectrum auction processes undertaken since 1999 and would allow existing licensees serving the area to make use of their existing infrastructure to overlay the additional spectrum. As noted by the Department in the Consultation Document, there are many

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<sup>16</sup> BCBA Initial Comments, para. 14.

<sup>17</sup> <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf11273.html>



potential complementary areas that are interdependent between the regional 2500 MHz licences that are being made available.. The Groups proposed by the Department take proper account of these potential complementarities and interdependencies and therefore, promote the policy objective of ensuring that mobile wireless deployment occur across all regions of the country. Licensing the spectrum on a non-tier basis would negate these complementarities and interdependencies and could result in, among other things, reduced spectral efficiency and reduced quality of service for consumers.

## **V. CONCLUSION**

27. Shaw applauds the Department's initiative in making this residual spectrum available and generally supports the Department's proposed licencing framework. The Department's proposals foster innovation and facilities-based investment and support competition for the benefit of Canadians.
28. In particular, in Shaw's view, there is no reason to deviate from the Department's proposal to maintain the spectrum aggregation limits in the 700 MHz and 2500 MHz bands. Adoption of this and other proposed in the Department's policy, licensing and auction framework in the residual auction would represent an important incremental step toward a more-level spectrum playing field for the benefit of Canadians. Shaw generally believes that the proposals with respect to the maintenance of spectrum aggregation limits and the proposed auction format rules as set out in Sections 6.2 and 6.3 of the Consultation Document will ensure that the spectrum licences that are being made available will maximize economic and social benefits for Canadians and will achieve the Department's objectives.

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