

Industry Canada

**Consultation on a Framework to Auction Spectrum in the 2  
GHz Range including Advanced Wireless Services**

DGTP-002-07

**REPLY COMMENTS OF  
SHAW COMMUNICATIONS INC.**

June 27, 2007

## Introduction

1. Shaw Communications Inc. (“Shaw”) provides its reply to comments filed in response to *Consultation on a Framework to Auction Spectrum in the 2 GHz Range including Advanced Wireless Services* (the “Consultation”), released by Industry Canada in February 2007.<sup>1</sup> Shaw remains of the view that a competitive process would best service the public interest. In the context of an auction, however, Shaw supports the following measures to facilitate new entry:
  - a. A set-aside of 50 MHz of AWS spectrum for new entrants;
  - b. Mandatory roaming and tower-sharing obligations at essential facilities rates, with a five-year sunset period; and
  - c. Staged bid payment consequent on an entrant adding subscribers to its network.
  
2. The number and extent of comments submitted in response to the Consultation are indicative of the importance of Industry Canada’s plan to release new mobile spectrum in the 2 GHz range, including for Advanced Wireless Services (“AWS”), and the significant opportunity for Canada that this represents. If this opportunity to ensure new entry is squandered, the government risks being required to undertake more explicit and detailed regulation if further spectrum concentration is the outcome. This result would be inconsistent with the government's policy of placing greater reliance on market forces. Moreover, this result would be inconsistent with the sole objective recently announced by the Department as part of its Spectrum Policy Framework for Canada: “To maximize the economic and social benefits that Canadians derive from the use of the radio frequency spectrum resource.”<sup>2</sup>

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<sup>1</sup> In these reply comments, Shaw will focus primarily on responding to the first round comments filed by the wireless incumbents, Bell Canada (“Bell”), TELUS Communications Inc. (“TELUS”), Rogers Wireless (“Rogers”) and their industry association, the Canadian Wireless Telecommunications Association (“CWTA”). Failure to address any submission made by these parties should not be taken as Shaw’s agreement with that submission.

<sup>2</sup> *New Spectrum Policy Framework for Canada*, Gazette Notice DGTP-002-07.

3. In its first round comments, Shaw indicated a strong desire to enter the mobile wireless market provided the licensing terms and conditions established pursuant to this consultation reflect the significant challenges faced by any new facilities-based entrant. Notwithstanding these challenges, Shaw believes it can provide significant choice and innovation to customers across Western Canada, in competition with the wireless incumbents.
4. Since the filing of first round comments, TELUS has announced a bid for BCE. In order to address the concern that this would further consolidate the mobile wireless industry from three carriers to two, TELUS announced the next day that it was altering its position in this consultation in respect of measures such as a spectrum set-aside, mandatory roaming and tower sharing for new entrants. Shaw welcomes TELUS' support for these measures. In the event the industry is permitted to consolidate in this manner, however, Shaw reiterates that a competitive process would be the most effective to ensure entry from those best able to compete.
5. Regardless of whether the status quo consists of two carriers or three, in an auction setting the wireless incumbents will have both the incentive and financial advantage to keep spectrum out of the hands of new entrants. The wireless incumbents are able to warehouse additional spectrum acquired in an auction, or bid up the cost of that spectrum at the expense of new entrants. Alternatively, they can put it to use to avoid the cost of building out additional cell sites to accommodate the anticipated increase in traffic resulting from future increases in penetration and bandwidth-hungry applications. Under any of these scenarios, the cycle of limited choice for consumers is perpetuated, and facilities-based new entry is either prevented or weakened.

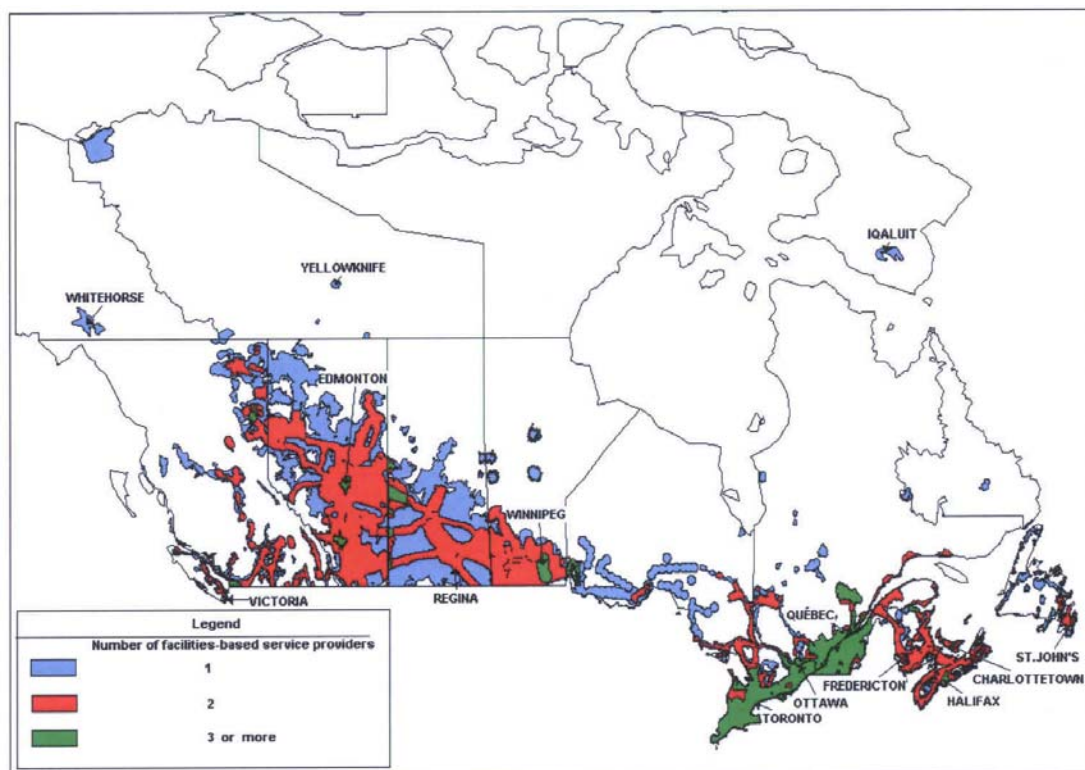
### **The Need for New Entry**

6. These outcomes are in opposition to government policy supporting greater reliance on market forces and facilities-based competition, as well as the findings and recommendations of the Telecommunications Policy Review Panel (TPR).

7. In their first round comments, the wireless incumbents submit that potential new entrants are seeking a government subsidy or hand-out to enter what these incumbents claim to be a “competitive” market. However, these incumbents were themselves awarded the bulk of their spectrum in competitive processes, designed precisely for the same purpose as the measures advocated by Shaw and others – to facilitate competition. Moreover, the primary measure under consideration by the Department, i.e. a set-aside, if implemented, will require new entrants to compete for spectrum in an auction, and to pay heavily in order to gain entry.
8. The wireless incumbents’ principal claim is that their segment is competitive, and therefore no measures to facilitate new entry are warranted. In reality, the wireless incumbents do not operate in an openly competitive marketplace and are in fact protected from such an industry structure.
9. First and foremost, the wireless incumbents are protected by restrictions on the foreign ownership and control of Canadian carriers. These restrictions have allowed them to enjoy high margins without fear of entry from T-mobile, Verizon or Cingular. These restrictions have also permitted them to purchase new entrants such as Clearnet and Microcell without competition from foreign bidders. Within this protected environment, the wireless incumbents have been permitted to exploit their incentive to acquire new entrants based on the value of synergies with their existing businesses, as well as the value of reducing the intensity and amount of competitive discipline and rivalry in the market.
10. Second, to support their claim that their segment is competitive, the wireless incumbents point to the growth of resale by MVNOs. This contradicts their comments, made in other contexts, to the effect that resale provides little discipline or potential for innovation. It is natural for the wireless incumbents to prefer resale of their networks by MVNOs over facilities-based competition. The wireless incumbents control the technological platforms on which the MVNOs operate, and with it, their services and ultimately, their pricing in the downstream retail market. In contrast to these MVNOs, new facilities-

based entrants with their own spectrum are in a position to truly challenge the wireless incumbents and to provide Canadians with lower prices and increased innovation.

11. The wireless incumbents' discussion of the structure of the mobile wireless industry omits the important fact that in many areas outside urban centres, Canadians have only one, and at most, two providers from which to choose. This is particularly the case in the provinces of British Columbia and Alberta. The following map, taken from the July 2006 CRTC Telecommunications Monitoring Report, illustrates the wireless facilities-based service providers' coverage by number of service providers.



12. As can be seen from this map, in Western Canada, consumers in the small-to-medium centres have access to only one facilities-based provider, or must choose between only two. This is not an industry structure that “maximizes” the use of the spectrum resource, let alone fosters vigorous competition.
13. As outlined in Shaw’s first round comments, the TPR clearly expressed a concern that Canada not be complacent regarding its lagging leadership position in the wireless and

broadband segments. It also clearly recommended measures, such as spectrum caps, to facilitate new entry, and supported tower sharing initiatives.<sup>3</sup>

14. Bell and TELUS have been strong supporters of steps taken by the Government to implement the recommendations of the TPR's report. At the time of the report's release, Bell Canada issued the following statement:

“This is a landmark report that will ignite a key driver of Canada's economy. The panel has acknowledged the rapid change taking place in the telecommunications and ICT sectors and set out a comprehensive framework for Canada to not only catch-up with our major competitors but move ahead. Just as important is their recognition of the urgent need to allow market forces to prevail in order to ensure Canadian consumers and businesses receive the full benefits of competition and innovation.

The Government of Canada now has a detailed blueprint for change and a method and timetable for action. This panel has done cutting-edge work. Their report positions Canada well to take a world-leading role in this dynamic and critical sector of the economy. It is in the interests of all Canadians that the government acts quickly and decisively on the report's recommendations.”<sup>4</sup>

15. The TPR recommended measures to improve the vibrancy and competitiveness of this segment, and there are obvious public welfare benefits to doing so. The point the TPR made emphatically is that Canadian consumers and the industry will suffer if we remain complacent. Yet in their first round submissions, the CWTA, Bell, TELUS and Rogers seek to challenge the underpinnings of the TRP's finding that Canada's mobile wireless industry lags behind its major trading partners.<sup>5</sup>
16. With regard to the TRP's recommendation that regulatory measures be taken to facilitate new entry, there was a total absence of discussion of this recommendation in the wireless incumbents' first round comments, excluding Telus' recent announcement as part of its

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<sup>3</sup> See, for example, recommendation 5-9: “continued use of regulatory mechanisms such as spectrum caps (aggregation limits) where spectrum is scarce in order to provide an opportunity for new entrants to acquire spectrum and for Canadians to have an expanded choice of service providers.”

<sup>4</sup> Bell Canada Statement re. Telecom Policy Report, March 22, 2006. Appearing before the Standing Committee on Industry, Science and Technology, Janet Yale, Executive Vice-President, Corporate Affairs of TELUS also supported the “holistic” implementation of the TPR's report and recommendations.<sup>4</sup>

<sup>5</sup> See CWTA comments, page 7.

bid for BCE; however, their recommendation that no measures be taken to facilitate new entry flatly contradicts a central recommendation of the panel.

17. Potential new entrants like Shaw, who are considering incurring the risk of entering the mobile wireless market at a relatively mature stage, have pointed to the inescapable fact that spectrum is an absolute barrier to facilities-based entry. Accordingly, spectrum – a public resource – should be employed in the public interest, to enhance competition in what is now the most significant and fastest growing segment of the Canadian telecommunications market. This, as detailed in the first round comments of Shaw and others, will entail the use of regulatory measures, including a spectrum set-aside and roaming and tower-sharing arrangements, necessary and appropriate to the goal of achieving greater facilities-based entry.

### **Measures to Facilitate New Entry**

18. In Shaw’s first round comments, in the absence of a competitive process we strongly supported a spectrum set-aside for new entrants as a measure to ensure spectrum actually gets into the hands of those who can provide increased facilities-based competition to the wireless incumbents. Predictably, the wireless incumbents argue that a set-aside is unnecessary, unjustified, or worse still, would encourage inefficient entry. These claims are contradicted both by theory and experience.
19. In Shaw’s submission, it is clear that an auction for the AWS spectrum, in the absence of a set-aside for new entrants, will likely lead to spectrum warehousing, and inefficient non-deployment of the AWS spectrum. In a recent study (the “Wilkie Study”) by Simon Wilkie, the Director of the Centre for Communications Law and Policy at the University of Southern California and a former Chief Economist at the FCC <sup>6</sup>, the author made a number of points that are directly relevant to the issues under consideration in the Consultation:

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<sup>6</sup> *Spectrum Auctions are not a Panacea: Theory and Evidence of Anti-competitive and Rent-seeking Behaviour in FCC Rulemakings and Auction Design*, by Simon Wilkie (March 26, 2007), available at [●](#).

- a. Firms with powerful incentives to delay or deter new entry find the means to do so through, among other things, competitive bidding in the auction process.<sup>7</sup>
- b. “This asymmetry between new entrants and incumbent players in the market for telecommunications raises important public policy issues with respect to spectrum policy.”<sup>8</sup>
- c. Where scarce spectrum is a key input to a firm’s production, incumbent carriers can effectively increase rivals’ costs by pushing up the price of the spectrum license at auction, increase the new entrants’ sunk entry investment and potentially affect the marginal costs of entrants by including higher capital costs or foreclose market entry altogether by acquiring the new available spectrum in order to prevent others from using it (i.e., “warehousing” the spectrum).<sup>9</sup>
- d. “In order to address potential anti-competitive behaviour and promote the most efficient use of the scarce resource, spectrum policymakers should incorporate mechanisms specifically designed to promote and nurture rapid entry into the market by potential new competitors.”<sup>10</sup>

20. The Wilkie Study includes empirical analysis that debunks the claims of the wireless incumbents that spectrum set-asides result in inefficient outcomes and fail to raise sufficient revenues for the public.

21. In determining the incentives of the wireless incumbents, it is important to examine the extent of their current spectrum holdings. Shaw notes that in its first round comments, Mobilexchange Ltd. filed a study by Lemay-Yates Associates Inc. entitled, “Canadian and US Mobile Spectrum Holdings.” This demonstrates that Bell and TELUS pre-AWS have similar amounts of spectrum per comparable market to Verizon and Sprint/Spectrum Co. post-AWS, and Rogers, with 75 or 85 MHz of spectrum pre-AWS, typically has more spectrum in these markets than AT&T post-AWS.<sup>11</sup> The only conclusion that can be drawn is that the wireless incumbents already enjoy sufficient spectrum – indeed, even if they were prevented from acquiring any AWS spectrum in the

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<sup>7</sup> Page 9.

<sup>8</sup> Page 49.

<sup>9</sup> Page 14.

<sup>10</sup>Page 10.

<sup>11</sup> Page 10.

upcoming auction – which is not Shaw’s proposal – these incumbents would still be in a position to carriers in similar markets in the U.S.<sup>12</sup>

22. Rogers recommended an asymmetrical obligation for new entrants to deploy their spectrum. Shaw would be prepared to accept a reasonable obligation to deploy, but clearly, any such obligation should be imposed on any successful bidder and not just on new entrants.
  
23. In its first round comments, Shaw highlighted its concern with the Department’s proposal for a requirement to make payment for the entire amount of the bid within 30 days of the auction’s close. In light of the obligation to deploy likely to be imposed on new entrants, Shaw believes that bid payment should be required on a staged basis, in a manner that facilitates, and does not discourage, both network build-out and customer acquisition. Specifically, Shaw is of the view that the payment obligation should be made expressly subject to the acquisition of subscribers by the entrant. In this regard, Shaw proposes that an entrant be required to make payments to Industry Canada quarterly, based on the incremental number of post-paid subscribers added by the entrant to the network during the previous quarter. Payments would be made in the amount of \$200 per such additional subscriber until such time as the total bid payment has been fully paid off. On the fifth anniversary of the auction’s close, any outstanding balance of the bid amount shall immediately be due and payable.

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<sup>12</sup> Shaw notes from the Wilkie Study that Clearwire (a company in which Bell has invested and with which it has partnered in the U.S.) articulated a concern regarding the ability of AT&T, as a result of its merger with Bell-South, to use the spectrum it had obtained to impede competition. In a petition to deny the merger, Clearwire laid out the holdings that AT&T would control if the merger were approved without conditions. These included “the largest wireline network”, “a nationwide PCS network”, an almost national footprint in the WCS (2.3 GHz band) (suitable for WiMax) and BellSouth’s licences and leases of 2.5 GHz spectrum. The Wilkie Study quotes Clearwire, as well as others, as raising the concern that AT&T/BellSouth had a clear incentive to warehouse mobile broadband spectrum, to prevent it from falling into the hands of competitors or cannibalizing its own services. This same concern is highly relevant in the context of the AWS auction, particularly given the ubiquitous wireline networks owned by the wireless incumbents, and the Rogers/Bell partnership in connection with the Inukshuk MCS spectrum.

## **Tower-sharing and Mandatory Roaming**

24. The wireless incumbents argue against mandatory roaming arrangements for new entrants, arguing that mandatory arrangements would provide an incentive to new entrants not to construct facilities; they also argued that commercial agreements are to be preferred over regulatory measures. In our first round comments, Shaw addressed the lack of incentive for the wireless incumbents to negotiate reasonable commercial arrangements for roaming with new entrants who have yet to construct their own networks. This was made clear by the difficulties experienced by Microcell, also noted in our first round comments. Shaw therefore recommended mandatory roaming arrangements should only apply for a limited period of time sufficient to permit a build-out of the new entrants' networks. In combination with condition of licence containing reasonable spectrum deployment obligations, such a temporary measure would clearly support, rather than undermine, network investment.
25. In its first round comments, Rogers supports tower sharing as providing an incentive for facilities construction and network expansion, by making important infrastructure available to new entrants. Rogers thus supports the Department's tower sharing initiative.

## **Conclusion**

26. The availability of additional spectrum in the 2 GHz frequency band represents a one-time opportunity to enhance the adoption of next-generation mobile wireless services by Canadians and Canadian businesses, regain Canada's leadership position in the mobile wireless industry, and increase the productivity of the Canadian economy. This opportunity would be best realized through the facilitation of entry into the market by new facilities-based carriers. If it is to be successful in attracting entry, the licensing framework established by the Department must embrace active measures to foster new entry and enhance competition.

27. Industry Canada must therefore take advantage of the present opportunity to further the government's policy objective of enhancing competition – and facilities-based competition in particular – and to increase reliance on market forces. In Shaw's view, the risk of further, irreversible concentration of the spectrum among the wireless incumbents far outweighs any risks associated with facilitating market entry by new competitors.
  
28. In light of these considerations, Shaw respectfully submits the Minister of Industry should exercise his licensing power in a manner that best serves the public interest. This can best be achieved by awarding the AWS spectrum through a competitive process, rather than an auction. If an auction is used, the process and criteria must be structured to the greatest extent possible, to meet the same policy objectives as a competitive process by setting aside 50 MHz of spectrum in the AWS band for new entrants and taking measures to mandate roaming and tower sharing. Only such a policy will ensure market forces can be successful in delivering tangible benefits to Canadians.