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

Comments

of

Cybersurf Corp.

25 May 2007
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Introduction

1. Cybersurf Corp. (“Cybersurf” or the “Company”) is pleased to provide these comments to Industry Canada (the “Department”) in accordance with Notice No. DGTP-002-07 – Consultation on a Framework to Auction Spectrum in the 2 GHz Range including Advanced Wireless Services, February 16, 2007 (“Notice” DGTP-002-07 or the “Notice”).

2. Cybersurf, directly and through a number of subsidiaries, is an independent provider of telecommunications services, including dial-up and high-speed Internet access services, long distance voice services and voice over IP (VoIP) local and long distance telephony services. None of these services are presently delivered by Cybersurf via wireless technologies at this point in time, but the Company is considering acquiring spectrum in order to provide its own range of wireless services, including Advanced Wireless Services. Accordingly, Cybersurf has a very significant interest in ensuring that the policy framework for the use of spectrum in Canada promotes a vigorous competitive environment for telecommunications services.

3. Based on its real world experiences, which involves being subjected to the market power of both independent local exchange carriers (ILECs) and the cable companies in the wireline environment, Cybersurf is providing a number of recommendations that it believes will create a more vigorous competitive environment in the delivery of wireless services, and telecommunications generally, in response to some of the questions posed in the Notice.
1. **Addressing the Potential for New Entry**

1.1 **General**

*In section 2.7 of the Notice, the Department seeks comments on whether there is a need for measures intended to enable market entry in the AWS spectrum auction.*

4. There is significant evidence that the presence of three independent network operators that compete at the retail level in the provision of wireless services is not sufficient to ensure that consumers and the Canadian economy as a whole derive the full benefits associated with competition in the provision of such services.

5. Mobile wireless services in Canada are typically offered in any given region by no more than three national incumbent mobile wireless service providers affiliated with wireline carriers (two of which are ILECs and one of which is a cable BDU/CLEC).\(^1\) Access to wireless networks is unregulated and is not readily available to those competitors that are perceived by the network operators to be a significant competitive threat to their retail operations. Cybersurf has first hand experience in that regard since requests for access made to mobile wireless network operators have been rejected.

6. Since the three national mobile wireless network operators do not facilitate access to their networks that would stimulate competition at the retail level to any significant degree, it would not be surprising to find that competition in the provision of mobile wireless services in Canada is not as evolved as it is in other countries where more network operators are present. That is precisely what the Telecommunications Policy Review Panel ("Panel") found to be the case.

7. In a comparison between Canada and the US, the Panel found that: (a) mobile wireless is lower in Canada; (b) Canadian usage of mobile wireless services is approximately 52 percent of the US usage; (c) Canada lags in the rollout of many new

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\(^1\) The entities usually providing mobile wireless services are Bell Mobility, which is owned by BCE Inc., Rogers Wireless/Microcell owned by Rogers, and Telus Mobility owned by Telus Corp.
wireless services and features; and (d) mobile wireless pricing is significantly higher in Canada than in the US. In attempting to explain these results the Panel concluded:

“The smaller number of mobile providers in Canada – and the fact that all three national wireless service providers are also owned by large telecommunications service providers that also provide wireline services – may mean that there is less competition in the Canadian market than in the U.S. market, which consequently has resulted in higher prices, less innovation, lower uptake and lower rates of usage.” (emphasis added)

8. Improving this situation requires creating conditions that will encourage economic entry by additional competitors. For that reason, Cybersurf believes that there is a need for measures intended to enable market entry in the AWS spectrum auction.

9. This view is further reinforced by the heightened role recently accorded by the Government of Canada to wireless services in creating a more competitive environment for the delivery of local telephony services to Canadians.

10. More specifically, at paragraph 2 of Order Varying Telecom Decision CRTC 2006-15 P.C. 2007-0532 (the “Local Forbearance Variance Order”), the Governor in Council varied paragraph 242 of Forbearance from the regulation of retail local exchange services, Telecom Decision CRTC 2006-15, 6 April 2006, in part to impose the following pre-condition for forbearance by the Canadian Radio-television and Telecommunications Commission (“CRTC”) from the regulation of local telephony services in a given relevant residential market:

“The Commission considers that, if an ILEC can satisfy the following criteria, then the requirements of section 34 of the Act for a forbearance determination will have been met and the Commission may therefore grant local forbearance in accordance with that section:

a. the ILEC demonstrates that one of the following circumstances exists in the relevant market:

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3 Id., at page 1-21.
that, if the ILEC offers residential local exchange services, there are, in addition to the ILEC, at least 2 independent facilities-based telecommunications service providers, including providers of mobile wireless services, each of which offers local exchange services in the market and is capable of serving at least 75% of the number of residential local exchange service lines that the ILEC is capable of serving, and at least one of which, in addition to the ILEC, is a facilities-based, fixed-line telecommunications service provider, or …” (emphasis added)

11. The benefits of this policy will be significantly enhanced if the providers of mobile services competing in local exchange markets are new entrants that are not affiliated with any of the existing incumbent local exchange carriers (“ILECs”) or with any cable carrier that is an affiliate of any incumbent mobile wireless service provider.

12. Another trend that is very important with respect to competition in telecommunications is the emphasis on the ability of service providers to bundle different types of services. In a proceeding commenced by the CRTC by way of Review of regulatory framework for wholesale services and definition of essential service, Telecom Public Notice CRTC 2006-14, 9 November 2006, Rogers Communications Inc. recently observed:

“Rogers considers its ability to bundle two or more of telephony, high-speed Internet, wireless and broadcasting services to be helpful in competing with the ILECs and other competitors. A significant segment of the market values the convenience of one-stop shopping and any discounts that may be associated with bundled services.”

13. Cogeco made the following similar submission in that proceeding:

“Bundling broadcast and telecom services for residential customers is one of many marketing strategies used by telecommunications service providers to reduce churn, gain market share and grow revenues. In this competitive

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4 Rogers(Cybersurf)12Apr07-6.
context, Cogeco considers that offering bundled services in addition to stand-alone cable, Internet and telephony services is an important marketing approach to remain competitive and meet consumer needs.”

14. Bell Aliant Regional Communications, Limited Partnership, Bell Canada, Saskatchewan Telecommunications and Télébec, Société en commandite provided the most compelling evidence of the significance of bundling in that proceeding:

“Both in the residential and business segments, customers are increasingly looking for complete multi-service solutions. The customer benefits of subscribing to a bundle include a simplified customer service relationship, an integrated bill for all communications services, potentially greater service interoperability than if the services are purchased from different suppliers, and typically, a price discount which recognizes the customer's volume purchase.

Not all residential customers will want to purchase all three or four services from a single supplier, but as recent evidence suggests, many will. Investment firm UBS estimated that 90% of households in Bell Canada's traditional territory of Ontario and Québec will subscribe to bundles by the end of 2008.

Bundling is also very important in the business segments. As was found in the Adventis study, large business customers seek solutions and, in that context, consider IT and telecommunications to be parts of the same purchase. At least 50% of large business customers buy networking and telecom products as part of larger, customized solutions.” (footnotes omitted)

15. The bottom line is that bundling is crucial, but the only facilities-based carriers that have the ability to bundle telephone, Internet access and video services on a widespread basis are the ILECs and cable carriers. The addition of mobile wireless services to a bundle requires the participation of one of the three national mobile wireless service providers and these entities in most cases only support the bundles offered by their own wireline affiliates. The introduction of new mobile wireless entrants that can provide such bundles of services on wireless AWS platforms would significantly enhance the otherwise duopolistic (and

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5 Cogeco(Cybersurf)12Apr07-6.
6 The Companies(Cybersurf)12Apr-07-6.
hence very limited) form of competition presently available with respect to the kinds of bundles of services just described.

16. For all of these reasons, Cybersurf believes that the case for measures intended to enable market entry in the AWS spectrum auction can easily be made on a balance of probabilities. Concerns regarding uneconomic entry should not serve as a deterrent to the introduction of such measures since the market will ultimately determine which carriers succeed and which fail. The failure of any individual new entrant would not prevent the spectrum acquired by that entrant from being passed to another entrant that can operate on an economic basis. The important consideration is to ensure that incumbent carriers are prevented from lessening or precluding competition by acquiring all or most of the spectrum available or bidding up the price to a point that artificially makes its actual use uneconomical by other successful bidders.

1.2 Spectrum Set-aside

*In section 2.7.1 of the Notice, the Department seeks comments on whether a certain amount of spectrum should be set aside for new entrants, including a precise description of those who should or should not be entitled to bid.*

17. For the reasons set out in section 1.1 of these Comments above, a certain amount of spectrum should be set aside for new entrants as means of ensuring that incumbent carriers, which have very significant financial resources, do not block the entry of new entrants by bidding-up the price of all of the spectrum being auctioned.

18. In particular, the three existing national mobile wireless carriers and all of their wireline affiliates should be prohibited from being allowed to bid on any spectrum that is set aside. For this purpose, Cybersurf defines an affiliate as a person who controls or is controlled by the mobile wireless carrier or who is controlled by a person who also controls the mobile wireless carrier. In all cases, control means control in any manner that results in control in fact, whether directly through the ownership of securities or indirectly through a trust, agreement or arrangement, the ownership of any body corporate or otherwise.
In section 2.7.1 of the Notice, the Department seeks comments on the amount of spectrum that could potentially be set aside, including whether a single block should be set aside or if the set-aside could be broken up into two or more blocks.

19. Cybersurf is of the view that two 15 MHz blocks, two 10 MHz blocks and two 5 MHz blocks of spectrum should be set aside for new entrants for AWS in the 1710-1755 MHz and 2110-2155 MHz frequency ranges, and that the paired blocks for PCS expansion should also be set aside for new entrants as well.

In section 2.7.1 of the Notice, the Department also seeks justification for proposals in this area that stipulate how such provisions would be in the public interest, with supporting evidence or rationale.

20. Cybersurf is proposing that these set-asides be reserved in recognition of the fact that the competitive telecommunications landscape would be greatly improved by the addition of two or three new entrants, and because the incumbent mobile wireless carriers together with their affiliates also have wireline means available for delivering advanced services that are not available to potential new wireless entrants.

21. The AWS set-asides should be reserved in matching sets of two blocks each to provide sufficient bandwidth for a broad range to AWS, while allowing distinct blocks to be used for receivers and base stations, respectively. It would be open to the incumbent mobile wireless carriers and their affiliates to compete in the auction for the remaining two 10 MHz blocks and two 5 MHz blocks.

22. A set-aside in the PCS expansion areas would provide the means for a new entrant to compete with the existing PCS network operators. The incumbent mobile wireless carriers employ an abundant amount of PCS spectrum.

23. The set-asides proposed would promote competition as described herein and this is desirable for the reasons set out in section 1.1 of these Comments. As such, implementation of this proposal is in the public interest.
In section 2.7.1 of the Notice, the Department seeks comments on the implementation of the set-aside post auction and the duration of any conditions of licence specific to the set-aside that may affect the licence such as divisibility and transferability.

24. In order for the licensing of spectrum allocated through set-asides to continue promoting the pro-competitive objectives of the set-aside policy, a condition of licence should exist that prevents the spectrum in question from falling into the hands of incumbent mobile wireless carriers or their affiliates, even in cases of the division and/or transfer of such spectrum.

25. In other words, in order to promote a pro-competitive policy that could be defeated or diminished if spectrum aggregation occurs over time after the completion of the auction, set-asides should continue for an indeterminate period. Additional consultation by the Department should take place before any set-asides are reduced or eliminated, should that ever be contemplated.

1.3 Spectrum Aggregation Limit on Auctioned Spectrum

In section 2.7.1 of the Notice, the Department seeks comments as to whether an auction spectrum aggregation limit should be placed on the amount of spectrum that can be acquired by a single wireless service provider and its affiliates. Such comments should include the amount of spectrum for the auction spectrum aggregation limit, to which bands it should apply and the duration.

26. Cybersurf agrees that a spectrum aggregation limit should apply, particularly in the case of the incumbent mobile wireless carriers and their affiliates. Such a limit would prevent the concentration of spectrum by any single entity.

27. No entity should be allowed to acquire more than either: (1) two 15 MHz AWS blocks; (2) two 10 MHz AWS blocks; or (3) two 5 MHz AWS blocks. Similarly, no entity should be allowed to acquire more than either: (1) two paired 5MHz PCS expansion service blocks; or (2) one 5MHz block in the 1670-1675 MHz range.
28. Cybersurf agrees that a two year period is too short a duration for an aggregation limit, given the time it takes network operators to build and expand networks and deploy services. In addition, in order to promote a pro-competitive policy that could be defeated or diminished if spectrum aggregation occurs over time after the completion of the auction, the spectrum aggregation limit should continue for an indeterminate period. Additional consultation by the Department should take place before any limits are reduced or eliminated, should that ever be contemplated.

2. Mandated Roaming

In section 3 of the Notice, the Department seeks comments on mandating incumbent mobile wireless operators to offer roaming services – to both competing and non-competing Canadian carriers – to foster the development of competitive wireless communications services. Comments are also invited on the extent to which the lack of mandated roaming could be a barrier into the wireless market. Comments are sought on what services should be included in any mandated roaming and to what specific frequency band(s) roaming should apply. Comments are sought on the mechanisms that would best implement the policy objectives regarding roaming.

29. Due to the competitive considerations set out in section 1.1 of these Comments, incumbent mobile wireless operators should offer roaming services to both competing and non-competing Canadian carriers.

30. The absence of a roaming requirement would place new entrants at a significant competitive disadvantage, particularly during the early stages of service delivery after the auction is held when entrant networks will still be small in size and so their geographic coverage will be limited.

31. In order to maximize competitive entry and expansion, roaming should be included for all services in all frequency bands. Mandated roaming becomes even more important if the set-asides recommended by Cybersurf are not reserved. In that scenario, mandated roaming will have a crucial role in fostering some degree of competition in the provision of AWS and greater competition in the provision of PCS.
Mandated roaming could be a license condition and compulsory roaming agreements could be the vehicle by which such arrangements would be given effect. Additional consultation by the Department should take place before mandated roaming is reduced or eliminated, should that ever be contemplated.

3. Technical Considerations

3.1 General

In sections 4.1.1, 4.2.2 and 4.2.3 of the Notice, the Department seeks comments on whether the band plans described therein should be adopted in Canada and whether: (1) in the case of AWS band plans the Department should allow TDD operation in the corresponding sub-bands if the meet certain conditions listed by the Department; (2) in the case of the band 1670-1675 MHz, technological neutrality related to duplexing should be adopted in Canada and; (3) in the case of the bands 1910-1915 MHz and 1990-1995 MHz, the standards for PCS should be applicable.

Cybersurf agrees with the band plans proposed by the Department. In the case of AWS band plans, the Department should allow TDD operation in the corresponding sub-bands if it meets the conditions listed by the Department. In the case of the band 1670-1675 MHz, technological neutrality related to duplexing should be adopted in Canada. In the case of the bands 1910-1915 MHz and 1990-1995 MHz, the standards for PCS should be applicable. The Department’s proposals provide considerable flexibility and versatility in the use of the spectrum to be auctioned.

3.2 Service Areas

In section 4.2.1 of the Notice, the Department seeks comments on its proposed tier sizes for AWS spectrum and on whether the block and tier sizes proposed will allow the entry of new carriers in the market.

Cybersurf supports the Department’s proposed tier sizes and believes that the block and tier sizes will allow the entry of new carriers in the market, provided the set-aside and spectrum aggregation limit proposals of Cybersurf are also adopted. Otherwise, the AWS
spectrum will end up in the hands of the incumbent carriers or unused, irrespective of block and tier configurations.

**In sections 4.2.2 and 4.2.3 of the Notice, the Department seeks comments on the proposal of Tier 2 service areas for PCS expansion spectrum and the 1670-1675 MHz band, respectively.**

35. Cybersurf concurs with the Department’s proposal of Tier 2 service areas for PCS expansion spectrum and for the 1670-1675 MHz band.

### 3.3 Co-channel/Adjacent Area Coordination and Adjacent Channel/Same Area Coordination

**In sections 4.3 and 4.4 of the Notice, the Department seeks comments on technical considerations for AWS systems in the applicable bands.**

36. Cybersurf has nothing to add to the discussion contained in those sections of the Notice at this time.

### 3.4 Sharing Issues with Other Services

**In section 4.5 of the Notice, the Department seeks comments on technical considerations for sharing AWS systems with other services in the applicable bands.**

37. Cybersurf has nothing to add to the discussion contained in this section of the Notice at this time.
4. Licensing Process

4.1 License Term, Renewal and Implementation Requirements

In section 5.3 of the Notice, the Department seeks comments on the licence term, implementation and renewals.

38. Cybersurf agrees with the ten-year licence term proposed by the Department. However, the Company is also of the view that an interim implementation requirement should also be imposed, in order to ensure that auctioned spectrum does not sit idle, thereby diminishing the competitive benefits and innovation associated with the licensing of that spectrum.

39. Cybersurf believes that an implementation review at the three year mark of the ten-year licence term is appropriate. By this point in time, licensees should have substantially implemented services supported by the licensed spectrum in the serving areas to which the licenses apply. Licensees should not be allowed to use spectrum as a speculative commodity and sit on it pending technological developments without putting it to productive use. Cybersurf has seen instances of this very kind of behaviour by holders of spectrum who are not using licensed spectrum, but will not presently allow it to be used by other parties under commercial terms either.

40. Cybersurf acknowledges that a variety of business plans and technologies may be employed in the licensed bands across markets of various sizes, leading to various deployment strategies. Therefore, the criteria for substantial implementation must be flexible. Accordingly, the Company proposes that implementation be based on the straightforward principle that the licensed spectrum is being used by the licensee in the geographic area to which the license applies so as to provide one or more wireless services accessible by at least 50 percent of the population of that area. If this test is not met, the licences in question should typically be revoked.

41. In order to keep the process associated with the implementation review as simple as possible, the means of determining compliance would be affidavits from two senior officers
of the entity in question. At the same time, the affidavits should be sufficiently detailed with regards to the services offered, population base reached, as well as numbers of subscribers, base stations and towers in a given market to ensure that the review is, in fact, meaningful.

42. Cybersurf considers the renewal expectancy provisions and process proposed by the Department to be appropriate. Requiring an application for renewal two years before licence expiry is also appropriate.

43. The means of determining compliance for the purpose of a renewal application should be an affidavit, as in the case of an implementation review.

44. Non-compliance with the provisions of the Radiocommunication Act, Radiocommunication Regulations or conditions of licence should typically lead to a revocation of the licence.

45. In circumstances in which compliance could be achieved quickly and with little effort following non-compliance which is not serious in nature, providing the licensee an opportunity for a short period of time to become compliant may be appropriate, whether the non-compliance comes to light during an implementation review, license renewal process or at any other time.

4.2 Conditions of Licence

_In section 5.4 of the Notice, the Department seeks comments on the proposed conditions for the AWS, PCS expansion and 1670-1675 MHz spectrum bands._

46. Cybersurf concurs with the licence conditions proposed by the Department. However, Cybersurf is also requesting that additional conditions be added to incorporate the Company’s submissions in these Comments with respect to set-asides, aggregation limits of auctioned spectrum and implementation reviews.
5. Financial Aspects of the Auction

In section 6.2 of the Notice, the Department is seeking comments with respect to the opening bids and pre-auction deposits for AWS licences.

47. Cybersurf concurs with the pre-auction process and formulas proposed by the Department. However, the Company finds the proposed opening bids excessive. These amounts may deter participation and ultimately entry by new competitors that would otherwise deliver many benefits to consumers and the Canadian economy as a whole. The setting of minimum opening bids is by definition an arbitrary process that is not grounded in sound economic policy. For these reasons, Cybersurf is of the view that there should be no minimum opening bids. While this may mean that the auction process is lengthier, the outcome will be more reflective of the real value that the market places on the auctioned spectrum and potential entrants will not be arbitrarily excluded from the auction process.

Conclusion

48. Cybersurf is pleased to provide these Comments in this consultation and looks forward to reviewing the policy articulated by the Department following this process.