



DATA & AUDIO-VISUAL  
ENTERPRISES

June 27, 2007

Leonard St-Aubin  
Director General  
Telecommunications Policy Branch  
Industry Canada  
300 Slater Street  
Ottawa, Ontario  
K1A 0C8

**Re: DGTP-002-07 – Consultation on a Framework to Auction Spectrum in the 2 GHz Range including Advanced Wireless Services – Comments in Reply**

Dear Mr.St-Aubin,

Please find enclosed our reply to submissions filed with respect to the consultation process regarding the framework to auction spectrum in the 2 GHz range.

Our submissions are in PDF format, Windows XP operating system.

Yours Sincerely,

DATA & AUDIO-VISUAL ENTERPRISES INC.

Encl.

**DATA & AUDIO-VISUAL ENTERPRISES INC (DAVE)**

**REPLY TO SUBMISSIONS FILED WITH RESPECT TO DGTP-002-07**

***CONSULTATION ON A FRAMEWORK TO AUCTION SPECTRUM IN THE 2GHz RANGE  
INCLUDING ADVANCED WIRELESS SERVICES***

## A) NEW ENTRANT

1. With respect to set asides for new entrants, many of the same studies and theories were put forth by those on both sides have very different interpretations. On the one hand, the 'Big 3' incumbents (Rogers, Bell and Telus) urged Industry Canada to rely on market forces alone and not to 'encourage uneconomic entry' [Rogers] of a new entrant. On the other hand, the majority of potential new entrants made the case that the current industry structure was such that the incumbents enjoyed market power and the barriers to entry were too high given the cost of acquiring spectrum in direct competition with Rogers, Bell and Telus, a network build out and no mandated roaming. By way of a new entrant, most respondents supported the common definition as 'one who does not operate, or does not have an affiliate that operates, a national wireless PCS/Cellular network that offers high mobility phone services'.
2. In their responses, the Big 3 claim the industry is competitive. In the past they may have been correct when there were up to 5 options for consumers to choose from, prior to the acquisition of Clearnet and Microcell. Now there are only 3 national carriers to choose from. It is clear that the wireless industry is moving toward increased consolidation rather than away from it. With increased consolidation comes increased market power amongst incumbents and decreased competition, precisely the combination of effects Industry Canada should seek to avoid. Should this status quo continue, the Canadian consumer will pay the price, both literally, through the continuance of high prices, and figuratively, through continued delayed rollout of advanced networks and services.
3. As part of their rationale against enabling market entry, Telus claims that a new entrant could 'acquire backing of U.S. carriers and private equity funds' [Telus] implying that private equity would provide limitless financial backing for any venture. In reality, private equity firms have strict due diligence processes that look for specific rates of return and payback periods. Given the current state of the industry, with a few entrenched incumbents with deep pockets, the high cost of a network build out with no mandated tower sharing, no mandated roaming to support new entrants during their network build out and the cost of building a new brand and acquiring customers, most private equity firms would not provide capital to fund a new entrant.
4. In their comments, Niagara Networks correctly predicted the end state of an auction that relied solely on market forces. The Big 3 would acquire all of the spectrum at prices well beyond the reach of any new entrant and each of the Big 3 would hold approximately 70MHz of spectrum. Rogers, Bell and Telus would cement their stranglehold on the industry since very little equivalent spectrum will become available in the foreseeable future. Even if some additional spectrum became available in the future, any new entrant at that time would be facing three incumbents with 70MHz of spectrum. No new entrant could compete against incumbents with such vast spectrum holdings. With 100MHz of prime spectrum available in the AWS auction, the Department must act now if it wishes to enable viable market entry.
5. The incumbents and select others would like Industry Canada to rely solely on 'market forces' for the upcoming auction with no spectrum set asides, aggregation limits, mandated roaming or tower sharing. For any one of the Big 3, considering their existing spectrum, an established national network and existing roaming agreements this position makes perfect sense. However, one has to wonder where the cries for reliance on 'market forces' were when spectrum was handed out using a "beauty contest", a 'no-head start'

policy was used to hold back the telephone companies enabling Rogers to build their first cellular network in 1983, and mandated roaming was instituted to allow new PCS carriers to build out their networks while still attracting customers.

6. There will always be claims of unfairness when spectrum allocation moves from comparative assessments to auctions. While DAVE supports the move to spectrum auctions, one cannot dismiss the current and future effects caused by comparative assessments of the past. There are 3 large incumbents that dominate the wireless market in Canada. These incumbents relied heavily on government assistance to build their businesses, the same government assistance that they are now trying to deny to any new entrants.

## **B) ENABLING MARKET ENTRY**

7. The Department highlighted two mechanisms that could be used to enable market entry, spectrum set asides and spectrum aggregation limits. The majority of potential new entrants supported a set aside, including ourselves. Incumbents and various special interest groups (who tend to support existing large entities such as the Big 3) such as the Montreal Economic Institute, Board of Trade of Metropolitan Montréal, Business Council of British Columbia, Ontario Chamber of Commerce, and Vancouver Board of Trade sought only to rely on market forces. A few potential new entrants supported an aggregation limit such as Sasktel, but on whole, a set aside was favoured by most respondents as the preferred mechanism to enable market entry.
8. When asked about the amount of spectrum that should be set aside, some respondents gave ranges, others gave minimums and others still gave maximums. When taken as a whole, the range of set asides requested spanned from approximately 20MHz to 60MHz. The majority of respondents fell in the upper end of this range, in the 50-60MHz area, along with ourselves at 60MHz. The rationale for setting aside 50 – 60 MHz was best articulated by Niagara Networks.

‘In 1995, Industry Canada demonstrated leadership and foresight by issuing two licenses to new entrants for 30 MHz of PCS spectrum. Both licenses were three times greater than the 10 MHz of PCS spectrum awarded to incumbents Rogers and Mobility. The incumbents had an aggregate spectrum holding of 35 MHz cellular/ PCS spectrum placing new entrants virtually on par in terms of spectrum holdings.’ [Niagara Networks]

9. At current levels, Rogers, Bell and Telus hold an average of ~56MHz of spectrum. Should 60MHz be set aside for new entrants, it goes to reason that the incumbent would acquire the remaining 40MHz (30 MHz of AWS & 10MHz of PCS expansion). This would bring their average holding post auction to ~70MHz. By setting aside 60MHz of spectrum for new entrants, the Department would replicate the success they had in the past with the viability of Clearnet and Microcell when they matched the amount of spectrum set aside to the average holdings of the incumbents.

### ***AWS Block Number, Block Sizes & Tiers***

10. The majority of respondents fell between 5 - 6 blocks of AWS spectrum. Those supporting 6 blocks largely rationalized their suggestion by feeling the need to harmonize

with the AWS band plan defined by the FCC. We support harmonization with the FCC and have no objection to realigning our proposed band plan to that utilized by the FCC. With 3 x 10+10MHz blocks and 3 x 5+5MHz blocks, the FCC band plan easily supports our recommendation of setting aside the 3 x 10+10MHz blocks for new entrants. The incumbents can bid on the 3 x 5+5MHz blocks of remaining AWS spectrum as well as the 5+5MHz block of PCS expansion spectrum available.

11. With respect to tier size, most comments suggested that lower tier sizes (ie. Tier 1 and Tier 2) would be most desired by the industry. We support this notion but feel that at least one, non-set aside block should be Tier 3 to allow incumbents to economically gap fill where necessary.

### **C) MANDATED ROAMING**

12. Perhaps not surprisingly, the Big 3 were against any form of mandated roaming. This position is logical as these carriers already have existing national networks or have existing roaming agreements signed amongst each other. In contrast, the majority of potential new entrants supported mandated roaming as a way to ensure the viability and competitiveness of any new entrant while they undertake their network build out.
13. Few commented explicitly on mechanisms that would best implement the policy objectives regarding roaming. Quebecor Media & Niagara Networks both suggested the use of arbitration as a potential recourse should negotiations fail to reach an agreement. DAVE supports the use of arbitration should negotiations fail to reach an agreement after a fixed and relatively short period of time. Without the backstop of arbitration, incumbents have every incentive to use stall tactics when negotiating roaming agreements with new entrants.
14. In their comments, the Big 3 suggested that mandated roaming would unfairly expose their networks to abuse by new entrants who would rather subject their customers or themselves to constant roaming charges instead of building out their own infrastructure. This argument appears intended to obscure the fact that network coverage is a major competitive advantage that incumbents will enjoy over new entrants for several years given the long network build out times. Mandated roaming will remove this competitive advantage and force the incumbents to compete on consumer friendly, and margin unfriendly, areas such as price and new technology. On a similar note, the proliferation of MVNOs indicates that the incumbents have plenty of excess network capacity.
15. Some, including ourselves, pointed to the success of mandated roaming in the past when existing cellular carriers were forced to provide roaming access to new PCS providers as digital networks were being built out. Perhaps a way to bridge the divide between incumbents and new entrants would be for the Department to mandate roaming, backed by arbitration, but only for a limited time until new entrants' networks are near completion. We suggest this timeframe should be between 3 – 5 years after the auction is complete and the licenses are awarded.

### **D) TOWER SHARING**

16. While the Department never explicitly requested comments concerning mandated tower sharing, many respondents felt it necessary to bring this important issue to the forefront. No one provided more compelling evidence of the need for mandated tower sharing than

Quebecor Media. The picture below, provided by Quebecor Media, clearly demonstrates the absurdity of the current situation. Redundant towers are built mere feet from each other simply because each incumbent uses tower space as a competitive advantage.



17. Not only is the lack of mandated tower sharing extremely cost prohibitive to new entrants, it is also an eye sore as unsightly and expensive telecommunication towers proliferate in urban and rural areas. Given the cost to erect a new tower and build a base station, one has to wonder if safety is being compromised in an effort to reduce costs. A few incumbents point to the US as evidence of the fact that mandated tower sharing is not required. This argument glosses over the fact that wireless providers in the US acquire the vast majority of their site locations from large, independent third parties such as American Tower, whose sole business is to provide safe, well equipped and consolidated telecommunication sites.
18. Should the Department feel that a new entrant would benefit the Canadian consumer through increased competition; mandated tower sharing is the third critical step in ensuring the viability of a new entrant when applied in combination with a spectrum set aside and mandated roaming.

## **E) AUCTION RULES**

### **License Term & Winning Bid Payment**

19. The industry was united with respect to license terms. The consensus reached was that longer terms, from 15 to 20 years were more appropriate than the 10 year term proposed. Longer license terms, with increased guarantees on renewals would give the winning bidders more confidence to continue to invest in upgrading technology over the entire license term.
20. With respect to payment of winning bids, Quebecor Media proposed the idea of amortizing winning bid payment over the license term. We support this idea as it aligns revenue collection by the Department with revenue collection by wireless carriers. It eases the upfront cash burden placed on winning bidders and allows more of the initial capital raised to go towards network build out and marketing.

## **License Divisibility and Transferability**

21. The majority of respondents differed from ourselves with respect to license divisibility and transferability. Most respondents felt there should be some form of restriction on spectrum acquired as part of a set aside. These restrictions were meant to prevent license flipping or auction profiteering. The suggestions on how to implement the restrictions varied from not allowing any division or transferability to division and transferability to other new entrants only. The most balanced view appeared to come from Quebecor Media's submission whereby set aside spectrum could not be transferred to existing incumbents for 5 years. While there was no clear consensus on how best to implement such restrictions, DAVE supports restrictions on divisibility and transferability of licenses to existing incumbents but only for a limited period of time. New entrants should be allowed to trade / sell set aside licenses amongst themselves immediately post auction.

## **Build Out Timelines & Auction Timing**

22. Some respondents felt the need for timelines or checkpoints to ensure that winning bidders, especially those benefiting from spectrum set asides begin to offer more choice to consumers as quickly as possible. We fully support realistic checkpoints to ensure that Canadians begin to benefit from increased service and choice shortly after the auction. To further increase the speed of new market entry, we echo the request of Quebecor Media and ask that the auction be scheduled as quickly as possible, preferably in early Q4 2007.

## **F) CONCLUSION**

23. We believe there is no greater time to enable new market entry through a viable competitor, and it is incumbent on the Department to consider the merits of taking such important steps to do so. Despite how the data is interpreted, there is no question that the Canadian wireless consumer is saddled with high prices, limited choice and antiquated technology. Should the Department agree with the majority of respondents that some form of minor intervention is required, it is important to create the appropriate environment for change. This suggests that the Department should address enabling new entry through spectrum set asides, mandated roaming and mandated tower sharing as a single issue. Only when these 3 issues are addressed will the viability of new entrants and increased choice for consumers be maximized.