January 14, 2009

VIA E-mail

Mr. Peter Hill,
Director, Spectrum Management Operations,
Industry Canada
300 Slater Street
Ottawa, Ontario  K1A 0C8

Re:  Canada Gazette, Part I, December 6, 2008; DGRB-004-08, Spectrum Utilization Policy and Consultation on a Framework to Auction Spectrum in the Bands 849-851 MHz and 894-896 MHz for Air-Ground Services

Dear Mr. Hill:

1. We represent Aircell LLC (“Aircell”), on whose behalf we are pleased to file these comments in response to the Department’s Spectrum Utilization Policy and Consultation on a Framework to Auction Spectrum in the Bands 849-851 MHz and 894-896 MHz for Air-Ground Services, DGRB-004-08 (the “Consultation Paper”).

2. As the licensee of the 3 MHz block of Air-to-Ground (“ATG”) spectrum and commercial provider of broadband services in the U.S., Aircell has an interest in the licensing of this spectrum in Canada.

3. The commercial airline industry operates seamlessly across the territories of Canada and the U.S., including across our shared border. As recognized by the Department in the Consultation Paper, the use of a regionally harmonized band plan in Canada and the U.S. has proven to be advantageous for airline travellers, permitting telephone calls over the North American continent. Similarly, and given the extent of cross border air traffic between Canada and the U.S., the seamless operation of Canadian and U.S. ATG networks capable of accommodating Internet access should be a priority of any government policy in this unique segment of the telecommunications market.
4. Aircell welcomes the Consultation Paper and supports the Departments determinations set out in Part A. Aircell believes it is critical that Canada now move quickly to establish a Canadian network to serve both domestic and cross-border demand. As the Department is aware, Aircell’s “Gogo®”-branded broadband service has already been successfully launched in the U.S. on the flights of a number of commercial air carriers. Aircell has also entered into an agreement with Air Canada to test its service over U.S. airspace on a limited number of aircraft flying trans-border routes between Canada and the U.S. Canadian air carriers operate in an integrated North American market and must be in a position to offer services, including telecommunications services, comparable to U.S. airlines.

5. In response to the Department’s call for comments, therefore, Aircell will focus on issues that will affect the ability of a licensee to establish a Canadian network in an efficient and timely manner and help to ensure that effective service will be made available quickly and efficiently to airline passengers in Canadian airspace. In our view, the most critical factors in ensuring the establishment of a Canadian network are the use of a multiple round auction, with a requirement to build out the network to serve Canadian territory, and full transparency regarding the identity of qualified bidders. Each of these measures will help ensure that the successful bidder is one who acquires the spectrum with the full intention to deploy a Canadian ATG network to serve Canadian demand at the earliest opportunity.

6. In the order raised by the Consultation Paper, the issues addressed by Aircell are:

a. **Conditions of Licence**: Imposing a roll-out requirement on any licensee;

b. **Licensing Process**: Employing a transparent, multiple round auction process – i.e., the Department’s Simultaneous Multiple Round Ascending auction design; and

c. **Auction Rules**: Making public the names of the qualified bidders prior to the auction and conducting the auction at the earliest opportunity.
Conditions of Licence

7. In the Consultation Paper the Department does not propose any roll-out requirement on licensees. Aircell believes that such a roll-out requirement can ensure that the spectrum is acquired at auction by a licensee with the full intention to deploy the network to serve Canadians, rather than to speculate on the value of such spectrum, either for its deployment at some future point in time or to prevent its use in competition with other technologies. Aircell notes that Industry Canada has imposed roll-out requirements on licensees for other spectrum, and also that the FCC, in licensing this same ATG spectrum, imposed roll-out requirements on successful bidders, including Aircell. Since the objective of licensing should be the provision of service to Canadians within a reasonable time, Aircell therefore proposes that the Department impose a roll-out requirement.

8. Given the unique nature of this service, Aircell proposes that this roll-out requirement stipulate that within 2 years of the licence being issued, the licensee must provide substantial coverage to Canadian airspace. The licence condition should provide further that this requirement will be met where the licensee either: (a) provides service to the airspace of five (5) of the ten (10) busiest airports in Canada (as measured by passenger traffic), or (b) provides service from at least six (6) cell sites in Canada.

Licensing Process

9. The Department seeks comments on the use of a sealed-bid, second-price (“Vickrey”) auction, a new, untested auction design for Canadian spectrum auctions. As noted in the Consultation Paper, in past auctions, Industry Canada has employed the Simultaneous Multiple Round Ascending (“SMRA”) auction design, carried on over the Internet. Aircell strongly believes that the use of the SMRA auction design will better serve the public interest in this instance, and accordingly, that Industry Canada should not depart from its past practice.
10. As discussed above, the ATG service is a reality today in the U.S., and the timely roll-out of a Canadian network to ensure both that domestic demand is met and the operation of trans-border service is seamless should be a public interest priority in the licensing of this spectrum. In addition, the auction design should be carefully chosen to ensure the greatest transparency possible, in order to make the auction accessible to, and encourage greater participation from, all potential bidders, including small and medium sized enterprises in Canada. Aircell believes that although the new Vickrey auction design proposed by the Department superficially appears to fulfill the interest in a simple and efficient process, in reality an Internet-based SMRA auction – with a proven track record for successful spectrum license auctions in Canada – will be superior in meeting the broader public interest objectives at stake.

11. In its *Framework for Spectrum Auctions in Canada*, Industry Canada stated the following regarding auction design and rules:

> The Department’s objective is to design a transparent, fair process that will award spectrum licences to those who value them the most. To meet these objectives the Department has selected the simultaneous ascending auction as its general auction design, and has used the multiple round version to conduct its spectrum auctions.

12. Aircell believes that together with other proposals made in these comments (including a roll-out requirement), the use of a SMRA auction design will be more likely to award the licence or licences to those who value them the most, as well as to ensure a transparent, fair process, than will a Vickrey auction.

13. The use of a multiple round auction will be more likely to award the licence to the bidder who values it the most because it will permit bidders, after each round, to assess the standing high bid and determine whether it will be necessary to bid a higher amount in the next round of the auction in order to be successful. This is the conclusion reached by the FCC in the United States, which, based on its experience with SMRA auctions, has explained that:

> The multiple-round auction’s main advantages are that it provides information to bidders regarding the value other bidders place on licenses and allows them to act
on that information. This information increases the likelihood that licenses will be assigned to bidders that value them most highly, because bidders do not have to guess about the value that the second highest bidder places on the license, as they do in a single-round auction. In a single-round auction, bidders who bid incorrectly could fail to obtain the license even though their actual valuation is the highest.¹

14. This information feedback is especially important for the ATG auction because the spectrum is being auctioned for a new service. Because there has never been an auction of comparable spectrum in Canada, placing a fair-market value on the spectrum becomes difficult.² In a SMRA auction, bidders who are unsure of the appropriate market value of the spectrum may gain confidence and comfort in increasing their bids as they see other bidders doing the same. Thus, a SMRA design has the potential to increase the amount of revenue obtained for the Canadian public, as bidders will be inclined to continue to bid incrementally more as they see evidence that a market exists for the license at a given price.

15. The Department has itself recognized that a major benefit of a multiple round auction is one of transparency. In a sealed-bid environment, a potential licensee with relatively less auction participation expertise may be reluctant to submit its “best offer” given the lack of feedback. By contrast, a multiple round auction is very transparent, and in fact resembles the auction design employed by eBay, the dynamics of which are well understood by a much broader segment of the business community than Vickrey auctions. This greater transparency and familiarity in turn will promote broader

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¹ *FCC Report to Congress on Spectrum Auctions*, WT Docket No. 97-150, Report, FCC 97-3543 (rel Oct. 9, 1997) p.14. The Report also noted that “[M]ultiple-round auctions have the additional advantage of enhancing the credibility of the auction process. That is, the result is more likely to be perceived as open and fair.” *Id.* See also *Auction of FM Broadcast Construction Permits Scheduled for January 10, 2007*, Public Notice, 21 FCC Rcd 11144 (2006), ¶ 100 (“In addition to the informational and bidding flexibility advantages, simultaneous multiple round auctions engender vigorous competition and are more likely to place construction permits in the hands of the bidder with the highest valuation.”).

² Because of the differences between the U.S. and Canada, it is difficult to extrapolate fair market values for the Canadian spectrum simply based on prices paid at the FCC’s 2006 ATG auction. Moreover, the prices paid in 2006 are no longer an accurate indicator of the current market value of the spectrum, even in the United States.
participation in the auction, potentially by small and medium sized businesses. This is highly desirable in the circumstances of the ATG market.

16. Given a condition of licence requiring a licensee to build out the Canadian network within a reasonably short period of time, a multiple round auction will ensure that the price paid at auction for spectrum will be an efficient price that will maximize the value of the spectrum while at the same time permitting a business plan to be implemented and to be successful. By contrast, a sealed-bid Vickrey auction increases the possibility of either inefficient entry, or the potential for the prospective licensee which values the licence the most to be unsuccessful. For example, the “second-highest bid” aspect of the Vickrey auction may encourage a highly-motivated bidder to significantly overbid for a license given that it knows it will not be paying that amount, but rather some lesser amount. However, if the second-highest bidder also follows that strategy, the winning bidder will still end up paying more for the license than its true valuation, which could detrimentally impact the winning bidder’s ability to obtain adequate financing to construct its network and launch service. On the flip side, if the second-highest bidder is a very cautious bidder (again, due to the lack of pricing information), the winning bidder will obtain the license at an amount below its true valuation, thereby providing the winner with a windfall and depriving the Canadian public of revenue. Moreover, the second-highest bidder might actually be the bidder who values the license the most, but because of its more cautious nature in the face of an information deficit, it could fail to obtain the license.

17. The Department has stated its belief that interest in the ATG market will be limited in scope and size, relative to the United States. It does not follow from this belief that a Vickrey auction is preferable to a SMRA auction, however. To begin with, Aircell cautions that the level of interest in the ATG market cannot be accurately gauged from

3 As already noted above, the FCC’s auction experience has led it to conclude that “in a single-round auction, bidders who bid incorrectly could fail to obtain the license even though their actual valuation is the highest.” See supra, ¶ 13.

4 Consultation Paper, page 3.
the number of parties who might respond to a consultation such as the present one, let alone from interest in the Department’s initial consultation process, that was initiated more than two years ago. In this regard, Aircell notes that the number of parties who commented on the licensing process in the U.S. greatly belied the interest eventually demonstrated in the spectrum, as revealed by the far greater number of actual participants in the FCC’s auction. Moreover, as noted above, Aircell’s ATG service is being introduced by commercial airlines in the U.S. at this time. One can expect that as passengers become aware, and take advantage, of the service, acceptance of the viability of inflight broadband service will increase, and with it, the demand for spectrum. For the reasons set out above, in a situation where there are indeed multiple bidders for the spectrum, a SMRA auction design will likely yield higher revenues. Accordingly, Aircell does not believe that the Vickrey auction design is likely to maximize the value of this spectrum should the assumption regarding limited interest in the ATG market prove to be incorrect.

18. Finally, use of a Vickrey auction could increase speculation in the licenses. If a speculative bidder knows that it will only pay the amount that the second-highest bidder would have been willing to pay, it may feel more confident that it would be able to resell the license for at least that price in the future. Taken together, the risks of an inefficient allocation of spectrum resulting from the informational deficiencies inherent in a Vickrey auction cannot be outweighed by the minor advantages gained in administrative simplicity and speed.

19. In the Consultation Paper, the Department points out that the SMRA is an “excellent tool when there are a large number of licences”, and there are only two spectrum licences being offered in this case. Nevertheless, there are likely to be significant synergies and price interdependence between the two licenses being offered. In this circumstance, a SMRA is typically the preferred auction method, because of its informational advantages
over sealed-bid auctions, which provide bidders with more flexibility to pursue back-up strategies or alternative business plans.\(^5\)

20. The Department also points out that package bidding (\emph{i.e.,} bidding for the 3 MHz and 1 MHz blocks together) is not supported by the Department’s SMRA design. In light of the public interest advantages of a SMRA auction, however, Aircell encourages the Department to consider options for upgrading the Department’s current SMRA design.\(^6\)

Given that there are only two licenses, calculating the provisionally winning bids between bidding rounds with a package option should not be difficult, even if performed manually. If the Department nevertheless determines that these simple calculations are not feasible, it would be preferable to forego the package bidding option, as the risks associated with a Vickrey auction outweigh any advantage that could be obtained through package bidding.

21. In sum, Aircell proposes that the two blocks of ATG spectrum be auctioned using the Department’s tried and true SMRA auction design, modified, as the Department sees fit, to accommodate package bidding. This licensing process will promote maximum transparency and broadest participation, thereby ensuring that the spectrum will in fact be awarded to the potential licensee that places the highest value on the licence and will implement a business plan to efficiently deploy the spectrum on a timely basis to serve Canadians.

\(^5\) \textit{Revision Of Part 22 And Part 90 Of The Commission’s Rules To Facilitate Future Development Of Paging Systems;} Second Report and Order, 12 FCC Rcd 2732 (1997) at ¶ 92 (In cases where there is license interdependence, “simultaneous multiple round bidding generates more information about license values during the course of the auction and provides bidders with more flexibility to pursue back-up strategies than if the licenses were auctioned separately or through sealed bidding.”); G. Anandalingam, “On the Use of Vickrey Auctions for Spectrum Allocation in Developing Countries,” Robert H. Smith School of Business, University of Maryland (2001), p. 9 (explaining that SMRA auctions are better for “allowing bidders to bid on combinations of licenses that will form synergies”); cf \textit{Closed Auction of Licenses for Cellular Unserved Service Areas Scheduled for December 4, 2002,} Public Notice, 17 FCC Rcd 17102 (2002) (finding that a single sealed bid auction method was appropriate because “there are no synergies among the licenses being offered. Accordingly, bidders do not need the information afforded by a simultaneous multiple round auction to consider valuations, alternative business plans or backup strategies.”).

\(^6\) The Department has recognized the need to modify its auction design where necessary: see \textit{Frequently Asked Questions: Industry Canada’s Auction of Spectrum in the 2300 MHz and 3500 MHz Frequency Bands.}
Auction Rules

22. Assuming the Department implements a SMRA auction design, then necessary revisions will have to be made to the Auction Rules set out in the Consultation Paper to support such a design. The Department has specifically asked for comments as to whether the names of qualified the qualified bidders and/or the deposit amounts should be made public prior to the submission of bids. In Aircell’s view, regardless of the auction design employed by the Department, this information should be made public. The absence of this information will only lead to speculation regarding the value of the licences and the potential narrowing of potential participants. In particular, smaller businesses benefit from knowing in advance of the auction who the competing bidders will be, as such information may be helpful in raising the capital needed for a successful bid. For example, if investors see that a major company plans to bid for the spectrum, they may be inclined to invest more money in the effort to obtain the license. This information is critical to maximizing the transparency and efficiency of the auction process, and is mandatory to ensure the spectrum will be awarded to the potential licensee that places the highest value on the licence and will implement a business plan to efficiently deploy the spectrum on a timely basis to serve Canadians.

Miscellaneous

23. While not specifically raised for comment, Aircell notes that TRC-81, Technical Requirements for an Air-Ground Public Telephone Service in the Bands 849-851/894-896 MHz is referenced in the Consultation Paper. In Aircell’s view, this circular will have to be amended to reflect the new spectrum utilization policy and use of this band.
24. Aircell appreciates the opportunity to comment on the Consultation Paper and looks forward to the Department’s early determination and implementation of its framework to auction spectrum in this band.

Yours very truly,

GOODMANS LLP
Per:

Michael Koch

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