



15 June 2009

Director, Spectrum Management Operations
Radiocommunications and Broadcasting Regulatory Branch
Industry Canada
300 Slater Street
Ottawa, Ontario
Canada K1A 0C8

Dear Sir or Madam:

Re *Canada Gazette Notice DGRB-001-09 – Consultation on Revisions to the Framework for Spectrum Auctions in Canada, April 2009 (the “Notice”)*

Ciel Satellite Limited Partnership (“Ciel”), as a licensed Canadian satellite operator, is pleased to provide the following comments in connection with Industry Canada’s *Consultation on Revisions to the Framework for Spectrum Auctions in Canada*. (DGRB-001-09) (the “Notice”).

The Notice seeks input and commentary in three main areas:

- the use of auction types other than simultaneous multiple-round ascending;
- the use of auctions as a means of awarding satellite licences; and
- the renewal of long-term spectrum licences.

Ciel is strongly opposed to the use of any type of auction as a means of awarding satellite licences, for the reasons set out in detail in this submission, and we have therefore not addressed the use of alternate auction types. On the matter of the renewal of long-term spectrum licences and fees, Ciel understands that Industry Canada will conduct a separate review of the radio licence fee regime applicable to satellite operations. Ciel will provide

comments concerning fees and licence renewals within the context of that proceeding, but for present purposes we note that Ciel believes that satellite spectrum fees should be limited to the recovery of direct administrative and regulatory costs. Ciel believes that it is also appropriate and necessary to consider R&D investment requirements, and by extension, the public institution benefits provision, in the Department's upcoming proceeding on fees and renewals. Consequently, Ciel hereby requests that these matters be addressed in the upcoming proceeding.

In the course of carrying out its mandate, the Department has concluded that in certain circumstances auctions may best achieve the goal of efficiency in managing Canadian spectrum. In Ciel's view, those circumstances do not apply to the Canadian satellite industry. To the contrary, as Industry Canada has itself previously concluded,¹ we believe that auctions would not be an effective method of assigning satellite licences and would instead harm Canadian satellite operators and consumers alike. Auctions should not be used for licensing satellite resources for the following reasons:

1. Satellite services are inherently international in nature, and the higher cost of acquiring auctioned spectrum would place Canadian operators at a competitive disadvantage.
2. The number of parties likely to bid for a satellite licence in Canada is insufficient to achieve an economically efficient outcome in an auction process;
3. Auctions are not warranted where the supply of available spectrum is abundant;
4. An auction diverts financial resources from private sector investment in infrastructure; and

¹ See Industry Canada, *Framework for Spectrum Auctions*, August 1998, as well as the updated version of this document (Issue 2) dated October 2001, in which Industry Canada stated that: "Where satellite systems are global in nature or where a significant level of international coordination is required, it would not be practical for an individual country to use an auction as the assignment mechanism."

5. Auctions are likely to result in higher prices to consumers or users;

Each of these points is discussed in greater detail below.

- 1. Satellite services are inherently international in nature, and the higher cost of acquiring auctioned spectrum would place Canadian operators at a competitive disadvantage**

As the Department is aware, the satellite services market spans international boundaries. For example, both Canada and the United States permit foreign-licensed satellites to provide services in their markets (with the partial exception of DTH services). In today's market, Canadian satellite operators such as Ciel regularly compete with non-Canadian operators in both domestic and international markets.

Any material cost imposed on Canadian operators that non-Canadian operators do not have to bear would place Canadian-licensed entities at a serious competitive disadvantage. As noted below, many other administrations, including Canada's closest neighbour, the United States, have already considered and rejected the use of auctions as a means of assigning satellite spectrum. Ciel submits that adopting an auction approach in Canada would run counter to international practice and sound public policy. Furthermore, if Canadian satellite service operators are disadvantaged and cannot achieve the degree of market success that they would otherwise earn, the consequences would include the loss of Canadian jobs, tax revenue, research and development, and infrastructure investment that helps to form the platform for broader economic activity.

Auctions are a particularly ineffective means of assigning spectrum in the satellite context. Terrestrial services have well-defined domestic coverage and are within the full control and jurisdiction of the Canadian government. Satellite services and resources are inherently multinational and receive priority in accordance with the ITU Radio Regulations. If utilized, satellite auctions would result in essentially an auction of defeasible ITU priority rights or filings with a resulting indeterminate value, in contrast to the auction of discrete, more "exclusive" licences that can be issued in the terrestrial context.

2. The number of parties likely to bid for a satellite licence in Canada is insufficient to achieve an economically efficient outcome in an auction process

The Department commented in the Notice that “it would be inappropriate to assign satellite spectrum using an auction where there is unlikely to be significant competitive interest.” In considering the question of spectrum auctions for satellite licences, it is first necessary to determine whether the demand for Canadian satellite spectrum is characterized by “significant competitive interest.”

Only two parties participated fully in the Department’s last Call for Interest in Satellite Spectrum: Ciel and Telesat.² If Canada were to implement auctioning for satellite licensing, it is unlikely that additional prospective entrants will emerge who are qualified or interested in bidding for Canadian satellite licences. If anything, adoption of an auction process would deter potential applicants because Canada already permits foreign-licensed satellite operators to provide capacity in Canada, as noted by the Department in the Notice. Thus, for an operator interested in serving Canada, it would be more efficient and effective to obtain a satellite licence outside of Canada and avoid the uncertainty and expense of a Canadian licensing procedure that relied on auctions. The key question then becomes, does the existence of only two Canadian-licensed satellite service providers likely to consider participating in an auction constitute “significant competitive interest” in satellite spectrum? Ciel submits that it does not.

As noted by auction industry experts,³ “if there are a sufficiently large number of bidders, then any auction is approximately efficient.” But what is a “sufficiently large number”? There is no universally accepted definition of how many participants are required to produce an efficient outcome in an auction process. However, it is generally acknowledged that more participants are preferred to less. Moreover, a limited number of bidders cannot be expected to produce an outcome that maximizes economic surplus.

² The submissions of a third applicant, Canadian Satellite Radio, were dismissed by the Department as non-compliant.

³ Dasgupta and Masken, *Quarterly Journal of Economics*, “Efficient Auctions” May 2000.

In many respects, this question is similar to the issue of how many participants are needed to produce a workably competitive market. In the view of the Canadian Competition Bureau, a workably competitive market is much more likely to occur with many participants. The Bureau has stated that it will not challenge a merger “when the post-merger market share of the merged entity would be less than 35 per cent” or when “the post-merger market share accounted for by the four largest firms in the market (known as the four-firm concentration ratio or CR4) would be less than 65 per cent.”⁴ Assuming that both Ciel and Telesat were interested in bidding in a given auction for a Canadian satellite licence, if no other party participates then the CR2 (that is, the concentration ratio of the two – not four – largest firms) is 100%. By implication, an auction involving only two bidders would raise *prima facie* concerns for the Bureau regarding the likelihood of an optimal market outcome.

There are many other reasons why a limited participant pool would most likely fail to produce an optimal auction outcome, including: the lack of complete market information⁵, asymmetry of information between participants, financing constraints⁶, and timing and risk considerations⁷.

The vast majority of countries in the world do not use auctions to licence satellite systems. Notably, in the over thirty years in which the United States has licensed the operation of hundreds of commercial satellites, it has assigned only four satellite licences by auction. However, no auctions have occurred since the 2000 passage of U.S. legislation⁸ which greatly curtailed the FCC’s latitude to use auctions in satellite licensing. In the few cases

⁴ See <http://www.competitionbureau.gc.ca/eic/site/cb-bc.nsf/eng/01245.html#part2overview>.

⁵ That is, the larger the number of participants, the more likely that all relevant market information is incorporated into the bidding process, thereby leading to the most efficient outcome.

⁶ If bidders have asymmetric cash positions and independent private values, then auctions will be inefficient. Moreover, the addition of capital markets will still not ensure an efficient outcome. See http://papers.ssrn.com/sol3/papers.cfm?abstract_id=265150.

⁷ That is, with only two parties bidding and relatively high capital costs and a long lead time in bringing facilities to market, the degree of financial risk can be elevated to unacceptable levels such that spectrum which would otherwise be socially beneficial may not be utilized.

⁸ *Open-market Reorganization for the Betterment of International Telecommunications Act* (“ORBIT Act”), Pub. L. 106-180, 114 Stat. 48 (2000), as amended.

where the FCC has auctioned a satellite licence, a prospective licensee could predict with some certainty the “price” of its decision to participate in the licensing process, and could rationally determine whether to go forward with the design, construction and launch of its proposed satellite system.

However, given the international nature of satellite systems and the uncertainty highlighted in the Notice associated with the priority system for satellite spectrum under the ITU rules⁹, it would be impossible for any bidder to have a good *ex ante* understanding of the ultimate “costs” of any domestically allocated orbital location. As mentioned earlier, the degree of risk associated with an auction process could well deter bidders from utilizing otherwise useful spectrum.

3. Auctions are not warranted where the supply of available spectrum is abundant

As a consequence of the efforts and foresight of Canadian government spectrum managers, Canada has enjoyed (and will continue to enjoy for the foreseeable future) a relative abundance of satellite spectrum and ITU orbital filings available for domestic licensing. Auctions have the potential to create efficiency gains only under conditions where there is a scarcity of resources. Given this relative abundance of satellite spectrum and orbital resources (especially due to complete or near-complete frequency re-use at adjacent orbital locations in the FSS and BSS), there is no compelling efficiency reason to adopt auctions as a technique for satellite licensing.

We also note that ITU Bringing into Use (“BIU”) dates for satellite orbital locations and the implementation milestones included in Canadian Approvals in Principle for satellite networks provide a sufficient incentive to utilize spectrum promptly (where warranted by economic conditions) with or without the use of an auction process. Combined with the abundant supply and re-use of satellite spectrum, these deadlines provide an over-riding incentive to bring spectrum into use in a timely manner. The use of auctions would not in any way improve the timeliness with which spectrum is brought to market.

⁹ Notice at 6

4. An auction diverts financial resources from private sector investment in infrastructure

Financial resources that are consumed by the purchase price of spectrum are not available for capital investment. This concern is particularly acute in a period where the overall economy is shrinking and governments worldwide are committing substantial funds for the creation of infrastructure projects. The government goal of spurring a sluggish economy with incentives for infrastructure investment is squarely at odds with a policy designed to extract the maximum possible price from private sector builders of infrastructure.

5. Auctions are likely to result in higher prices to consumers or users

Suppliers must fully recover their costs over time, as well as make a reasonable rate of return on their investment, if they are to continue operations. To the extent that auctions raise costs for suppliers (such as satellite operators), those costs must eventually be recovered from consumers. The highest price that a given bidder is willing to pay is often a function of projected cost savings or other innovations that the bidder is hoping to achieve. While we acknowledge this theoretical possibility, it should be noted that the satellite operations market is a relatively small global market with quick and relatively costless transference of product and process innovations. Deep, cost-saving innovations are simply not available to one satellite operator versus another.

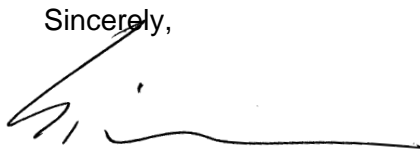
As a consequence, any price premium that is paid for satellite spectrum is likely to be reflected in higher consumer prices. Ultimately, customer and consumer prices are the only recovery option available to operators.

In conclusion, Ciel urges the Department not to adopt an auction approach for satellite licensing. The Canadian satellite market is not suitable for the use of an auction methodology. The use of auctions would place Canadian operators at an enormous competitive disadvantage domestically and internationally, and would put Canadian policy at odds with that of the majority of other space-faring nations, including the United States. There are too few likely participants to ensure an economically rational outcome of any auction process. The supply of Canadian satellite spectrum is relatively abundant and is used in a highly-efficient manner. The cost implications of an auction would divert revenue

from investment in Canadian infrastructure and would result in higher prices for users. The complexities of ITU priority and coordination introduce significant uncertainties to calculating the value of satellite resources. It is clear that Canada's satellite spectrum resource interests will be most actively advanced, and therefore defensible internationally, if the Department decides against using auctions to issue satellite licences.

All of which is respectfully submitted.

Sincerely,

A handwritten signature in black ink, appearing to read 'S. Gibson', with a long horizontal flourish extending to the right.

Scott Gibson

Vice President & General Counsel
Ciel Satellite Limited Partnership