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

Subject: Gazette Notice DGRB-001-09 -- Consultation on Revisions to the Framework for
Spectrum Auctions in Canada

Dear Sir or Madam:

The Satellite Industry Association (“SIA”)¹ hereby submits its comments in the above referenced proceeding (the “Consultation”) and expresses its support for the comments filed by the Canadian Satellite and Space Industries Forum (“CSSIF”) in this proceeding. SIA is a U.S. based trade association providing worldwide representation of the leading satellite operators, service providers, manufacturers, launch services providers, and ground equipment suppliers. SIA is the unified voice of the U.S. satellite industry on policy, regulatory, and legislative issues affecting the satellite industry.

¹ SIA Executive Members include: Arrowhead Global Solutions Inc.; Artel Inc.; The Boeing Company; DataPath, Inc.; The DIRECTV Group; Hughes Network Systems, LLC; ICO Global Communications; Integral Systems, Inc.; Intelsat, Ltd.; Iridium Satellite, LLC; Lockheed Martin Corp.; Loral Space & Communications Inc.; Northrop Grumman Corporation; SES Americom, Inc.; SkyTerra; and TerreStar Networks, Inc. Associate Members include: ATK Inc.; Comtech EF Data Corp.; DRS Technologies, Inc.; EchoStar Satellite, LLC; EMC, Inc.; Eutelsat Inc.; iDirect Government Technologies; Inmarsat Inc.; Marshall Communications Corp.; Panasonic Avionics Corporation; Spacecom Ltd.; Stratos Global Corp; SWE-DISH Space Corp; Telesat; ViaSat Inc.; and WildBlue Communications, Inc. Additional information about SIA can be found at <http://www.sia.org>.

SIA comments here on one of the issues raised in the Consultation: whether auctions should be used to award satellite licenses. SIA strongly opposes auctions as a means of granting satellite authorizations. Auctions are ill-suited to license inherently international satellite networks, and could place Canadian licensees at a disadvantage relative to other operators. Furthermore, auctions can artificially increase the costs to satellite operators to build and operate reliable satellite networks. These higher costs would then be passed on to customers, resulting in higher prices for end users.

Auctions are Inconsistent with the International Nature of Satellite Communications

Satellite networks are inherently international in scope and are subject to regulations of the International Telecommunication Union (“ITU”), in addition to the regulations imposed by their licensing administration. Use of the satellite spectrum must be coordinated with other satellite operators or Administrations in accordance with procedures contained in the ITU Radio Regulations. The coverage areas of satellites invariably extend beyond the borders of the nation that grants operating authority to the satellite operator, because the laws of physics make it impossible for satellite antennas to be designed without some incidental coverage of neighboring countries. Satellites can also be designed with broad coverage areas encompassing as much as a third of the Earth’s surface.

In this proceeding, Industry Canada (“IC”) seeks input on whether auctions are a proper mechanism to employ to award satellite authorizations. SIA notes that other leading space faring nations have concluded that auctions are not the appropriate mechanism to award satellite authorizations and have consciously decided against satellite auctions. For example, in the United States, legislation² specifically prohibits auctions of “orbital locations or spectrum used for the provision of international or global satellite services”.³ Recently, this view was reaffirmed by the United States Senate Committee on Commerce, Science and Transportation when it advised the U.S. Senate Budget Committee that: “because of the inherent international nature of satellite services, the auctioning of domestic satellite spectrum may lead to retribution by other nations.”⁴

SIA strongly agrees with the U.S. view that auctions are an inappropriate satellite licensing tool given the international nature of satellite systems. As the Consultation acknowledges, the ITU priority rules regarding spectrum rights at a satellite orbital position inject substantial uncertainty into the satellite licensing process, such that there is “no guarantee that Canada and the selected satellite operator would secure [spectrum]

² *The Orbit Act*, Pub L. 87-624, title VI, sec. 647, as added Pub. L. 106-180, sec 3, Mar. 17, 2000 114 Stat. 57.

³ *Id.*

⁴ Letter from United States Senate Committee on Commerce, Science, and Transportation to United States Senate Budget Committee, March 13, 2009.

access in the end.”⁵ A satellite license is worthless if the licensee ultimately is unable to use the spectrum involved because another operator’s ITU filing has date priority. Additional uncertainty results from the need to comply with domestic regulations of multiple countries if a satellite operator wants to gain market access across its coverage area. Using auctions in these circumstances would not be an effective licensing mechanism because it is so difficult for a prospective bidder to determine the value of the rights that would be obtained through the satellite license.

Auctions Could Reduce Competition in the Canadian Marketplace and Set a Harmful International Precedent

If Canada were to adopt auctions as a means of awarding satellite authorizations, it would be the first such decision by a leading nation with a major presence in space.

Such a decision could place Canadian-licensed satellite operators at a significant competitive disadvantage with respect to the many foreign satellite licensees authorized to serve Canada. Specifically, the foreign operators’ costs to provide service would be lower because they would not be inflated by the amounts paid in a licensing auction. Placing an auction requirement only on Canadian-licensed satellite operators would result in the Government of Canada effectively discriminating against its own businesses in favor of foreign competitors. If, in order to establish a semblance of parity, Canada were to then auction market access (“landing rights”),⁶ satellite operators licensed by other administrations might instead choose to terminate their satellite service in Canada to avoid the increased costs of market participation. This would result in reduced service availability, reduced competition in Canada, and potentially even higher end-user prices.

In addressing the question of auctioning satellite licenses, IC must also consider the potential international implications of its decision. Other nations that have rejected auctions have done so because of a concern that such a precedent would lead to the use of auctions in multiple countries for landing rights for foreign satellites. Such policies would create uncertainty about whether a satellite that was designed to provide coverage of a particular service area would in fact be able to provide service throughout that area, because the satellite operator would be required to win landing rights in multiple auctions throughout the coverage area. Success could be achieved only if the operator chose to pay the highest auction price in each jurisdiction. Even if the operator “succeeded” in these circumstances, the costs of paying the auction bids would ultimately be passed on to subscribers. A serious consequence of this regulatory uncertainty would be hesitancy by satellite operators to invest in new and innovative satellite networks. These results would be particularly damaging in countries, such as Canada, where satellites are a crucial link to vast, sparsely-populated areas.

⁵ Consultation at 6.

⁶ Auctioning market access makes even less sense than auctioning satellite authorizations, given the marketplace, different frequency use schemes, and orbital slot filing regulations at the international level.

Auctions Do Not Promote Spectrum Efficiency — Satellite Operators already Have Strong Economic Incentives to Utilize Spectrum Efficiently

Given the high cost of satellite infrastructure (to design, construct, launch, insure and operate a communications satellite⁷), the satellite industry has always had strong incentives to utilize spectrum efficiently. Over the years, it has developed products, services, and techniques to steadily increase the amount of information that a satellite channel can deliver, thereby maximizing spectral efficiency.⁸ Continued advances in satellite technology have enabled the satellite industry to provide greater overall capacity, achieve a higher level of frequency reuse and share spectrum more efficiently with other satellite networks. Investment in such ongoing technological improvements might be hampered should increased financial resources be diverted to paying auction fees for licenses and landing rights.

In SIA's opinion, satellite auctions should not be used as a revenue generator and should not be used as a substitute for good spectrum management policies. There is a danger that short-term revenue generating policies could affect the long-term technical and economic viability of existing and new satellite services. In the face of increasing spectrum usage and market access costs from multiple countries, consumers of satellite services would face higher prices, and ultimately, less choice among competing providers.

Recommendation for Award of Satellite Licenses

In its comments, CSSIF stated its view that award of satellite licenses by either comparative process or by auction is not appropriate. SIA supports this view.

The United States Federal Communications Commission ("FCC") addressed this same issue, and after public comment concluded that a modified First-Come-First-Served licensing process, similar in some respects to the procedures contained in the ITU Radio Regulations,⁹ is the most efficient and least time-consuming process to award satellite

⁷ Today these costs consistently approach US\$200 million, a sum which is most often borrowed by the satellite operator and repaid from satellite revenues after a satellite is successfully launched and placed into commercial service.

⁸ Examples of such developments include multiple access protocols, compression techniques, advanced modulation techniques, and advances in antenna technology.

⁹ The ITU is the international organization that, with the cooperation of its members, manages orbital spectrum resources. Access to most satellite spectrum is based on a first-come-first-served basis. The ITU receives satellite filings from administrations and based on procedures established by administration at World Radio Conferences ("WRCs") processes the filings and ensures that relevant deadlines are met including bringing into use a satellite within the agreed seven (7) year period from the first filing, in the case of the unplanned bands.

authorizations.¹⁰ SIA members have significant experience with the U.S. approach, which has considerably reduced average processing time for satellite applications.

The CSSIF proposes that a similar process be adopted in Canada. Satellite authorizations would be granted to the first applicant and suitable administrative measures would be implemented by IC to ensure award only to serious applicants with the intention to bring the spectrum in to use, and not to mere speculators.

Conclusion

SIA agrees with the CSSIF that auctions are inappropriate as a means of awarding satellite licenses for the following reasons:

- satellites are inherently international;
- auctioning of spectrum by a major space faring nation could set an undesirable and cost-ineffective precedent;
- auctioning of satellite spectrum by Industry Canada could disadvantage Canadian operators and lessen competition; and
- satellite license auctions would not promote spectrum efficiency.

Therefore, SIA urges Industry Canada not to adopt the concept of spectrum auctions as a mechanism to award satellite authorizations and to adopt the more effective and efficient means of granting satellite authorizations on a first-come-first-served basis.

Very truly yours,



Patricia Cooper
President

¹⁰ *In the Matter of Amendment of the Commission's Space Station Licensing Rules and Policies and Mitigation of Orbital Debris*, First Report and Order and Further Notice of Proposed Rulemaking in IB Docket No. 02-34, and First Report and Order in IB Docket No. 02-54, 18FCC Rcd 10760 (2003).