



May 23, 2012

Director General  
Engineering, Planning and Standards Branch  
Industry Canada  
19th Floor  
300 Slater Street  
Ottawa, Ontario  
K1A 0C8

Re: Consultation on the Licensing Framework for Fixed-Satellite Service (FSS) and  
Broadcasting-Satellite Service (BSS) in Canada, Canada Gazette, Part I, March  
2012 (SMSE-003-12)

Dear Director General,

As the trade association representing the satellite industry, the Satellite Industry Association ("SIA")<sup>1</sup> has a strong interest in satellite licensing policies that encourage evolving technologies and maximize spectrum efficiency. Satellites are the most efficient technology for providing communications services to large geographical and sparsely populated areas, including to end-users dispersed throughout entire countries, continents or large oceanic regions. Satellites operate in an inherently international environment, both from the perspective of their orbital position in space and their service coverage capabilities on the ground. In order to continue existing services and expand into new services, satellite operators must be able to rely on targeted spectrum policies that create a reasonable regulatory environment. Accordingly, domestic policies should facilitate, not impede, realization of the full potential of satellite capabilities.

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<sup>1</sup> 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. Since its creation more than fifteen years ago, SIA has become the unified voice of the U.S. satellite industry on policy, regulatory, and legislative issues affecting the satellite business.

SIA Executive Members include: Artel, Inc.; The Boeing Company; The DIRECTV Group; EchoStar Satellite Services LLC; Harris CapRock Communications; Hughes Network Systems, LLC; Intelsat, S.A.; Iridium Communications Inc.; Kratos Defense & Security Solutions; LightSquared; Lockheed Martin Corporation.; Northrop Grumman Corporation; Rockwell Collins Government Systems; SES S.A.; and Space Systems/Loral. SIA Associate Members include: ATK Inc.; Cisco; Cobham SATCOM Land Systems; Comtech EF Data Corp.; DRS Technologies, Inc.; Eutelsat, Inc.; GE Satellite; Globecom Systems, Inc.; Glowlink Communications Technology, Inc.; iDirect Government Technologies; Inmarsat, Inc.; Marshall Communications Corporation.; NewSat; Orbital Sciences Corporation; Panasonic Avionics Corporation; Spacecom, Ltd.; Spacenet Inc.; TeleCommunication Systems, Inc.; Telesat Canada; Ultisat, Inc.; ViaSat, Inc., and XTAR, LLC. Additional information about SIA can be found at [www.sia.org](http://www.sia.org).

We applaud Industry Canada for initiating efforts to update Canada's current licensing framework. Modification and relaxation of the Canadian regulations will encourage licensing of satellite operations in Canada, which will produce economic and social benefits in Canada and internationally.

SIA agrees with Industry Canada's position on the general impracticality of using auctions to assign satellite spectrum. Management practices commonly applied to terrestrial wireless services, such as auctions, are neither appropriate nor needed to achieve the goal of spectrum efficiency for satellite services. Concern about auctions could curtail the ability of satellite operators to raise the needed capital to construct, launch, and operate their systems, especially if auctions are a threat in multiple jurisdictions within the footprint of a planned satellite system. This in turn could threaten the viability of these satellite operators, which would work counter to Industry Canada's goal of maximizing spectrum efficiency and potentially deprive Canadian users of the public interest benefits of these systems. SIA supports the adoption of a first-come, first-served (FCFS) process to assign satellite spectrum at orbital positions for FSS and BSS, which will facilitate the timely and predictable assignment of satellite spectrum.

SIA also supports efforts to make the Canadian licensing fee structure less cumbersome. This streamlining will provide stability and predictability to Canada's licensing structure and will facilitate efficient satellite operations. However, while we understand the goals behind the Department's proposal that the annual fees be payable upon authorization of the individual geostationary satellite orbit (GSO) satellite or non-GSO (NGSO) system rather than at commencement of services, we oppose this aspect of the fee structure.

Reasonable financial and administrative measures can be designed to discourage the warehousing of spectrum. The issuance of spectrum licenses upon approval of applications provides security for satellite companies before they commence the capital-intensive process of acquiring satellites. Industry Canada's requirement that license fees be paid two to three years in advance of operations creates a disincentive to such investment, and does not serve the goal of maximizing economic and social benefits for Canadians. Satellite systems have extremely high up-front infrastructure costs, as the business of purchasing, launching, operating and insuring even a single satellite is highly capital intensive, and the operator does not receive any revenue until after the satellite is placed into commercial service. Requiring license fees years in advance of offsetting revenue does not incentivize investment by the satellite industry, which is of social and economic value to Canadians. An alternative approach that instead relies on reasonable financial and administrative measures can be designed to discourage the warehousing of spectrum.

Additionally, the adoption of a terrestrial spectrum license structure for satellite services is not appropriate in a satellite environment. While the Department's objective of reducing frivolous satellite applications is valid, the payment of fees during the time required to manufacture a satellite does not achieve the Department's goal of bringing spectrum into use sooner. The years required to design, launch, and operate the space and ground segments of satellite networks represent a significantly longer development time with higher up-front and fixed financial investment than terrestrial systems. The imposition of fees during this lengthy and financially challenging process does not accelerate either the speed at which a satellite can be built or the date at which the spectrum will be brought into use. Other approaches, such as reasonable milestone enforcement, provide sufficiently effective encouragement of timely spectrum use.

SIA supports Industry Canada's proposed adoption of a fee structure that encourages spectral efficiency and fairly compensates the Canadian public for the use of the resource. The Department's intention to consider market value, simplicity of fee administration, predictability of fees, and a technology-neutral approach to setting fees is commended. However, the contemplated fee structure does not reflect both the different commercial value of the bands and the priority given to satellite services within those bands, as suggested by the Department's proposal. Specifically, the proposed three-tier structure differentiates and inflates the cost of Ka-band usage, and does not accurately reflect the commercial value of Ka-band in relation to C-band and Ku-band. SIA supports a two-tier fee structure that differentiates between shared and non-shared primary allocations. The application of a two-tiered fee structure for spectrum utilized to serve Canada would achieve Industry Canada's goal of ensuring the availability of services in all areas of Canada, while accurately reflecting the commercial value and priority of services in the C-band, Ku-band, and Ka-band.

Finally, while SIA acknowledges that the proposed fees are a vast improvement over the status quo, they are still significantly higher than the fees in the United States and the United Kingdom. We understand that Industry Canada does not perceive a clear best practice to follow with respect to establishing fees, since no two administrations use the same licensing approach or share the same legal frameworks or policy objectives. However, given the significant initial capital commitment that satellite operators must make when purchasing new spacecraft, it would be appropriate to set the fees lower than proposed in order to be more aligned with other jurisdictions which utilize the first-come, first-served process.

In sum, SIA believes that the imposition of license fees upon approval, years before satellite operations, does not achieve the goals of timely and efficient use of spectrum, but instead creates disincentives to investment. We agree that a licensing regime which successfully balances the prevention of spectrum warehousing with the need for flexible pursuit of business opportunities is a worthwhile goal. We support the adoption of a first-come, first-served licensing process and modifications that improve the efficiency

of the Canadian licensing fee structure. However, we do not support a licensing structure which requires payment of fees immediately upon approval of a license. SIA encourages Industry Canada to explore alternative, more targeted approaches to increasing the efficient use of spectrum, such as reasonable milestone enforcement.

Respectfully submitted,

SATELLITE INDUSTRY ASSOCIATION

A handwritten signature in black ink, appearing to read "Patricia Cooper". The signature is written in a cursive, flowing style.

Patricia Cooper, President  
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