



BY E-MAIL TO wireless@ic.gc.ca

April 30, 2002

Michael Helm
Director General
Telecommunications Policy Branch
Industry Canada
200 Slater Street
Ottawa, Ontario
K1A 0C8

Dear Mr. Helm,

**Re: PanAmSat Comments on Canada Gazette Notice DGTP-001-02:
Consultation Paper on Revisions to the Spectrum Utilization
Policies in the 3-30 GHz Frequency Range**

These comments are filed by PanAmSat Corporation (“PanAmSat”), a Delaware Corporation headquartered in Wilton, Connecticut, U.S.A. PanAmSat operates a global network of over twenty commercial communications satellites. Using these satellites, PanAmSat has provided a wide variety of reliable satellite services for many years. PanAmSat’s satellites provide the means for commercial television and radio distribution, teleconferencing, video backhaul, high speed image transmission, and private data networks, among other services.

PanAmSat owns and operates a global fixed satellite service (“FSS”) system, a major portion of which is dedicated to providing service within the United States. Since the opening of the Canadian market on March 1, 2000, PanAmSat has devoted substantial efforts to understanding the Canadian marketplace for FSS and to positioning itself in order to provide a range of competitive services. PanAmSat has taken seriously Industry Canada’s wish to promote competition in this market.

The removal of Telesat Canada’s monopoly to provide FSS telecommunications services meant that other service providers can now provide these services within Canada and between Canada and the U.S. A procedure was established in Industry Canada document CPC-2-6-01 to approve the use of foreign FSS satellites and to maintain a list of approved satellites that licensees of earth stations could communicate with. Since the Canadian market was opened to foreign FSS satellites, a large number of such satellites have been approved including ten that are owned and operated by PanAmSat.

A prime rationale behind the liberalization of Canada’s FSS satellite policy was to introduce greater competition into the marketplace in order to provide greater access to the wide range of services that FSS satellites can provide. This policy rationale was well expressed in the following excerpt from the Department’s December, 1998 “Policy Framework for the Provision of Fixed Satellite Services” at page 3:

Canadians in all geographic regions of the country must be provided with access to a broad range of reliable, high quality telecommunications services. In this regard, Canadians should be able to benefit fully from all existing and planned fixed satellite systems. This policy framework has been developed for the guidance of potential providers of fixed satellite services to the Canadian domestic and international markets and to facilitate the orderly transition of these services to a market-based regime which is open and allows full participation and competition.

In PanAmSat's view, changes to certain regulatory provisions are urgently needed if the policy objective of full participation and competition in FSS is to be realized in the near term. PanAmSat has substantial capacity currently available on satellites that are on the list of approved FSS satellites that can operate on the relatively little-used 10.95 to 11.2 GHz downlink band. These facilities are ideal for providing high-speed Internet access *today* to virtually all Canadians in remote and rural areas, as well as in urban areas. However, regulatory restrictions that Canadian domestic footnote C16A has placed on this (and certain other) bands, restrict their use to areas outside urban areas and to large antennas, which is generally understood to mean at least four meters in diameter. Requiring antennas of this great size make offering services in this band commercially unrealistic in the less developed areas of the country. Given these restrictions, this particular band has essentially lain fallow for domestic FSS. We therefore welcome very much the Department's call for comments on the appropriateness of lifting these restrictions. Specifically, the Department has asked in question (i) on page 14:

whether to provide full flexibility for the deployment of fixed-satellite service earth stations in the band 10.7-11.7 GHz on a coordinated first-come-first-serve basis with the fixed service in order to stimulate the development of the available Canadian orbital positions and advance competition in satellite offerings or to retain the domestic footnote C16A for FSS in the band and extend its application to the entire band 10.7-11.7 GHz;

PanAmSat is very much in favour of full flexibility and removal of domestic footnote C16A, in particular for the downlink band 10.95-11.2 GHz. PanAmSat submits that this particular band would yield the most convenient and economical spectrum (together with an appropriate uplink band) to provide two-way high-speed Internet access. It would be convenient and economical for the following reasons. This frequency band, part of the extended Ku band, is allocated to FSS internationally. As a result, there exist inexpensive, off-the-shelf ground stations that are tuned to operate throughout the Ku band, including extended Ku. Also, and perhaps most importantly, this band is largely unused and could be made available for a much lower price per transponder than the highly-used and increasingly scarce, conventional Ku bands. These features would make it especially attractive to organizations like Indian bands which are

most often located in rural and remote areas, and which have a current and pressing need for affordable high-speed Internet connectivity. The service can be kept relatively inexpensive, however, only if smaller size VSAT antennas of no more than 90 cm can be used. The much larger antennas required under Canadian footnote C16A are costly to produce, costly to install, and unsightly for people living or working near them.

Furthermore, if the service is to pay its way, service providers utilizing satellite capacity must be able to access subscribers inside the more populous urban areas. PanAmSat is convinced that a certain critical mass of customers is necessary to keep prices low enough to make it affordable to the individual and organizational customers that would be targeted. And to maintain affordability, the customer base cannot be restricted solely to the smaller markets outside urban areas. In our submission, therefore, both the geographic and the antenna-size restrictions must be removed from domestic footnote C16A with respect to the band in question, if it is to contribute to the policy goals that FSS liberalization seeks to achieve.

We note from the description of the fixed service in section 4.2 of SP 3-30 GHz that the band 10.7-11.7 GHz is used by low, medium, and high capacity digital line-of-sight radio systems that typically deploy single and multi-loop point-to-point configurations. As these systems are authorized on a site-by-site and frequency-by-frequency basis, it would seem that co-ordination on a first-come, first-served basis would not be particularly difficult. Furthermore, as stated by the FSS community in the RABC response to SP 3-30 GHz, deployments by both services in this co-primary band would not be ubiquitous. This further supports our belief that co-ordination between the FS and the FSS in this band would be entirely manageable. While PanAmSat, like others in the FSS community would like to see domestic footnote C16A removed from the entire 10.7-11.45 GHz band, we would, if necessary, be prepared to see it removed only from the 10.95-11.2 GHz portion for the reasons expressed above.

We trust you will find these comments helpful. If you require any further information, or elaboration on the above, we would be pleased to provide it.

Yours sincerely,

Kalpak S. Gude
Vice President, Regulatory &
Government Affairs &
Associate General Counsel