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January 14, 2005

Director of Spectrum & Radio Services
Industry Canada
Room 1611A, 300 Slater Street
Ottawa, Ontario
K1A 0C8

Dear Sir:

**Re: Notice No. DGTP-008-04 – Revisions to Spectrum Utilization Policies
in the 3-30 GHz Frequency Range & Further Consultation**

In the above referenced Notice, published in the *Canada Gazette*, Part 1, dated October 1, 2004, the Department calls for comment on revisions to the spectrum utilization policies in certain bands in the frequency range 3-30 GHz, including revisions to the *Canadian Table of Frequency Allocations* adopted on a provisional basis (the “*provisional changes*”), as well as on further consultation proposals for policy revisions in certain bands in the frequency range 3-95 GHz (the “*further consultation issues*”). Telesat Canada provided its views to the Department on the *provisional changes* in its November 2, 2004 comments, and, with this letter, is pleased to submit its comments in response to the *further consultation issues* of direct relevance to the Company. More specifically, these comments will focus on proposals concerning conventional and extended C-band, license exempt applications in the 3650-3700 MHz band, and the licensing of new bands above 70 GHz.

C-band Issues

In the conventional C-band (3700-4200 MHz and 5925-6425 MHz), the Department has acknowledged the declining use of and requirement for these bands to support heavy route Fixed Service (“FS”). However, in the 5925-6425 MHz band, medium-capacity (“MC”) FS will be permitted throughout and low-capacity (“LC”) FS will be permitted in

up to 150 MHz within the band, with some incumbent users encouraged to relocate to this 150 MHz. These changes will have adverse implications for satellite.

In particular, while the continuing decline in the number of high-capacity (“HC”) microwave routes suggests a more favourable sharing environment for conventional C-band transmit earth stations over time, allowing LC and MC FS in the uplink band may increase the FS usage. The full impact of these changes can not be understood until the Department specifies what 150 MHz in the conventional C-band will be designated for LC FS use. Telesat requests that the Department specify as soon as possible the frequency range and channelization plan for the 150 MHz in which LC FS will be permitted, as this may have implications on Telesat’s traffic planning. Telesat suggests that the 150 MHz for LC FS use be allocated either at 5925-6075 MHz or 6275-6425 MHz in order to maximize overlap with satellite C-band guardbands. Telesat notes in this regard that the same channelization plan at C-band is used on virtually all FSS satellites on the Department’s Approved FSS Satellite List.

Telesat also notes that the Department is proposing a new domestic footnote C16X to give both FS and MS systems priority over FSS in the 5850-5925 MHz band, to read as follows:

“C16X In the band 5850-5925 MHz the use of the fixed and mobile services has priority over the use of the fixed-satellite service. The use of the fixed-satellite service in this band shall be limited to applications that pose minimal constraints on the deployment of fixed and mobile service systems. An example of such an application would be the use of a small number of large aperture earth stations, taking into account existing and potential service areas for ubiquitous deployment of fixed and mobile service systems.”

In view of the difficult sharing constraints in this band and the companion extended C-band downlink band, Telesat has no plans for usage at this time. However, in Telesat’s view the proposed wording of this footnote may cause confusion. Telesat suggests that the footnote be changed to read as follows:

“C16X In the band 5850-5925 MHz the use of the fixed and mobile services has priority over the use of the fixed-satellite service. The use of

the fixed-satellite service in this band shall be limited to applications that pose minimal constraints on the deployment of fixed and mobile service systems. The Department will consider applications for earth station licenses in this band on a case-by-case basis, taking into account existing and potential service areas for ubiquitous deployment of fixed and mobile service systems. An example of a permitted application would be the use of a small number of earth stations in locations unlikely to impact existing and potential FS and MS system deployment.”

The Department may wish to consider similar wording changes in footnotes C16D, C16E, C16F and C16G.

Licence Exempt Operation in the 3650 -3700 MHz Band

The Department seeks comment on opening the extended C-band (3650-3700 MHz) for licence-exempt applications.

As the Department is aware, licensed satellite, broadcast and FS interests have all expressed concerns about possible harmful interference caused by such devices to their systems or services, and consistently argued that the operation of such devices must be sufficiently constrained to remove this possibility both within the band and in adjacent bands. In light of the existing policy constraints on the use of the FSS in the extended C-band, Telesat has no plans at this time to operate in the 3650-3700 MHz band. However, Telesat is especially concerned that unlicensed devices not cause interference in the adjacent 3700-4200 band, and urges the Department to allow the operation of unlicensed devices in the 3650-3700 MHz band only under conditions where adequate protection is accorded FSS receivers in the adjacent 3700-4200 MHz band. Telesat submits that this may be achieved only if unlicensed devices designed for operation in the 3650-3700 MHz band are subject to stringent out-of-band (OOB) emission limits designed to protect adjacent licensed services. To ensure compliance, the Department should impose a type-approval process on any proposed unlicensed device. Telesat would be pleased to participate with the Department in a future consultation concerning suitable OOB emission masks that should apply.

Licensing of Additional Bands

In the *further consultation* the Department also seeks comment on a framework to license FS in the 71-76 GHz, 81-86 GHz and 92-95 GHz bands.

Telesat notes that provision 5.561 of the ITU *Radio Regulations* precludes harmful interference from the FS (and other terrestrial services) operating in the 74-76 GHz band into earth stations in the FSS and BSS operating in accordance with the results of a future planning conference. Since the outcome of such a conference is not predictable, Telesat suggests that the Department not license FS operations in the 74-76 GHz band.

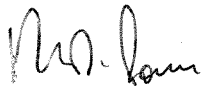
Telesat would offer two other related observations on this proposed licensing. First, the bands 71-76 GHz and 81-86 GHz are allocated internationally to FSS on a primary basis. As the Department is aware, harmonization of band allocations across countries can have significant long-term benefits particularly for smaller market economies like Canada. These benefits include possible larger markets for service suppliers and customer access to lower-cost and more feature-rich services or equipment principally developed in, or for, larger markets.

The second observation is that, even though use of these bands by the FSS may be some years away, extensive use by the FS could preclude these bands ever being available for satellite purposes. In situations such as these, it is incumbent on the Department to proceed cautiously in the licensing of these bands so to ensure that public benefits associated with the development of these bands across alternative technologies are maximized over the long term.

Accordingly, while Telesat does not oppose FS licensing in these bands (other than in the 74-76 GHz band as outlined above), future satellite use should be taken into account through licensing the FS at known geographic locations (i.e., non-ubiquitous licensing) to facilitate future coordination with satellite earth stations.

Telesat appreciates the opportunity to provide its comments to the Department on these important matters and would be pleased to offer further assistance.

Yours truly,

A handwritten signature in black ink, appearing to read "R. Power", written in a cursive style.

Robert Power
Director, Regulatory & Government Initiatives