

**Before the  
FEDERAL COMMUNICATIONS COMMISSION  
Washington, D.C. 20554**

In the Matter of )  
 )  
Establishment of an Interference Temperature )  
Metric to Quantify and Manage Interference and to ) ET Docket No. 03-237  
Expand Available Unlicensed Operation in certain )  
Fixed, Mobile and Satellite Frequency Bands )

**REPLY COMMENTS OF TELESAT CANADA**

Telesat Canada (“Telesat”) hereby submits the following Reply Comments to the Federal Communications Commission (“FCC” or “the Commission”) in the above captioned proceeding. Telesat is a Canadian-licensed satellite operator, and is keenly interested in this proceeding as any resulting policy determinations could have a direct bearing on Telesat’s present and future satellite operations across all of North America. In this regard, Telesat notes that it now has four Fixed Satellite Service (“FSS”) satellites, Anik E2, E2R, F1 and F2, on the FCC’s Permitted Space Station List, along with Commission approval to offer two-way broadband services at Ka-band in the U.S. using the Anik F2 satellite.<sup>1</sup> In addition, Telesat currently owns and operates two satellites in the Broadcasting-Satellite Service (“BSS”) band, which are used by a customer to provide Direct-to-Home and other services in Canada (similar to the Direct Broadcasting Satellite (“DBS”) services licensed by the FCC). Two U.S. service providers have also been authorized by the Commission to access these satellites for DBS in the United States.<sup>2</sup>

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<sup>1</sup> *Request to Eliminate Conditions on E1 and E2’s Inclusion on the Permitted Space Station List*, DA 01-2051 16 FCC Rcd 15979 (International Bureau, 2001) (Order); *Petition for Declaratory Ruling for Inclusion of Anik E2R on the Permitted Space Station List*, SAT-PDR-20030416-00068 (granted stamped June 3, 2003); *Anik F1 Permitted Space Station List Order*, DA 00-2835, (International Bureau, 2000); and *Anik F2 Permitted Space Station List and Ka-band Order*, DA 02-3490, (International Bureau, 2002).

<sup>2</sup> See Digital Broadband Applications Corp., Consolidated Application for Authority to Operate U.S. Earth Stations with a U.S.-Licensed Ku-Band FSS Satellite and Canadian-Licensed Nimiq and Nimiq 2 Satellites to Offer Integrated Two-Way Broadband Video and Data Service Throughout the United States (Call Sign E020010), *Order*, 18 FCC Rcd 9455 (2003); and Pegasus Development Corporation, Consolidated Applications for Authority to Operate one U.S. Transmit/Receive Fixed Earth Station (Call Sign E010320) and 1,000,000 Receive-Only Earth

As the Commission is aware, the interference temperature concepts being considered in this proceeding were initially developed as part of the Spectrum Policy Task Force's work. In this other forum, a variety of satellite companies, including Telesat,<sup>3</sup> expressed strong reservations over the potential use of these concepts in bands used for FSS and BSS. In the Comment round of this proceeding, several satellite companies (including, jointly, Globalstar, ICO Global Communications, Inmarsat Ventures, Intelsat Global Service, Lockheed Martin, Loral Space & Communications, New Skies Satellites, Northrop Grumman Space Technology, PanAmSat and SES Americom - collectively, the "Satellite Companies" – and, individually, the DIRECTV Group)<sup>4</sup> have raised similar objections and again forcefully shown that use of these concepts are impractical in the satellite context and would impair, not improve, spectral efficiency. Telesat's previously reported examination of the interference temperature approach led to similar conclusions, and thus Telesat fully supports the comments and strong opposition of the satellite companies to using such an approach in satellite service bands.

Telesat's experience also confirms the likelihood that disruptive interference and enforceability problems will result if this approach is adopted to accommodate new unlicensed services in FSS and DBS bands. For example, as noted by the Satellite Companies at IV B, unlicensed radar detectors provide a current example of the potential disruptive effect on licensed satellite services from unlicensed services. Telesat first noticed such interference in 1992, and although recently manufactured detectors are not an issue, interference from older models persists and remains impossible to control.

As noted by the Satellite Companies at V and the DIRECTV Group at C, the applicability of the interference temperature approach to satellite bands also cannot be treated as a domestic issue. Implementation of the rules would affect both U.S. licensed and non-U.S. licensed satellites, regardless of whether the satellites are designed and authorized to serve the U.S. market. As the

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Stations (Call Sign E020022) with the Canadian-Licensed Nimiq 1 and Nimiq 2 Satellites to Offer Direct Broadcast Satellite Service Throughout the United States, *Order*, March 31, 2004.

<sup>3</sup> See, for example, Comments of Telesat Canada re *Spectrum Task Force Seeks Comment on Issues Related to Commission's Spectrum Policies*, ET Docket No. 02-135, 8 July 2002, and Comments of Telesat Canada re *Commission Seeks Comment on Spectrum Policy Task Force Report*, ET Docket No. 02-135, 27 January 2003.

<sup>4</sup> See the Comments of Globalstar, L.P., ICO Global Communications, Inmarsat Ventures Ltd., Intelsat Global Services Corp., Lockheed Martin Corp., Loral Space & Communications Ltd., New Skies Satellites, Northrop

DIRECTV Group states: “To assume...that the U.S. and only the U.S. will roll out devices that need to be accounted for ...would appear to be rather presumptuous on the part of the U.S.” (at C page 19) Telesat agrees with this sentiment and believes that implementation of the interference temperature approach to satellite bands must first be the subject of multinational consultations.

Furthermore, as noted by the Satellite Companies at V, the Ku-band frequencies proposed by the Commission are subject to the ITU Allotment Plan, contained in Ap. 30B of the ITU *Radio Regulations*. As noted in Article 1 of Ap. 30B, “The objective of the procedures prescribed in this Appendix is to guarantee in practice, for all countries, equitable access to the geostationary orbit in the frequency bands of the fixed-satellite service covered by this Appendix.” Any unilateral action by the U.S. affecting the interference levels of networks licensed by other administrations would be incompatible with this objective.

Telesat therefore concurs with the Satellite Companies and the DIRECTV Group that many important unanswered issues remain with the interference temperature approach, and that as a consequence it would be premature for the Commission to proceed to use such an approach to guide policy decisions in satellite frequency bands.

Respectfully submitted,

TELESAT CANADA



Robert Power  
Director – Regulatory & Government Initiatives

May 5, 2004