

LAW OFFICES  
**GOLDBERG, GODLES, WIENER & WRIGHT LLP**  
1025 CONNECTICUT AVENUE, N.W., SUITE 1000  
WASHINGTON, D.C. 20036-2413

HENRY GOLDBERG  
JOSEPH A. GODLES  
JONATHAN L. WIENER  
DEVENDRA ("DAVE") KUMAR

HENRIETTA WRIGHT  
THOMAS G. GHERARDI, P.C.  
COUNSEL

THOMAS S. TYCZ\*  
SENIOR POLICY ADVISOR

\*NOT AN ATTORNEY

(202) 429-4900  
TELECOPIER:  
(202) 429-4912  
e-mail:  
general@g2w2.com  
website: www.g2w2.com

March 19, 2018

**FILED ELECTRONICALLY VIA ECFS**

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, SW  
Washington, DC 20554

Re: Ex Parte Meeting IB Docket No. 16-408

Dear Ms. Dortch:

This is to inform you that on March 15, 2018, the representatives of Telesat Canada ("Telesat") and WorldVu Satellites Limited, d/b/a OneWeb ("OneWeb") who are identified in Attachment 1 met with Will Adams, Legal Advisor to Commissioner Carr.

The Telesat and OneWeb representatives described the contributions their non-geostationary satellite orbit ("NGSO"), low earth orbit satellite systems will make to bridging the digital divide. These systems will provide high performance, affordably priced, low latency, fiber quality wireless broadband service. The systems will enhance competition in areas that already are served and connect Rural America and underserved communities in the United States, as well as rural and remote regions around the world, that presently lack broadband capabilities.

While the Telesat and OneWeb representatives generally applauded the Commission's new NGSO regulatory framework, they addressed the reasons that the spectrum sharing approach the Commission has taken in its Report and Order<sup>1</sup> is unworkable. As the Commission notes in the *NGSO Report & Order*, the  $\Delta T/T$

---

<sup>1</sup> *Update to Parts 2 and 25 Concerning Non-Geostationary, Fixed-Satellite Service Systems and Related Matters, Report & Order and Further Notice of Proposed Rulemaking, IB Docket 16-408, 32 FCC Rcd 7809 (2017) ("NGSO Report & Order").*

mechanism is similar to the “international *coordination trigger* between GSO FSS networks.”<sup>2</sup> Telesat and OneWeb explained that the  $\Delta T/T$  proposal that OneWeb made in the proceeding was intended only as a means of determining when NGSO operators had to coordinate their systems. They distinguished this from the regime adopted by the Commission under which, absent coordination, band splitting would be required whenever the  $\Delta T/T$  of an interfered link exceeds six percent. It is unclear how the Commission moved from using  $\Delta T/T$  as a coordination trigger in the GSO context to a band splitting trigger in the NGSO context.

Telesat and OneWeb further explained how the information required to make these  $\Delta T/T$  determinations cannot be collected and processed in real time and how, even if this could be accomplished, it would be impossible to implement location-specific and time-specific band splitting within the required time frames. OneWeb’s representatives pointed out that this fundamental difference between what OneWeb proposed and what the Commission adopted prompted the filing of OneWeb’s Petition for Reconsideration in this proceeding, which Telesat supports.<sup>3</sup>

On balance, a regime based on ITU procedures is fairer and more predictable than a regime that mandates band splitting. In an ITU-based system, an applicant that is later in line can design its system around those that are earlier in line. In a band splitting system, on the other hand, an applicant that is first in line cannot determine while it is designing its system when, where, and with whom it will have to band split in the future. In light of these considerations, the Commission should replace its band splitting approach with an approach based on ITU coordination procedures.

The Telesat and OneWeb representatives also discussed circumstances that have changed since the Commission adopted its NGSO rules. Although the Commission recognized the need “to provide regulatory certainty while operators pursue the development of their constellations,”<sup>4</sup> it was of the view, based on the record at the time, it could “first gain[ ] experience in ... implementation” of the  $\Delta T/T$  regime, following which it could “revisit [its] specific threshold for spectrum-splitting in light of the matured technical designs of those systems that have continued to progress.”<sup>5</sup>

As the Telesat and OneWeb representatives explained, however, they do not have the luxury of time while the Commission gains experience with the  $\Delta T/T$  regime. Telesat and OneWeb already are undertaking initial steps to construct their systems

---

<sup>2</sup> *NGSO Report & Order*, 32 FCC Rcd at 7823-24 ¶46 (emphasis added).

<sup>3</sup> See Petition for Reconsideration of WorldVu Satellites Limited, IB Docket No. 16-408 (filed Jan. 17, 2018).

<sup>4</sup> *NGSO Report & Order*, 32 FCC Rcd at 7825 ¶49

<sup>5</sup> *Id.*

and, most importantly, secure from debt and equity investors the billions of dollars required to fund their ambitious systems. Given the high-profile failures of past NGSO initiatives<sup>6</sup> and the present concern in the public markets regarding the prospects of traditional satellite service providers, the absence of regulatory certainty makes an already challenging fundraising environment more difficult still. The prospect of having to comply with an unworkable band splitting requirement is the antithesis of regulatory certainty.

The Telesat and OneWeb representatives urged, therefore, that the Commission adopt the  $\Delta T/T$  regime as proposed by OneWeb. By doing so, the Commission will allow NGSO licensees to coordinate in accordance with ITU procedures while allowing subsequent systems to design around earlier systems and avoid the need to engage in coordination negotiations altogether where the  $\Delta T/T$  threshold is not exceeded. Unlike the Commission's proposed band splitting mechanism, ITU coordination procedures have been in effect for many years. They have a proven track record that provides a level of comfort to the financial industry.

The Telesat and OneWeb representatives stressed they are not seeking to change the Commission's system under which NGSO-like filings that are submitted by a cut-off date are grouped for consideration in a processing round. They support the Commission's approach of issuing grants to all applicants in the Ku/Ka-band processing round that are found to be qualified.

The Telesat and OneWeb representatives pointed out, however, that there is a disconnect between the goals of the processing round procedure and the reality of operating competing NGSO systems that need access to sufficient spectrum to provide

---

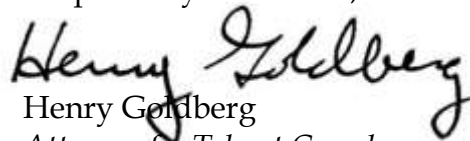
<sup>6</sup> Iridium, the global satellite phone company backed by Motorola, was the 20<sup>th</sup> largest US bankruptcy when it filed in 1999. See e.g. Douglas A. McIntyre, *The 10 Biggest Tech Failures of the Last Decade*, TIME, (May 14, 2009), found at [http://content.time.com/time/specials/packages/article/0,28804,1898610\\_1898625\\_1898640,00.html](http://content.time.com/time/specials/packages/article/0,28804,1898610_1898625_1898640,00.html). See also, Barnaby J. Feder, *Globalstar, Bankrupt Satellite Company, to Be Sold for \$55 Million*, New York Times (Jan 16, 2003), found at <http://www.nytimes.com/2003/01/16/business/globalstar-bankrupt-satellite-company-to-be-sold-for-55-million.html>. Note that other high-profile NGSO satellite start-ups never made it off the ground. See e.g. *Teledesic Relinquishes License*, Via Satellite (July 14, 2003) found at <http://www.satellitetoday.com/uncategorized/2003/07/14/teledesic-relinquishes-license/>; Tim Furniss *Alcatel Set to Scrap Skybridge Project*, FlightGlobal (Jan 8 2002) found at <https://www.flightglobal.com/news/articles/alcatel-set-to-scrap-skybridge-project-140940/>

service. Those goals can be made compatible by reliance on ITU coordination procedures and by the Commission actively assuring the good faith intersystem coordination that is required by both the ITU regulations and the Commission's new NGSO rules.<sup>7</sup> This is the essence of the proposal made by OneWeb and Telesat.

Although a regime based on ITU coordination procedures might to some degree benefit those with ITU date priority, no system is completely neutral. The NGSO grants the Commission has made are subject to EPFD limits that impinge on some system designs more than others. They are subject to milestone requirements that affect larger systems to a greater degree than smaller ones. They are subject to end-of-life disposal requirements that require more fuel to be reserved for some orbits than others. And they are subject for international purposes to the outcome of an ITU coordination process that may provide an easier path to interference protection for some systems than for others.

Please direct any questions regarding this matter to the undersigned and to Brian Weimer, Sheppard, Mullin, Richter & Hampton LLP, counsel for OneWeb.

Respectfully submitted,

  
Henry Goldberg  
*Attorney for Telesat Canada*

cc: Will Adams

---

<sup>7</sup> See *NGSO Report & Order*; See also International Telecommunications Union, Radio Regulations, Article 9.

## ATTACHMENT 1

### Participants:

#### Telesat Canada:

Daniel Goldberg  
Michael Schwartz

#### Counsel for Telesat Canada:

Henry Goldberg, Joseph A. Godles  
Goldberg Godles Wiener & Wright LLP

#### WorldVu Satellites Limited, d/b/a OneWeb (“OneWeb”):

Eric Béranger  
Mike Lindsay

#### Counsel for OneWeb:

Brian Weimer  
Sheppard, Mullin, Richter & Hampton LLP