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November 13, 2009

**BY ELECTRONIC FILING**

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
445 12th Street, S.W.  
Washington, D.C. 20544

*Re: File No. SAT-LOA-20090807-00085*

Dear Ms. Dortch:

Yesterday, DIRECTV, Inc. ("DIRECTV") filed a reply in the above-captioned proceeding to the Comments of Ciel Satellite Limited Partnership ("Ciel") concerning DIRECTV's request of authority to launch and operate DIRECTV RB-2A, a geostationary 17/24 GHz Broadcast Satellite Service ("BSS") satellite to be located at the nominal 103° W.L. position. I inadvertently failed, however, to attach Exhibit A to that filing. Attached please find a copy of the filing with the attachment. Please accept my apologies for the inconvenience.

Sincerely,

Michael Nilsson  
*Counsel for DIRECTV, Inc.*

Cc: Scott Gibson  
Howard Waltzman

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

<i>Application of</i>	)	
<b>DIRECTV ENTERPRISES, LLC</b>	)	File No. SAT-LOA-20090807-00085
For Authority to Launch and	)	Call Sign: S2796
Operate DIRECTV RB-2A, a Satellite	)	
in the 17/24 GHz Broadcasting Satellite	)	
Service at 103° W.L.	)	
	)	

**REPLY COMMENTS OF DIRECTV ENTERPRISES, LLC**

DIRECTV Enterprises, LLC (“DIRECTV”) hereby replies to the Comments of Ciel Satellite Limited Partnership (“Ciel”) concerning DIRECTV’s request of authority to launch and operate DIRECTV RB-2A, a geostationary 17/24 GHz Broadcast Satellite Service (“BSS”) satellite to be located at the nominal 103° W.L. position.<sup>1</sup> Ciel argues that the Commission’s domestic licensing authority should be rendered subordinate to the date priority of network filings at the International Telecommunications Union (“ITU”).

The Commission should take this opportunity to clarify its policies by definitively rejecting such an outcome.

DIRECTV holds a Commission license to operate another 17/24 GHz BSS satellite at the nominal 103° W.L. location to provide service into the United States.<sup>2</sup> Similarly, Ciel has been authorized by the Canadian government to provide 17/24 GHz

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<sup>1</sup> *Satellite Space Applications Accepted for Filing*, Report No. SAT-00636 (Int’l. Bur., rel. Oct. 2, 2009); Comments of Ciel Satellite Limited Partnership, File No. SAT-LOA-20090807 (filed Nov. 2, 2009) (“Ciel Comments”).

<sup>2</sup> *DIRECTV Enterprises, LLC*, 24 FCC Rcd. 9393 (Int’l Bur. 2009) (“*RB-2 Order*”) (authorizing DIRECTV to operate the DIRECTV RB-2 satellite at the nominal 103° W.L. orbital location).

BSS service into Canada from the same slot. Ciel suggests that, because Canada enjoys ITU date priority over the United States for these frequencies at this orbital location, Ciel would be entitled to blanket the entire United States with 17/24 GHz BSS transmissions “regardless of the impact on any DIRECTV customers” in the absence of coordination.<sup>3</sup>

This assertion is mistaken. Canada’s ITU date priority does not give Ciel *carte blanche* to cause harmful interference in areas where it is not and cannot now be authorized to provide service. Canada’s ITU date priority means simply that U.S.-licensed operators cannot interfere with Ciel’s duly licensed operations – while Ciel itself is likewise obligated to minimize interference to licensed operators outside of its licensed area. Ciel’s sweeping assertions to the contrary betray an erroneous understanding of the ITU coordination process for BSS systems.

#### ARGUMENT

Ciel misstates the nature of international coordination obligations and the consequences of failure to reach agreement. According to Ciel, DIRECTV is required to protect Ciel’s operations throughout Region 2 because Canada’s ITU date priority extends throughout the entire region.<sup>4</sup> Yet when it applied for a Canadian license, Ciel ~~represented to Industry Canada that it would serve Canada only, stating that “[o]ne-~~ hundred percent of the 17 GHz BSS capacity on Ciel-6 will be made available to the Canadian Broadcast and BDU community.”<sup>5</sup> Industry Canada granted Ciel’s license for

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<sup>3</sup> Ciel Comments at 6. Ciel also argues that any authorization issued in this proceeding should be conditioned upon the outcome of international coordination, as the Commission has done in other cases. *See id.* at 3-5. DIRECTV’s application implicitly assumed that such a condition would be applied to any authorization granted in this proceeding. At one point, however, Ciel seems to assert that such a condition should be phrased in terms of “successful” coordination, *id.* at 1, but the Commission has never used such a formulation and it would not be appropriate.

<sup>4</sup> Ciel Comments at 6.

<sup>5</sup> Applications in Reply to Notice DGRB-001-06 - Call for Applications to License Satellite Orbital Positions at 5, attached hereto as Exhibit A.

103W based in part upon that representation. Nonetheless, Ciel now argues that, once it commences service, DIRECTV “will have to modify or terminate its operations as necessary to protect Ciel” in the United States, “regardless of the impact on any DIRECTV customers.”<sup>6</sup>

Ciel is wrong in suggesting that date priority alone determines a network’s “relative rights to operate and to be protected from interference.”<sup>7</sup> To the contrary, the ITU Radio Regulations Board (“Board”) states that “coordination is a two-way process,” and that the intent of the date priority rules is simply “to identify to which administrations a request for coordination is to be addressed, and *not* to state an order of priority for rights to a particular orbital position.”<sup>8</sup>

ITU date priority, moreover, does not give any carrier the right to serve areas in which it not licensed. If it did, domestic licensing would be unnecessary, and the ITU would be the only regulatory body necessary for satellite authorizations. Thus, U.S.-Canada coordination at 103° W.L. will be constrained by the fact that Ciel cannot gain market access to the United States without Commission authorization<sup>9</sup> – authorization which Ciel does not have.

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<sup>6</sup> Ciel Comments at 6.

<sup>7</sup> *Id.* at 4.

<sup>8</sup> ITU Radio Regulations Board, Rule of Procedure, Art. 9.6 (also providing that “no administration obtains any particular priority as a result of being first to start either the advance publication phase (Section I of Article 9) or the request for coordination procedure (Section II of Article 9).”).

<sup>9</sup> *See Establishment of Policies and Service Rules for the Broadcasting Satellite Service at the 17.3-17.7 GHz Frequency Band and at the 17.7-17.8 GHz Frequency Band Internationally, and at the 24.75-25.25 GHz Frequency Band for Fixed Satellite Services Providing Feeder Links to the Broadcasting-Satellite Service and for the Satellite Services Operating Bi-directionally in the 17.3-17.8 GHz Frequency Band*, 22 FCC Rcd. 8842, ¶ 17 *et seq.* (2007) (“BSS R&O”) (setting forth market access standard for non-U.S. licensed space stations).

Ciel's argument seems to presume that it might obtain such authorization, but it is difficult to see how that could come about.<sup>10</sup> DIRECTV is already licensed under the Commission's rules to provide 17/24 GHz BSS service at 103° W.L.<sup>11</sup> Under these rules, a subsequent application will be granted only "if the proposed space station will not cause harmful interference to a previously licensed space station, or to a space station proposed in a previously filed application."<sup>12</sup> By contrast, "if an application reaches the front of the queue that conflicts with a previously granted license, [the Commission] will deny the application rather than keeping the application on file in case the lead applicant does not construct its satellite system."<sup>13</sup>

A satellite that would require DIRECTV to "modify or terminate its operations" "conflicts" with its previously granted license.<sup>14</sup> This standard, moreover, explicitly applies to foreign-licensed satellites, which must take their place in the queue just as do U.S.-licensed satellites.<sup>15</sup> There is thus no question of Ciel legally serving the United States so long as DIRECTV holds this license.

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<sup>10</sup> Ciel Comments at 4 (suggesting that the Commission will grant market access to a foreign licensee with ITU date priority notwithstanding a prior grant of a U.S. License for the same spectrum at the same orbital location) (citing *Telesat Canada*, 17 FCC Rcd. 25,287 (Int'l. Bur. 2002)).

<sup>11</sup> *RB-2 Order*, ¶ 1.

<sup>12</sup> *Id.*, ¶ 8 (citing 47 C.F.R. § 25.158(b)(3)).

<sup>13</sup> *Amendment of the Commission's Space Station Licensing Rules and Policies*, 18 FCC Rcd. 10760, ¶ 113 (2003) ("*First Come, First Served Order*").

<sup>14</sup> Ciel Comments at 6.

<sup>15</sup> *First-Come, First-Served Order*, ¶ 294 ("Given that we will continue to consider public interest factors in reviewing requests for market access, we must determine the procedures for reviewing Letters of Intent in conjunction with the first-come, first-served procedure for GSO-like satellite applications we adopt in this Order. We conclude that Letters of Intent should be treated the same as satellite applications. This is consistent with our WTO commitments to treat non-U.S. satellite operators no less favorably than we treat U.S. satellite operators."); *BSS R&O*, ¶ 23 (providing that "all non-U.S.-licensed satellite operators must meet the requirements adopted in this proceeding, including but not limited to bond requirements, milestone requirements, geographic service requirements, public interest obligations and spacecraft end-of-life disposal requirements"). The *Telesat Canada* case, cited by Ciel for the proposition that it could obtain market access to operate at 103° W.L., did not concern licensing under the "first come, first served" rules that the Commission made applicable to 17/24 GHz BSS

In such circumstances, DIRECTV's proposed space station is subject to international coordination obligations as described in its application – “with a Canadian system providing service across Canada.”<sup>16</sup> Because Canada's 17/24 GHz BSS ITU filing has date priority over that of the United States, DIRECTV cannot cause harmful interference to Ciel's licensed operations absent a coordination agreement.<sup>17</sup> But because the system described in the instant application is composed of four independent spot beams, one of which is centered in western Texas and another of which is centered in Utah, DIRECTV has significant flexibility in accommodating Ciel's needs for protecting its Canadian service. Even the two remaining spot beams would protect services provided from the same orbital location over the vast majority Canada.

Canada's ITU date priority does not permit Ciel simply to “rain” harmful interference throughout areas where it is *not* authorized to provide service. To the contrary, ITU Radio Regulations state that, “[i]n devising the characteristics of a space station in the broadcasting-satellite service, all technical means available shall be used to reduce, to the maximum, the radiation over the territory of other countries unless an agreement has been previously reached with such countries.”<sup>18</sup> Thus, just as ITU regulations require DIRECTV not to interfere with Ciel's Canadian operations, they also

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applications. Moreover, *Telesat Canada* did not stand for the proposition that foreign-licensed satellites can obtain market access regardless of interference to existing U.S. licensees. Rather, it explicitly provided that, under *DISCO II* (not to mention the ECO-SAT test applicable here), “there may be cases where granting a non-U.S.-licensed satellite operator access to the U.S. market would create debilitating interference or require U.S.-licensed operators to alter their operations significantly” and that “[i]n that case, [the Commission] could place conditions on the foreign satellite operations to prevent harmful interference or, in cases where conditions cannot remedy the problem, deny entry.” *Telesat Canada*, ¶ 24.

<sup>16</sup> Application, Narrative at 3.

<sup>17</sup> ITU Radio Regulations Arts. 9.6, 9.27, 11.42.

<sup>18</sup> ITU Radio Regulations Art. 23.13.

obligate Ciel to minimize interference into DIRECTV's U.S. operations to the greatest extent possible.

Were the rule instead as Ciel suggests, the Commission could be required to grant market access to satellite systems licensed by both Canada and Luxembourg, each of which has a network filing at this slot with ITU date priority over the U.S. Ciel has also recently filed comments in support of the pending application by a Netherlands-authorized operator to provide service in the U.S. from 103° W.L. -- even though the U.S. has ITU date priority over the Netherlands filing at this location.<sup>19</sup> The regime Ciel posits would lead to multiple authorizations at a number of orbital locations, and the resulting regulatory confusion and uncertainty would wreak havoc with an industry that depends upon long-range planning and investments of hundreds of millions of dollars.<sup>20</sup>

\* \* \*

DIRECTV recognizes that it must engage in international coordination with Ciel regarding 17/14 GHz BSS operations at 103° W.L. It intends to do so diligently and in good faith, and expects those talks to be successful. Neither the ITU regulations nor the Commission's policies, however, permit Ciel to override the Commission's domestic ~~licensing authority and cause widespread harmful interference throughout a country. Ciel~~ is not licensed to serve to the detriment of a duly authorized licensee in that country. The Commission should take this opportunity to authoritatively reject Ciel's erroneous

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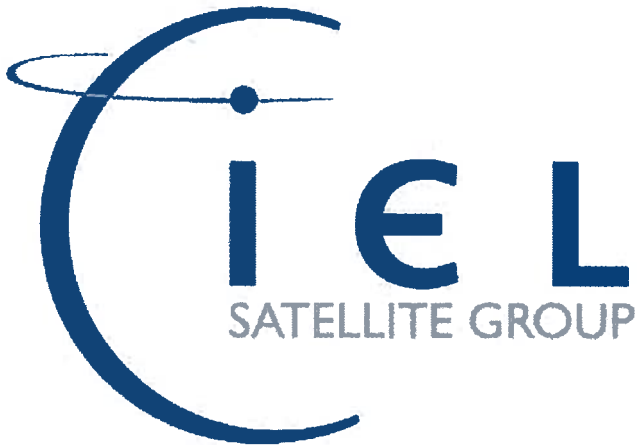
<sup>19</sup> See Comments of Ciel Satellite Limited Partnership, IBFS File No. SAT-LOI-20081119-00217 (Nov. 9, 2009).

<sup>20</sup> It is also not at all clear what would happen under Ciel's regime if a non-U.S. licensed 17/24 GHz BSS system with ITU date priority sought market access at a non-grid location between two previously licensed U.S. systems located on-grid. Under Section 25.262(d) of the Commission's rules, the off-grid foreign system would be required to protect the on-grid U.S. licensees (by operating at reduced power flux-density levels and accepting interference from the on-grid operators), but under Ciel's theory the on-grid licensees would have to accommodate the foreign system with ITU date priority (effectively eviscerating the Commission's four-degree spacing policy for this band).









**Licence 12**

**103°W 17 GHz BSS**

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**Canadian Satellite Capacity and  
Services Plan**

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**Applications in Reply to Notice  
DGRB-001-06 - Call for Applications  
to License Satellite Orbital Positions**

**15 November 2006**

## **1. INTRODUCTION**

Ciel Satellite Limited Partnership (“Ciel”) is applying for a radio spectrum licence in the 17 GHz BSS at 103°W, Licence 12, in accordance with Gazette Notice DGRB-001-06 *Call for Applications to License Satellite Orbital Positions* (the “Call for Applications”) issued 7 July 2006 by the Department of Industry (“Industry Canada” or the “Department”). This Canadian Satellite Capacity and Services Plan (the “CSCS Plan”) explains our intended use of this spectrum.

Ciel will develop and make the 17 GHz BSS spectrum at 103°W available for the benefit of Canadian broadcasters and distributors. Ciel’s proposal offers two clear benefits to the Canadian satellite user community: substantial additional capacity that is available at an affordable price and located at the only available orbital position that can augment both existing DTH and BDU broadcast distribution neighbourhoods.

## **2. A BRIEF DESCRIPTION OF CIEL**

Ciel was formed in 2004 by a number of Canadian satellite industry veterans, including Brian Neill, Dave Lewis and Scott Gibson. The company was licensed at the 129°W 12 GHz BSS orbital position and commenced operations there with an interim satellite in 2005, making history by becoming the first competitive Canadian satellite operator.

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Ciel is owned by Mr. Neill, a Canadian DTH industry pioneer; Borealis Infrastructure Management Inc., an investment unit of the Ontario Municipal Employees Retirement Systems (OMERS); and SES Americom, Inc., a unit of Luxembourg-based satellite operator, SES Global S.A. Ciel is Canadian owned and controlled.

Ciel is a vibrant and innovative Canadian organization with unique qualifications to deliver high-quality competitive satellite services to Canadians. Ciel has quickly established itself in the Canadian market as a credible alternative supplier of satellite capacity and has developed a strong relationship with and the respect of the Canadian satellite user community. Ciel has the benefit of the technical, financial and regulatory expertise of an outstanding management team, and the

substantial industry experience and financial support of its shareholders. The shareholders of Ciel are committed to making the investment needed to grow the business and as a result, Ciel is uniquely well-positioned to fulfill the policy goals set by the Department in issuing the Call for Applications.

### **3. CONSULTATION WITH CANADIAN SATELLITE USERS**

Ciel undertook extensive direct and indirect consultations over the past year with Canadian broadcasters and BDUs in order to better understand users' requirements. We have met as well with industry associations such as the Canadian Satellite Users Association (CSUA) and the Canadian Association of Broadcasters (CAB). In addition, Ciel commissioned new and independent research from the Nordicity Group concerning future demand in Canada for satellite services, including both broadcasting and broadband.

*Direct Consultations:* Ciel met with many Canadian satellite users prior to and during the preparation of its applications for the Department's Call for Applications. These discussions allowed Ciel to gain a detailed understanding of the objectives, technical requirements and commercial terms that many in the industry seek.

*Indirect Consultations:* Ciel also commissioned the Nordicity Group to determine market requirements for additional satellite capacity. Nordicity interviewed most major Canadian users and developed a unique picture of the users' requirements.

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### **4. CANADIAN SATELLITE USERS' REQUIREMENTS**

Ciel has measured Canadian satellite user requirements through the consultation process, and has divided these requirements into two broad market segments: broadcast distribution and broadband Internet access. As the application for Licence 12 addresses the broadcast distribution requirements exclusively, this CSCS Plan addresses only the broadcast market requirements. However, there is an evident need for a significant amount of additional satellite capacity in both market segments.

The demand for programming, and corresponding bandwidth, continues to grow with the introduction of new kinds of programming content, new digital specialty channels, pay-per-view, video-on-demand, interactive television and HDTV. Simply stated, Canadian broadcasters require significant additional satellite capacity to distribute their content. At the November 2006 Canadian Association of Broadcasters convention in Vancouver, it was suggested that the Canadian market could be introducing between 90 and 150 new channels in the next few years, but only if satellite capacity is available.

The penetration of digital television in Canada continues to grow as consumers show keen interest in higher quality digital services, HDTV and specialty programming. Of the approximately 12.5 million Canadian households nationwide, more than 87 percent pay for television service. Among this group, the penetration of digital households over the past five years has grown rapidly reaching 44 percent of total television households in Canada according to the Fast Forward Trend Analysis, prepared for the CRTC by the Solutions Research Group Consultants Inc. in August 2006.

The CSUA worked with member organizations to develop a demand estimate for satellite capacity as outlined below. The CSUA estimated that:

- In five years, 75 percent of existing channels will launch in HD.
- In 10 years, 100 percent of channels will be HD.

Based on its discussions with Canadian broadcasters, Ciel estimates that between 30 percent and 50 percent of channels will launch in HD in the next 2 to 3 years.

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The Nordicity study found consistent themes with the CSUA study in evaluating the demand for additional broadcasting capacity in Canada. In summary, Nordicity found that the requirement for additional broadcasting capacity is occurring in capacity demand ‘waves’ of demand based on the established broadcasters transition to HDTV, the introduction of new broadcasting technology, and the supply of satellite capacity. These ‘waves’ indicate a capacity requirement of two satellites for Star Choice over the next 10 years.

Star Choice currently operates from two Ku band orbital positions (111.1°W and 107.3°W) with an approximately one and half satellites worth of capacity. Bell ExpressVu operates from two

orbital positions (82°W and 91°W) with approximately two satellites worth of capacity.

Nordicity's research shows that four additional satellites will be needed to supply the future demand at the two established broadcast distribution neighbourhoods. The capacity needed will only be available through the spectrum offered in the Call for Applications. Ciel's proposal addresses this demand.

The regulatory assumptions behind the projected capacity requirement are primarily a status quo environment. For instance, Ciel does not assume a digital transition regulatory mandate that would accelerate the move to HDTV; nor does Ciel assume that there will be a liberalization of broadcaster or BDU foreign ownership regulations.

#### **5. CIEL-6 AT 103°W 17 GHz BSS – BROADCAST SOLUTION**

Ciel plans to design, construct and operate the new Ciel-6 satellite at the 103°W 17 GHz BSS orbital position to address the increased demand for capacity at both the 111.1°W and 107.3°W cable and DTH broadcast neighbourhood and the 91°W and 82°W DTH neighbourhood. Ciel-6 will have 16 – 24 MHz transponders of capacity covering all of Canada at power-levels that can serve DTH antennas augmented to serve both the existing DTH neighbourhoods and the 103°W position. One hundred percent of the 17 GHz BSS capacity on Ciel-6 will be made available to the Canadian Broadcast and BDU community.

The majority of the BSS spectrum in North America is used to broadcast DTH applications. The consumption of most of the 12 GHz BSS capacity has been driven by the growth in DTH programming services coupled with the increase in bandwidth demand from such applications as HDTV, Pay-Per-View ("PPV"), Video-on-Demand ("VOD"), international programming, niche/specialty programming, and interactive services. While the introduction and adoption of new compression and encoding technologies such as MPEG-4 will potentially reduce bandwidth requirements, it is only with the ITU allocation of additional frequencies at 17 GHz BSS that Canada's mid- and long-term service demands for satellite capacity can be fully satisfied.

Ciel is interested in 103°W 17 GHz BSS as a means to provide additional DTH broadcasting capacity in Canada since 17 GHz BSS is ideally suited for video distribution. The 17 GHz BSS spectrum at 103°W is the last available orbital location that can serve both of the major Canadian

DTH neighbourhoods, making it technically possible to serve customers of either Bell ExpressVu (82°W and 91°W), Star Choice (107.3°W and 111.1°W), or both with a single triple feed antenna. As such, this orbital location is a very valuable Canadian resource. Ciel believes that in order to ensure Canadians have the benefit of effective competition going into the next decade it is absolutely essential that the Industry Canada allocate this “green-field” position to a new entrant.

Ciel’s business case to develop the 103°W orbital position is based on satisfying the continuing demand for satellite-delivered video broadcasting capabilities to existing DTH platforms in Canada. In accordance with Ciel’s strategy of measured deployment based on waves of capacity demand, this expansion will be done in stages.

Ciel looks forward to providing crucially required expansion capacity, exactly timed to the Canadian market requirements while providing critical in-orbit backup and restoration facilities for the Canadian DTH, cable, and programming services.

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