

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

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<i>Applications of</i>)	
)	
DIRECTV ENTERPRISES, LLC)	Call Sign: S2712
)	
For Extension or Waiver of the Launch)	File No. SAT-MOD-20140624-00075
And Operate Milestone)	
)	
For Minor Modification of Authorization to)	File No. SAT-MOD-20140612-00066
Launch and Operate DIRECTV RB-2)	
_____)	

CONSOLIDATED RESPONSE OF DIRECTV ENTERPRISES, LLC

In these proceedings, DIRECTV Enterprises, LLC (“DIRECTV”) has requested two things: extension or waiver of the launch and operate milestone for DIRECTV RB-2, a 17/24 GHz BSS payload to be located at the 103° W.L. orbital location; and modification of its RB-2 authorization to conform to adjustments made in the course of satellite construction. The DIRECTV 15 satellite (which carries the RB-2 payload) is now completely constructed and ready for delivery to the launch site as soon as Arianespace indicates that a launch vehicle is available. Launch of this satellite, along with the satellite carrying DIRECTV’s other 17/24 GHz BSS payload (DIRECTV RB-1), will mark the operation of the first ever 17/24 GHz BSS payloads capable of providing commercial service to consumers —culminating an effort begun over 15 years ago. DIRECTV will use these payloads to support the launch of bandwidth-intensive ultra-high definition television (“Ultra HD”) services. This is, in other words, a real payload that will offer real service to tens of millions of real subscribers.

Two parties have opposed DIRECTV’s applications. SES Americom, Inc. (“SES”) and its corporate affiliate, Ciel Satellite Limited Partnership (“Ciel”), ask the Commission to deny

DIRECTV's extension/waiver request, rendering a now-completed payload unusable.¹ In the event that the Commission grants DIRECTV's extension/waiver request, both SES/Ciel and DISH Operating L.L.C. ("DISH")² request that the Commission defer operational authority until DIRECTV has completed coordination with Ciel and adjusted the parameters of its authorization to reflect the terms of coordination.

DIRECTV hereby provides its consolidated response to those petitions. As demonstrated below and in its initial application, DIRECTV has shown extraordinary commitment to achieving launch and operation of its RB-2 payload, which is now completely constructed just one month after the milestone date. Such commitment justifies either extension or waiver of the milestone under Commission precedent. As for coordination, the current RB-2 authorization already includes a condition that requires successful coordination. DIRECTV has requested neither modification of, nor relief from, that condition. Indeed, it is currently engaged in negotiations with Ciel, with a meeting of both parties and their respective administrations being organized for the near future. In these circumstances, there is nothing more for the Commission to do. Accordingly, it should deny both petitions in their entirety.

I. DIRECTV'S DEMONSTRATED COMMITMENT AND OTHER OVERRIDING PUBLIC INTEREST CONSIDERATIONS JUSTIFY GRANT OF THE REQUESTED RELIEF

As demonstrated in its request for extension or waiver of the launch and operate milestone,³ DIRECTV has diligently pursued development of the 17/24 GHz BSS band in general, and the 103° W.L. orbital location in particular. Over fifteen years ago, DIRECTV filed

¹ See Petition to Deny of SES Americom, Inc. and Ciel Satellite Limited Partnership (filed Sep. 2, 2014) ("SES/Ciel Petition"). Ciel is a corporate sibling of SES, as it is a 70 percent owned, consolidated subsidiary of SES's parent company, SES S.A. Unless otherwise indicated, all filings cited herein were filed in IBFS File Nos. SAT-MOD-20140624-00075 and SAT-MOD-20140612-00066.

² See Petition to Condition of DISH Operating L.L.C. (filed Sep. 2, 2014) ("DISH Petition").

³ See Application for Milestone Extension, IBFS File No. SAT-MOD-20140624-00075, at 2-4 (filed June 24, 2014) ("DIRECTV Extension Request").

a petition for rulemaking to allocate spectrum for the 17/24 GHz BSS service in the U.S. Table of Frequency Allocations,⁴ and was the first to seek authority from the Commission to operate in the 17/24 GHz BSS band.⁵ After participating in the ensuing rulemaking and pursuing its applications for over a decade, DIRECTV was finally awarded several of the first licenses issued in this new band, including authority to operate at 103° W.L. As of the date it filed its Extension Request, DIRECTV had nearly completed construction of a satellite to make use of that authorization, with 91.4% of all pre-launch construction payments made. It had also made 90% of the payments required under its agreement with launch provider Arianespace.

In the time since the extension request was filed, DIRECTV's efforts have continued. Construction of the satellite was completed in August – nearly two months ahead of the contractual schedule. Had a launch vehicle been available, it is possible that construction could have been accelerated still further. DIRECTV has now made 95.1% of all pre-launch construction payments and 100% of all pre-launch payments due to Arianespace. DIRECTV has also continued with construction of ground infrastructure at three of DIRECTV's existing uplink facilities (in Castle Rock, CO, New Hampton, NH, and Moxee, WA) and development of new consumer equipment capable of receiving and processing signals in the 17/24 GHz BSS band. Through its consistent and significant investment in this system, DIRECTV has developed the assets that will support the launch of bandwidth-intensive Ultra HD services. No one is more anxious to launch this satellite and make immediate productive use of the additional capacity it will provide than is DIRECTV.

These efforts stand in contrast to those of SES/Ciel. Ciel received its original license for 17/24 GHz BSS operations at 103° W.L. in June 2008. That authorization included a

⁴ See *Public Notice*, Report No. 2208 (rel. July 1, 1997).

⁵ See IBFS File Nos. SAT-LOA-19970605-00049, -00050, and -00051.

requirement that Ciel launch and operate a new satellite at 103° W.L. by January 1, 2013.⁶ Later that year, Ciel received an amendment to that license such that it was required to launch and operate only an “interim satellite” by January 1, 2013, while the date for launching a “new satellite” was extended to January 1, 2015.⁷ In September 2012, Ciel sought and received a second modification that further extended the date by which a “new satellite” had to be launched to December 1, 2018 – *i.e.*, more than ten years after the original license was issued.⁸ SES launched the SES-3 satellite (with the Ciel-6i “interim” 17/24 GHz BSS payload on board) in July 2011. After completing in-orbit testing, this satellite was then moved to the 99° W.L. location (*i.e.*, DIRECTV’s other 17/24 GHz BSS licensed location), where it was claimed to have brought into use 17/24 GHz BSS spectrum under international rules.⁹ It was then positioned at the 108° E.L. location for approximately five months before arriving at the 103° W.L. location in late 2012, where it was used once again to claim that a 17/24 GHz BSS network had been brought into use.

By contrast, DIRECTV received its license for the RB-2 payload in July 2009, over a year after Ciel received its initial authorization. DIRECTV constructed and launched its own “interim” 17/24 GHz BSS payload (DIRECTV RB-2A) to the 103° W.L. location aboard the DIRECTV 12 satellite in December 2009,¹⁰ four years ahead of Ciel’s interim payload.

⁶ See Letter from J.K. Lindsey to David Lewis, File No. 46215-1 (156297 RH) (June 27, 2008), *available at* <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf09020.html>.

⁷ Satellite Limited Partnership Ciel – Conditions to Obtain Authority to Operate a 17 GHz BSS Space Station at the 103° W Orbital Position, *available at* <https://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf09773.html>.

⁸ See Letter from Suzanne Lambert to Bernie Haughian, File No. 46215-1 (303498 AT) (Sep. 21, 2012), *available at* <http://www.ic.gc.ca/eic/site/smt-gst.nsf/eng/sf09772.html>.

⁹ Note that this claim was later rejected by the International Telecommunication Union’s Radiocommunication Bureau.

¹⁰ See Stamp Grant, IBFS File No. SAT-LOA-20090807-00085, Condition 3 (granted Jan. 8, 2010) (expressly stating that construction and launch of RB-2A payload has no effect on RB-2 milestone).

DIRECTV did not, however, seek extension of the milestone requirements applicable to its license for RB-2 based on this interim payload, nor claim that this interim payload had brought into use any spectrum under international rules. Rather, DIRECTV proceeded diligently toward construction and launch of a fully-capable 17/24 GHz BSS satellite on the timetable originally contemplated when it received its authorization.

As a result, while DIRECTV has completed construction of a satellite capable of providing commercial service to millions of consumers across the United States from 103° W.L., Ciel is not even required to submit the design specifications for its “new satellite” at that location until September 2015.¹¹ These are the circumstances in which the Commission must consider SES/Ciel’s charge that grant of DIRECTV’s application would encourage spectrum warehousing.¹²

A. DIRECTV’s Decision to Change Satellite Manufacturers Was Necessitated by Technical Issues Beyond Its Control and Did Not Delay Completion of Construction

SES/Ciel asserts that DIRECTV is responsible for delay in completing construction of RB-2 due to its decision to switch manufacturers in October 2011 and its decision to add Ka-band and DBS payloads to the satellite.¹³ Those arguments are clearly erroneous. As explained in its Extension Application, DIRECTV’s original manufacturer (Space Systems/Loral (“SS/L”)) encountered difficulties with its supplier of travelling wave tube amplifiers (“TWTAs”) for the spacecraft, which was experiencing significant manufacturing process development issues.

¹¹ Given that this “new satellite,” known as Ciel 6, will not launch for another four years, the Commission should disregard DISH’s assertion that it is preparing an application for authority to operate up to 50,000 earth stations in the United States to receive service from that satellite. *See* DISH Petition at 3 n.11.

¹² *See* SES/Ciel Petition at 17.

¹³ *See id.* at 7-10.

Despite DIRECTV's best efforts, those difficulties persisted through the summer of 2011, with no prospect for resolution. At that point, *any* satellite manufacturer would have had to procure TWTAs from a different supplier, and that process – rather than any other aspect of satellite design or construction – would become the gating item for completion of the satellite.

Facing the prospect of significant delay by SS/L's TWTA manufacturer, DIRECTV called for proposals to build the satellite using another TWTA manufacturer (Thales). Like the original agreement with SS/L, DIRECTV specified a multi-mission, multi-band satellite with 17/24 GHz BSS, Ka-band, and DBS payloads on board.¹⁴ No manufacturer – including SS/L – submitted a contract proposal with a timetable that would have satisfied the July 2014 launch and operate milestone. Because DIRECTV determined that the proposal made by Astrium SAS was superior to the others and also reduced the company's reliance on a single manufacturer that had already experienced significant delays, DIRECTV terminated its agreement with SS/L and entered into a new construction contract with Astrium in October 2011.

At that time, SS/L was also building DIRECTV 14, the satellite carrying DIRECTV's second 17/24 GHz BSS payload. SES/Ciel points to the fact that SS/L completed construction of this satellite in December 2013 as evidence that moving the DIRECTV 15 contract to Astrium slowed down completion of that satellite.¹⁵ The evidence shows otherwise. From the beginning, DIRECTV 14 was ahead of RB-2 in SS/L's production queue because the contract was executed in April 2010 rather than July 2010. When SS/L's TWTA supplier was unable to deliver as required, SS/L was able to procure some TWTAs from the inventory of a second supplier,

¹⁴ The original satellite under construction by SS/L included payloads in all three frequency bands. *See* Letter from William M. Wiltshire to Marlene H. Dortch, IBFS File Nos. SAT-LOA-20060908-00100, SAT-AMD-20080114-00014, and SAT-AMD-20080321-00077 (filed July 26, 2010) (submitting SS/L contract). Accordingly, SES/Ciel's speculation that DIRECTV added two additional bands when it switched to Astrium is incorrect. *See* SES/Ciel Petition at 16 and n.46.

¹⁵ *See* SES/Ciel Petition at 8, 10.

Thales. This allowed SS/L to proceed with construction of DIRECTV 14 to some extent. However, because of the limited number of such TWTAs that were available, there were none left for use on RB-2. Indeed, there were not even enough to complete DIRECTV 14, and the delay in delivery of new TWTAs to complete the set caused that satellite to be delivered eight months behind schedule.

As SES/Ciel recognizes, the Commission expects that each of its licensees will “attempt to resolve issues that may impede its ability to meet its milestones.”¹⁶ That is precisely what DIRECTV did. Once the true extent of the problem with SS/L’s TWTA supplier became known, DIRECTV moved quickly to seek alternative arrangements. Unfortunately, for reasons totally beyond DIRECTV’s control, no manufacturer could guarantee delivery of a satellite in time to meet the launch and operate milestone. This had nothing to do with the multi-band, multi-mission capabilities of the satellite, since the delay was caused by the 17/24 GHz BSS payload itself. DIRECTV was able to mitigate the risk of further delay by engaging a second contractor, which actually did deliver the satellite ahead of schedule. Unfortunately, the unavailability of TWTAs was simply too much to overcome within the RB-2 milestone requirements.

SES/Ciel also asserts that DIRECTV failed in its duty to promptly advise the Commission when it encountered a problem that could have affected milestone compliance.¹⁷ Yet the case cited by SES/Ciel faulted the party seeking extension because it “waited until the milestone period expired before asserting, for the first time, that the pendency of the [an assignment application] was preventing [it] from meeting the construction-commencement requirement.”¹⁸ Here, by contrast, DIRECTV raised this issue before expiration of the

¹⁶ See *id.* at 7 n.14 (citing *WB Holdings 1 LLC*, 20 FCC Rcd. 10846, ¶ 6 (Int’l Bur. 2005)).

¹⁷ See *id.* at 6-7.

¹⁸ *Motorola, Inc.*, 17 FCC Rcd. 16543, ¶21 (Int’l Bur. 2002) (“*Motorola*”).

milestone, both by filing its Astrium construction contract – including the construction and delivery schedule – in July 2012¹⁹ and by filing its Extension Request in June 2014.

B. The Commission Grants Extension/Waiver Requests Where the Applicant Demonstrates a Commitment to Make Productive Use of Spectrum

In its application, DIRECTV cited a number of cases in which the Commission had granted milestone extensions and/or waivers under circumstances such as those presented here, where the applicant had demonstrated its commitment to make productive use of its authorization.²⁰ For example, the Commission granted a five-month extension of New ICO's launch and operate milestone, based on unanticipated technical problems and "the extent of [the] satellite's construction and the amounts paid toward to the total contract price."²¹ The Commission also waived a four-year launch delay where EchoStar had filed a timely extension request, had completed construction of its satellite, and was prepared to launch the satellite imminently – factors which negated any inference that EchoStar had warehoused spectrum.²²

In opposition, SES/Ciel cites to cases in which the Commission has denied such relief – but those cases involved very different circumstances. For example, SES/Ciel relies upon several cases that relate to requests for extension or waiver of the applicant's *first* milestone (contracting) based on the pendency of a request for license modification²³ or for a transfer of

¹⁹ See Letter from William M. Wiltshire to Marlene H. Dortch, IBFS File Nos. SAT-LOA-20060908-00100, SAT-AMD-20080114-00014, and SAT-AMD-20080321-00077 (filed July 27, 2012).

²⁰ See DIRECTV Extension Request at 7-10.

²¹ *New ICO Satellite Services G.P.*, 22 FCC Rcd. 2229, ¶ 15 (Int'l Bur. 2007). In doing so, the Commission favorably noted that "[t]he requested extensions are brief." *Id.*, ¶ 1.

²² See *EchoStar Satellite Corp.*, 18 FCC Rcd. 15875, ¶¶ 9, 13 (Int'l Bur. 2003). See also *Astrolink Int'l LLC*, 17 FCC Rcd. 11267, ¶ 6 (Int'l Bur. 2002) (waiving construction commencement milestone where spacecraft was 90% complete).

²³ See *Motorola; PanAmSat Licensee Corp.*, 15 FCC Rcd. 18720 (Int'l Bur. 2000); *Columbia Communications Corp.*, 15 FCC Rcd. 15566 (Int'l Bur. 2000) ("*Columbia F*").

control.²⁴ The Commission routinely denies early-milestone waiver requests, and with good reason. Early milestones “are especially important because they provide an initial objective indication as to whether licensees are committed to proceeding with implementation of their proposals.”²⁵ By contrast, the investment of years of effort and hundreds of millions of dollars toward system construction and launch itself demonstrates the requisite commitment. Moreover, “[t]he Commission has determined that filing a modification application does not warrant extension of milestone deadlines”²⁶ and that “seeking additional time to negotiate a construction contract in view of a proposed merger does not warrant a milestone extension.”²⁷ DIRECTV does not request relief based on some proposed change to a notional satellite or to its ownership, but rather based on construction and launch delays beyond its control on a satellite that is now fully built and ready for launch. The cases cited by SES/Ciel could hardly be less comparable.

II. DIRECTV RECOGNIZES ITS OBLIGATION TO COORDINATE AND IS IN THE PROCESS OF DOING SO

In the event that the Commission grants DIRECTV’s request for extension or waiver of its milestone, both SES/Ciel and DISH request that the Commission defer operational authority until DIRECTV has completed coordination with Ciel and adjusted the parameters of its authorization to reflect the terms of coordination.²⁸

²⁴ See *Columbia Communications Corp.*, 15 FCC Rcd. 16496 (Int’l Bur. 2000) (“*Columbia I*”); *American Tel. & Tel. Co.*, 2 FCC Rcd. 4431 (1987) (“*AT&T*”).

²⁵ *Motorola*, ¶ 11.

²⁶ *Columbia I*, ¶ 12.

²⁷ *Columbia II*, ¶ 14 (citing *AT&T*).

²⁸ See SES/Ciel Petition at 19-22; DISH Petition at 1-2.

DIRECTV's existing RB-2 authorization includes a requirement that it complete the international coordination process.²⁹ DIRECTV has requested neither modification of, nor relief from, that condition. DIRECTV is currently engaged with Ciel in coordination negotiations. Indeed, the two parties and their respective administrations are planning to meet on this issue in the near future. DIRECTV is cautiously optimistic that a reasonable coordination arrangement can be reached with Ciel, and intends to continue working with the Commission toward that goal. No further condition on its authorization is required in this regard.

However, to the extent SES/Ciel and DISH insist that DIRECTV be required to modify its license to reflect the terms of any coordination agreement reached with Ciel, the Commission should deny that request. The parties cite no rule or precedent that would impose such a requirement. The simple reason for this omission is that there is no such rule or precedent. Indeed, coordination agreements are highly confidential, and requiring modification to reflect the terms of such agreements would defeat that confidentiality. There is no need for DIRECTV to modify its authorization so long as it can operate consistent with the parameters agreed to in coordination within the technical envelope created by its authorization. Accordingly, no such requirement should be imposed.

* * *

For the foregoing reasons, and the reasons set forth in DIRECTV's applications, the Commission should deny the Petitions filed by SES/Ciel and DISH.

²⁹ See *DIRECTV Enterprises, LLC*, 24 FCC Rcd. 9393, ¶ 41 (Int'l Bur. 2009), *recon. denied*, 27 FCC Rcd. 5932 (Int'l Bur. 2012).

DECLARATION

I, Philip J. Goswitz, hereby make the following declaration under penalty of perjury. I understand that this Declaration will be submitted to the Federal Communications Commission.

1. I am Senior Vice President, Video, Space, and Communications at DIRECTV.
2. I have reviewed the foregoing Consolidated Response of DIRECTV Enterprises, LLC, and certify that the facts set forth therein are true and correct to the best of my knowledge.

/s/
Philip J. Goswitz
Senior Vice President,
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Executed: September 15, 2014

CERTIFICATE OF SERVICE

I hereby certify that, on this 15th day of September, 2014, a copy of the foregoing Consolidated Opposition of DIRECTV Enterprises, LLC was served by first class mail upon:

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