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**Subject:** FW: Meeting with LightSquared to Discuss Form 312  
**Location:** 8 south (8-B516)  
**Start:** Tue 11/16/2010 9:00 AM  
**End:** Tue 11/16/2010 9:30 AM  
**Show Time As:** Tentative  
**Recurrence:** (none)  
**Meeting Status:** Not yet responded

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**From:** Kim Mattos  
**Sent:** Monday, November 15, 2010 11:59 AM  
**To:** Austin Schlick; Paul de Sa; John Leibovitz; Roderick Porter; Vicky Torres; Juliana Villalta; Kim Mattos  
**Cc:** Ruth Milkman; Mindel DeLaTorre; Jim Bird; Ronald Repasi; David Horowitz; Gardner Foster; Robert Nelson; Jennifer Tomchin; Jeremy Marcus; Blaise Scinto; Paul Murray; Tom Peters; Steven Spaeth  
**Subject:** Meeting with LightSquared to Discuss Form 312  
**When:** Tuesday, November 16, 2010 9:00 AM-9:30 AM (GMT-05:00) Eastern Time (US & Canada).  
**Where:** 8 south (8-B516)

When: Tuesday, November 16, 2010 9:00 AM-9:30 AM (GMT-05:00) Eastern Time (US & Canada).  
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Note: The GMT offset above does not reflect daylight saving time adjustments.

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Henry Goldberg and Joseph Godles of Goldberg, Godles, Wiener & Wright request a meeting to discuss the attached Form 312/integrated service showing.

<<final draft.Integrated service update.Nov 14.docx>>

Other participants: Jeff Carlisle of LightSquared; same folks from the last meeting: Frank Boulden, Brian Deobald and Scott Wiener

POC:  
Henry Goldberg  
HGoldberg@G2W2  
(202) 429-2101 (direct)



final  
ft.Integrated servic

[L2 letterhead]

November XX, 2010

**REDACTED VERSION<sup>1</sup>**

**VIA HAND DELIVERY**

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

Re: LightSquared/integrated service

Dear Ms. Dortch:

LightSquared Subsidiary LLC ("LightSquared")<sup>2</sup> hereby provides an update of its plans for offering an integrated service consisting of mobile satellite service ("MSS") and MSS-ancillary terrestrial component service ("ATC") service.

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<sup>1</sup> LightSquared is filing two versions of this letter. A limited number of dollar, bandwidth, and capacity figures have been redacted from the publicly-filed version of the letter. These figures are included in a second version of the letter that is being filed under a request for confidential treatment.

<sup>2</sup> LightSquared previously was known as SkyTerra Subsidiary LLC, and before that it was known as Mobile Satellite Ventures Subsidiary LLC. See Letter from Jeffrey J. Carlisle, Executive Vice President, LightSquared GP Inc., to Marlene H. Dortch, Secretary, FCC (July 20, 2010) (notifying the Commission of the corporate name changes affecting various SkyTerra-named entities). To simplify matters,

## I. INTRODUCTION AND SUMMARY

At the time LightSquared's predecessor applied for ATC authority, the company, in order to demonstrate compliance with the Commission's integrated service requirements, planned to use dual-mode handsets exclusively. In this context and throughout this filing, "dual-mode" has the same meaning as in the Commission's rules – a device "that can communicate with both the MSS network and the MSS ATC component."<sup>3</sup>

In the six years since LightSquared's ATC application was granted, control of the company has been transferred<sup>4</sup> and its business plans have evolved. Indeed, the Commission has found there is a substantial public interest benefit in LightSquared's deploying a high-capacity terrestrial network as part of its satellite-terrestrial service and has held LightSquared to a rigorous terrestrial network construction timetable.<sup>5</sup>

LightSquared has invested billions of dollars and years of development to provide an integrated MSS-ATC service featuring a substantial satellite service. LightSquared recently launched a \$600 million next generation satellite that will dramatically enhance satellite capabilities. LightSquared also is investing tens of

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"LightSquared" is used in this filing to refer to the company even if the reference involves a time period when the company was under a former name.

<sup>3</sup> 47 C.F.R. § 25.149(b)(4)(i).

<sup>4</sup> See *In the Matter of SkyTerra Communications Inc., Transferor, and Harbinger Capital Partners Funds, Transferee, Applications for Consent to Transfer of Control of SkyTerra Subsidiary LLC*, Memorandum Opinion and Order and Declaratory Ruling, IB Docket No. 08-184 (March 26, 2010) ("LightSquared MO&O").

<sup>5</sup> See LightSquared MO&O, ¶¶ 70, 72 and Appendix B.

millions of dollars in a dual-mode device ecosystem even though, as a wholesale provider of integrated capacity, it will not offer devices itself.<sup>6</sup>

LightSquared will have an integrated pricing structure under which the retailers that purchase services from LightSquared will pay for both satellite air time and terrestrial air time regardless of whether they choose to offer dual-mode or terrestrial-only devices.<sup>7</sup> This pricing structure gives LightSquared's customers ample incentive to make dual-mode devices available to end users.

There has been no change in the plan for all users to be served by LightSquared's integrated satellite and terrestrial network. LightSquared's network also will continue to have substantial satellite capabilities, which will continue to be used to serve customers who rely on them heavily, including local, state and federal government agencies, healthcare entities, first responders, and similar high-value satellite communications customers.

## **II. LIGHTSQUARED WILL PROVIDE AN INTEGRATED SERVICE.**

In addition to launching its new satellite, LightSquared is constructing a nationwide 4G LTE network. Constructing this network will require an investment of billions of dollars over the next several years and, LightSquared estimates, will support over 16,000 jobs.

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<sup>6</sup> No investment has yet been made in development of terrestrial-only chipsets pending the outcome of this proceeding. Accordingly, because of the lead time required to develop such chipsets, it is expected that during the first year of commercial operations only the Qualcomm dual-mode chipset will be available to users of the LightSquared network.

<sup>7</sup> LightSquared also will offer satellite-only rates.

LightSquared will operate its network on a wholesale basis and make capacity on the network available to customers serving end users. The central features of the network will be the SkyTerra satellite system and a terrestrial component that will be provided via a nationwide network of 40,000 terrestrial base stations.

LightSquared's service will be integrated in every sense. It will be technically integrated because LightSquared's satellite and terrestrial components will comprise a single network. It will be integrated from the perspective of LightSquared's customers because they will be able to offer their end users dual-mode devices. It will be economically integrated because LightSquared will only offer rate cards with integrated MSS/ATC pricing.

***Integrated network.*** The satellite and terrestrial components of LightSquared's network will be integrated technically. All traffic, whether it passes through the satellite or terrestrial conduits, will be processed and handled by the same integrated core network and business/operations support systems ("B/OSS"). Similarly, a single set of Regional Aggregation Centers and National Data Centers will be used for satellite and terrestrial traffic. From an operational perspective, therefore, there is no separate "satellite network" or "terrestrial network." There is only a single "integrated network," making for a seamless customer experience and thus a technically integrated network.

***Dual-mode devices.*** LightSquared has made a substantial investment to ensure that dual-mode devices will be available to users of its network. It is spending over \$50

million on the development of a Qualcomm dual-mode chipset and on associated satellite ground station infrastructure. The dual-mode chipset will make it possible for a single device to communicate with LightSquared's L-band satellites and with its L-band ATC base stations.

The satellite and terrestrial components of the Qualcomm dual-mode chipset will be fully integrated: There will be no separate satellite chip. Rather, L-band capability with satellite protocol will be embedded as software within commercial chipsets that also are capable of providing access to terrestrial service.

Through its agreement with Qualcomm, a leading chipset supplier, LightSquared has ensured that an initial range of dual-mode chipsets will be available to device manufacturers on pricing terms equal to those which apply to the same chipsets without the satellite protocol software. The agreement, whose term is 15 years, also provides for the availability of the satellite protocol in future chipsets on commercially reasonable terms. The aim of these provisions and LightSquared's investments in chipset and infrastructure development is to ensure that manufacturers are able to produce dual-mode devices employing the same components and having the same costs as those without satellite capability. As such, manufacturers will be able to offer satellite-capable devices to the company's retailers at prices equal to those of functionally identical devices without satellite capability.

LightSquared is taking and will continue to take commercially reasonable measures to ensure that dual-mode MSS/ATC component parts (*e.g.*, chipsets and RF

elements) are available from one or more mainstream component suppliers.

LightSquared will ensure that its investment in dual-mode chipsets and devices result

in readily available dual-mode data cards by the third quarter of 2011 and dual-mode

smartphones by the second quarter of 2012. LightSquared anticipates that a variety of

dual-mode handsets incorporating the integrated Qualcomm chipset will be

manufactured. In order to assure the Commission that MSS/ATC components such as

chipsets and RF elements continue to be available from mainstream component

suppliers, LightSquared will file status reports with the Commission every calendar

quarter once dual-mode devices are commercially available, reporting the availability of

dual-mode MSS/ATC component parts.

LightSquared's subsidization of dual-mode technology has given, and will continue to give, its retailer customers ample incentive to make dual-mode devices available to end users. Moreover, as described in further detail in the following section, by offering only an integrated price to its customers LightSquared will make satellite service over dual-mode devices substantially more attractive to end users than it might otherwise be absent integration into a terrestrial network.

*Integrated pricing.* LightSquared operates under a unified cost structure for its integrated network. The only price available to customers not selecting LightSquared's

satellite-only price will be an integrated MSS/ATC price. LightSquared will ensure that

the public and all of its actual and potential customers are notified of the availability of integrated service offerings to its retailer customers by posting descriptions of its integrated devices, pricing and technology to its website and updating these descriptions as necessary to capture any changes over time.

LightSquared's integrated MSS/ATC service offerings will be commercially competitive and will include a substantial satellite component. The company's pricing is integrated charging \$6 per one GB of terrestrial usage and providing 500 kb of satellite usage as part of the integrated price, with a charge for satellite usage above these levels of \$0.01/kb. This integrated pricing structure allows the user to pay a single price for satellite and terrestrial network access while reasonably reflecting the relative capacity of the satellite and terrestrial segments.<sup>8</sup> While LightSquared may offer volume discounts similar to those typically offered by telecommunications service providers, LightSquared will not offer exceptions or carve-outs from integrated pricing based on the type of customer or the services the customer provides.

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<sup>8</sup> LightSquared estimates that the capacity of its fully deployed terrestrial network as being 2,800 terabytes per hour, while each SkyTerra satellite has a capacity of 100 gigabytes per hour.

Although LightSquared's retailer customers will have the ability to offer terrestrial-only plans to their own end users, LightSquared will not provide any preferential terms for customers that offer such service. To the contrary, under LightSquared's integrated pricing, customers acquiring terrestrial capacity from LightSquared will have to pay for the satellite capacity that comes with it, whether they use the satellite capacity or not. Moreover, LightSquared commits that it will not institute policies or practices that would discourage its customers from offering integrated MSS/ATC service.

### **III. LIGHTSQUARED WILL CONTINUE TO PROVIDE SUBSTANTIAL SATELLITE SERVICE.**

An upgrade of LightSquared's satellite capabilities is imminent. LightSquared has spent \$600 million to construct, launch, and insure SkyTerra-1, which will inaugurate LightSquared's next generation system. The satellite was launched on November 14. This launch represents the culmination of seven years of project development and spectrum coordination.

SkyTerra-1 represents a major advance in satellite technology. Its 23 meter reflector is the largest reflector ever launched on a commercial satellite. When SkyTerra-1 enters into service, customers will see a revolutionary improvement in the size and cost of the satellite-enabled devices they use. What once was a 40-pound device the size of a suitcase that bore a \$4,000 price tag will have been reduced to a smartphone that can be purchased for a few hundred dollars or a data card that will cost under \$100.

LightSquared plans to grow its satellite business and make its satellite offerings more attractive to traditional satellite users. Satellite customer segments include the rural, public safety, and homeland security markets. In addition, LightSquared has made a commitment to the Indian Health Service to provide satellite service to American Indian and Alaska Native communities. The features that will become available once LightSquared's next generation system is in place are particularly attractive to public safety customers, because they make it possible to put an affordable device in the hands of every first responder. LightSquared anticipates that the number of devices that are enabled to communicate with its satellite network will double between 2011 and 2015.

By any standard, the range of satellite services that will be available to customers using the LightSquared network will be substantial. As a further demonstration of LightSquared's commitment to substantial satellite service, LightSquared pledges the following:

First, sufficient spectrum to conduct substantial satellite operations and in no event less than 6 MHz of LightSquared's L-band spectrum will be dedicated nationwide to satellite service. This amount of spectrum reflects LightSquared's commitment to satellite service.

Second, LightSquared's satellites will be capable of providing service across all of the L-band MSS frequencies the Commission has authorized LightSquared to operate on in the United States. The same will be true for satellite-only and dual-mode devices

accessing LightSquared's satellites. These commitments will ensure that LightSquared's L-band spectrum can enable satellite communication during times and in places in which LightSquared's terrestrial network is not available (*e.g.*, rural areas not within range of LightSquared base stations, disaster events).

Third, LightSquared will actively market its satellite service and will offer commercially competitive rates for the service.

Finally, once commercial MSS/ATC operations have begun, LightSquared will file reports with the Commission every six months providing the aggregate results of surveys given its customers requesting the number of terminals in service falling into each of three categories: MSS only, dual-mode MSS/ATC, and terrestrial-only.

#### **IV. REQUEST FOR PERMIT BUT DISCLOSE TREATMENT**

LightSquared requests that the Commission designate the *ex parte* status of this filing as "permit-but-disclose" under the Commission's rules.<sup>9</sup> Doing so will facilitate the development of a complete record and is consistent with Commission decisions in other ATC proceedings.<sup>10</sup>

#### **CONCLUSION**

The information provided in this filing demonstrates that LightSquared's revised business plan satisfies the Commission's integrated service requirements for L-

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<sup>9</sup> See 47 C.F.R. §§ 1.1200 et seq.

<sup>10</sup> See, *e.g.*, *Mobile Satellite Ventures Subsidiary LLC, Application for Minor Modification of Space Station License for AMSC-1*, Order and Authorization, 19 FCC Rcd 22144 (Int'l Bur. 2004) at ¶ 8 & n. 14.

band MSS systems. LightSquared's network is integrated. LightSquared's pricing is integrated. LightSquared's customers can offer dual-mode devices. And LightSquared's satellite service is substantial. If notwithstanding these integrated service features the Commission believes that any element of LightSquared's showing requires a waiver, there is ample basis for granting one under applicable standards.<sup>11</sup>

Sincerely,

/ s / Jeffrey J. Carlisle  
Executive Vice President  
Regulatory Affairs and Public Policy

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<sup>11</sup> See *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969) (grant of a waiver request is appropriate if: (1) a waiver would not undermine the underlying policy objectives of the rule(s) in question; and (2) a denial of the waiver request would not be in the public interest.).