April 15, 2020

BY ECFS

Marlene H. Dortch Secretary Federal Communications Commission 445 12th Street, SW, Room TW-A325 Washington, DC 20554

Re: Ligado Network Subsidiary LLC, Amendment to License Modification Applications, IBFS File Nos. SAT-AMD-20180531-00045, SAT-AMD-20180531- 00044, SES-AMD-20180531-00856; SES-MOD-20151231-00981, SAT-MOD20151231-00090, and SAT-MOD-20151231-00091 (the "Modification Applications"); IB Docket Nos. 12-340, 11-109; RM-11681

Dear Ms. Dortch:

For nearly a decade Ligado Networks LLC ("Ligado") has subjected the FCC to a steady barrage of waiver requests, license modification applications, amendments to those applications, and *ex parte* presentations, all attempting to abandon its dwindling satellite business in order to gain the Commission's blessing for its constantly evolving terrestrial wireless business plans that seem more attuned to political expedience than a response to actual market needs. In response, the Commission has opened multiple separate dockets to deal with the varied, overlapping, and at times conflicting issues posed by these filings. The Commission and other stakeholders have now devoted over 9,900 pages of filings, multiple Congressional hearings, and countless meetings to addressing one company's spectrum arbitrage effort, and the public has nothing to show for it. Throughout this process, the Coalition of Aviation, Satellite Communications, and Weather Information Users ("Coalition")¹ has repeatedly highlighted Ligado's failure to meaningfully address the harmful interference that its proposed operations will cause to critical services in adjacent frequency bands.² Recent filings from the Department of Defense and the National Telecommunications and Information Administration ("NTIA") express similar concerns about harmful interference from Ligado's operations, and make it clear that grant of Ligado's applications will have substantial, costly, and far-reaching implications for federal and

¹ The Coalition includes diverse membership from across the aviation, satellite communications, and weather information communities, including: Aerospace Industries Association, Aircraft Owners and Pilots Association, Airlines for America ("A4A"), American Weather and Climate Industry Association, Aviation Spectrum Resources, Inc., Cargo Airline Association, General Aviation Manufacturers Association, Iridium Communications Inc., Lockheed Martin Corporation, Microcom Environmental, Narayan Strategy, National Air Carrier Association, National Air Transportation Association, NENA – The 9-1-1 Association, Satelles, Semaphore Group, and Skytrac among others.

² See Letter from Bryan N. Tramont & Patrick R. Halley, Counsel to Iridium Communications, Inc., to Marlene H. Dortch, Secretary, FCC, IB Docket Nos. 11-109 and 12-340 (filed Jul. 9, 2019); Letter from Bryan N. Tramont, Counsel to Iridium Communications Inc., to Marlene H. Dortch, Secretary, FCC, IB Docket Nos. 11-109 and 12-340, at 2 (filed Aug. 26, 2019); Letter from Bryan N. Tramont, Counsel to Iridium Communications Inc., to Marlene H. Dortch, Secretary, FCC, IB Docket Nos. 11-109 and 12-340, at 2 (filed Aug. 26, 2019); Letter from Bryan N. Tramont, Counsel to Iridium Communications Inc., to Marlene H. Dortch, Secretary, FCC, IB Docket Nos. 11-109 and 12-340, at 2 (filed Oct. 2, 2019).

non-federal operations alike.³ Given Ligado's failure to adequately address the harmful interference at the heart of its proposals and the convoluted and dated record for this proceeding, the most appropriate action for the FCC to take is to deny the Ligado applications by terminating the associated dockets.

The Commission has terminated proceedings where they have been pending for an undue period and where such action "would eliminate the need for further expenditure of time and resources by the Commission and promote administrative efficiency."⁴ All of those factors are present in the Ligado case. The dockets in question have been open and pending since 2011 and 2012. In the past nine years, Ligado and its predecessors have filed multiple modifications and amendments, and have made numerous other revisions to the proposal in supplemental filings in these dockets as well.⁵ Each of these filings has included new or revised operational and technical details, but they all stop short of fully addressing the substantiated concerns of harmful interference by predecessor proposals. Closing the dockets and denying Ligado's proposals would eliminate the ongoing and unproductive administrative burdens placed on the Commission and other stakeholders in reviewing Ligado's seemingly endless filings in these dockets and permit the Commission as well as the industry to move forward with a clean slate.

The Commission has also terminated dockets where "the subject of [a] proceeding has changed significantly" from when it was initiated, and when "fundamental changes in the telecommunications industry [have] rendered the docket stale."⁶ It is clear that Ligado's proposed terrestrial service and the subject matter of the associated dockets has evolved significantly from June 2011, when IB Docket 11-109 was first opened to invite comment on technical studies resulting from a working group process. As members of the Coalition have

⁵ See, e.g., IBFS File Nos. SAT-MOD-20120928-00160; SAT-MOD-20151231-00090; SAT-AMD-20180531-00044.

³ See Letter from Douglas W. Kinkoph, Associate Administrator, Performing the Delegated Duties of the Assistant Secretary for Communications and Information, National Telecommunications and Information Administration, United States Department of Commerce, to Ajit Pai, Chairman, FCC at 2 (Apr. 10, 2020) ("We believe that the Commission cannot reasonably reach ... a conclusion [that the harmful interference concerns have been resolved]"); Letter from Douglas W. Kinkoph, Deputy Assistant Secretary for Communications and Information (Acting), National Telecommunications and Information Administration, United States Department of Commerce, to Ajit Pai, Chairman, FCC at 2 (Dec. 6, 2019) ("[d]espite the considerable efforts [of federal agencies] to find a satisfactory solution, NTIA, on behalf of the executive branch, is unable to recommend the Commission's approval of the Ligado applications.").

⁴ Petition of Skype Communications S.A.R.L. to Confirm a Consumer's Right to Use Internet Communications Software and Attach Devices to Wireless Networks, RM-11361, Order, 30 FCC Rcd 3689 para. 4 (2015) (granting request to withdraw a petition for rulemaking and terminating the associated proceeding "because it would resolve a proceeding that has been pending for over eight years, eliminate the need for further expenditure of time and resources by the Commission, and promote administrative efficiency.").

⁶ Policies and Rules Governing Interstate Pay-Per-Call and Other Information Services, and Toll-Free Number Usage, Notice of Proposed Rulemaking and Memorandum Opinion and Order, 19 FCC Rcd 13461, 13476, para. 38 (2004) (900 Service 2004 Order & NPRM) (terminating a docket regarding audiotext information services because the "market, as well as related regulatory environment and technology have undergone significant changes."); Long-Run Regulation of AT&T's Basic Domestic Interstate Services, Order, CC Docket No. 83-1147, 5 FCC Rcd 5411 para. 1 (1990) ("In this Order, we terminate the present proceeding in light of the fundamental changes that have taken place in the telecommunications industry since the proceeding was initiated.").

explained previously, Ligado's pending proposal differs dramatically from what was considered in 2011, and differs even more dramatically from the ATC offerings that the Commission contemplated in 2003 when it first adopted ATC rules.⁷ In the past year alone Ligado has suggested multiple new operational models for its network,⁸ and is now discussing plans to pair its spectrum with mid-band spectrum in the C-band⁹—a proposal wholly absent, even in notional form, from its applications or earlier filings. There is no question that the service that Ligado seeks to provide today is fundamentally different from those it sought to provide in the past. Members of the Coalition have valiantly tried to address the confused and convoluted Ligado dockets over the years, but those efforts seem like a fool's errand when Ligado itself appears incapable of keeping track of its ever-changing proposals.

As Ligado's proposals have changed, so too have the services operated in adjacent frequency bands. The members of the Coalition rely on satellites operating in the L-band for a variety of services. The aviation industry increasingly relies on L-band satellite communications and location services to ensure safe, efficient, and reliable air travel, with GPS services are an essential enabler required to support implementation of the Federal Aviation Administration's ("FAA") NextGen program for the United States' National Airspace System (NAS).¹⁰ GPS has had a transformative impact on a number of industries and has already generated more than \$1.4 trillion in economic benefit for the U.S. economy.¹¹ Through its satellite network, Iridium provides an unprecedented level of reliable and secure communications around the world, enabling a range of communications and safety applications.¹² The NOAA Geostationary Operational Environmental Satellite ("GOES") system provides weather information users with data needed for timely and accurate weather forecasting.¹³ These services have evolved with time and their utility to the public has increased dramatically, but so too has the potential for harm to these services from interference caused by a system like Ligado's.¹⁴

¹⁰ See Letter from Edward A. Yorkgitis, Jr., Counsel to Aviation Spectrum Resources, Inc., to Marlene H. Dortch, Secretary, FCC, IB Docket Nos. 11-109 and 12-340 (filed Jul. 29, 2016).

⁷ Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands, Order on Reconsideration, 18 FCC Rcd 13590 (2003).

⁸ See Letter from Gerard J. Waldron, Counsel to Ligado Networks LLC, to Marlene H. Dortch, Secretary, FCC, IB Docket No. 11-109 (filed Aug. 6, 2019) (listing several different deployment approaches that Ligado is considering, including using its spectrum for carrier aggregation, supplemental uplinks, and downlink/uplink decoupling).

⁹ See Letter from Gerard J. Waldron, Counsel to Ligado Networks LLC, to Marlene H. Dortch, Secretary, FCC, IB Docket No. 11-109 (filed Feb. 6, 2020); Letter from Gerard J. Waldron, Counsel to Ligado Networks LLC, to Marlene H. Dortch, Secretary, FCC, IB Docket No. 11-109 (filed Dec. 16, 2019).

¹¹ NTIA, RTI International, Economic Benefits of the Global Positioning System (GPS) (Jun. 2019), <u>https://www.rti.org/sites/default/files/gps_finalreport.pdf</u>.

¹² See, e.g., *Iridium Certus*®, IRIDIUM, <u>https://www.iridium.com/services/iridium-certus/</u> (last visited Apr. 9, 2020); Safety Services, IRIDIUM, <u>https://www.iridium.com/solutions/maritime/safety/</u> (last visited Apr. 9, 2020); *Iridium* NEXT, AIREON, <u>https://aireon.com/resources/overview-materials/iridium-next/</u> (last visited Apr. 9, 2020).

¹³ NOAA's Environmental Observations: Spectrum Matters, NOAA NESDIS (Aug. 8, 2016), https://www.nesdis.noaa.gov/content/noaa%E2%80%99s-environmental-observations-spectrum-matters

¹⁴ Letter from Bryan N. Tramont, Counsel to Iridium Communications Inc., to Marlene H. Dortch, Secretary, FCC, IB Docket Nos. 11-109 and 12-340, at 4 (filed Oct. 2, 2019).

Given the tortured history of this proceeding and the current state of the record, the Commission and all parties concerned would be best served by starting with a clean slate, including Ligado itself. The dockets related to the Ligado proceeding should be closed and Ligado's pending applications should be dismissed. To the extent that Ligado desires to file new applications to fit some new business vision that is consistent with its existing authority, it of course may do so.

The Commission should put an end to this constant, fruitless distraction, and allow the parties to refocus their efforts on operating their businesses, as well as the affected federal agencies missions, and productively supporting the public interest.

Sincerely,

| Aerospace Industries Association | Lockheed Martin Corporation |
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| Aircraft Owners and Pilots Association | Microcom Environmental |
| Airlines for America | Narayan Strategy |
| Aviation Spectrum Resources, Inc. | National Air Carrier Association |
| Cargo Airline Association | National Air Transportation Association |
| Delta Airlines | NENA – The 9-1-1 Association |
| FedEx | Satcom Direct |
| General Aviation Manufacturers Association | Satelles |
| Helicopter Association International | Semaphore Group |
| JetBlue | Skytrac |
| Iridium Communications Inc. | Southwest Airlines |