June 3, 2020

VIA ECFS

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

Re: IB Docket Nos. 11-109, 12-340; IBFS File Nos. SES-MOD-20151231-00981, SAT-MOD-20151231-00090, SAT-MOD-20151231-00091

Dear Ms. Dortch,

The undersigned parties write to support the Petition for Stay filed by the National Telecommunications and Information Administration ("NTIA") in the above-referenced matters.[1] The Petition satisfies the four-part test established by the Court of Appeals and applied by the Commission.[2] As the Commission has put it, under this test, a stay is warranted "when a serious legal question is presented, if little harm will befall others if the stay is granted and denial of the stay would inflict serious harm."[3] The Petition (as well as the numerous petitions for reconsideration filed against the *Ligado Order*) demonstrates conclusively that the *Order* presents serious and unresolved legal and factual questions, that grant of the stay will not harm

[1] Petition for Stay of the National Telecommunications and Information Administration, IB Docket Nos. 11-109, 12-340 (filed May 22, 2020) ("Petition"). Each undersigned entity has an interest in the outcome of this matter and could be affected by the grant or denial of NTIA's petition. Several of the undersigned parties – specifically, Iridium Communications Inc., Aviation Spectrum Resources, Inc., Air Line Pilots Association, Int'l, Aerospace Industries Association, Aircraft Owners and Pilots Association, Aireon LLC, Airlines for America, FLYHT Aerospace Solutions Ltd., Skytrac, Resilient Navigation and Timing Foundation, Cargo Airline Association, General Aviation Manufacturers Association, Helicopter Association International, and International Air Transport Association – have filed petitions with the Commission asking it to reconsider its April 22, 2020 Order in this matter, *Lightsquared Technical Working Group Report et al.*, Order and Authorization, FCC 20-48 (rel. Apr. 22, 2020) ("*Order*" or "*Ligado Order*").

[2] *Washington Metro. Area Transit Comm'n v. Holiday Tours, Inc.*, 559 F.2d 841, 843, (D.C. Cir. 1977); *Va. Petroleum Jobbers Ass'n v. Fed. Power Comm'n*, 259 F.2d 921, 925 (D.C. Cir. 1958); *Indiana & Sprint Corp.*, 32 FCC Rcd 4058, 4059 ¶ 4 (2017) (stay warranted where petitioner demonstrates that '(i) it is likely to prevail on the merits; (ii) it will suffer irreparable harm, absent a stay; (iii) other interested parties will not be harmed if the stay is granted; and (iv) the public interest favors a grant of the stay.'" (citation omitted)); *City of Boston, Mass., and Sprint Nextel*, 22 FCC Rcd. 2361, 2364 ¶ 8 (2007); *Comcast Cable Commc'ns, LLC Petition for Emergency Stay*, 20 FCC Rcd. 8217 ¶ 2 (2005); *Cincinnati Bell Telephone Company*, 8 FCC Rcd 6709 (2003).

[3] Petition at 2-3 (*quoting Fla. Pub. Services Comm'n Request for Interpretation of the Applicability of the Limit on Change in Intrastate Allocation, Section 36.154(f) of the Commission's Rules*, 11 FCC Rcd 14324, 14326 ¶ 3 (1996)).

others, and that a stay is necessary to prevent serious harm arising from harmful interference into mission-critical GPS devices and satellite communications. In short, the public interest strongly favors maintaining the *status quo* during the pendency of NTIA's petition for reconsideration, and the Commission should grant the Petition.

NTIA's arguments for stay are especially powerful given the unique federal interests implicated by the *Order*, as represented by NTIA. Some fourteen executive branch agencies opposed grant of Ligado's requests, including NTIA, the Department of Transportation (which is charged with ensuring civilian access to the benefits of GPS technology) and the Department of Defense ("DOD") (which is responsible for safeguarding GPS for military purposes, and for ensuring national security more broadly). DOD, in particular, stated that approval "would cause unacceptable operational impacts and adversely affect the military potential of GPS," and made clear that there were "no practical measures to meaningfully mitigate" those impacts.[4] DOD further cautioned that approval might set back efforts to "respond to rapidly evolving threats by decades."[5] Historically, the FCC has worked collaboratively with NTIA and other federal stakeholders to reach reasonable and mutually satisfactory solutions to governmental concerns, including concerns significantly less alarming than those raised in this matter. Here, the Commission made little, if any, cognizable effort to accommodate federal concerns, and it surely did not "resolve" such concerns, as Section 343 of the Communications Act requires.[6] This omission in and of itself warrants grant of a stay to maintain the *status quo* while the Commission corrects this error.

As to the specific waiver standards, NTIA shows conclusively that there is a substantial likelihood that its petition for reconsideration will succeed on the merits. As NTIA demonstrates, the *Ligado Order* is premised upon an untested metric for determining harmful interference[7] and the resulting "conclusion that harmful interference to GPS devices is unlikely."[8] The Commission adopts this conclusion despite acknowledging the contrary fact that harmful interference to Federal, as well as non-Federal GPS devices used by aviation and many other industry sectors is likely[9] and despite the proven harmful interference to reliable, ubiquitous satellite communications services offered into the record by other providers.[10] The

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[4] Letter from Dana Deasy, DOD Chief Operation Officer, and Michal Griffin, Under Secretary of Defense for Research and Engineering, to Douglas W. Kinkoph, NTIA, at 1 (Mar. 12, 2020); Memorandum for IRAC Chairman, Department of the Air Force, at 1 (Feb. 14, 2020).

[5] *Id*. at 5 (emphasis added).

[6] 47 U.S.C. § 343.

[7] Petition at 4-5.

[8] *Id.* at 4.

[9] *Id.* at 5.

[10] *See, e.g.*, Technical Analysis of Ligado Interference Impact on Iridium User Link, IB Docket Nos. 11-109, 12 -340 ("Iridium User Link Analysis"), *attached to* Letter from Bryan N. Tramont, Counsel to Iridium, to Marlene H. Dortch, Secretary, FCC, IB Docket Nos. 11-109, 12-340 (filed Sept. 1, 2016); Technical Analysis of Ligado Interference Impact on Iridium Aviation Services, IB Docket Nos. 11-109,

cognitive dissonance displayed by these contradictory conclusions demonstrates that the *Ligado Order* cannot stand and that the Commission will have to resolve these matters on reconsideration.

Ligado's contrary claim that NTIA's arguments "boil down to nothing more than a disagreement" with the Commission's expert judgment is flatly incorrect.[11] NTIA demonstrates convincingly that the Commission *failed* to apply its expertise, instead adopting irreconcilable conclusions and entirely ignoring evidence contrary to its views. Staying the *Order* is thus warranted while the Commission undertakes the steps to test its interference theory and identify an interference standard appropriate to the actual manner in which Ligado would deploy and operate its network.

NTIA also demonstrates the likelihood that it will experience irreparable harm in the absence of a stay.[12] As noted, the *Order* itself acknowledges the likelihood of harmful interference to GPS devices and other petitions for reconsideration further prove the additional likelihood of harmful interference to satellite communications. Moreover, NTIA points out that the *Ligado Order* "pays no heed to previously recognized concerns about overload interference, the resulting new interference environment from dense deployment of terrestrial base stations, or the impact on a number of GPS devices even with the adopted guard band and reduced power."[13]

Ligado contends that no harm is imminent because "Ligado's system will not become operational for a period as long as eighteen months."[14] This promise can provide no comfort, however, because "a period as long as eighteen months" could mean a period of six days, six weeks, or six months. In other words, absent a prohibition against Ligado beginning operations before eighteen months from the date of the *Order*, the harm NTIA identifies is imminent. Ligado cannot credibly rely on the outer bound of its likely deployment schedule to avert a stay without a commitment not to deploy until eighteen months have indeed passed. If NTIA is

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12-340, *attached to* Letter from Bryan N. Tramont, Counsel to Iridium, to Marlene H. Dortch, Secretary, FCC, IB Docket Nos. 11-109, 12-340 (filed Dec. 14, 2016); Letter from Bryan N. Tramont, Counsel to Iridium, to Marlene H. Dortch, Secretary, FCC, IB Docket Nos. 11-109, 12-340 (filed Oct. 2, 2019). Reply Comments of Aviation Spectrum Resources, Inc. on Ligado Modification Applications, IB Docket Nos. 11-109 and 12-340; IBFS File Nos. SES-MOD-20151231-00981 *et al.*, SAT-MOD-20151231-00090, SAT-MOD-20151231-00091, *et al.*, at 16-18 (July 24, 2018) (explaining that Inmarsat acknowledges that Ligado's proposed services would interfere with Inmarsat SATCOM providing both ground connectivity and Air Traffic Control in certain categories of airspace and, presupposing that compatibility can be achieved between Inmarsat downlinks and Ligado base station transmissions, a full fleet retrofit for Inmarsat receivers on aircraft may be needed and require temporary separation zones around aircraft operating areas).

[11] Ligado Networks LLC's Opposition to NTIA's Petition for Stay, IB Dkt. Nos. 11-109, 12-340 at 4 (filed May 29, 2020) ("Ligado Opposition").

[12] Petition at 6-7.

[13] *Id.* at 7.

[14] Ligado Opposition at 2.

expected to renew its request for a stay closer to the close of the eighteen-month period,[15] the Commission should require it to commit not to begin operations before that period lapses.

Nor will the conditions set forth in the *Order* be effective in protecting against such harmful interference. When one peeks behind their façades, these "conditions," like the homes in a Potemkin Village, lack any substance. They at most require Ligado to confer with parties that might experience harmful interference, without requiring Ligado to take any *action* in the event, presumably in its discretion, it refuses to admit to the problem. Indeed, the conditions are useless with respect to federal GPS users, the class of users ostensibly proffered the most protection by the conditions in the *Order*: Ligado's operations would affect too many federal GPS devices for repair or replacement to be feasible, and the conditions fail to account for the classified nature of the military GPS uses or the fact that many affected receivers are embedded into military hardware and weapons systems.[16] Moreover, as the several petitions for reconsideration from the aviation sector also show, the conditions fail to provide sufficient protection to ensure safety of flight throughout critical aeronautical operations including near Ligado base stations, especially by medical emergency helicopters and other low-altitude flight operations.[17] In short, "denial of a stay could result in serious harm to the national security and the public safety, [and] grant of a stay would be appropriate."[18]

Further, there can be no dispute that others will incur little if any harm should the Commission grant NTIA's stay request. A stay will simply maintain the *status quo*, which has been in place for over a decade. During that period, Ligado and its predecessors-in-interest have engaged in a campaign of misdirection and mystification, repeatedly changing their proposals and insisting that their hypothetical offering will surely advance whatever goal is deemed fashionable at any given time, while refusing to address head on the concerns that others, including many of the signatories to this letter, raised about the grave risks of harmful interference its proposals create. To the extent Ligado has endured any delay, it has been the author of its own misfortune, playing procedural games designed to maximize its chances of approval while minimizing any obligation to deploy service on a timely basis or to resolve serious interference matters.

Having time and again kicked the proverbial can down the road, Ligado has no basis on which to object to a stay at this point, particularly given the *Order*'s many errors and omissions. Ligado's only argument that it will be harmed by a stay actually proves the opposite. Ligado contends that a stay will deprive it of "certainty," leaving it "unable to make the investments

[15] *Id*. at 8 n.3.

[16] *See id.* at 6.

[17] *See, e.g.,* Petition of the Aerospace Industries Association, *et al.,* IB Docket No. 11-109 and 12-340, et al. at 8-11, 14-18 (May 22, 2020); Petition for Reconsideration of the Air Line Pilots Association, International, IB Docket No. 11-109 and 12-340, at 9-11, 13-15 (May 21, 2020).

[18] *Id.* at 5.

necessary to develop its network or to enter into network partnership agreements."[19] Ligado neglects to mention that there are now multiple petitions on file asking the Commission to reconsider the *Order*, meaning that Ligado *already* faces substantial uncertainty. If, as Ligado itself says, such uncertainty precludes it from taking any action, then a stay will not have any material effect on its options – in other words, a stay will not harm Ligado at all. Thus, grant of a stay will "harmlessly" allow the Commission to establish a valid interference metric for Ligado's proposed service.[20]

In sum, Petition satisfies the four-part stay standard; it has demonstrated (1) the existence of serious legal flaws in the *Order* that will necessitate Commission reconsideration, (2) the likelihood of irreparable harm absent stay, and (3) the lack of significant harm that would result from a stay. Finally, the balance of public interests convincingly favors grant of stay here. Indeed, as the Commission recognizes, "[i]f there is a particularly overwhelming showing in at least one of the factors, the Commission may find that a stay is warranted notwithstanding the absence of another one of the factors."[21] In this regard, the Commission's utter disregard for Executive Branch concerns regarding harmful interference to federal GPS devices standing alone is sufficient to warrant a stay, let alone the other serious issues with the *Order* and the potential for harm to public safety described herein.

The Commission should therefore grant NTIA's Petition for Stay for the reasons presented above.

Sincerely yours,

ACR Electronics, Inc.

Aerospace Industries Association (AIA)

Air Line Pilots Association, International (ALPA)

Aircraft Electronics Association

Aircraft Owners and Pilots Association (AOPA)

Aireon LLC

Airlines for America (A4A)

Alaska Airlines

Alert Users Group

American Airlines

American Association of Airport Executives

American Association of Port Authorities (AAPA)

American Bus Association

American Geophysical Union (AGU)

American Meteorological Society (AMS)

[19] Ligado Opposition at 8.

[20] Petition at 5.

[21] *Telecomms. Relay Servs. and Speech-to-Speech Servs. for Individuals with Hearing and Speech Disabilities*, 23 FCC Rcd. 1705, 1706-07 ¶ 4 (2008);

American Sportfishing Association

American Trucking Associations

American Weather and Climate Industry Association

Associated Equipment Distributors

Association of Equipment Manufacturers (AEM)

Atlas Air Worldwide

Aviation Spectrum Resources, Inc. (ASRI)

BoatU.S

Cargo Airline Association

Center for Sportfishing Policy

CoBank

Delta Air Lines, Inc.

DTN

Equipment Dealers Association

FedEx Corporation

FLYHT Aerospace Solutions Ltd.

FreeFlight Systems

Frontier Airlines

General Aviation Manufacturers Association (GAMA)

GeoOptics, Inc.

Geospatial Equipment & Technology Institute

Helicopter Association International (HAI)

Helicopter Safety Advisory Conference (HSAC)

International Air Transport Association

Iridium Communications Inc.

JetBlue

Maxar

Microcom Design

Narayan Strategy

National Agricultural Aviation Association (NAAA)

National Air Carrier Association (NACA)

National Defense Industrial Association

National Marine Manufacturers Association (NMMA)

National Society of Professional Surveyors

National Weather Association

NENA – the 9-1-1 Association

NetJets Association of Shared Aircraft Pilots (NJASAP)

PHI Aviation

PlanetiQ

Polar Air Cargo

Regional Airline Association (RAA)

Resilient Navigation and Timing Foundation (RNTF)

Satelles

Semaphore Group

Skytrac

Southwest Airlines

Spire Global

Subsurface Utility Engineering Association

Trimble Inc.

United

U.S. Contract Tower Association

U.S. Geospatial Executives Organization

UPS

Vertical Flight Society