

**Before the
DEPARTMENT OF COMMERCE
NATIONAL TELECOMMUNICATIONS AND INFORMATION ADMINISTRATION
Washington, D.C. 20230**

In the Matter of)
)
Telecommunications Assessment of the) Docket No. 140925800-4800-01
Arctic Region)

COMMENTS OF IRIDIUM SATELLITE LLC

Iridium Satellite LLC (“Iridium”) hereby submits comments in response to the National Telecommunications and Information Administration’s (“NTIA’s”) Notice of Inquiry (“NOI”) in the above-referenced proceeding.¹ Iridium appreciates the opportunity to highlight the important, unique, diverse, and innovative communications capabilities that its truly global satellite service provides Alaska and the entire Arctic region. Iridium, a U.S.-based and U.S.-licensed company, operates the world’s largest commercial satellite constellation and is the only mobile satellite service (“MSS”) provider capable of providing service to all parts of the globe, allowing it to serve remote domestic and international areas that other telecommunications operators are unable to reach. The Iridium satellite network supports a variety of affordable, reliable satellite-based communications solutions, including one-way, two-way, and group mobile and fixed voice and data communications services, satellite data modem, asset tracking, simplex messaging, and remote monitoring services. Iridium is committed to Alaska and the pan-Arctic region, and its robust MSS system provides critical communications services to first responders, the Federal Government, aid organizations, medical care providers, the U.S. military, and private users. Additionally, Iridium is the only provider of critical flight, maritime, and

¹ Dept. of Commerce, NTIA, *Telecommunications Assessment in the Arctic Region*, Notice of Inquiry, 79 Fed. Reg. 59746 (Oct. 3, 2014) (“NOI”).

worker safety applications in the polar regions, including Alaska. With the planned launch of its second-generation Iridium NEXT fleet in 2015, Iridium will sustain and build upon its core services, adding new, advanced functionality that will bring the benefits of its highly reliable, ubiquitous satellite services to new industries and markets.

I. INTRODUCTION AND SUMMARY

Iridium agrees with NTIA that “[e]ffective communications services are critical to accommodate the increase in commercial, residential, governmental, and other critical economic and social activities across Arctic Alaskan communities, as well as the pan-Arctic region in general.”² Since initiating service in 1998, Iridium has emerged as a leader in the field of MSS operations. Iridium is the only mobile satellite communications provider capable of providing truly global service without the need for local terrestrial facilities or local gateways. As the NOI asks whether “existing and planned satellite systems . . . provide 24/7 availability,”³ Iridium emphatically answers “yes.” Iridium provides worldwide coverage through the operation of the world’s largest commercial satellite constellation, consisting of sixty-six low-Earth orbiting, cross-linked satellites operating as a fully meshed network and supported by in-orbit spares.

That is why Iridium is uniquely suited to provide innovative and diverse service offerings to areas of Alaska and the Arctic that other providers simply do not reach. It is the only mobile satellite service offering coverage over the entire state of Alaska, including the Aleutians and surrounding waters, and even the far northern regions above the Arctic Circle. The late former Alaska Senator Ted Stevens recognized Iridium’s “commitment to Alaska,” stating that Iridium “satellite communications have become a lifeline for our state. Our first responders, commercial

² NOI, 79 Fed. Reg. at 59747-48.

³ *Id.*, 79 Fed. Reg. at 59749.

fishermen in Dutch harbor, oil and gas workers in the remote north, and bush pilots flying across our state rely upon this system.”⁴ Some examples of Iridium’s capabilities and services are:

- The distinctive architecture of Iridium’s system allows it to provide mobile voice and data services to individuals located outside population centers that are unserved or underserved by other telecommunications services. For example, Iridium satellite phones such as the Iridium Extreme provide customers with two-way voice, SMS, and data services. And Iridium recently announced the introduction of Iridium GO!TM, a Wi-Fi hotspot device that allows users to access email and data services over their smartphone or laptop anywhere in the world.
- Iridium Pilot® Land Stations allow individuals in small, indigenous Arctic communities as well as individuals and businesses in remote locations to obtain, for the first time, reliable Internet connections and voice calling.
- With the Northern Lights prepaid card, Iridium provides a specific, geo-restricted discounted commercial offering for Alaska and Canada that is among the most cost-effective of any of its offerings in the world.
- Iridium has a strategic relationship with U.S. Government and Alaskan government customers, providing vital, 24/7 services to the Department of Defense and many federal and state bureaus, agencies and departments.
- As recognized by FirstNet and the FCC, Iridium’s 24/7, round-the-world MSS plays an indispensable role in emergency and search-and-rescue operations across the globe and in Alaska. For example, Iridium satellite phones, such as the Extreme described above, provide connectivity during emergencies. Iridium’s two-way personal tracking devices facilitate emergency response for Alaska’s outdoor adventurers.
- The Federal Aviation Administration (“FAA”) Alaska Flight Services recently approved the DeLorme inReach device for the Enhanced Special Reporting Service (“eSRS”) program. The device utilizes the Iridium network to provide Global Positioning System (“GPS”) Automated Flight Following, SOS alerting and two-way text messaging from the air. In addition, the Spidertracks Satellite Aircraft Tracking system utilizes the Iridium network to aid search-and-rescue missions for downed aircraft.
- The FCC recently approved Iridium’s provision of Aeronautical Mobile-Satellite (Route) Service (“AMS(R)S”) for service in oceanic, polar, and remote regions, which will enhance flight safety and communications systems.

⁴ Iridium LLC, Press Release, *Senator Ted Stevens Officiates at New Iridium Satellite Ground Station in Alaska* (Aug. 29, 2006), available at <http://www.spaceref.com/news/viewpr.html?pid=20704>.

- Iridium’s OpenPort® service offers a suite of capabilities for maritime vessel telecommunications optimization, and its transceivers are engineered for enhanced durability to withstand the harshest maritime conditions.
- Iridium’s diverse commercial customer base, which includes markets critical to Alaska such as oil and gas, mining, recreation, forestry, construction, and transportation, rely on Iridium short-burst data services for tracking and monitoring as essential to their daily operations.

Additionally, Iridium plans several enhancements and new service offerings that will benefit its customers in the Arctic region and across the globe:

- Expected to be deployed in 2015, Iridium NEXT will enable enhanced voice quality, substantially improved data transmission speeds, and numerous other advanced services.
- The Aireon hosted payload on Iridium NEXT will provide the world’s first satellite-based global air traffic surveillance system.
- With the support of the U.S. Coast Guard, Iridium is working to gain international regulatory approval for Iridium to be a provider of Global Maritime Distress and Safety System (“GMDSS”), which automates and improves emergency communications for maritime users.

As the foregoing demonstrates, Iridium’s distinctive and robust network offerings allow it to foster a special relationship with customers across all sectors of Alaska and the Pan-Arctic region.

Iridium is encouraged that the NOI asks how public investment can foster the deployment of advanced communications networks in Alaska and the Arctic.⁵ One barrier to adoption by consumers and businesses of any communications service in Alaska and the Pan-Arctic region is cost. Australia addressed this barrier by establishing a program that provided subsidies for satellite phone handsets. Australia’s program successfully assisted more than 26,000 individuals and small businesses in remote, unserved locations to obtain voice and data service.⁶ Iridium

⁵ See 79 Fed. Reg. at 59750.

⁶ Australian Government, Dept. of Communications, *Satellite Phone Subsidy Scheme*, available at http://www.communications.gov.au/news/media_centre/satellite_phone_subsidy_scheme.

supports the introduction of a similar program in the United States for Alaska and the pan-Arctic regions.

II. IRIDIUM'S TRULY GLOBAL SERVICE IS INVALUABLE FOR EMERGENCY RESPONSE AND SEARCH-AND-RESCUE MISSIONS

The NOI asks “what communications services are used for search and rescue operations and what is their availability and reliability?”⁷ Iridium’s robust MSS system delivers indispensable communications services to Alaskan state government and federal public safety users. As demonstrated by recent events such as Hurricane Sandy in the Northeast United States, Iridium’s satellite communications services are essential to organizations and individuals operating in the areas affected by a disaster in the hours and days immediately following it when some terrestrial systems are unavailable. Key to Iridium’s appeal for public safety users is its network of low earth orbiting satellites and resilient ground infrastructure, which contains multiple layers of redundancy and backup protection for all critical features to ensure network reliability even during and after emergencies that disrupt all terrestrial wireless communications. Each satellite in Iridium’s constellation communicates with other nearby satellites in adjacent orbits, handing off voice or data communications from one spot beam to another within the satellite footprint and from one satellite to the next as they pass overhead. Voice and data communications are relayed around the orbital network without touching ground until the point at which they are transmitted to an Iridium gateway and transferred to the public switched telephone network.

Indeed, FirstNet has recognized that it should leverage the reliability, redundancy, and ubiquity of MSS to ensure maximum network resiliency during times of emergency.⁸ Likewise,

⁷ NOI, 79 Fed. Reg. at 59749.

⁸ See generally FirstNet Program Roadmap Executive Summary (Mar. 2014), available at http://firstnet.gov/sites/default/files/FirstNet%20Program%20Roadmap%20Executive%20Summary_03112014.pdf.

the FCC has recognized “the importance of maintaining MSS to provide services, for example, to public safety and Federal government agencies, to rural areas, and during natural disasters.”⁹

MSS “serve[s] important needs,” and the agency correctly noted that “MSS systems can provide communications in areas where it is difficult or impossible to provide communications coverage via terrestrial base stations, such as remote or rural areas and non-coastal maritime regions, and at times when coverage may be unavailable from terrestrial-based networks, such as during natural disasters.”¹⁰

Iridium’s indispensable role in emergency telecommunications is recognized in Alaska and around the world. For example, one hiker noted that only Iridium satellite phones provide service along portions of the trails in Alaska’s Klondike Gold Rush National Historical Park where no cell phone service is available and park officials “might be hours or even days away.”¹¹ And in October 2012, Iridium received an International Telecommunication Union Humanitarian Award “in recognition of the commitment and consistent leadership in supporting the use of telecommunications to save lives during emergencies.”¹²

Iridium agrees with NTIA that “[a]ccurate and reliable networks and services, such as radionavigation, are critical to the safety and security of the [Arctic] region.”¹³ Iridium’s global coverage and low-latency data connections provide the enabling technology for satellite aircraft

⁹ See *Fixed and Mobile Satellite Service Bands at 1525-1559 MHz and 1626.5-1660.5 MHz, 1610-1626.5 MHz and 2483.5-2500 MHz, and 2000-2020 MHz and 2180-2200 MHz*, Notice of Proposed Rulemaking and Notice of Inquiry, 25 FCC Rcd 9481, ¶ 4 (2010) (“MSS NPRM and NOI”).

¹⁰ *Id.*, ¶¶ 3, 33.

¹¹ Jim Burnett, *Challenging Rescue on the Chilkoot Trail at Klondike Gold Rush National Historical Park*, NATIONAL PARKS TRAVELER (Aug. 3, 2013 at 1:49 a.m.), <http://www.nationalparkstraveler.com/2013/08/challenging-rescue-chilkoot-trail-klondike-gold-rush-national-historical-park23705>.

¹² Press Release, International Telecommunication Union, ITU Humanitarian Awards Presented (Oct. 17, 2012) available at http://www.itu.int/net/pressoffice/press_releases/2012/78.aspx#.UQciKb_XbbM.

¹³ NOI, 79 Fed. Reg. at 59748.

tracking and data communications for operators flying over Alaska — and anywhere in the world. Indeed, in March 2014, the FAA Alaska Flight Services approved the DeLorme inReach device, which utilizes the Iridium network, for the eSRS program.¹⁴ The inReach device provides GPS Automated Flight Following (“AFF”) SOS alerting and two-way text messaging from the air.¹⁵ In addition, the device has a dedicated SOS button that immediately sends a distress message when pressed. Importantly, the two-way communication feature of the inReach allows search-and-rescue authorities to send and receive text messages with those in distress in the most remote regions of Alaska. Similarly, the Spidertracks Satellite Aircraft Tracking system developed an AFF-compliant and Webtracker-compatible system that integrates Iridium’s short-burst data (“SBD”) service and truly global communications network into its system.

These Iridium-enabled AFF devices provide Alaskan operators with a choice of cost-effective, proven solutions that also enhance the safety and efficiency of their operations. As noted by the *Alaska Dispatch*, “[s]earch and rescue operations are usually dependent upon the last known aircraft position,” and Iridium-enabled systems “offer[] several features that ensure that an aircraft that has gone down can be found.”¹⁶ In fact, the Department of the Interior

¹⁴ *DeLorme inReach Satellite Communicator Receives FAA Approval for Enhanced Special Reporting Service in Alaska* (Mar. 27, 2014), available at http://www.delorme.com/about/pressreleases/faa_approval.htm.

¹⁵ Automated Flight Following “automatically tracks the location and velocity of specially-equipped aircraft and mobile assets, providing this information in near-real-time to dispatchers, aviation managers, and other authorized users.” See *Welcome to AFF*, available at www.aff.gov.

¹⁶ Craig Medred, *The Hunt for Aircraft Search and Rescue Success*, ALASKA DISPATCH NEWS, Sept. 6, 2010, <http://www.adn.com/article/hunt-aircraft-search-and-rescue-success>; Rob Stapleton, *In an Alaska Bush Crash, Getting Found is More than Half the Work*, ALASKA DISPATCH NEWS, Dec. 10, 2010, <http://www.adn.com/article/alaska-bush-crash-getting-found-more-half-work>.

(“DOI”), Alaska requires an operational Iridium Satellite Aircraft Tracking system on board all aircraft that carry employees working in any DOI department.¹⁷

The FCC also recently granted Iridium authority to add AMS(R)S to its space-station license for service in oceanic, polar, and remote regions.¹⁸ The FCC stated AMS(R)S “provid[es] enhanced options for safety communications with aircraft in areas in which such communications are currently unavailable or limited.”¹⁹ As commercial airlines made clear to the FCC, “AMS(R)S over Iridium’s unique global network would provide myriad benefits . . . by allowing us to enhance our flight safety and communications systems and further secure the safety of [our] passengers and crew.”²⁰ Indeed, “[i]n many cases, Iridium is the only satellite network able to provide communications for the entire flight.”²¹

III. IRIDIUM SERVICES ARE WIDELY USED BY ARCTIC ALASKAN COMMUNITIES AND ACROSS THE PAN-ARCTIC REGION

A. Iridium Provides Diverse, Targeted Offerings to Alaska and the Pan-Arctic Region

With regard to satellite communications service, the NOI asks “[w]hich specific user segments are being targeted and what services will be offered?”²² In addition to enabling the ubiquitous emergency response communications described above, Iridium offers numerous

¹⁷ Press Release, *Aircraft Tracking Solution in the Alaskan Skies*, Iridium.com (May 2012), available at <https://www.iridium.com/iridiumconnected/viewallstories/Spidertracks.aspx>.

¹⁸ *Iridium Constellation LLC*, Memorandum Opinion and Order, DA 13-141, ¶¶ 1, 10 (I.B. 2013). In response to the NOI’s question regarding “adoption barriers,” one barrier is regulatory delay. *See* 79 Fed. Reg. at 59750. For example, although Iridium filed blanket applications to modify its earth station licenses for AMS(R)S capability more than one year ago, the applications remain pending with the FCC. *See* FCC IBFS File Nos. SES-MOD-20130416-00323, SES-MOD-20130416-00322.

¹⁹ *Id.*, ¶ 1.

²⁰ Letter from Captain Joe Burns, Managing Director Technology and Flight Test, United Airlines, to Marlene H. Dortch, FCC, File Nos. SAT-MOD-19961204-00139, SAT-AMD-20051118-00160, and SAT-AMD-20051118-00236, at 1-2 (Dec. 29, 2011) (“United Airlines Letter”); *see also* Letter from Captain Ken Rewick, Vice President, Flight Operations, Hawaiian Airlines, to Marlene H. Dortch, FCC (Jan. 10, 2012); Letter from Steve Dickson, Senior Vice President – Flight Operations, Delta Airlines, to Marlene H. Dortch, FCC (Jan. 12, 2012).

²¹ United Airlines Letter, at 1-2.

²² NOI, 79 Fed. Reg. at 59749.

satellite services in Alaska and the polar regions that benefit individual, commercial, and government users.

It bears repeating that Iridium is the only MSS provider with full global satellite coverage. As a result, it is the only communications provider that can cover the entire geography of Alaska and the pan-Arctic region with affordable, reliable satellite-based communications solutions. Iridium's service offerings are critical for consumers located outside population centers that are unserved or underserved by other telecommunications services. Iridium satellite phones such as the Iridium Extreme provide customers with two-way voice, SMS, and data services, and the new Netted Iridium® commercial push-to-talk ("PTT") service, which is an evolution of technology originally created for military use, will allow a low-latency PTT experience—either within a localized area or across Iridium's global footprint. Customers also benefit from the new Iridium GO!TM device, a Wi-Fi hotspot that will allow users to use their native smartphone, tablet, or laptop to check their email and utilize data services anywhere in the polar regions or the world.²³ Outdoor enthusiasts exploring the vast Alaskan wilderness can rely on Iridium personal tracking and messaging devices to send distress alerts if the need arises.

Iridium's MSS also plays a vital role with the famous Iditarod Trail Sled Dog Race. The majority of the Iditarod Trail spans wilderness in which Iridium provides the only means of communication.²⁴ For years, Iridium has provided devices for the race's mushers, the sleds' drivers.²⁵ Before then, if an emergency arose, mushers would have to travel nearly fifty miles on

²³ Iridium Go!TM, available at <http://www.iridium.com/products/iridium-go.aspx>.

²⁴ *Iridium Provides Satellite Communications for 2011 Iditarod Sled Dog Race Safety*, DELTA NEWS WEB, Mar. 5, 2011, <http://news.deltanewsweb.com/news/2011/03/05/iridium-provides-satellite-communications-for-2011-iditarod-sled-dog-race-safety/>.

²⁵ *Iridium Provides Satellite Communications for 2011 Iditarod Sled Dog Race Safety*, DELTA NEWS WEB, Mar. 5, 2011, <http://news.deltanewsweb.com/news/2011/03/05/iridium-provides-satellite-communications-for-2011-iditarod-sled-dog-race-safety/>.

the trail to call for help.²⁶ Now, mushers have a reliable lifeline to medical and race personnel for “race safety communications,”²⁷ which was critical in 2010 when a racer crashed into a tree.²⁸ Iridium devices also provide fans with the ability to track their favorite team throughout the race.²⁹

Iridium’s 24/7, unparalleled coverage also explains its strategic relationship with U.S. Government and Alaskan government customers to provide critical communications services. In addition to the emergency and search-and-rescue communications capabilities described above, Iridium offerings assist state and federal agencies in areas such as land management and law enforcement. For instance, Alaska’s Bureau of Land Management recommends that its fire crews “have at least 1 Iridium (satellite) phone,” which “ensures any incidents are reported and responded to appropriately.”³⁰

Beyond the diverse offerings outlined above, Iridium’s commercial customer base, including markets such as oil and gas, mining, recreation, forestry, construction, and transportation, utilizes Iridium SBD services for tracking and monitoring that are critical to each market’s daily operations.³¹ In addition, the Iridium OpenPort[®] service offers a suite of

²⁶ Craig Medred, “*Mayor of Rohn*” *Missing This Last Great Race*, ALASKA DISPATCH NEWS, Mar. 7, 2011, <http://www.adn.com/article/mayor-rohn-missing-last-great-race>.

²⁷ *Iridium Provides Satellite Communications for 2011 Iditarod Sled Dog Race Safety*, DELTA NEWS WEB, Mar. 5, 2011, <http://news.deltanewsweb.com/news/2011/03/05/iridium-provides-satellite-communications-for-2011-iditarod-sled-dog-race-safety/>.

²⁸ Craig Medred, “*Mayor of Rohn*” *Missing This Last Great Race*, ALASKA DISPATCH NEWS, Mar. 7, 2011, <http://www.adn.com/article/mayor-rohn-missing-last-great-race> (“When Midwest musher Pat Moon hit a tree . . . Bond was able to use the phone to consult with race officials about how best to evacuate him. It was a vast change from the old days”); see also Craig Medred, *Humans and Technology: Best Frenemies*, ALASKA DISPATCH NEWS, Oct. 2, 2010, <http://www.adn.com/article/humans-and-technology-best-frenemies>.

²⁹ Rachel D’oro, *Follow That Musher!*, JUNEAU EMPIRE, Feb. 27, 2008, http://juneauempire.com/stories/022708/spo_251622594.shtml.

³⁰ Alaska Bureau of Land Management, 2010 Alaska Handy Dandy Field Guide, *available at* <http://fire.ak.blm.gov/content/training/handydandy/2010%20AK%20Handy%20Dandy%20Public%20website.pdf>.

³¹ Press Release, Iridium, *Iridium Announces Second-Quarter 2014 Results; Company Affirms 2014 and Long-Range Outlook* (July 31, 2014), *available at* <http://investor.iridium.com/releasedetail.cfm?ReleaseID=863249>.

capabilities for maritime vessel telecommunications optimization, and its transceivers are engineered for enhanced durability to withstand the harshest maritime conditions.³²

B. Iridium Provides Reasonably-Priced Services to Arctic Consumers with Unmatched Ubiquity and Reliability

The NOI also asks “[f]or areas where satellites constitute the only form of communications, what ensures reasonable pricing and service quality?”³³ With regard to service quality, ubiquity, reliability, and redundancy are the hallmarks of Iridium’s service. With regard to reasonable pricing, Iridium provides a specific, geo-restricted, discounted prepaid card for Alaska and Canada.³⁴ This offering, the Northern Lights prepaid card, provides unmatched value for customers in these areas.

Additionally, Iridium expanded the reach of its cost-effective Iridium OpenPort® service to offer broadband communications to terrestrial users with the launch of the Iridium Pilot® Land Station.³⁵ For the first time, many individuals and businesses in remote Arctic locations, many of whom reside in indigenous communities, can obtain reliable broadband connections and voice calling. Easy to install and affordably priced, the Iridium Pilot® Land Station provides pole-to-pole coverage and broadband data speeds, with independent voice lines for simultaneous voice and data communications. The ruggedized hardware utilizes the Iridium OpenPort® broadband service, allowing operation in the extreme weather conditions common to Alaska and the Arctic regions.

³² Press Release, Iridium, *Another Major Shipping Company, Reederei Werner Bockstiegel, Upgrades to Iridium Pilot™ and se@COMM Data Package* (June 6, 2012), available at <http://investor.iridium.com/releasedetail.cfm?ReleaseID=680578>.

³³ NOI, 79 Fed. Reg. at 59749.

³⁴ See, e.g., Satphonestore.com, Iridium 200 Minute “Northern Lights” SIM Card, available at <http://www.satphonestore.com/airtime/iridium-airtime/iridium-200-minute-northern-lights-sim-card.html>.

³⁵ Press Release, Iridium, *Iridium Expands Broadband Service to Remote Areas With Iridium Pilot(R) Land Station* (Feb. 11, 2014), available at <http://investor.iridium.com/releasedetail.cfm?ReleaseID=824689>.

IV. IRIDIUM'S FUTURE DEPLOYMENTS WILL ENHANCE ITS ALREADY ROBUST SERVICE OFFERINGS.

The NOI asks “[w]hat network technologies and services are being planned across the pan-Arctic region to address both current and emerging user needs?”³⁶ Iridium NEXT—scheduled for initial launch in 2015—will bring the potential for new, greater-bandwidth, and advanced services that will be the face of Iridium’s services for more than a decade to come.³⁷ Iridium NEXT will deliver a high-speed user experience with sustained data speeds up to 512 Kbps and bursts up to 1.5 Mbps over an end-to-end packet data solution. Leveraging the innovation of Iridium’s current constellation, Iridium NEXT will have a substantial, tangible impact across the land mobile, maritime, aviation, M2M business and beyond into entirely new services and sectors previously not served by satellite solutions. Indeed, Iridium forecasts that the increased emphasis on data services with NEXT will result in an explosion in demand similar to what was experienced by terrestrial mobile network operators with the advent of mobile broadband. And importantly, Iridium NEXT is backward-compatible, meaning that current Iridium subscribers will not have to purchase new equipment.

Additionally, Aireon, a subsidiary of Iridium and a joint venture with Nav Canada, will launch as a hosted payload on Iridium NEXT and enable the world’s first satellite-based global air traffic surveillance system.³⁸ Aireon will extend the benefits of current radar-based surveillance systems, which cover less than 10 percent of the world, to the entire planet. By

³⁶ NOI, 79 Fed. Reg. at 59750.

³⁷ Anticipated to launch in 2015, Iridium NEXT builds on Iridium’s existing constellation architecture to enhance and extend mobile communication services. Press Release, Iridium, *Iridium NEXT Constellation Passes Critical Milestones; On Schedule for Planned Launch in 2015* (Mar. 12, 2012), <http://investor.iridium.com/releasedetail.cfm?releaseid=656450>.

³⁸ Press Release, Iridium, *Iridium’s Space-Based Air Traffic Surveillance Venture, Aireon, Signs New Investors* (Dec. 20, 2013), available at <http://investor.iridium.com/releasedetail.cfm?releaseid=815112>.

providing higher-accuracy data on aircraft positions over the polar regions, remote land areas, and oceans, Aireon promises substantial fuel savings by enabling more efficient aircraft routes.³⁹

The Coast Guard is also working with Iridium to move through the international regulatory process for Iridium to be an approved GMDSS provider. GMDSS automates and improves emergency communications for the maritime users,⁴⁰ and adding Iridium as a GMDSS provider undoubtedly will reap benefits for maritime users. If Iridium receives international regulatory approval, the FCC will soon be in a position to modify Iridium's satellite authorization to include the provision of GMDSS.

V. IRIDIUM ENCOURAGES NTIA TO EXPLORE A PROGRAM THAT WOULD FACILITATE VOICE AND DATA CONNECTIVITY IN UNSERVED AREAS.

The NOI asks what measures would facilitate the deployment of additional communications capabilities across Arctic Alaska and the pan-Arctic region, including public investment.⁴¹ One barrier to adoption is the high cost of communications services in these regions. Iridium encourages NTIA to recommend a program that would provide support for users to access satellite services. For example, in 2002, the Australian government established a program whereby it subsidized the purchase of satellite phone handsets.⁴² The program, which covered 85% of the cost of a device, helped bring voice and data service to more than 26,000 individuals and small businesses in rural and remote Australia.⁴³ With the goal of providing "99 percent of premises with terrestrial mobile coverage," the program underscored "the continued importance of communications access and infrastructure for regional and remote

³⁹ Peter B. de Selding, *Iridium: Aireon Air Traffic Venture Can Fly without Another Investor*, Spacenews.com (June 19, 2012), available at <http://www.spacenews.com/article/iridium-aireon-air-traffic-venture-can-fly-without-another-investor>.

⁴⁰ GMDSS Study Guide, GMDSS.com, available at <http://www.gmdss.com/>.

⁴¹ NOI, 79 Fed. Reg. at 59750.

⁴² *See supra* n.6.

⁴³ *Id.*

communities.”⁴⁴ Iridium supports the exploration of a similar program in the United States, which would facilitate voice and data connectivity in unserved and underserved areas of Alaska and the pan-Arctic region.

VI. CONCLUSION

Iridium is the only communications provider capable of covering the entire Arctic region and the globe, providing diverse, innovative communications services to first responders, the Federal Government, state government, aid organizations, medical care providers, and private users. Iridium appreciates the opportunity presented by the NOI to underscore the importance of its diverse, ubiquitous communications capabilities in Alaska and the pan-Arctic region.

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November 3, 2014

⁴⁴ *Id.*