Iridium Communications Inc.
Form 10-K
February 25, 2016

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

x ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2015

OR

o TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the transition period from to

Commission File Number 001-33963

Iridium Communications Inc.

(Exact name of registrant as specified in its charter)

Delaware	26-1344998
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

1750 Tysons Boulevard, Suite 1400, McLean, Virginia 22102

(Address of principal executive offices, including zip code)

703-287-7400

(Registrant's telephone number, including area code)

Securities Registered Pursuant to Section 12(b) of the Act:

Title of Each Class	Name of Each Exchange on Which Registered
Common Stock, $0.001 par value	NASDAQ Global Select Market
6.75% Series B Cumulative Perpetual Convertible Preferred Stock, $0.0001 par value	NASDAQ Global Select Market

Securities Registered Pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes x No o

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes o No x

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No o

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§ 232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No o

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§ 229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. x

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	x	Accelerated filer	o
Non-accelerated filer	o (Do not check if a smaller reporting company)	Smaller Reporting Company	o

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes o No x

The aggregate market value of the voting and non-voting common equity held by non-affiliates computed by reference to the price at which the common equity was last sold as of June 30, 2015 was approximately $739.4 million.

The number of shares of the registrant's common stock, par value $0.001 per share, outstanding as of February 22, 2016 was 95,129,867.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement for its 2016 annual meeting of stockholders to be filed pursuant to Regulation 14A with the Securities and Exchange Commission not later than 120 days after the registrant's fiscal year end of December 31, 2015, are incorporated by reference into Part III of this Form 10-K.

IRIDIUM COMMUNICATIONS INC.

ANNUAL REPORT ON FORM 10-K

Year Ended December 31, 2015

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Forward-Looking Statements

This report contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. For this purpose, any statements contained herein that are not statements of historical fact may be deemed to be forward-looking statements. Such forward-looking statements include those that express plans, anticipation, intent, contingencies, goals, targets or future developments or otherwise are not statements of historical fact. Without limiting the foregoing, the words “believes,” “anticipates,” “plans,” “expects,” “intends” and similar expressions are intended to identify forward-looking statements. These forward-looking statements are based on our current expectations and projections about future events, and they are subject to risks and uncertainties, known and unknown, that could cause actual results and developments to differ materially from those expressed or implied in such statements. The important factors discussed under the caption “Risk Factors” in this Form 10-K could cause actual results to differ materially from those indicated by forward-looking statements made herein. We undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

PART I

Item 1. Business

Corporate Background

We were formed as GHL Acquisition Corp., a special purpose acquisition company, in November 2007, for the purpose of effecting a merger, capital stock exchange, asset acquisition, stock purchase, reorganization or other similar business combination. On February 21, 2008, we consummated our initial public offering. On September 29, 2009, we acquired, directly and indirectly, all the outstanding equity of Iridium Holdings LLC, or Iridium Holdings, and changed our name from GHL Acquisition Corp. to Iridium Communications Inc.

Iridium Holdings was formed under the laws of Delaware in 2000, and on December 11, 2000, Iridium Holdings, through its wholly owned subsidiary Iridium Satellite LLC, or Iridium Satellite, acquired certain satellite assets from Iridium LLC, a non-affiliated debtor in possession, pursuant to an asset purchase agreement.

Business Overview

We are the second largest provider by revenue of mobile voice and data communications services via satellite, and the only commercial provider of communications services offering true global coverage. Our satellite network provides communications services to regions of the world where existing wireless or wireline networks do not exist or are limited, including remote land areas, open ocean, airways, the polar regions and regions where the telecommunications infrastructure has been affected by political conflicts or natural disasters.

We provide voice and data communications services to businesses, the U.S. and foreign governments, non-governmental organizations and consumers via our satellite network, which has an architecture of 66 in-orbit satellites with in orbit spares and related ground infrastructure. We utilize an interlinked mesh architecture to route traffic across our satellite constellation using radio frequency crosslinks between satellites. This unique architecture minimizes the need for local ground facilities to support the constellation, which facilitates the global reach of our services and allows us to offer services in countries and regions where we have no physical presence.

Our commercial business, which we view as our primary source of long-term growth, is diverse and includes markets such as emergency services, maritime, aviation, government, utilities, oil and gas, mining, recreation, forestry, heavy equipment, construction and transportation. Many of our end users view our products and services as critical to their daily operations and integral to their communications and business infrastructure. For example, multinational corporations in various sectors use our services for business telephony, e-mail and data transfer, including telematics, and to provide mobile communications services for employees in areas inadequately served by other telecommunications networks. Ship crews and passengers use our services for ship-to-shore calling, as well as to send and receive e-mail and data files, and to receive electronic media, weather reports, emergency bulletins and electronic charts. Shipping operators use our services to manage operations on board ships and to transmit data, such as course, speed and fuel stock. Aviation end users use our services for air-to-ground telephony and data communications for position reporting, emergency tracking, weather information, electronic flight bag updates and fleet information. Commercial enterprises use our services to track assets in remote areas and provide telematics information such as location and engine diagnostics.

The U.S. government, directly and indirectly, has been and continues to be our largest single customer, generating $93.9 million in service and engineering and support service revenue, or 23% of our total revenue, for the year ended

December 31, 2015. This does not include revenue from the sale of equipment that may be ultimately purchased by U.S. or non-U.S. government agencies through third-party distributors, or airtime services purchased by U.S. or non-U.S. government agencies that are provided through our commercial gateway, as we lack visibility into these activities and the related revenue. We have a multi-year, fixed-price contract with the U.S. government to provide satellite airtime services for an unlimited number of U.S. Department of Defense, or DoD, and other federal government subscribers, with a total contract value of $400 million over its five-year term through October 2018.

The DoD owns and operates a dedicated gateway in Hawaii that is only compatible with our satellite network. The U.S. armed services, State Department, Department of Homeland Security, Federal Emergency Management Agency, or FEMA, Customs and Border Protection, and other U.S. government agencies, as well as other nations' governmental agencies, use our voice and data services for a wide variety of applications. Our voice and data products are used for numerous primary and backup communications solutions, including logistical, administrative, morale and welfare, tactical, and emergency communications. In addition, our products are installed in ground vehicles, ships, rotary and fixed-wing aircraft and are used for command-and-control and situational awareness purposes. Our satellite network provides increased network security to the DoD because traffic is routed across our satellite constellation before being brought down to earth through the dedicated, secure DoD gateway, thus providing additional levels of protection. Since our network was launched in the 1990s, the DoD has made significant investments to build and upgrade its dedicated gateway and to purchase our voice and data devices, all of which are only compatible with our satellite network. In addition, the DoD continues to invest directly and indirectly in additional services on our network such as Distributed Tactical Communications Services, which we also refer to as Netted Iridium®.

We sell our products and services to commercial end users primarily through a wholesale distribution network, encompassing more than 75 service providers, more than 200 value-added resellers, or VARs, and more than 45 value-added manufacturers, or VAMs, which create and sell technology that uses the Iridium® network either directly to the end user or indirectly through other service providers, VARs or dealers. These distributors often integrate our products and services with other complementary hardware and software and have developed a broad suite of applications using our products and services to target specific lines of business. We expect that demand for our services will increase as more applications are developed and deployed that utilize our technology.

At December 31, 2015, we had approximately 782,000 billable subscribers worldwide, representing a 6% increase compared to December 31, 2014. Total revenue increased from $408.6 million in 2014 to $411.4 million in 2015.

In July 2016, we expect to begin launching our new satellite constellation, Iridium NEXT. Iridium NEXT will maintain the architecture of our current constellation, with 66 in-orbit satellites, as well as six in-orbit spares, and we are building nine ground spares. We have contracted with Thales Alenia Space France, or Thales, to construct the Iridium NEXT satellites, which are designed to be compatible with our current constellation and current end-user equipment, so that as the Iridium NEXT satellites are launched, they will replace satellites in the current constellation without affecting the service to our end users. We plan to deploy 70 satellites on seven Falcon 9 rockets launched by Space Exploration Technologies Corporation, or SpaceX, and two satellites on a Dnepr rocket launched by International Space Company Kosmotras, or Kosmotras. We expect to complete the deployment of the Iridium NEXT constellation in 2017. We estimate the costs associated with the design, build and launch of Iridium NEXT and related ground infrastructure upgrades through 2017 to be approximately $3 billion. Our funding plan for these costs includes the substantial majority of the funds available under our $1.8 billion credit facility, or the Credit Facility, together with cash on hand and internally generated cash flows, including contracted cash flows from hosted payloads and potential cash flows from Iridium PRIME℠.

The Iridium NEXT constellation will also host the Aireon℠ system to provide a global air traffic surveillance service through a series of automatic dependent surveillance-broadcast, or ADS-B, receivers on the Iridium NEXT satellites. Aireon LLC, our joint venture with the air navigation service providers, or ANSPs, of Canada, Italy, Denmark and Ireland, has contracted to provide the Aireon service to our co-investors in Aireon, as well as NATS (En Route) PLC, the ANSP of the United Kingdom, and other ANSPs. Aireon also plans to offer the service to other customers worldwide including the U.S. Federal Aviation Administration, or FAA. Aireon will pay us a fee to host the ADS-B receivers on Iridium NEXT, as well as data service fees for the delivery of the air traffic surveillance data over the Iridium NEXT system. In addition, we have entered into an agreement with Harris Corporation, the manufacturer of the Aireon hosted payload, pursuant to which Harris pays us fees to allocate the remaining hosted payload capacity to its customers; we anticipate that Harris will also pay us data service fees on behalf of these customers.

Industry

We compete in the mobile satellite services sector of the global communications industry. Mobile satellite services operators provide voice and data services to people and machines using a network of satellites and ground facilities. Mobile satellite services are intended to meet users' needs for connectivity in all locations where existing terrestrial wireline and wireless communications networks do not exist, do not provide sufficient coverage, or are impaired. Further, many regions of the world benefit from satellite networks, such as rural and developing areas that lack adequate wireless or wireline networks, airways, ocean and polar regions where few alternatives exist, and regions where the telecommunications infrastructure has been affected by political conflicts or natural disasters.

Government organizations, including military and intelligence agencies and disaster response agencies, non-governmental organizations and industrial operations and support teams depend on mobile and fixed voice and data satellite communications services on a regular basis. Businesses with global operations require reliable communications services when operating in remote locations around the world. Mobile satellite services users span many sectors, including emergency services, maritime, aviation, government, utilities, oil and gas, mining, recreation,

forestry, heavy equipment, construction, and transportation, among others. Many of our customers view satellite communications services as critical to their daily operations.

We believe that increasing mobile penetration will provide a significant market opportunity for the mobile satellite services industry. According to a 2015 study by the GSM Association, total mobile connections reached 7.1 billion throughout the world as of the end of 2014 and are projected to reach 9 billion by 2020. We believe that growth in the terrestrial wireless industry has increased awareness of the need for reliable mobile voice and data communications services. In addition, despite significant penetration and competition, terrestrial wireless systems only serve a small fraction of the earth's surface and are focused mainly in those areas where people live, excluding oceans and other remote regions where ships, airplanes and other remote assets may be located or in transit. By offering mobile communications services with global voice and data coverage, mobile satellite service providers address the demand from businesses, governments and individuals for connectivity and reliability in locations not consistently served by wireline and wireless terrestrial networks.

The mobile satellite services industry also benefits from the continued development of innovative, lower-cost technology and applications integrating mobile satellite products and services. We believe that growth in demand for mobile satellite services is driven in large part by the declining cost of these services, the diminishing size and lower costs of voice, data and machine-to-machine, or M2M, devices, the rollout of new applications tailored to the specific needs of customers across a variety of markets, and a more favorable regulatory environment in international markets.

Communications industry sectors include:

- mobile satellite services, which provide customers with voice and data connectivity to mobile and fixed devices using ground facilities and networks of geostationary, or GEO, satellites, which are located approximately 22,300 miles above the equator, medium earth orbit satellites, which orbit between approximately 6,400 and 10,000 miles above the earth's surface, or low earth orbit, or LEO, satellites, such as those in our constellation, which orbit between approximately 300 and 1,000 miles above the earth's surface;
- fixed satellite services, which use GEO satellites to provide customers with broadband communications links between fixed points on the earth's surface; and
- terrestrial services, which use a network of land-based equipment, including switching centers and radio base stations, to provide wireless or wireline connectivity and are complementary to satellite services.

Within the major satellite sectors, fixed satellite services and mobile satellite services operators differ significantly from each other with respect to size of antenna and types of services offered. Fixed satellite services providers, such as Intelsat S.A., Eutelsat Communications S.A. and SES S.A., are characterized by large, often stationary or fixed ground terminals that send and receive high-bandwidth signals to and from the satellite network for video and high-speed data customers and international telephone markets. By contrast, mobile satellite services providers, such as us, Inmarsat plc, Globalstar, Inc., and ORBCOMM Inc. focus more on voice and data services, where mobility and small-sized terminals are essential.

A LEO system, such as the system we operate, generally has lower transmission delays than a GEO system, such as that operated by Inmarsat, due to the shorter distance signals have to travel, which also enables the use of smaller antennas on mobile devices. We believe the unique interlinked mesh architecture of our constellation, combined with the global footprint of our satellites, distinguishes us from regional LEO satellite operators such as Globalstar and ORBCOMM, by allowing us to route voice and data transmissions to and from anywhere on the earth's surface via a single gateway. As a result, we are the only mobile satellite services operator offering real-time, low-latency services with true global coverage, including full coverage of the polar regions.

Our Competitive Strengths

- Attractive and growing markets. We believe that the mobile satellite services industry will continue to experience growth driven by the increasing awareness of the need for reliable mobile voice and data communications services, the lack of coverage by terrestrial wireless systems of most of the earth's surface, and the continued development of innovative, lower cost technology and applications integrating mobile satellite products and services. Only satellite providers can offer global coverage, and the satellite industry is characterized by significant financial, technological and regulatory barriers to entry.
- True global coverage. Our network provides true global coverage, which none of our competitors, whether LEO or GEO, can offer. Our network of 66 operational satellites relies on an interlinked mesh architecture to transmit signals from satellite to satellite, which reduces the need for multiple local ground stations around the world and facilitates the global reach of our services, and the Iridium NEXT constellation will maintain this architecture. GEO satellites orbit above the earth's equator, limiting their visibility to far northern or southern latitudes and polar regions. LEO satellites from operators like Globalstar and ORBCOMM use an architecture commonly referred to as "bent pipe," which requires voice and data transmissions to be immediately routed to ground stations in the same region and can only provide real-time service when they are within view of a ground station, limiting coverage to areas near where they have been able to license and locate ground infrastructure. The LEO design of our satellite constellation produces minimal transmission delays compared to GEO systems due to the shorter distance our

signals have to travel. Additionally, LEO systems typically have smaller antenna requirements and are less prone to signal blockage caused by terrain and other environmental factors than GEO satellite networks. As a result, we believe that we are well-positioned to capitalize on the growth in our industry from end users who require reliable, easy-to-use communications services in all locations.

- Wholesale distribution network. The specialized needs of our global end users span many markets, including emergency services, maritime, aviation, government, utilities, oil and gas, mining, recreation, forestry, heavy equipment, construction and transportation. We sell our products and services to commercial end users primarily through a wholesale distribution network of service providers, VARs and VAMs, which often specialize in a particular line of business. Our distributors use our products and services to develop innovative and integrated communications solutions for their target markets, often combining our products with other technologies, such as GPS and terrestrial wireless technology. In addition to promoting innovation, our wholesale distribution model allows us to capitalize on the research and development expenditures of our distributor partners, while lowering overall customer acquisition costs and mitigating some risks, such as consumer relationship risks. By partnering with these distributors to develop new products, services and applications, we believe we create additional demand for our products and services and expand our target markets at a lower cost than would a more direct marketing model. We believe our distribution network can continue to grow with us and increase our market penetration.
- Strategic relationship with the U.S. government. The U.S. government is our largest single customer, and we have had a relationship with the DoD since our inception. We believe the DoD views our Netted Iridium, M2M devices, encrypted handset and other products as mission-critical services and equipment. The DoD has made significant investments in a dedicated gateway on a U.S. government site to provide operational security and allow DoD handset users to communicate securely with other U.S. government communications equipment. This gateway is only compatible with our satellite network. In October 2013, we entered into a five-year, fixed-price contract with the U.S. government to provide satellite airtime services for an unlimited number of DoD and other federal government subscribers, with a total contract value of $400 million.

Our Business and Growth Strategies

- Leverage our largely fixed-cost infrastructure by growing our service revenue. Our business model is characterized by high capital costs, primarily incurred every 10 to 15 years, in connection with designing, building and launching new generations of our satellite constellation, but the incremental cost of providing service to additional end users is relatively low. We believe that service revenue will be our largest source of future growth and profits, and we intend to focus on growing both our commercial and government service revenue in order to leverage our largely fixed-cost infrastructure. In particular, we believe that M2M services, where we are engaging large, global enterprises as long-term customers for telematics solutions, represent an opportunity for service revenue growth.
- Accelerate the development of personal communications capabilities. Part of our strategy for the development of personal mobile satellite communications is to allow users to connect to our network in more ways, including from devices such as smartphones, tablets and laptops through our Iridium GO!® device; by making our technology more accessible and cost-effective for our distribution partners to integrate by licensing our core technologies; by adding new functionality, such as push-to-talk, or PTT, capability, allowing multiple users to participate in talkgroups worldwide; by providing rugged, dependable devices and services; and by developing new services, such as our planned global broadband offering, Iridium Certus℠, that will take advantage of the improved capabilities of the Iridium NEXT constellation.
- Continue to expand our distribution network. We believe our wholesale distribution network lowers our costs and risks, and we plan to continue to selectively expand our network of service providers, VAMs and VARs and to expand our sales and distribution efforts geographically. We expect that our current and future value-added partners will continue to develop customized products, services and applications targeted to the land mobile, maritime, aviation, M2M and government markets. We believe these markets represent an attractive opportunity for continued subscriber growth.
- Continued growth in services provided to the DoD. In October 2013, we executed a five-year Enhanced Mobile Satellite Services, or EMSS, contract with the Defense Information Systems Agency, or DISA. Under the terms of this agreement, we provide Iridium airtime and airtime support to U.S. government and other authorized customers, including voice, low- and high-speed data, paging, broadcast, and distributed tactical communication, or netted, services. The service fees we will receive under the EMSS contract are fixed and increase from $64 million and $72 million in the first two years, then to $88 million in years three through five. In addition, other services we are developing, such as future broadband capabilities, provide us with opportunities to offer new products and services to the DoD for an additional fee.

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- Develop the Iridium NEXT constellation. We are developing our next-generation satellite constellation, Iridium NEXT, which will replace our existing constellation with a more powerful satellite network while maintaining backward compatibility with our current system and end-user devices. Iridium NEXT will maintain our current system's key attributes, including the capability to upload new software, while providing new and enhanced capabilities, such as higher data speeds and increased capacity. We believe Iridium NEXT's increased capabilities will expand our target markets by enabling us to develop and offer a broader range of products and services, including a wider array of cost-effective and competitive broadband data services. Our satellite development contractor, Thales Alenia Space, has made significant progress in proving their satellite design by qualifying hardware components, testing platform and payload software and substantially completing production of the initial few satellites in 2015 in anticipation of our first launch scheduled for 2016.
- Continue to develop Aireon and Iridium PRIME. Aireon is a joint venture between us and four ANSPs, NAV CANADA, Enav (Italy), Naviair (Denmark) and the Irish Aviation Authority. Aireon has developed an ADS-B receiver to be hosted on Iridium NEXT to provide a global air traffic surveillance service. Aireon has contracted to offer its service to our co-investors in Aireon, as well as NATS and other ANSPs, and plans to offer it to other customers worldwide, including the FAA. Aireon will pay us a fee to host the ADS-B receivers on Iridium NEXT, as well as data service fees for the delivery of the air traffic surveillance data over the Iridium NEXT system. We will also continue to hold an equity stake in Aireon. In addition, we are developing Iridium PRIME, which will allow customers to host payloads on stand-alone satellites integrated into the Iridium NEXT constellation, giving them greater volume, weight, power and data capacity, as well as flexibility of launch schedule, while holding costs down compared to an independent satellite development effort.

Distribution Channels

We sell our products and services to customers through a wholesale distribution network of more than 75 service providers, more than 200 VARs and more than 45 VAMs. These distributors sell our products and services to end users, either directly or indirectly through service providers, VARs or dealers. Of these distributors, 31 sell primarily to U.S. and international government customers. Our distributors often integrate our products and services with other complementary hardware and software and have developed individual solutions targeting specific lines of business. We also sell airtime services directly to the U.S. government, including the DoD, for resale to other government agencies. The U.S. government and international government agencies may purchase additional services as well as our products and related applications through our network of distributors.

We provide our distributors with support services, including assistance with coordinating end user sales and marketing, strategic planning and training, and second-tier customer support, as well as helping them respond to new opportunities for our products and services. We have representatives covering three regions around the world to better manage our distributor relationships: the Americas, which includes North, South and Central America; Asia Pacific, which includes Australia and Asia; and Europe, the Middle East, Africa and Russia. We have also established a global support service program to provide portside service for Iridium OpenPort® maritime customers at major ports worldwide. In addition, we maintain various online management tools that allow us to communicate efficiently with our distributors, and allow them to manage their customers' Iridium devices from anywhere in the world. By relying on our distributors to manage end user sales, we believe that we reduce some of the risks and costs related to our business, such as consumer relationship risks and sales and marketing costs, while providing a broad and expanding distribution network for our products and services with access to diverse and geographically dispersed niche markets. We are also able to benefit from the specialized expertise of our distributors, who continue to develop innovative and improved solutions and applications integrating our product and service offerings, providing us with an attractive platform to support our growth.

Commercial Markets

We view our commercial business as our primary source of long-term growth. Service providers and VARs serve as our main distribution channel by purchasing our products and services and marketing them directly to their customers or indirectly through independent dealers. They are each responsible for customer billing, end user customer care,

managing credit risk and maintaining all customer account information. If our service providers or VARs provide our services through dealers, these dealers will often provide such services directly to the end user. Service providers typically purchase our most basic products and services, such as mobile voice services and related satellite handsets, and offer additional services such as voice mail. Unlike service providers, our VARs typically focus more on data applications and provide a broader array of value-added services specifically targeted to the niche markets they serve, such as maritime, M2M, aviation and government markets, where high-use customers with specialized needs are concentrated. These VARs integrate our handsets, transceivers, high-speed data devices and short-burst data modems with other hardware and software to create packaged solutions for end users. Examples of these applications include cockpit voice and data solutions for use by the aviation sector and voice, data and tracking applications for industrial customers, the DoD and other U.S. and foreign government agencies. Our service providers include satellite service providers such as Airbus Defense and Space, Applied Satellite Technology Limited and Network Innovations, as well as some of the largest telecommunications companies in the world, including Telstra Corporation Limited, KDDI Corporation and Singapore Telecommunications Limited. Our VARs include Gogo Business Aviation LLC, ARINC Incorporated, Blue Sky Network, LLC, DeLorme Publishing Company Inc., General Dynamics Corporation, Joubeh Technologies Inc., Kore Telematics Inc., Mix Telematics International (Pty) Ltd., NAL Research Corporation, OnixSat Rastreamento de Veículos Ltda. and Zunibal S.A.

We also sell our products to VAMs, who integrate our transceivers into their proprietary hardware. These VAMs produce specialized end-user equipment, including integrated ship, vehicular and aviation communications systems, and global asset tracking devices, which they offer to end users in maritime, aviation, government and M2M markets. As with our service providers and VARs, VAMs sell their products either directly or through other distributors, including some of our service providers and VARs. Our VAMs include Applied Satellite Engineering, Inc., Beam Communications Pty Ltd., DeLorme Publishing Company Inc., Gilat Satcom Ltd., Honeywell, Calamp Wireless Networks Corporation, Quake Global, Inc. and Cobham plc.

In addition to VARs and VAMs, we maintain relationships with approximately 40 value-added developers, or VADs. We typically provide technical information to these companies on our products and services, which they then use to develop software and hardware that complements our products and services in line with the specifications of our VARs and VAMs. These products include handset docking stations, airline tracking and flight management applications and crew e-mail applications for the maritime industry. We believe that working with VADs allows us to create new platforms for our products and services and increases our market opportunity while reducing our overall research and development, marketing and support expenses. Our VADs include Two10degrees Limited, Global Marine Networks, LLC, Hirschmann Automation and Controls, Inc. and Maxtena, Inc.

We maintain a pricing model for our commercial products and services with a consistent wholesale rate structure. Under our distribution agreements, we charge our distributors wholesale rates for commercial products and services, subject to discount and promotional arrangements and geographic pricing. We also charge fixed monthly access fees per subscriber for some of our services. Our distributors are in turn responsible for setting their own pricing to their customers. Our agreements with distributors typically have terms of one year and are automatically renewable for additional one-year terms, subject to termination rights. We believe this business model provides incentives for distributors to focus on selling our commercial product and service portfolio and developing additional applications. An additional benefit of this model is simplicity. This model reduces back-office complexities and costs and allows distributors to remain focused on revenue generation.

Government Markets

We provide mission-critical mobile satellite products and services to all military branches of the DoD as well as other U.S. government departments and agencies. These users require voice and two-way data capability with global coverage, low latency, mobility and security and often operate in areas where no other terrestrial or wireless means of communications are available. We believe we are well-positioned to satisfy demand from these users. Our 9505A satellite handset is the only commercial, mobile handheld satellite phone that is capable of Type I encryption accredited by the U.S. National Security Agency for Top Secret voice communications. In addition, the DoD has made significant investments in a dedicated gateway that provides operational security and allows users of encrypted DoD handsets to communicate securely with other U.S. government communications equipment. These investments include upgrading the gateway to take advantage of the enhanced capabilities of Iridium NEXT. This gateway is only compatible with our satellite network.

We provide Iridium airtime and airtime support to U.S. government and other authorized customers pursuant to our five-year EMSS contract, effective as of October 22, 2013. Under the terms of this agreement, authorized customers utilize Iridium airtime services, provided through the DoD’s dedicated gateway. These services include unlimited global secure and unsecure voice, low and high-speed data, paging, broadcast, and distributed tactical communications system, or DTCS, services for an unlimited number of DoD and other federal subscribers. The fixed-price rates in each of the five contract years, which run from October 22 through the following October 21 of each year, are $64 million and $72 million in years one and two, respectively, and $88 million in each of the years three through five. While we sell airtime directly to the U.S. government for resale to end users, our hardware products are sold to U.S. government customers through our network of distributors, which typically integrate them with other products and

technologies. Pursuant to federal acquisition regulations, the U.S. government may terminate the EMSS contract, in whole or in part, at any time.

We also provide maintenance services for the DoD gateway pursuant to our Gateway Maintenance and Support Services, or GMSS, contract managed by DISA. This agreement, effective September 2013, provides for a one-year base term and up to four additional one-year options exercisable at the election of the U.S. government, the first two of which have been exercised. If the U.S. government elects to exercise all available one-year options, the total value of the contract to us would be approximately $38 million. The U.S. government may terminate the GMSS contract, in whole or in part, at any time.

In October 2012, we were also awarded a five-year indefinite-delivery/indefinite-quantity contract from DISA to upgrade the DoD gateway and ensure its compatibility with Iridium NEXT. This contract has a one-year base period and four one-year options, the first three of which have been exercised, and has a maximum potential value of $47 million to us over the full five-year period, if all options are exercised.

U.S. government services accounted for approximately 23% of our total revenue for the year ended December 31, 2015. Our reported U.S. government revenue includes airtime revenue derived from the EMSS contract and services provided through the GMSS contract and other engineering and support contracts with the U.S. government. This revenue does not include airtime services purchased by U.S. or non-U.S. government agencies that are provided through our commercial gateway, which we report as commercial service revenue, or equipment purchased by government customers from third-party distributors. We are unable to determine the specific amount of U.S. government revenue derived from these commercial sources.

Lines of Business

The specialized needs of our global customers span many markets. Our system is able to offer our customers cost-effective communications solutions with true global coverage in areas unserved or underserved by existing telecommunications infrastructure. Our mission-critical communications solutions have become an integral part of the communications and business infrastructure of many of our end users. In many cases, our service is the only connectivity for these critical applications or is used to complement terrestrial communications solutions.

Our current principal lines of business include land mobile, M2M, maritime, aviation, and government.

Land Mobile

We are the leading provider of mobile satellite communications services to the land mobile sector, providing handset services to areas not served or inconsistently served by existing terrestrial communications networks. In a 2015 report, Euroconsult estimated that there were approximately 625,000 active satellite handsets in the market in 2015. Mining, forestry, construction, oil and gas, utilities, heavy industry and transport companies as well as the military, public safety and disaster relief agencies constitute the largest portion of our land mobile end users. We also include sales of Iridium GO! and Iridium push-to-talk, or PTT, services in the land mobile sector. We believe that demand for mobile communications devices operating outside the coverage of terrestrial networks, combined with our small, lightweight, durable handsets with true global coverage, will allow us to capitalize on growth opportunities among these users.

Our land mobile end users utilize our satellite communications services for:

- Voice and data: Multinational corporations in various sectors use our services for business telephony, e-mail and data transfer services, location-based services, and to provide pay telephony services for employees in areas inadequately served by terrestrial networks. Oil and gas and mining companies, for example, provide their personnel with our equipment solutions while surveying new drilling and mining opportunities and while conducting routine operations in remote areas that are not served by terrestrial wireless communications networks. In addition, a number of recreational, scientific and other outdoor segments rely on our mobile handheld satellite phones and services for use when beyond terrestrial wireless coverage. In addition, Iridium PTT offers military, first responder, oil and gas, civil government and other users the ability to hold group calls using the Iridium Extreme® PTT handset. Our VAMs and VARs can also develop their own land mobile, fixed, aviation or maritime Iridium PTT devices using the Iridium 9523 PTT.
- Mobile and remote office connectivity: A variety of enterprises use our services to make and receive voice calls and to establish data, e-mail, internet and corporate network connections.
- Public safety and disaster relief: Relief agencies, such as FEMA, and other agencies, such as the Department of Homeland Security, use our products and services in their emergency response plans, particularly in the aftermath of natural disasters such as the Nepal earthquake, Hurricane Sandy, the Japan earthquake and tsunami and Typhoon Haiyan. These agencies generate significant demand for both our voice and data products, especially in advance of the hurricane season in North America.
- Public telephone infrastructure: Telecommunications service providers use our services to satisfy regulatory mandates and government expectations regarding the availability of communications services for rural populations currently not served by terrestrial infrastructure. Telstra Corporation, for example, uses our services to provide

communications services in some of Australia's most remote locations.

Machine-to-Machine

We are one of the leading providers of satellite-based M2M services. We believe the early stage of this market and its low penetration present opportunities for future growth. As with land mobile, our largest M2M users include mining, construction, oil and gas, utilities, heavy industry, maritime, forestry and transport companies, as well as the military, public safety and disaster relief agencies. We believe increasing demand for automated data collection processes from mobile and remote assets operating outside the coverage of terrestrial wireline and wireless networks, as well as the continued need to integrate the operation of such assets into enterprise management and information technology systems, will likewise increase demand for our M2M applications. For example, our M2M devices have been adopted as standard equipment and as factory options by heavy equipment manufacturers to provide telematics solutions for end users.

Our M2M services are used for:

- Fleet management: Our global coverage permits our products and services to be used to monitor the location of vehicle fleets, hours of service and engine telemetry data, as well as to conduct two-way communications with drivers around the world. Fleet management companies, such as Trimble Transportation & Logistics, Mix Telematics and Zatix, use our service to provide distance drivers with reliable communication to their dispatchers and their destinations to coordinate changing business needs, and our satellite network provides continuous communications coverage while they are in transit. We expect that the need for more efficient, cost-effective and safer fleet operations as well as the imposition of regulatory mandates related to driver safety, such as drive-time monitoring, will increase demand for our services in this area.
- Fixed-asset monitoring: Multinational corporations, such as oil-field service companies like Schlumberger Limited and ConocoPhillips Company, use our services to run applications that allow remote monitoring and operation of equipment and facilities around the globe, such as oil pipelines and offshore drilling platforms.
- Asset tracking: Leveraging M2M applications developed by several of our distributors, companies use our services and related devices to track assets, including personnel, for logistics, theft-prevention and safety purposes. Companies and organizations that have fleets of vehicles use M2M solutions from Iridium distributors to improve the efficiency of their operations. For example, customers use inthinc's waySmart M2M solution to reduce accidents and increase vehicle uptime, and the Department of Homeland Security Office of Enforcement and Removal uses Fleet Management Solutions' M2M solution to transmit position, direction, speed and other data for management of its vehicle fleet.
- Resource management: Our global coverage and data throughput capabilities support natural resource management applications, such as fisheries management systems. CLS and FW Telematics, two of our VARs, have developed applications for the fishing industry that enable regulatory compliance of fishing practices in a number of countries around the world.
- Scientific data monitoring: The global coverage of our network supports many scientific data collection applications such as the Argo float program of the National Oceanographic and Atmospheric Administration, or NOAA, and the Global Ocean Observation project Challenger, operated by Rutgers University. These programs rely on our M2M services to collect scientific data from buoys and ocean gliders located throughout the world's oceans for monitoring and analysis. We believe the increased need for monitoring climate and environmental data associated with global climate change and human impact on the planet will increase demand for these services.
- Personal Tracking Devices and Location-Based Services: Several of our VAMs and VARs, such as DeLorme, NAL Research and Track24, have introduced small, portable personal tracking devices that will provide personal tracking and data communications services to commercial end users. In addition, Iridium GO! and the Iridium Extreme handset offer personal tracking and location-based services. These devices use M2M data services to send location information and other data to web-based portals for tracking of and messaging with users.

Maritime

We believe the maritime market is one of our most significant long-term market opportunities. End users of our services in the maritime sector include companies engaged in merchant shipping, passenger transport, fishing, energy and recreation. Merchant shipping accounts for a significant portion of our maritime revenue, as those ships spend the majority of their time at sea away from coastal areas and out of reach of terrestrial communications services. Our products and services targeting the maritime market typically have high average revenue per subscriber, with multiple users on a single subscriber account. Once a system is installed on a vessel, it often generates a multi-year recurring revenue stream from the customer. As a consequence, from time to time we may offer promotions or rebates to accelerate new customer acquisitions and a long-term revenue stream.

We believe demand for higher-speed, low-cost data services will allow us to capitalize on opportunities in this market. We believe Iridium Pilot®, which uses our Iridium OpenPort service to offer uncompressed data speeds of up to 134 kilobits per second, or kbps, and three independent voice lines, presents a competitive, broadband communication solution to end users in the maritime market.

Maritime end users utilize our satellite communications services for the following:

- Data and information applications: Ship operators and crew use our services to send and receive e-mail and data files and to receive other information services such as electronic media, weather reports, emergency bulletins and electronic charts. We believe Iridium Pilot provides an attractive alternative for shipping operators and fishing fleets seeking increased functionality at competitive prices, as well as for yachts, work boats and other vessels for which traditional marine satellite systems have typically been costly and underperforming.

- Voice services: Maritime global voice services are used for both vessel operations and communications for crew welfare. Merchant shipping operators use prepaid phone cards for crew use at preferential around-the-clock flat rates.
- Vessel management, procurement and asset tracking: Shipping operators, such as China Ocean Shipping Company (COSCO) and Zodiac Shipping Ltd., use our services to manage operations on ships and to transmit data, such as course, speed and fuel stock. Our services can be integrated with GPS to provide a position reporting capability. Many fishing vessels are required by law to carry terminals using approved mobile satellite services for tracking purposes as well as to monitor catches and to ensure compliance with geographic fishing restrictions. European Union regulations, for example, require EU-registered fishing vessels of over 15 meters to carry terminals for the purpose of positional reporting of those vessels. Furthermore, new security regulations in some jurisdictions are expected to require tracking of merchant vessels in territorial waters, which would provide an additional growth opportunity for us.
- Safety applications: Ships in distress, including as a result of potential piracy, hijack or terrorist activity, rely on mobile satellite voice and data services. The Ship Security and Alert Systems regulations were adopted by the International Maritime Organization, or IMO, to enhance maritime security in response to the threat from terrorism and piracy. Most deep-sea passenger and cargo ships must be fitted with a device that can send an alert message containing the ship's ID and position whenever the ship is under threat or has been compromised. We and our distribution partners have developed several product solutions to meet this requirement for merchant vessels. The Global Maritime Distress and Safety System, or GMDSS, is a maritime service built to alert a maritime rescue coordination center of each vessel's situation and position, information that can then be used to coordinate search and rescue efforts among ships in the area. The IMO requires all vessels flagged by signatories to the International Convention for the Safety of Life at Sea (SOLAS) over 300 gross tons and certain passenger vessels, irrespective of size, that travel in international waters to carry distress and safety terminals that use GMDSS applications. We are working through the authorization process with the IMO for provisional inclusion in the GMDSS, which we currently anticipate receiving in late 2016. Following this process, we expect to conduct integration and trial service activities with Iridium Certus terminals that include GMDSS service capabilities developed by our manufacturing licensees, allowing final approval of GMDSS capability and availability of the service to customers as early as 2018.

Aviation

We are one of the leading providers of mobile satellite communications services to the aviation sector. Our services are increasingly used in commercial and global government aviation applications, principally by corporate jets, corporate and government helicopter fleets, specialized general aviation fleets, such as medevac companies and fire suppression fleets, and high-end personal aircraft. Our services are also employed by commercial airline operators for cockpit voice and data link services for aircraft operational and safety communications. As a result of the 2011 FAA announcement that it will approve Iridium for flight safety data communications and the U.S. Federal Communications Commission's, or FCC's, approval of Iridium for flight safety communications, commercial operators are installing avionics that use the Iridium network on the flight deck to comply with international air navigation communications requirements to operate in oceanic and remote airspace. Our voice and data devices from our VAMs and VARs have been adopted as standard equipment and as factory options for a range of airframe manufacturers in business aviation and air transport, such as Gulfstream Aerospace Corporation, Bombardier Inc., Cessna Aircraft Company, Boeing and Airbus. Our devices are also installed in the aftermarket on large volume and a variety of other types of aircraft.

Aviation end users utilize our satellite communications services for:

- Aviation operational communications: Aircraft crew and ground operations use our services for air-to-ground telephony and data communications. This includes the automatic reporting of an aircraft's position and mission-critical condition data to the ground and controller-pilot data link communication for clearance and information services. We provide critical communications applications for airlines and air transport customers such as Hawaiian Airlines, United Airlines, UPS, Lufthansa, Cathay Pacific Airways and El Al Airlines. These operators rely on our services because other forms of communication may be unaffordable or unreliable in areas such as the

polar regions. ARINC Incorporated and SITA, SC, the two leading providers of voice and data link communications services and applications to the airline industry, integrate our products and services into their offerings.

- Aviation passenger communications: Corporate and private fleet aircraft passengers use our services for air-to-ground telephony and data communications. Operators are currently using our services to enable passengers to e-mail using their own Wi-Fi-enabled mobile devices, including smartphones, without causing interference with aircraft operation. We believe our distributors' small, lightweight, cost-effective solutions offer an attractive option for aircraft operators, particularly small fleet operators.

- Rotary and general aviation applications: We are also a major supplier for rotary aviation applications to end users in a number of markets, including medevac, law enforcement, oil and gas, and corporate work fleets. Companies such as Air Logistics, EagleMed and Air Evac Lifeteam rely on applications from our distributors for traditional voice communications, fleet tracking and management, and real-time flight diagnostics. VARs and VAMs such as Flightcell International Ltd., Garmin International, Inc., Honeywell International, Inc., SkyTrac and Spider Tracks Limited incorporate Iridium products and services into applications for this market.
- Air traffic control communications and safety applications: The International Civil Aviation Organization, or ICAO, has approved standards and recommended practices allowing us to provide Aeronautical Mobile Satellite (Route) Services to commercial aircraft on long-haul routes. This allows member states to evaluate and approve our services for safety communications on flights in oceanic and remote airspace. After several years of working with the Performance Based Aviation Rules Making Committee, or PARC, and illustrating a successful operational evaluation using Iridium data services, in 2011 the FAA announced that it would approve Iridium for use in the Future Air Navigation Services (FANS) and Automatic Dependent Surveillance – Contract (ADS-C) datalink communications with Air Traffic Control, or ATC. We are currently coordinating with PARC on an operational evaluation of our voice communications services for ATC. As our services become approved by regulatory organizations and member states, aircraft crew and air traffic controllers will be able to use our services for data and voice communications between the flight deck and ground-based air traffic control facilities. We are the only satellite provider capable of offering such critical flight safety applications around the entire globe, including the polar regions. We believe this particular sector of the market will present us with significant growth opportunities, as our services and applications will serve as a cost-effective alternative to systems currently in operation.

Government

We are one of the leading providers of mobile satellite communications services to the U.S. government, principally the DoD. We provide mobile satellite products and services to all branches of the U.S. armed forces. Our voice products are used for a variety of primary and backup communications solutions, including tactical operations, logistical, administrative, morale and welfare, and emergency communications. In addition, our products and related applications are installed on ground vehicles, ships, rotary- and fixed-wing aircraft, embedded in unattended sensors and used for command and control and situational awareness purposes. Global security concerns are among the factors driving demand for our products and services in this sector. See “—U.S. Government Services” for more information.

Seasonality

Our business is subject to seasonal usage changes for commercial customers, and we expect it to be affected by similar seasonality going forward. March through October are typically the peak months for commercial voice traffic and related subscriber equipment sales, given the predominance of population and activity in the northern hemisphere. U.S. government usage and commercial M2M usage have been less subject to seasonal changes.

Services and Products

At December 31, 2015, we had approximately 782,000 billable subscribers worldwide. Our principal services are mobile satellite services, including mobile voice and data services, M2M services and high-speed data. Sales of our commercial services collectively accounted for approximately 59% of our total revenue for the year ended December 31, 2015. We also sell related voice and data equipment to our customers, which accounted for approximately 18% of our total revenue for the year ended December 31, 2015. In addition, we offer services to U.S. government customers, including the DoD. U.S. government services accounted for approximately 23% of our total revenue for the year ended December 31, 2015.

Commercial Services

Postpaid Mobile Voice and Data Satellite Communications Services

We sell our mobile voice and data services to service providers and VARs who in turn offer such services to end users, either directly or indirectly through dealers, using various packaged solutions such as monthly plans with differing price levels that vary depending upon expected usage. In exchange for these services, we typically charge service providers and VARs a monthly access fee per subscriber, as well as usage fees for airtime minutes used by their respective subscribers.

Prepaid Mobile Voice Satellite Communications Services

We also offer mobile voice services to service providers and VARs through prepaid plans. Service providers and VARs pay us in advance for defined blocks of airtime minutes with expiration periods in various configurations, ranging from 30 days to two years. These services are then generally sold to subscribers in the form of prepaid scratch cards and e-vouchers that enable subscribers to use our services on a per-minute basis. Unused minutes are forfeited on the applicable expiration date. We believe service providers and VARs are drawn to these services because they enable greater cost control by eliminating the need for monthly billings and reducing collection costs, and can be sold in countries where credit may not be readily available for end users. Our distributors often offer our prepaid voice services through fixed devices to subscribers in rural villages, at remote industrial, commercial and residential sites and on ships at sea, among other places. Fixed voice satellite communications services are in many cases an attractive alternative to handheld mobile satellite communications services in situations where multiple users will access the service within a defined geographic area and terrestrial wireline or wireless service is not available. Fixed phones, for example, can be configured as pay phones that accept prepaid scratch cards and can be installed at a central location, for example in a rural village or on a maritime vessel.

Iridium PTT Service

Building on the foundation of DTCS, which provided regional tactical radio service to DoD users, we launched Iridium PTT to our commercial customers in July 2015. Iridium PTT enables regional PTT calls, or global PTT calls among users on the same talkgroup in up to 10 geographically disparate locations around the world, providing a fast and robust communication experience. Iridium PTT can be used via the Iridium Extreme PTT satellite phone or the Iridium 9523 PTT core transceiver, which gives our VAMs the ability to build Iridium PTT into existing land mobile, maritime and aviation communications equipment. We and our partners are also developing interoperability solutions for existing terrestrial Land Mobile Radio systems, which will further extend the utility of the service.

Broadband Data Services

Our broadband data service, Iridium OpenPort, offers maritime, aviation and terrestrial users speeds of up to 134 kbps and three independent voice lines. We believe Iridium OpenPort offers a competitive alternative to other satellite broadband services that are sold at higher costs. For our Iridium OpenPort service, we typically charge service providers usage fees for airtime consumed by the respective subscribers for voice and data communications. In conjunction with our distributors, we also offer additional services that permit service providers and VARs to offer complete integrated solutions for prepaid calling, e-mail and IP-based data communications. For example, we offer a product with one of our distribution partners, KVH Industries, Inc., that integrates Iridium Pilot with its mini-VSAT^{SM} broadband service to provide backup connectivity when the mini-VSAT terminal is out of its coverage area or out of service.

Iridium is also developing a new broadband service with enhanced capabilities enabled by the more powerful Iridium NEXT satellites. Iridium Certus will become available as Iridium NEXT satellites are deployed, and will support a variety of data speeds and antenna types, ranging from 88kbps or lower, and eventually up to 1.4Mbps after the entire Iridium NEXT constellation is available. Iridium has licensed Iridium Certus technology to an initial group of terminal manufacturers who are developing products for the maritime, aviation and terrestrial markets. Iridium is also licensing and designating specific service partners who will be able to sell Iridium Certus products to their customers. We believe Iridium Certus will provide a competitive, cost-effective and reliable range of narrowband and broadband services to the market, in standalone applications or as a companion to other technologies like VSAT.

Machine-to-Machine Services

Our M2M services are designed to address the market need for a small and cost-effective solution for sending and receiving data, such as location, from fixed and mobile assets in remote locations to a central monitoring station. This

service operates through a two-way short-burst data transmission between our network and a transceiver, which may be located, for example, on a container in transit or a buoy monitoring oceanographic conditions. The small size of our units makes them attractive for use in applications such as tracking asset shipments, monitoring unattended remote assets, including oil and gas assets, vehicle tracking and mobile security. We sell our M2M services to our distributors, who incorporate them and in turn provide a solution package to commercial and government customers such as Schlumberger Limited, ConocoPhillips and NOAA. Increasingly, our M2M transceivers are being built into products for consumer markets, such as personal location devices that provide two-way messaging. As with our mobile voice and data offerings, we typically charge service providers and VARs a monthly access fee per subscriber as well as usage fees for data used by their respective subscribers.

Other Services

In addition to access and usage fees, we generate revenue from several ancillary services related to our core service offerings, such as inbound connections from the public switched telephone network, or PSTN, short message services, or SMS, subscriber identity module, or SIM, activation, customer reactivation and other peripheral services. We also provide research and development services to assist customers in developing new technologies compatible with our system, which we may leverage for use in service and product offerings in the future. We charge our distributors fees for these services.

U.S. Government Services

We provide U.S. government customers bulk access to our services, including voice, netted voice, data, messaging and paging services, as well as maintenance services for the DoD's dedicated gateway. We provide airtime to U.S. government subscribers through DoD's gateway, under the EMSS contract, which is a fixed-price contract covering voice, low-speed data, paging, broadcast and DTCS services. Additional services, such as future broadband capabilities, would be provided at an additional fee. To comply with U.S. government requirements, we ensure handsets sold for use by the U.S. government are manufactured in the United States. U.S. government customers procure our voice and data products through our network of distributors. Our VARs and VAMs typically integrate our products with other products, which they then offer to U.S. government customers as customized products. Our voice and data solutions include:

- personnel tracking devices;
- asset tracking devices for equipment, vehicles and aircraft;
- beyond-line-of-sight aircraft communications applications;
- submarine communications applications;
- specialized communications solutions for high-value individuals; and
- specialized, secure, mobile communications and data devices for the military and intelligence community, such as secure satellite handsets with U.S. National Security Agency Type I encryption capability.

With funding support from the DoD, we continue to invest in research and development to develop new products and applications for use by all branches of the U.S. armed forces. In conjunction with DISA, we and our distribution partners offer Netted Iridium, which uses a line of radio-only devices that permit beyond-line-of-sight PTT group calling services for a user-defined group, or net.

Our Products

We offer a broad array of voice and data products for customers that work worldwide. In most cases, our devices or an antenna must be located outside and within view of a satellite to be able to access our network.

Satellite Handsets

Our principal handset offerings are the Iridium 9555 and Iridium Extreme satellite handset phones, which are similar in functionality to ordinary cellular phones but with the solid, durable feel that many satellite phone users demand. We believe our reputation for industrial-strength products is critical for customers, many of whom are located in the most inhospitable spots on the planet and require rugged and reliable communications equipment.

Iridium 9555. The Iridium 9555 provides voice, SMS and data connectivity. This model introduced several features including a larger, brighter screen, improved SMS and e-mail capabilities, an integrated antenna and speakerphone. The Iridium 9555 weighs 9.4 ounces and offers up to 3.1 hours of talk time. The Iridium 9555 has an industrial feel, with a rugged housing to protect its sophisticated satellite transceiver.

Iridium Extreme. The Iridium Extreme adds to the Iridium 9555's capabilities by providing a rugged exterior that meets DoD Military Standard 810F for durability, a dedicated, two-way emergency SOS button and fully integrated GPS and location-based services. These extra features are provided in a handset that is even smaller than the Iridium 9555, weighing 8.7 ounces and offering up to four hours of talk time. An emergency response service provided by GEOS Travel Safety Group, or GEOS, is included with the purchase of the phone and airtime usage. The two-way emergency SOS button initiates a phone call and an emergency message via SMS to GEOS, which then coordinates with local emergency responders.

Iridium Extreme PTT. Iridium also offers the Iridium Extreme PTT, which enhances the Iridium Extreme with an intelligently designed push-to-talk mode, expanded loudspeaker, reinforced PTT button, and extended capacity battery.

The user interface provides access to multiple communication services, including voice calling, SMS and SOS in phone mode and PTT mode, allowing users to connect to a talkgroup located in up to 10 geographic regions worldwide. The Iridium Extreme PTT weighs 9.5 ounces and offers up to 6.5 hours of talk time in phone mode and five hours of talk time in PTT mode.

We expect these devices to maintain our competitive position as premium offerings in the market due to their capabilities, mobility, reliability and global coverage. In addition to these devices, we offer the Iridium 9505A handset and variants of the Iridium 9555 and Iridium Extreme handsets that are qualified for sale to U.S. government customers.

Iridium GO!

We also offer Iridium GO!, a small, rugged, personal connectivity device that connects to the Iridium network to create a Wi-Fi hotspot, enabling the use of smartphones and tablets to make voice calls, send text messages and emails, post to social networking sites, and use the mobile web. Iridium GO! also has an emergency SOS button and GPS and location-based services. Smartphone or tablet access is provided through special applications downloaded for free from the Apple App Store or through Google Play for Android smartphones or tablets. A software development kit is available to enable the creation of additional applications or integrate Iridium GO! connectivity into existing applications, targeted to specific customer segments.

Voice and Data Modems

We also offer a combined voice transceiver and data modem, which our distributors integrate into a variety of communications solutions that are deployed in different applications around the world. Our principal offering in this space is the Iridium Core 9523 L-Band transceiver, which utilizes the transceiver core of our Iridium Extreme satellite handset. The Iridium Core 9523 provides a small voice and data module that can be integrated with other components to create a modem tailored for typical VAM applications as well as specific applications, such as a dual-mode terrestrial radio and satellite phone or M2M applications that require larger data packets. The Iridium 9523 PTT adds PTT capability, allowing development partners to design and build land mobile, fixed, aviation and maritime devices with Iridium PTT. We also offer the 9522B L-Band transceiver, which utilizes the same transceiver core that is used in our Iridium 9555 satellite handset to provide voice and circuit-switched data services. Our principal customers for our L-Band transceivers are VAMs and VARs, who integrate them into specialized devices that access our network.

Broadband Data Devices

Our Iridium Pilot terminal provides up to three independent voice lines and an internet connection for data speeds from 32 to 134 kbps over our Iridium OpenPort service. All voice and data capabilities can be used simultaneously. Our principal customers for Iridium Pilot are service providers who integrate the device with their own hardware and software products to provide a suite of customer-focused voice and IP-based data packages for ship business, crew calling and e-mail. We believe our Iridium Pilot terminal, with its high bandwidth and flexible service options, provides an excellent low-cost option to the maritime market, including market sectors such as luxury yachts, tug boats and other fishing and cruising vessels. Iridium Pilot also offers a low-cost solution as a complement to maritime Very Small Aperture Terminal, or VSAT, systems providing broadband and data services for ships, where Iridium Pilot can fill in coverage gaps, provide services where the VSAT terminal is not licensed to operate, and provide an alternate channel for VSAT maintenance and configuration. We also offer Iridium Pilot Land Station, which allows remote individuals and businesses from off-the-grid terrestrial locations to obtain reliable internet connections and voice calling no matter where they are located.

Machine-to-Machine Data Devices

Our principal M2M devices are the Iridium 9602 and 9603 full-duplex short-burst data transceivers. The Iridium 9602 is a small data device with two-way transmission, capable of sending packet data to and from any point in the world with low latency. The principal customers for our Iridium 9602 data modems are VARs and VAMs, who embed the Iridium 9602 into their tracking, sensor, and data applications and systems, such as asset tracking systems. Our partners often combine the Iridium 9602 with a GPS receiver to provide location information to customer applications. We also offer the Iridium 9603, an even smaller transceiver that is functionally identical to the Iridium 9602. In addition, an increasing number of VARs and VAMs are including a cellular modem as part of their Iridium applications to provide low-cost cellular data transmission when available. These types of multimode applications are adopted by end users who require the ability to regularly transfer data but operate in areas with inconsistent cellular coverage. We provide gap-filler coverage for these applications, allowing users to operate anywhere on the globe. We continue to invest in research and development to develop smaller, lighter products in this market. We also offer Iridium Burst®, our one-to-many global data broadcast service, which enables enterprises to send data to an unlimited number of devices anywhere in the world, even inside buildings, vehicles or aircraft.

Device Development and Manufacturing

We contract with Cambridge Consulting Ltd. and other suppliers to develop all of our devices, and with Benchmark Electronics Inc., or Benchmark, to manufacture our devices in facilities in Thailand and the U.S. Pursuant to our contract with Benchmark, we may be required to purchase excess materials at cost plus a contractual markup if the materials are not used in production within the periods specified in the agreement. Benchmark generally repurchases the materials from us at the same price we paid, as required for the production of the devices. Our agreement with Benchmark is automatically renewable for additional one-year terms unless terminated by either party.

We generally provide our distributors with a warranty on subscriber equipment for one to five years from the date of activation, depending on the product. We also utilize other suppliers, some of which are the sole source, to manufacture some of the component parts of our devices.

In addition to our principal products, we also offer a selection of accessories for our devices, including extended-life batteries, holsters, earbud headphones, portable auxiliary antennas, antenna adaptors, USB data cables and charging units, among others. We purchase these products from several third-party suppliers either pursuant to contractual agreements or off the shelf at market prices.

Our Spectrum

We hold licenses to use 8.725 MHz of contiguous spectrum in the L-Band, which operates at 1.6 GHz, and allows for two-way communication between our devices and our satellites. In addition, we are authorized to use 200 MHz of K-Band (23 GHz) spectrum for satellite-to-satellite communications, known as inter-satellite links, and 400 MHz of Ka-Band spectrum (19.4 GHz to 19.6 GHz and 29.1 to 29.3 GHz) for two-way communication between our satellites and our gateways, known as feeder links. Access to this spectrum enables us to design satellites, network and terrestrial infrastructure enhancements cost effectively because each product and service can be deployed and sold worldwide. In February 2013, we filed an application with the FCC for an additional 1.775 MHz of L-band spectrum to increase our total amount to 10.5 MHz of contiguous spectrum. Our products and services are offered in over 100 countries, and we and our distributors continue to seek authorizations in additional countries.

Our use of spectrum is globally coordinated and recorded by, and subject to the frequency rules and regulations of, the International Telecommunication Union, or ITU. The ITU is the United Nations organization responsible for worldwide co-operation in the telecommunications sector. In order to protect satellite systems from harmful radio frequency interference from other satellite systems, the ITU maintains a Master International Frequency Register of radio frequency assignments. Each ITU administration is required to give notice of, coordinate and record its proposed use of radio frequency assignments with the ITU’s Radiocommunication Bureau. The coordination negotiations are conducted by the national administrations with the assistance of satellite operators. When the coordination process is completed, the ITU formally notifies all proposed users of frequencies and orbital locations in order to protect the recorded assignments from subsequent nonconforming or interfering uses by member states of the ITU. Only member states have full standing within this inter-governmental organization. Filings to the ITU for our current constellation were made on our behalf by the United States.

The ITU also controls the assignment of country codes used for placing telephone calls between different countries. Our network has been assigned the 8816 and 8817 country codes and uses these numbers for calling and communications between terminals.

Domestic and Foreign Revenue

We supply services and products to customers in a number of foreign countries. We allocate revenue geographically based on where we invoice our distributors, whom we bill for mobile satellite services and related equipment sales, and not according to the location of the end user. These distributors sell services directly or indirectly to end users, who may be located elsewhere. It is not possible for us to determine the geographical distribution of revenue from end users, as we do not contract directly with them. Substantially all of our revenue is invoiced in U.S. dollars. The table below sets forth the percentage of our revenue by country for the last three years.

	Year Ended December 31,		
	2015	2014	2013
United States	50%	47%	46%
Canada	10%	11%	13%
United Kingdom	11%	12%	10%
Other Countries [1]	29%	30%	31%

(1)No other single country represented more than 10% of our revenue for any of the periods indicated.

For more information about our revenue from sales to foreign and domestic customers, see Note 11 to our consolidated financial statements included in this annual report.

Traffic Originating Outside the United States

A significant portion of our voice and data traffic originates outside the United States. The table below sets forth the percentage of our commercial voice and data traffic originating outside the United States, excluding Iridium OpenPort traffic, for the last three years.

	Year Ended December 31,		
	2015	2014	2013
Commercial voice traffic (minutes)	88%	90%	90%
Commercial data traffic (kilobytes)			