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Iridium Communications Inc.
Form 10-K
February 23, 2017

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
For the fiscal year ended December 31, 2016

OR

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 (I.R.S. Employer
incorporation or organization) Identification No.)

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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 No

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 No

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 No

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 No

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.

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

Accelerated filer

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

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

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, 2016 was approximately \$730.8 million.

The number of shares of the registrant's common stock, par value \$0.001 per share, outstanding as of February 17, 2017 was 95,901,504.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive proxy statement for its 2017 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, 2016, 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, 2016

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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 terrestrial 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 operational 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.

We have begun launching our new satellite constellation, Iridium NEXT, which we expect to complete in 2018, and which will replace our first-generation satellite network with the same interlinked mesh architecture of our

first-generation constellation, with 66 operational satellites, as well as in-orbit and 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 first-generation constellation and current end-user equipment, so that as we launch Iridium NEXT satellites, we will replace the first-generation satellites in our constellation without affecting the service to our end users. We plan to deploy 75 satellites on seven dedicated Falcon 9 rockets and one shared Falcon 9 rocket launched by Space Exploration Technologies Corporation, or SpaceX. We estimate the costs associated with the design, build and launch of Iridium NEXT and related ground infrastructure upgrades through 2018 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, which is now fully drawn as of February 2017, together with cash on hand and internally generated cash flows, including contracted cash flows from hosted payloads.

The Iridium NEXT constellation will also host the AireonSM 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. We formed Aireon LLC in 2011, with subsequent investments from the air navigation service providers, or ANSPs, of Canada, Italy, Denmark and Ireland, to develop and market this service. Aireon has contracted to provide the 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 has contracted to 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.

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. Commercial enterprises use our services to track assets in remote areas and provide telematics information such as location and engine diagnostics. 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.

The U.S. government, directly and indirectly, has been and continues to be our largest single customer, generating \$110.4 million in service and engineering and support service revenue, or 25% of our total revenue, for the year ended December 31, 2016. 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. The DoD has made, and continues to make, significant investments to upgrade its dedicated gateway for Iridium NEXT 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, or DTCS.

We sell our products and services to commercial end users primarily through a wholesale distribution network, encompassing approximately 65 service providers, approximately 195 value-added resellers, or VARs, and approximately 80 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, 2016, we had approximately 850,000 billable subscribers worldwide, representing a 9% increase compared to December 31, 2015. Total revenue increased from \$411.4 million in 2015 to \$433.6 million in 2016.

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 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 2016 study by the GSM Association, total mobile connections reached 7.3 billion throughout the world as of the end of 2015 and are projected to reach 8.9 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 travel or be located. 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, including the continued advancement of the Internet of Things, or IoT. 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 without

the need for local infrastructure. 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

Iridium NEXT. The Iridium NEXT constellation, which we have begun launching and expect to complete in 2018, will offer new products and services to our customers, including our planned global broadband offering, Iridium CertusSM, support more bandwidth and higher speeds for new products, provide service continuity and backwards compatibility to our first-generation constellation, and support Aireon's aircraft tracking service, as well as other hosted payload missions.

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, applications integrating mobile satellite products and services and the continued development of the IoT. 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 design 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

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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 DTCS, M2M devices, encrypted handset and other products as mission-critical services and equipment. The DoD continues to make 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. We have seen significant annual increases in the number of federal government subscribers during the term of this agreement.

Our Business and Growth Strategies

• **Complete the deployment of the Iridium NEXT constellation.** We have begun launching our next-generation satellite constellation, Iridium NEXT, which will replace our first-generation constellation with a more powerful satellite network while maintaining backward compatibility with our first-generation system and end-user devices. Iridium NEXT will maintain our first-generation 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 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.

• **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 talk groups worldwide; by providing rugged, dependable devices and services; and by developing new services, such as 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,

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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 fee under the EMSS contract is \$88 million per year for the remaining term. In addition, other services we are developing, such as future broadband capabilities, and satellite time and location services, provide us with opportunities to offer new products and services to the DoD for an additional fee.

Continue to develop Aireon. Aireon, which we formed in 2011, is our primary hosted payload customer. Aireon received subsequent investments from 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 has contracted to 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.

Distribution Channels

We sell our products and services to customers through a wholesale distribution network of approximately 65 service providers, approximately 195 VARs and approximately 80 VAMs. These distributors sell our products and services to end users, either directly or indirectly through service providers, VARs or dealers. Of these distributors, 32 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 service program to provide portside service for our 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 DataSM, or SBDSM, 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 Marlink SAS, 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, Caterpillar Inc., Garmin Ltd., General Dynamics Corporation, Komatsu Limited, MetOcean Telematics Limited, 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., Garmin Ltd., 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 continues to make 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, which was 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 DTCS services for an unlimited number of DoD and other federal subscribers. Other services may be purchased at an additional cost. The fixed-price rate for the remaining contract years, which run from October 22 through the following October 21 of each year, is \$88 million per year. 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 three 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, all of which have been exercised, and has a value of \$47 million to us over the full five-year period.

U.S. government services accounted for approximately 25% of our total revenue for the year ended December 31, 2016. 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. We expect our planned introduction of Iridium Certus to impact our opportunities in each of our lines of business, by providing end users an additional competitive broadband communication solution.

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:

Heavy equipment monitoring: Large, global, heavy equipment original equipment manufacturers, such as Caterpillar Inc., Komatsu Limited, CNH Global N.V. and AGCO Corporation, use our global M2M services to monitor their off-road heavy equipment in markets such as construction, mining, agriculture and forestry.

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 Garmin, 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 serve the commercial maritime market with a variety of products including broadband terminals, embedded devices and handsets. This market space includes merchant shipping, fishing, research vessels and specialized water craft. The majority of our revenue in this segment is derived from shipboard data terminals including the Iridium Pilot®. While some Iridium Pilot equipment serves the terrestrial market, the vast majority of Iridium Pilot service revenue comes from the commercial maritime market described above. Our products and services targeting the maritime market typically have high average revenue per subscriber. 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 communication solution to users in the maritime market. Iridium Certus, which will be enabled by Iridium NEXT, will provide increased throughput, along with a portfolio of voice and data services that we expect to increase the addressable market for our services.

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

• **Business critical data applications:** Ship operators use our services to exchange e-mail and data files and to receive other information such as meteorological reports, emergency bulletins, cargo and voyage data and electronic chart updates. We believe Iridium Pilot provides attractively priced options for shipping operators and fishing fleets seeking increased functionality, 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 companies use prepaid phone cards for crew use at preferential around-the-clock flat rates.

• **Vessel management 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 are commonly integrated with GPS to provide a real-time 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 and Security 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 and Long Range Identification Tracking 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. In addition, the IMO and a NATO advisory group have recommended the installation of a safe room equipped with a standalone secure communication link the crew can use from inside the room to communicate with rescuing forces. We and our distribution partners have developed several product

solutions to meet these requirements for merchant and fishing 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 inclusion in the GMDSS. Upon completing this process, we expect Iridium Certus terminals, which will include GMDSS service capabilities developed by our manufacturing licensees, to be available to vessel operators.

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, 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. Rockwell Collins and SITA, SC, the two leading providers of voice and data link communications services and applications to the commercial 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. With the introduction of Iridium Certus, we expect that users in the corporate aviation market, and original equipment manufacturers (OEMs) for business jets, will increase adoption of Iridium for in-flight, passenger data communications. We believe this presents a significant opportunity to increase market penetration and revenues in this market.

✦ **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. We are currently coordinating with PARC on an operational evaluation of our voice communications services for air traffic control. Aircraft crew and air traffic controllers will be able to use our services for data and voice communications between the aircraft 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, 2016, we had approximately 850,000 billable subscribers worldwide. Our principal services are mobile satellite services, including mobile voice and data services, M2M services and high-speed data services and engineering services. Sales of our commercial services collectively accounted for approximately 58% of our total revenue for the year ended December 31, 2016. We also sell related voice and data equipment to our customers, which accounted for approximately 17% of our total revenue for the year ended December 31, 2016. In addition, we offer services to U.S. government customers, including the DoD. U.S. government services, including engineering services, accounted for approximately 25% of our total revenue for the year ended December 31, 2016.

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 resources consumed 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, our Iridium PTT service 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 platforms. 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. 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-VSATSM broadband service to provide backup connectivity when the mini-VSAT terminal is out of its coverage area or out of service.

We are also developing a new broadband service, Iridium Certus, with enhanced capabilities that will be enabled by the more powerful Iridium NEXT. Iridium Certus will support a variety of data speeds and antenna types, ranging from 22kbps to 700kbps, and eventually up to 1.4Mbps after the entire Iridium NEXT constellation is available. We have licensed the Iridium Certus technology to an initial group of terminal manufacturers who are developing products for the maritime, aviation and land mobile markets. We will also be designating distribution partners for the Iridium Certus service in each of these vertical markets. 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 complement to other wireless technologies.

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 SBD 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. 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 utilizing Iridium Certus, 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, including a new secure handset. In conjunction with DISA, we and our distribution partners offer DTCS, which provides critical, secure, PTT, netted communications using a lightweight, handheld tactical radio. In addition, in 2017 we expect to introduce to the U.S. government a next-generation secure satellite phone based on the Iridium Extreme, which we have also developed with funding support from the DoD. We expect this secure handset to be accredited by the National Security Agency (NSA) to provide Type-1 encryption, enabling communications up to Top Secret from anywhere in the world.

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 handsets, 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. We also offer 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. We are also working with one of our VADs to develop a secured version of the Iridium Extreme for use by the U.S. government.

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 communications of up to 134kbps, using 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 operation, 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. We have selected several VAMs to manufacture terminals for use with our Iridium Certus broadband service. We expect these units will begin to be commercially available once the Iridium Certus service is launched.

Machine-to-Machine Data Devices

Our principal M2M devices are the Iridium 9602 and 9603 full-duplex SBD 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, and are developing Iridium Edge™, an off-the-shelf, environmentally sealed, rugged device that will complement existing cellular solutions to create dual-mode connectivity for the most remote and inaccessible areas of the world, with an expected launch in 2017. We expect Iridium Edge to reduce the cost and complications associated with hardware development, manufacture and certification of satellite-specific terminal.

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. Our license for the launch and operation of our Iridium NEXT constellation also authorizes our use of the 156.0125-162.0375 MHz spectrum for reception of Automatic Identification System transmissions from maritime vessels and the 1087.7-1092.3 MHz spectrum for reception of Automatic Dependent Surveillance-Broadcast transmissions from aircraft. 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 a petition 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 first-generation 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,		
	2016	2015	2014
United States	52%	50%	47%
Canada	10%	10%	11%
United Kingdom	11%	11%	12%
Other Countries ⁽¹⁾	27%	29%	30%

(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,		
	2016	2015	2014
Commercial voice traffic (minutes)	88%	88%	90%
Commercial data traffic (kilobytes)	72%	67%	69%

Our Network

Our Constellation

Both our first-generation satellite network and our next-generation satellite constellation, Iridium NEXT, have an architecture of 66 operational LEO satellites in six orbital planes of eleven vehicles each in nearly circular polar orbits, in addition to in-orbit spares. Our operational satellites orbit at an altitude of approximately 483 miles (778 kilometers) above the earth and travel at approximately 16,689 mph, resulting in a complete orbit of the earth approximately every 100 minutes. The design of our constellation ensures that generally at least one satellite is visible to subscribers from any point on the earth's surface, covering all of the world's population. While our constellation offers true global coverage, most of our devices and antennas must have a direct line of sight to a satellite to transmit or receive a signal, and services on those devices are not available in locations where a satellite signal cannot be transmitted or received, such as inside a building.

We have begun launching our Iridium NEXT system. We launched ten Iridium NEXT satellites in January 2017. After completion of in-orbit testing, these satellites will begin to replace first-generation satellites in our constellation, minimizing disruption to our end users. Once our Iridium NEXT satellites begin carrying traffic, we will operate a hybrid constellation through the full deployment of Iridium NEXT, which we expect to occur during 2018. We will deorbit our first-generation satellites on an individual basis after they are replaced by Iridium NEXT vehicles, although some Iridium NEXT satellites will take a year or more to reach the appropriate orbital plane.

Our first-generation constellation and Iridium NEXT are unique among commercial constellations in the usage of radio frequency crosslinks between our satellites, which eliminates the need for local ground infrastructure. These crosslinks enable each satellite to communicate with up to four other satellites in space, two in the same orbital plane and two in adjacent planes. Our traffic is routed automatically between satellites to a predetermined satellite that is in contact with one of the Iridium teleport network, or TPN, locations. The TPN sites then transmit the traffic to and from the gateways which provide the interface to terrestrial-based networks such as the PSTN. The use of a TPN allows grounding traffic at multiple locations within our ground network infrastructure. This added flexibility allows for rapid reconfiguration of grounding traffic from the satellites in the event of a space, antenna or ground routing anomaly and results in greater reliability of our network. The design of our space and ground control system also facilitates the real-time intervention and management of the satellite constellation and service upgrades via software enhancements. In addition, we upgraded all our ground systems, including gateway and teleport technology and satellite control systems in anticipation of the completion of Iridium NEXT. We also have a gateway located in Russia, which was completed during 2016 and serves commercial users operating our devices within the Russian territory.

We believe our interlinked satellite infrastructure provides several advantages over low earth orbiting “bent-pipe” satellite networks that rely on multiple terrestrial gateways, such as Globalstar’s and ORBCOMM’s networks. We have the only satellite network with true global coverage, and our constellation is less vulnerable to single points of failure, since traffic can be routed around any one satellite problem to complete the communications path. In addition, the small number of ground stations increases the security of our constellation, a factor that makes our network particularly attractive to government institutions and large enterprises. The low orbit of our constellation also allows our network to operate with low latency and with smaller antennas due to the proximity of our satellites to the earth.

Our constellation is designed to provide significant coverage overlap for mitigation of service gaps from individual satellite outages, particularly at higher northern and southern latitudes. Each satellite, both in our first-generation constellation and our Iridium NEXT system, was designed with a high degree of on-board subsystem robustness, an on-board fault detection system, and isolation and recovery capabilities for safe and quick risk mitigation. Our ability to reposition our satellites provides us with operating flexibility and enhances our ability to maintain a commercially acceptable level of service. Historically, if a satellite should fail or become unusable, in most cases, we were able to reposition one of our in-orbit spare satellites to take over its functions. Today, if a failure occurs in an orbital plane in which we have an in-orbit spare, we may be able to reposition the spare within days, with minimal impact on our services. If there is no in-orbit spare located in the relevant orbital plane, we would replace it with a newly launched Iridium NEXT satellite, when available.

Our primary commercial gateway is located in Tempe, Arizona, and we completed a second dedicated gateway in Russia during 2016, which serves commercial users physically located within the Russian territory. Our network has multiple antennas, located at the TPN facilities, including the Tempe gateway, that communicate with our satellites and pass calls between the gateway and the satellites as the satellites traverse our antennas, thereby connecting signals from the terminals of end users to our gateways. This system, together with our satellite crosslinks, enables communications that are not dependent on a ground station in the region where the end user is using our services. A gateway can also generate and control user information pertaining to registered users, such as geo-location and call detail records. The DoD owns and operates a dedicated gateway for U.S. government users to take advantage of this capability. This gateway provides an interface between voice and data devices and the Defense Information Systems Network and other terrestrial infrastructure, providing DoD users with secure communications capabilities.

We operate our satellite constellation from our satellite network operations center in Leesburg, Virginia. This facility manages the performance and status of each of our satellites, developing and distributing routing tables for use by the satellites, TPN facilities and gateways, directing traffic routing through the network and controlling the formation of coverage areas by the satellites' main mission antennas. We also operate TPN facilities in Fairbanks, Alaska and Chandler, Arizona in the United States, and in northern Canada and Norway that perform telemetry, tracking and control functions. Three of our northern ground stations also provide earth terminal capability for the Tempe gateway.

From time to time, individual satellites in our constellation experience operating problems that may result in a satellite outage, but due to the overlapping coverage within our constellation, the individual satellite outages typically do not negatively affect our customers' use of our system for a prolonged period. In addition, most system processing related to our service is performed using software onboard each satellite instead of on the ground. We believe this provides us with significant flexibility and has contributed to the longevity of the system by enabling engineers to develop additional functionality and software-based solutions to occasional faults and anomalies in the system.

We have experienced fourteen satellite losses since we reintroduced commercial satellite services in 2001 that have resulted in the complete loss of the affected satellites or the loss of the ability of the satellite to carry traffic on the network, the last one being in June 2016. Twelve of these losses were from satellites that failed in orbit, we disposed of one satellite by initiating its de-orbit, and one satellite was lost in 2009 as a result of a collision with a non-operational Russian satellite.

Based on the failures and anomalies we have experienced to date, and considering the potential for future anomalies, we believe our first-generation constellation will provide a commercially acceptable level of service through the completion of Iridium NEXT, which we expect during 2018. We expect to be able to mitigate most satellite failures through initial placement of Iridium NEXT satellites, the implementation of software solutions, and by landing communications traffic using the sites within the TPN infrastructure and backhauling traffic to the Tempe gateway for processing and termination.

We also own spare parts for some of the equipment in our gateway and TPN facilities. We selectively replace parts for our gateway and TPN facilities as necessary and maintain an inventory of spare parts, which we continuously monitor. When we do not have necessary spares in inventory or our spares become obsolete, we rely on third parties to develop necessary parts.

Boeing has operated and maintained our satellite constellation under an operations and maintenance agreement since our inception. During 2016, Boeing provided these services to us pursuant to the terms of the Iridium NEXT support services agreement. Pursuant to this agreement, Boeing provided personnel services in support of the development of Iridium NEXT and agreed to operate and maintain Iridium NEXT, including a transitional period that began on January 1, 2015, during which Boeing supported a hybrid operations mode involving network elements from both the first-generation Iridium system and the Iridium NEXT system. Boeing provided these services on a time-and-materials fee basis.

In November 2016, we restructured our relationship with Boeing. We entered into an insourcing agreement, pursuant to which we hired, as of January 2017, the majority of the Boeing team that performed the operations and maintenance on our system. This transition will allow us to more directly manage our network and optimize operational expenses going forward. As part of this arrangement, we agreed to pay Boeing a fee of \$5.5 million, of which one-half was paid in December 2016 and the remainder will be paid in December 2017. In addition, we entered into a separate development services contract with Boeing, which will dedicate key Boeing personnel to continue the design and growth required for bringing new services and capabilities to the Iridium NEXT network.

Pursuant to an amended and restated transition services, products and asset agreement, or the TSA, with Motorola, and a separate agreement with Boeing, Motorola, and the U.S. government, we are required to maintain an in-orbit liability insurance policy, which also covers planned or unplanned de-orbits of individual first-generation satellites, with a de-orbiting endorsement to cover the mass de-orbit of our first-generation satellite constellation in the amount of \$500.0 million per occurrence, and \$1.0 billion in the aggregate. The current policy together with the de-orbiting endorsement covers amounts that we and other specified parties may become liable to pay for bodily injury or property damage to third parties related to processing, maintaining and operating our first-generation satellite constellation, including twelve individual satellite de-orbits, and, in the case of the de-orbiting endorsement, a mass de-orbit of the first-generation satellite constellation, although it contains exceptions for third-party damages which may result from the 2009 in-orbit satellite collision. The policy covers us, the U.S. government, Boeing, as the former operator of our system, Motorola Solutions, Inc., or Motorola Solutions, as successor to Motorola, and other named beneficiaries. The policy has been renewed annually since the expiration of the original policy's three-year term in 2003 and currently expires on December 8, 2017. We expect to continue to renew this policy annually through the life of our first-generation constellation. During 2016, we de-orbited one satellite from our first-generation constellation. We anticipate de-orbiting additional satellites once Iridium NEXT satellites begin to replace those in our first-generation constellation.

In addition, we maintain a separate \$1.0 billion product liability policy to cover Motorola Solutions' potential liability as manufacturer of the first-generation satellites. Given the flexibility of our satellite constellation and upcoming Iridium NEXT launches, we do not maintain in-orbit insurance covering losses from satellite failures or other operational problems affecting our first-generation constellation, although the terms of our Credit Facility require us to do so for a period of time with respect to our Iridium NEXT satellites. See "--Iridium NEXT" below.

Our first-generation satellite constellation license from the FCC has been extended until January 31, 2018, and we will file to further extend it as needed. During 2016, we also received the FCC space station license for the launch and operation of our Iridium NEXT constellation. Our U.S. gateway earth station licenses expire between 2018 and 2026, and our U.S. government customer's and commercial subscribers' earth station licenses for end user devices will expire in 2021. We must file renewal applications for earth station licenses between 30 and 90 days prior to expiration.

Iridium NEXT

Our first-generation constellation satellites continue to perform well, but they have exceeded their original design lives, and we have begun launching Iridium NEXT. We have contracted with Thales to construct the Iridium NEXT satellites.

We plan to deploy 70 satellites on seven Falcon 9 rockets launched by SpaceX, carrying ten satellites each. We have also contracted separately with SpaceX for an eighth Falcon 9 launch, which we intend to share with the GFZ German Research Centre for Geosciences, or GFZ, to launch five Iridium NEXT satellites and NASA's two Gravity Recovery and Climate Experiment Follow-On satellites. Additionally, we have contracted to launch two satellites on a Dnepr rocket launched by Kosmotras, but Kosmotras has to date been unable to obtain permission to launch our satellites.

The Iridium NEXT constellation will also host the Aireon system. The Aireon system is being developed by Aireon LLC, which we formed in 2011, with subsequent investments from the ANSPs of Canada, Italy, Denmark and Ireland, to provide a global air traffic surveillance service through a series of ADS-B receivers on the Iridium NEXT satellites. Aireon has contracted to offer this service to our co-investors in Aireon, as well as NATS and other ANSPs, and plans to offer the service to other customers worldwide, including the FAA. These ANSPs will use the service to provide air traffic control services over the oceans, as well as polar and remote regions. Aireon also plans to market the data to airlines and other users. Under our agreements with Aireon, Aireon will pay us fees of \$234 million to host the ADS-B receivers on Iridium NEXT, as well as data services fees of up to approximately \$20 million per year, once the system is fully operational, for the delivery of the air traffic surveillance data over the Iridium NEXT system.

While the Aireon ADS-B receivers are the primary hosted payload on the Iridium NEXT satellites, we have also entered into an agreement with Harris for it to utilize the remaining space for payloads it has constructed for its customers. We expect this agreement to result in an additional \$76 million in hosting and data service fees. We also offer Iridium PRIMESM to address the traditional challenges of hosted payload missions, which include inflexible launch schedules, “one-off” mission control systems and ground connectivity challenges. Iridium PRIME can provide customers with access to the Iridium NEXT satellite constellation with flexibility as to the number of payloads they can deploy, the number of orbital planes they occupy, and independent mission control, at substantial cost savings compared to current stand-alone solutions.

We estimate the aggregate costs associated with the design, build and launch of Iridium NEXT and related infrastructure upgrades through 2018 to be approximately \$3 billion. We believe the Credit Facility, as described in “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Credit Facility,” together with cash on hand and internally generated cash flows, including contracted cash flows from hosted payloads, will be sufficient to fully fund the aggregate costs associated with the design, build and launch of Iridium NEXT and related ground infrastructure upgrades through 2018.

The Credit Facility requires us to obtain insurance covering the launch and first 12 months of operation of the Iridium NEXT satellites, which we finished placing during 2016.

These insurance policies use nine ground spares and a prepaid relaunch right with SpaceX to self-insure a portion of our launch and in-orbit risks, as permitted under the Credit Facility. While we believe this enabled us to obtain insurance at a substantially lower cost than would have been possible without the ground spares and relaunch right, if we use our ground spares to replace lost satellites, we will likely choose to purchase additional satellites to maintain a backup supply of ground spares. The cost of such additional ground spares is not included in the \$3 billion estimated cost for the design, build and launch of Iridium NEXT and related infrastructure upgrades through 2018.

Full Scale Development and Launch Services Agreements

In June 2010, we executed a primarily fixed price full scale development contract, or FSD, with Thales for the design and manufacture of satellites for Iridium NEXT. The total price under the FSD will be approximately \$2.3 billion, and we expect our payment obligations under the FSD to extend through 2018. As of December 31, 2016, we had made total payments of \$1,753.6 million to Thales, of which \$1,490.6 million were from borrowings under the Credit Facility. We used the Credit Facility to pay 85% of each invoice received from Thales under the FSD with the remaining 15% funded from cash on hand; however, the Credit Facility is now fully drawn as of February 2017. We now expect to pay 100% of each invoice received from Thales from cash and marketable securities on hand as well as internally generated cash flows, including contracted cash flows from hosted payloads.

In March 2010, we entered into an agreement with SpaceX as the primary launch services provider for Iridium NEXT. The contract price under the SpaceX agreement is \$468.1 million, which includes the exercise of our reflight option in the event of launch failure. The SpaceX Falcon 9 rocket is configured to carry ten Iridium NEXT satellites to orbit with each launch. In November 2016, we entered into an additional agreement with SpaceX for an eighth Falcon 9 launch for a contract price of \$67.9 million. Although we are the customer of record with SpaceX, we have contracted separately with GFZ for \$31.8 million to share the launch of NASA's two Gravity Recovery and Climate Experiment Follow-On satellites on a specially designed dispenser on the Falcon 9 rocket. As of December 31, 2016, we had made aggregate payments of \$394.0 million to SpaceX, and received \$16.5 million from GFZ. We also maintain a \$1.5 million refundable deposit for the reservation of an additional future launch with SpaceX, which is not included in the total contract price.

In June 2011, we entered into an agreement with Kosmotras as a supplemental launch service provider for Iridium NEXT. The Kosmotras agreement originally provided for the purchase of up to six launches with options to purchase additional launches. Each launch can carry two satellites. In June 2013, we exercised an option for one launch to carry the first two Iridium NEXT satellites. If we do not exercise any additional options, the total cost under the contract including this single launch will be \$51.8 million. As of December 31, 2016, we had made aggregate payments of

\$36.8 million to Kosmotras. The option to purchase two dedicated launches expired as of December 31, 2013, and in June 2015 we agreed with Kosmotras to replace the remaining options with a new set of options to purchase up to six dedicated launches. Kosmotras has to date been unable to obtain permission to launch our satellites. We may be unable to recover the amounts already paid to Kosmotras.

Aireon LLC Agreement

On November 19, 2012, Iridium Satellite and Aireon entered into an Amended and Restated Limited Liability Company Agreement with NAV CANADA, the ANSP of Canada, and a wholly owned subsidiary of NAV CANADA. On February 14, 2014, we entered into a Second Amended and Restated Limited Liability Company Agreement, or the Aireon LLC Agreement, with NAV CANADA; Enav S.p.A., the ANSP of Italy; Naviair, the ANSP of Denmark; Irish Aviation Authority Limited, the ANSP of Ireland; and wholly owned subsidiaries of NAV CANADA, Enav and Naviair.

Under the Aireon LLC Agreement, NAV CANADA's subsidiary may acquire up to a 51% interest in Aireon and the other ANSP investors or their subsidiaries may acquire up to a 24.5% interest, collectively, with Iridium retaining a 24.5% interest. The Aireon LLC Agreement provides for the purchase by these investors of preferred membership interests in multiple tranches for an aggregate purchase price of \$270 million, of which \$243 million has been invested to date, with one tranche remaining. The final tranche is subject to the satisfaction of various operational, commercial, regulatory and financial conditions, including the completion of the Iridium NEXT constellation, which we expect the investors to waive in order to fund the final tranche in 2017. Following the completion of the investments by the new investors and NAV CANADA's subsidiary, Aireon will be required, if and when funds are available, to redeem a portion of our ownership interest for a payment of \$120 million. We expect this redemption of our ownership interest to occur in 2019.

The Aireon LLC Agreement provides for Aireon to be managed by a board of directors consisting of 11 members. Currently, Iridium Satellite may nominate four directors, NAV CANADA may nominate four directors, Enav may nominate one director and the other two investors may together nominate one director. The chief executive officer of Aireon serves as the eleventh director. Following the final investment tranche, expected in 2017, NAV CANADA will be able to nominate six directors and Iridium Satellite will be able to nominate two directors, with the remaining nomination rights unchanged. The Aireon LLC Agreement also provides the minority-interest holders with several protective provisions.

Constellation De-Orbiting Obligations

When Iridium Satellite purchased the assets of Iridium LLC out of bankruptcy, Boeing, Motorola and the U.S. government required specified de-orbit rights as a way to control potential liability risk arising from future operation of our first-generation constellation, and to provide for the U.S. government's obligation to indemnify Motorola pursuant to the Indemnification Agreement described below. As a result, Iridium Satellite, Boeing, Motorola and the U.S. government entered into the Indemnification Agreement, as subsequently amended in September 2010, giving the U.S. government the right, in its sole discretion, to require us to de-orbit our first-generation constellation in the event of: (a) Iridium Satellite's failure to maintain certain insurance and pay certain insurance premiums; (b) Iridium Satellite's bankruptcy; (c) Iridium Satellite's sale or the sale of any major asset in our satellite system; (d) Boeing's replacement as the operator of our satellite system; (e) Iridium Satellite's failure to provide certain notices as contemplated by the Indemnification Agreement; or (f) at any time after January 1, 2015. Prior to the September 2010 amendment of the Indemnification Agreement, the U.S. government had the right to require us to de-orbit our first-generation constellation at any time after June 5, 2009. Pursuant to the September 2010 amendment, the U.S. government may withdraw its agreement to postpone the exercise of its de-orbit right: (i) on or after January 1, 2015; (ii) if Iridium Satellite violates any terms of the Indemnification Agreement or fails to comply with any terms of the September 2010 amendment; (iii) if more than four satellites have insufficient fuel to execute a 12-month de-orbit; (iv) if Iridium Satellite fails to comply with the de-boost plans; (v) upon a finding by the FCC, not remedied by Iridium Satellite in the time set forth by the FCC, that Iridium Satellite has failed to comply with the terms of the Iridium Orbital Debris Mitigation Plan filed with the FCC and then in effect; (vi) upon the cancellation, non-renewal or refusal to provide any insurance required by the Indemnification Agreement; or (vii) upon the termination or completion of the current or any successor agreement between Iridium Satellite and the DoD pursuant to which Iridium Satellite provides mobile satellite services to the DoD. Because it is after January 1, 2015, more than four of our satellites currently have insufficient fuel to execute a 12-month de-orbit and due to the Boeing insourcing transaction described below in "Our Network", the U.S. government currently has the right to require us to de-orbit our first-generation constellation. In addition, the U.S. government also has the right to require us to de-orbit any of our individual functioning first-generation constellation satellites, including in-orbit spares that have been in orbit for more than seven years, unless the U.S. government grants a postponement. All of our functioning first-generation constellation satellites have been in orbit for more than seven years. We believe the probability that the U.S. government will exercise these rights is remote.

Motorola Solutions, as successor to Motorola, also has the right to require us to de-orbit our first-generation constellation pursuant to the TSA and pursuant to our previous operations and maintenance agreement, or O&M Agreement, with Boeing. Under these agreements, Motorola Solutions may require the de-orbit of our first-generation constellation upon the occurrence of any of the following: (a) the bankruptcy of our company, Iridium Holdings,

Iridium Constellation LLC or Iridium Satellite; (b) Iridium Satellite's breach of the TSA; (c) Boeing's breach of the O&M Agreement or a related agreement between Boeing and Motorola Solutions; (d) an order from the U.S. government requiring the de-orbiting of our satellites; (e) Motorola Solutions' determination that changes in law or regulation may require it to incur specified costs relating to the operation, maintenance, re-orbiting or de-orbiting of our first-generation constellation; or (f) our failure to obtain, on commercially reasonable terms, product liability insurance to cover Motorola Solutions' position as manufacturer of the first-generation constellation satellites, provided the U.S. government has not agreed to cover what would have otherwise been paid by such policy.

We have certain de-orbit obligations under our FCC licenses. Specifically, pursuant to an orbital debris mitigation plan incorporated into our FCC satellite constellation license in 2002, we are required to lower each satellite to an orbit with a perigee of approximately 250 kilometers as it reaches the end of its useful life and to coordinate these orbit-lowering maneuvers with the United States Space Command. In August 2014, we received a license modification from the FCC permitting us to operate up to ten satellites pursuant to the less stringent 600 kilometer de-orbit standards for non-geostationary satellites that the FCC acknowledged in 2004 would serve the public interest and has been utilized for other satellite constellations since that time.

Competition

The mobile satellite services industry is highly competitive but has significant barriers to entry, including the cost and difficulty associated with obtaining spectrum licenses and successfully building and launching a satellite network. In addition to cost, there is a significant amount of lead-time associated with obtaining the required licenses, building and launching the satellite constellation and deploying the ground network technology. We currently face substantial competition from other service providers that offer a range of mobile and fixed communications options. Currently, our principal mobile satellite services competitors are Inmarsat, Globalstar,

Thuraya Telecommunications Co., or Thuraya, and ORBCOMM. We compete primarily on the basis of coverage, quality, mobility and pricing of services and products.

Inmarsat owns and operates a fleet of GEO satellites. Unlike LEO satellites, GEO satellites orbit the earth at approximately 22,300 miles above the equator. GEO operators require substantially larger and more expensive antennas, and typically have higher transmission delays than LEO operators. Due to its GEO system, Inmarsat's coverage area extends and covers most bodies of water except for a majority of the polar regions. Inmarsat is the leading provider of satellite communications services to the maritime sector. Inmarsat also offers land-based and aviation communications services.

Globalstar owns and operates a fleet of LEO satellites. Globalstar's service is available only on a multi-regional basis as a result of its "bent pipe" architecture, which requires that voice and data transmissions be routed from satellites immediately to nearby ground stations. This design requires the use of multiple ground stations, which are impractical in extreme latitudes or over oceans. Unlike Inmarsat and us, Globalstar sells a higher percentage of its products and services directly to end users. Globalstar completed its most recent launch campaign in February 2013. It has currently arranged to replace only 24 of its original 48 satellites.

ORBCOMM also provides commercial services using a fleet of LEO satellites. Like Globalstar, ORBCOMM's network also has a "bent pipe" architecture, which limits its real-time coverage area. ORBCOMM's principal focus is low-cost data and M2M services, where it directly competes with our M2M offerings. Because a ground station may not be within view of a satellite, ORBCOMM's services may have a significant amount of latency, which may limit their use in some mission-critical applications. It does not offer voice service or high-speed data services.

We also compete with regional mobile satellite communications services in several geographic markets. In these cases, the majority of our competitors' customers require regional, not global, mobile voice and data services, so our competitors may present a viable alternative to our services. All of these regional competitors operate or plan to operate GEO satellites. Our regional mobile satellite services competitors currently include Thuraya, principally in Europe, the Middle East, Africa, Australia and several countries in Asia.

While we view our services as largely complementary to terrestrial wireline and wireless communications networks, we also compete with them indirectly. We provide service in areas that are inadequately covered by these ground systems. To the extent that terrestrial communications companies invest in underdeveloped areas, we will face increased competition in those areas. We believe that local telephone companies currently are reluctant to invest in new switches, landlines and cellular towers to expand their networks in rural and remote areas due to high costs and limited usage. Many of the underdeveloped areas are sparsely populated, making it difficult to generate the necessary returns on the capital expenditures required to build terrestrial wireless networks in those areas. We believe that our solutions offer a cost-effective and reliable alternative to terrestrial-based wireline and wireless systems in these remote regions.

Research and Development

Our research and development efforts have focused on the development, design and testing of new products and services, such as Iridium PTT, Iridium Burst, Iridium Pilot Land Station and Iridium GO!, each introduced in 2014, and the planning and development of the Iridium NEXT constellation, ground infrastructure and chipsets, as well as new products and services to be offered on Iridium NEXT, such as Iridium Certus and Iridium Edge. We also develop product and service enhancements and new applications for our existing products and services. Our research and development expenses were \$16.1 million, \$16.1 million and \$17.6 million for the years ended December 31, 2016, 2015 and 2014, respectively.

Employees

As of December 31, 2016, we had 244 full-time employees, none of whom is subject to any collective bargaining agreement. After the completion of the Boeing insourcing, as of January 3, 2017, we had 393 full-time employees, none of whom is subject to any collective bargaining agreement. We consider our employee relations to be good.

Intellectual Property

At December 31, 2016, we held fourteen U.S. patents and one foreign patent. These patents cover several aspects of our satellite system, our global network, our communication services, and our devices.

In addition to our owned intellectual property, we also license critical system technology from Motorola Solutions, including software and systems to operate and maintain our network as well as technical information for the design and manufacture of our devices. This intellectual property is essential to our ability to continue to operate our first-generation constellation and sell our devices. We also have licensed technology from Motorola Solutions relating to the development and operation of Iridium NEXT and related ground infrastructure, products and services. We maintain our licenses with Motorola Solutions pursuant to several agreements, which can be terminated by Motorola Solutions upon the commencement by or against us of any bankruptcy proceeding or other specified liquidation proceedings or upon our material failure to perform or comply with any provision of the agreements. If Motorola Solutions

were to terminate any such agreement, it may be difficult or, under certain circumstances, impossible to obtain the technology from alternative vendors. Motorola Solutions has assigned to a third party a portion of the patents that are covered by some of these licenses.

We license additional system technology from other third parties and expect to do so in the future both in connection with our first-generation network, products and services and with the development and operation of Iridium NEXT and related ground infrastructure, products and services. If any such third party were to terminate its agreement with us or cease to support and service this technology, or if we are unable to renew such licenses on commercially reasonable terms or at all, it may be difficult, more expensive or impossible to obtain substitute technology from alternative vendors. Any substitute technology may also have lower quality or performance standards, which would adversely affect the quality of our products and services. For more information, see “Risk Factors—We are dependent on intellectual property licensed from third parties to operate our constellation and sell our devices and for the enhancement of our existing products and services.”

Available Information

Copies of our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments, if any, to those reports filed pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, are available free of charge through our website at www.iridium.com and on the website of the Securities and Exchange Commission, or SEC, at www.sec.gov. A request for any of these reports may also be submitted to us by writing: Investor Relations, Iridium Communications Inc., 1750 Tysons Boulevard, Suite 1400, McLean, VA 22102, or by calling our Investor Relations line at 703-287-7570.

ITEM 1A. Risk Factors

Our business plan depends on increased demand for mobile satellite services, among other factors.

Our business plan is predicated on growth in demand for mobile satellite services. Demand for mobile satellite services may not grow, or may even contract, either generally or in particular geographic markets, for particular types of services or during particular time periods. A lack of demand could impair our ability to sell products and services, develop and successfully market new products and services and could exert downward pressure on prices. Any decline in prices would decrease our revenue and profitability and negatively affect our ability to generate cash for capital expenditures, investments and other working capital needs.

Our ability to successfully implement our business plan will also depend on a number of other factors, including:

- our ability to maintain the health, capacity and control of our first-generation satellites through the deployment of Iridium NEXT;
- our ability to operate a hybrid constellation and to successfully replace individual first-generation satellites with their Iridium NEXT replacements;
- our ability to complete the Iridium NEXT constellation and related products and services, and, once fully deployed, our ability to maintain the health, capacity and control of the new satellite constellation;
- the level of market acceptance and demand for our products and services;
- our ability to introduce innovative new products and services that satisfy market demand, including new product and service offerings on Iridium NEXT;
- our ability to expand our business using our existing spectrum resources both in the United States and internationally;
- our ability to sell our products and services in additional countries;
- our ability to maintain our relationship with U.S. government customers, particularly the DoD;
- the ability of our distributors to market and distribute our products, services and applications effectively and their continued development of innovative and improved solutions and applications for our products and services;
- the effectiveness of our competitors in developing and offering similar services and products;
- our ability to de-orbit our first-generation satellites; and

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- our ability to maintain competitive prices for our products and services and to control our costs.

Our business plan depends in large part on the success of our subsidiary, Aireon LLC, which is our primary hosted payload customer.

In June 2012, we announced our plans to host a payload being developed by our subsidiary, Aireon LLC, as our primary hosted payload on Iridium NEXT. We currently expect to rely on the cash flows generated from this hosted-payload arrangement with Aireon to satisfy a portion of our capital requirements for the development and deployment of Iridium NEXT. Aireon's payload is a satellite-based automatic dependent surveillance-broadcast, or ADS-B, system for global air traffic monitoring, and Aireon's success will depend on its ability to successfully deploy this system. Deploying an ADS-B system on satellites is a new and unproven method for providing this service.

In addition, Aireon's ability to pay us hosting fees will depend on the development of the market for a space-based ADS-B service among air navigation service providers, or ANSPs, particularly the FAA. Aireon does not have a contract to provide commercial, operational ADS-B services to the FAA, and there can be no assurance that it will be successful in securing such a contract. The FAA's activities to date have been limited to preparing to use space-based ADS-B, and no funds have been allocated by the FAA for a commercial, operational commitment to Aireon. If Aireon is not successful in entering into a contract for the provision of operational ADS-B services to the FAA, it may not be able to make its hosting reimbursement payments to us when we currently anticipate or at all.

Aireon will itself require significant additional capital to complete the successful deployment and operation of its system. The Aireon LLC Agreement provides for the purchase by NAV CANADA Satellite and three other ANSP investors of additional membership interests in multiple tranches through 2017 for an aggregate investment of up to \$270 million, of which \$243 million has been funded through February 2017. The remaining tranche is subject to the satisfaction of various operational, commercial, regulatory and financial conditions, some of which will be out of our control, and the investors have significant discretion in the determination of whether those conditions have been met. Further, Aireon is in the process of raising additional operating capital. If Aireon issues equity to raise such capital, we may experience dilution of our ownership interest in Aireon.

The management of Aireon is not within our control given that we only have rights to appoint a minority of the members of the Aireon board of directors, as well as significant veto rights and other protective provisions provided to NAV CANADA and the other investors. As a result, we may not be able to cause Aireon to take actions that we believe are necessary for its ultimate success.

If Aireon is unable to pay its hosting reimbursement costs, our ability to pursue our business plan would be compromised unless we were able to replace those amounts with capital from other sources. In addition, Aireon's failure to pay our data fees and make the anticipated redemption of a portion of our equity interest would negatively

affect our expected future results of operations.

We may need additional capital to complete Iridium NEXT, develop and launch new products and services, and pursue additional growth opportunities. If we fail to maintain access to sufficient capital, our liquidity could be compromised and we will not be able to successfully implement our business plan.

Our business plan calls for the continued deployment of Iridium NEXT, the development of new product and service offerings, upgrades to our current services, and upgrades to our business systems. We estimate the costs associated with the design, build and launch of Iridium NEXT and related ground infrastructure upgrades through 2018 to be approximately \$3 billion. Our funding plan for these costs includes the substantial majority of the funds under our \$1.8 billion Credit Facility, which we have fully drawn, together with cash on hand and internally generated cash flows, including contracted cash flows from hosted payloads.

There can be no assurance that our internally generated cash flows will meet our current expectations, or that we will not encounter increased costs. For example, Aireon may be unable to pay its hosting reimbursement costs. If internally generated cash flows, including potential cash from Aireon, are less than we expect, we might need to finance the remaining cost of Iridium NEXT by raising additional debt or equity financing. In addition, we may need additional capital to design and launch new products and services on Iridium NEXT. We would have to seek the permission of the lenders under the Credit Facility in order to obtain many alternative sources of financing, and there can be no assurance that we would have access to other sources of financing on acceptable terms, or at all.

If we are unable to generate sufficient cash flows or to raise additional capital for one or more of these needs, our ability to maintain our network, complete Iridium NEXT, develop new products and services, and pursue additional growth opportunities will be impaired, which would significantly limit the development of our business and impair our ability to provide a commercially acceptable level of service. We expect our overall liquidity levels in the coming years to be lower than our recent liquidity levels as we have fully drawn our Credit Facility and expect to begin repayments in early 2018. Inadequate liquidity could compromise our ability to pursue our business plans and growth opportunities, delay the continued deployment of Iridium NEXT, or otherwise impair our business and financial position or, we might need to satisfy our liquidity needs by raising additional debt or equity financing.

If we default under the Credit Facility, the lenders may require immediate repayment in full of amounts borrowed or foreclose on our assets.

The Credit Facility contains events of default, including:

- non-compliance with the covenants under the Credit Facility, including financial covenants and covenants relating to hosted payloads and launch and in-orbit insurance;
- cross-default with other indebtedness;
- insolvency of any obligor under the Credit Facility;
- revocation of the COFACE insurance policy;
- failure to maintain our first-generation satellites or complete Iridium NEXT by a specified date; and
- a determination by the lenders that we have experienced a material adverse change in our business.

Some of these events of default are outside of our control or otherwise difficult to satisfy. If we experience an event of default, the lenders may require repayment in full of all principal and interest outstanding under the Credit Facility. It is unlikely we would have adequate funds to repay such amounts prior to the scheduled maturity of the Credit Facility. If we fail to repay such amounts, the lenders may foreclose on the assets we have pledged under the Credit Facility, which includes substantially all of our assets and those of our domestic subsidiaries.

The Credit Facility restricts the manner in which we may operate our business, which may prevent us from successfully implementing our business plan.

The Credit Facility contains restrictions on the operation of our business, including limits on our ability to:

- make capital expenditures;
- carry out mergers and acquisitions;
- dispose of, or grant liens on, our assets;
- enter into transactions with our affiliates;
- pay dividends or make distributions to our stockholders;
- incur indebtedness;
- prepay indebtedness; and
- make loans, guarantees or indemnities.

The Credit Facility also prohibits us from paying dividends to holders of our preferred stock, including our Series A Preferred Stock and Series B Preferred Stock, if we are unable to certify that we anticipate being able to comply with

the financial covenants of the Credit Facility for the next twelve months each time we declare a dividend. If we are unable to make that certification, we will not be able to pay the dividends on our outstanding preferred stock. If we do not pay dividends on our preferred stock for six quarterly periods (whether or not consecutive), the holders of the Series A Preferred Stock and Series B Preferred Stock collectively will have the power to elect two members of our board of directors. The interests of the holders of our preferred stock may differ from those of our other stockholders. In addition, any dividend we fail to pay will accrue, and the holders of our Series A Preferred Stock and Series B Preferred Stock will be entitled to a preferential distribution of the original purchase price per share plus all accrued and unpaid dividends before any distribution may be made to holders of our common stock in connection with any liquidation event.

Complying with these restrictions may cause us to take actions that are not favorable to holders of our common stock and may make it more difficult for us to successfully execute our business plan and compete against companies who are not subject to such restrictions.

If we are unable to effectively deploy Iridium NEXT before our first-generation satellites cease to provide a commercially acceptable level of service, our business will suffer.

We are currently launching Iridium NEXT. While we expect our first-generation satellites to provide a commercially acceptable level of service through the completion of the transition to Iridium NEXT, we cannot guarantee it will do so. If we are unable to effectively complete the deployment of Iridium NEXT for any reason, whether as a result of insufficient funds, manufacturing or launch delays, launch failures, in-orbit satellite failures, inability to achieve or maintain orbital placement, failure of the satellites to perform as expected, interference between any hosted payload and our network, or otherwise, before our first-generation satellites cease to provide a commercially acceptable level of service, or if we experience backward compatibility problems with our new constellation, we would likely lose customers and business opportunities to our competitors, resulting in a potentially material decline in revenue and profitability and the inability to service our debt.

Iridium NEXT may not be completed on time, and the costs associated with it may be greater than expected.

We estimate that the costs associated with the design, build and launch of Iridium NEXT and related ground infrastructure upgrades through 2018 will be approximately \$3 billion, although our actual costs could substantially exceed this estimate. We may not complete Iridium NEXT on time, on budget or at all. Our first launch, originally scheduled for the first quarter of 2015, was delayed until January 2017 because of delays by our satellite manufacturer, the failure of one of our launch providers, Kosmotras, to obtain approval for launch, and delays by our other launch provider, SpaceX, and we may experience further delays. The design, manufacture and launch of satellite systems are highly complex and historically have been subject to delays and cost overruns. Deployment of Iridium NEXT may suffer from additional delays, interruptions or increased costs due to many factors, some of which may be beyond our control, including:

- lower than anticipated internally generated cash flows, including from Aireon and other hosted payloads;
- inadequate liquidity;
- operating and other requirements imposed by the lenders under the Credit Facility;
- Thales's ability to manufacture the Iridium NEXT satellites on time and on budget, including issues that might be found late in the process, for example during systems-level testing;
- interference between any hosted payload and our network;
- complex integration of our ground segment with the Iridium NEXT satellites and the transition from our first-generation satellites;
- denial or delays in receipt of regulatory approvals or non-compliance with conditions imposed by regulatory authorities;
- the breakdown or failure of equipment or systems;
- non-performance by third-party contractors, including the prime system contractor;
 - the inability to license necessary technology on commercially reasonable terms or at all;

- use of the SpaceX launch vehicle, which has a limited operating history, or the failure of SpaceX to sustain its business;
- launch delays or failures or in-orbit satellite failures once launched or the decision to manufacture additional replacement satellites for future launches;
- labor disputes or disruptions in labor productivity or the unavailability of skilled labor;
- increases in the costs of materials;
- changes in project scope;
- additional requirements imposed by changes in laws; or
- severe weather or catastrophic events, such as fires, earthquakes or storms.

If the manufacture and deployment of Iridium NEXT costs more or takes longer than we anticipate, our ability to continue to develop Iridium NEXT could be compromised.

Our Russian launch services provider has been unable to launch two of our Iridium NEXT satellites.

We contracted with International Space Company Kosmotras, or Kosmotras, a Russian launch services provider, for the launch of two of our Iridium NEXT satellites. Kosmotras has, to date, been unable to secure approval from the Russian Ministry of Defense to launch the Dnepr rocket from the military base in Yasny, Russia. Kosmotras may never be able to provide the launch services for which we contracted, and we may be unable to recover the amounts we have already paid to Kosmotras.

Loss of any Iridium NEXT satellite during launch or delays in our launch schedule could delay or impair our ability to offer our services or increase our costs.

The launch of our Iridium NEXT satellites will be subject to the inherent risk of launch failures, which could result in the loss or destruction of one or more satellites. We have entered into two launch services agreements with SpaceX, pursuant to which SpaceX will provide launch services to us in connection with our deployment of Iridium NEXT. The SpaceX agreements contemplate seven launches of ten satellites and one shared launch of five satellites, each on SpaceX's Falcon 9 rocket, over a two-year period. SpaceX is a rapidly growing company in a technically complicated industry, is working to meet an aggressive launch manifest and has experienced failures leading to launch delays in the past. In the event of a launch failure resulting in the destruction of our satellites, we may not be able to have enough replacement satellites manufactured in time to conduct all contracted launches. A failure by SpaceX to maintain its launch schedule could expose us to delay or the need to utilize an alternate launch services provider, which could substantially increase our launch costs.

Our launch insurance contains significant elements of self-insurance and some variability in premiums, as a result of which we may be subject to increased costs.

The launch and in-orbit insurance we have obtained contains, consistent with the terms of the Credit Facility, elements of self-insurance and deductibles, providing reimbursement only after a specified number of satellite failures. Further, some policies covering launches three through seven require the payment of additional premiums if there are losses on the first two launches. As a result, a failure of one or more of our satellites, or the occurrence of equipment failures and other related problems, could constitute an uninsured loss or require the payment of additional premiums and could harm our financial condition. Furthermore, launch and in-orbit insurance does not cover lost revenue.

Both our first-generation and our Iridium NEXT satellites have a limited life and may fail prematurely, which would cause our network to be compromised and materially and adversely affect our business, prospects and profitability.

Since we introduced commercial services in 2001, we have experienced fourteen first-generation satellite losses, most recently in June 2016. Twelve of our satellites have failed in orbit, which has resulted in either the complete loss of the affected satellites or the loss of the ability of the satellite to carry traffic on the network, we disposed of one satellite by initiating its de-orbit, and one satellite was lost as a result of a collision with a non-operational Russian satellite. Also, our first-generation satellites have already exceeded their original design lives. In addition, we may experience in-orbit malfunctions of Iridium NEXT satellites, which could adversely affect the reliability of their service or result in total failure of the satellite. While actual useful life typically exceeds original design life, the useful lives of our satellites may be shorter than we expect, and additional satellites may fail or collide with space debris or other satellites in the future. If we experience a failure in an orbital plane other than a plane in which we have a spare, we do not expect to replace the failure until we have an Iridium NEXT satellite available to do so. As a result, while we expect our first-generation satellites to provide a commercially acceptable level of service through the completion of the transition to Iridium NEXT, we cannot guarantee it will be able to do so.

In-orbit failure of a satellite may result from various causes, including component failure, loss of power or fuel, inability to control positioning of the satellite, solar or other astronomical events, including solar radiation and flares, and space debris. Other factors that could affect the useful lives of our satellites include the quality of construction, gradual degradation of solar panels and the durability of components. Radiation-induced failure of satellite components may result in damage to or loss of a satellite before the end of its expected life. As our first-generation satellites have aged, some of our satellites have experienced individual component failures affecting their coverage or transmission capacity, and other satellites may experience such failures in the future, which could adversely affect the reliability of their service or result in total failure of the satellite. As a result, fewer than 66 of our first-generation satellites are fully functioning at any time. Although we do not incur any direct cash costs related to the failure of a satellite, if a satellite fails, we record an impairment charge in our statement of operations to reduce the remaining net book value of that satellite to zero, and any such impairment charges could depress our net income for the period in which the failure occurs.

From time to time, we are advised by our customers and end users of temporary intermittent losses of signal cutting off calls in progress, preventing completions of calls when made or disrupting the transmission of data. If the magnitude or frequency of such problems increase and we are no longer able to provide a commercially acceptable level of service, our business and financial results and our reputation would be hurt and our ability to pursue our business plan would be compromised.

We may be required in the future to make further changes to our constellation to maintain or improve its performance. Any such changes may require prior Federal Communications Commission, or FCC, approval, and the FCC may subject the approval to other conditions that could be unfavorable to our business. In addition, from time to time we may reposition our satellites within the constellation in order to optimize our service, which could result in degraded service during the repositioning period. Although we have some ability to remedy some types of problems affecting the performance of our satellites remotely from the ground, the physical repair of our satellites in space is not feasible.

We will have to de-orbit all of our first-generation satellites, and we may not be able to obtain or maintain adequate de-orbit insurance.

Our FCC license requires us to de-orbit a first-generation satellite following its replacement with an Iridium NEXT constellation satellite and to notify the FCC within 30 days following removal of a first-generation satellite from its operational orbit for purposes of de-orbit. We must seek additional FCC authorization to retain a first-generation satellite as a spare following its replacement with an Iridium NEXT satellite.

Our current insurance policy covers amounts that we and other specified parties may become liable to pay for bodily injury and property damages to third parties related to a de-orbit of our first-generation satellites. Our current policy has a one-year term, which expires on December 8, 2017, and only covers the de-orbit of 12 satellites, unless we pay an additional premium. The price, terms and availability of insurance have fluctuated significantly since we began offering commercial satellite services. The cost of obtaining insurance can vary as a result of either satellite failures or general conditions in the insurance industry. Higher premiums on insurance policies would increase our cost. De-orbit liability insurance policies on satellites may not continue to be available on commercially reasonable terms or at all or in sufficient amount to cover the planned de-orbit, over time, of all satellites in our first-generation constellation. In addition to higher premiums, insurance policies may provide for higher deductibles, shorter coverage periods and additional policy exclusions. For example, our current de-orbit insurance covers only twelve months from attachment and therefore would not cover losses arising outside that timeframe. In addition, even if we continue to maintain a de-orbit liability insurance policy, the coverage may not protect us against all third-party losses, which could be material.

Our agreements with U.S. government customers, particularly the DoD, which represent a significant portion of our revenue, are subject to termination.

The U.S. government, through a dedicated gateway owned and operated by the DoD, has been and continues to be, directly and indirectly, our largest customer, representing 25% and 23% of our revenue for the years ended December 31, 2016 and 2015, respectively. We provide the majority of our services to the U.S. government pursuant to our Gateway Maintenance and Support Services, or GMSS, and EMSS contracts. We entered into these contracts in September 2013 and October 2013, respectively. The GMSS contract provides for a one-year base term and up to four additional one-year options exercisable at the election of the U.S. government, three of which have been exercised so far, and the EMSS contract provides for a five-year term. The U.S. government may terminate these agreements, in whole or in part, at any time for its convenience. If the U.S. government terminates either of the agreements or decides not to exercise options under the GMSS agreement, we would lose a significant portion of our revenue.

We are dependent on intellectual property licensed from third parties to operate our constellation and sell our devices and for the enhancement of our existing products and services.

We license critical system technology, including software and systems, to operate and maintain our network as well as technical information for the design, manufacture and sale of our devices. This intellectual property is essential to our ability to continue to operate our constellation and sell our services and devices. In addition, we are dependent on third parties to develop enhancements to our current products and services even in circumstances where we own the intellectual property. If any third-party owner of such intellectual property were to terminate any license agreement with us or cease to support and service this technology or perform development on our behalf, or if we are unable to renew such licenses on commercially reasonable terms or at all, it may be difficult, more expensive or impossible to obtain such technology or services from alternative vendors. Any substitute technology may also be costly to develop and integrate, or could have lower quality or performance standards, which would adversely affect the quality of our products and services. In connection with the manufacture and operation of Iridium NEXT and the development of new products and services to be offered on Iridium NEXT, we may be required to obtain additional intellectual property rights from third parties. We can offer no assurance that we will be able to obtain such intellectual property rights on commercially reasonable terms or at all. If we are unable to obtain such intellectual property rights on commercially reasonable terms, we may not be able to complete Iridium NEXT on budget or at all or may not be able to develop new products and services to be offered on Iridium NEXT.

Our products could fail to perform or could perform at reduced levels of service because of technological malfunctions or deficiencies or events outside of our control, which would seriously harm our business and reputation.

Our products and services are subject to the risks inherent in a large-scale, complex telecommunications system employing advanced technology. Any disruption to our satellites, services, information systems or telecommunications infrastructure could result in the inability of our customers to receive our services for an indeterminate period of time. These customers include government agencies conducting mission-critical work throughout the world, as well as consumers and businesses located in remote areas of the world and operating under harsh environmental conditions where traditional telecommunications services may not be readily available. Any disruption to our services or extended periods of reduced levels of service could cause us to lose customers or revenue, result in delays or cancellations of future implementations of our products and services, result in failure to attract customers or result in litigation, customer service or repair work that would involve substantial costs and distract management from operating our business. The failure of any of the diverse elements of our system, including our satellites, our commercial gateway, our satellite teleport network facilities or our satellite network operations center, to function as required could render our system unable to perform at the quality and capacity levels required for success. Any system failures, repeated product failures or shortened product life or extended reduced levels of service could reduce our sales, increase costs or result in warranty or liability claims or litigation, cause us to extend our warranty period and seriously harm our business.

Our failure to effectively manage the expansion of our product portfolio could impede our ability to execute our business plan, and we may experience increased costs or disruption in our operations.

We are dependent on our ability to develop and market new products for substantial future revenue growth. We currently face a variety of challenges, including maintaining the infrastructure and systems necessary for us to manage the growth of our business. As our product portfolio continues to expand, the responsibilities of our management team and other company resources also grow. Consequently, we may further strain our management and other company resources with the increased complexities and administrative burdens associated with a larger, more complex product portfolio. For example, we have in the past experienced quality issues and incorrect market assessments in connection with the introduction of new products and services, and we may experience such issues in the future. Our failure to meet these challenges as a result of insufficient management or other resources could significantly impede our ability to execute our business plan, which relies in part on our ability to leverage our largely fixed-cost infrastructure. To properly manage our growth, we may need to hire and retain additional personnel, upgrade our existing operational management and financial and reporting systems, and improve our business processes and controls. Failure to effectively manage the expansion of our product portfolio in a cost-effective manner could result in declines in product and service quality and customer satisfaction, disruption of our operations or increased costs, any of which would reduce our ability to increase our profitability.

As we and our distributors expand our offerings to include more consumer-oriented devices, we are more likely to be subject to product liability claims, recalls or litigation, which could adversely affect our business and financial

performance.

Through our network of distributors, we offer several products and services aimed at individual consumers, and we and our distributors continue to introduce additional products and services. These products and services, such as satellite handsets, personal locator devices and location-based services, may be used in isolated and dangerous locations, including emergency response situations, and users who suffer property damage, personal injury or death while using the product or service may seek to assert claims or bring lawsuits against us. Further, it is possible that our products would become the subject of consumer protection litigation, including class actions. We seek to limit our exposure to all of these claims through appropriate disclosures, indemnification provisions and disclaimers, but these steps may not be effective. We also maintain product liability insurance, but this insurance may not cover any particular claim or litigation, or the amount of insurance may be inadequate to cover the claims brought against us. Product liability insurance could become more expensive and difficult to maintain and might not be available on acceptable terms or at all. In addition, it is possible that our products would become the subject of a product recall as a result of a product defect. We do not maintain recall insurance, so any recall could have a significant effect on our financial results. In addition to the direct expenses of product liability claims, recalls and litigation, a claim, recall or litigation might cause us adverse publicity, which could harm our reputation and compromise our ability to sell our products in the future.

The collection, storage, transmission, use and disclosure of user data and personal information could give rise to liabilities or additional costs as a result of laws, governmental regulations and evolving views of personal privacy rights and information security standards.

We transmit, process, and in some cases store, end user data, including personally identifiable information. In jurisdictions around the world, the transmission and storage of personally identifiable information is becoming increasingly subject to legislation and regulations intended to protect consumers' privacy and the security of their personal information. The standards for processing, storing and using personally identifiable information continue to evolve, and may impose additional obligations and risk on our business, and have the potential to make some of our business processes less feasible. In addition, the interpretation of privacy and data protection laws and regulations regarding the collection, storage, transmission, use and disclosure of such information in some jurisdictions

remains unclear. These laws may be interpreted, applied and enforced in conflicting ways from country to country and in a manner that is not consistent with our current data protection practices. Complying with these varying international requirements could cause us to incur additional costs and change our business practices. Because our services are accessible in many foreign jurisdictions, some of these jurisdictions may claim that we are required to comply with their laws, even where we have no local entity, employees or infrastructure. We could face a variety of enforcement actions or government inquiries or be forced to incur significant expenses if we were required to modify our products, our services or our existing security and privacy procedures in order to comply with new or expanded regulations.

In addition, if end users allege that their personal information is not collected, stored, transmitted, used or disclosed by us or our business partners appropriately or in accordance with our privacy policies or applicable laws, or that our failure to adequately secure their information compromised its security, we could have liability to them or to consumer protection agencies, including claims and litigation resulting from such allegations. Any failure on our part to protect end users' privacy and data could result in a loss of user confidence, hurt our reputation and ultimately result in the loss of users.

Our satellites may collide with space debris or another spacecraft, which could adversely affect the performance of our constellation.

In February 2009, we lost an operational satellite as a result of a collision with a non-operational Russian satellite. Although we have some ability to actively maneuver our satellites to avoid potential collisions with space debris or other spacecraft, this ability is limited by, among other factors, uncertainties and inaccuracies in the projected orbit location of and predicted conjunctions with debris objects tracked and cataloged by the U.S. government. Additionally, some space debris is too small to be tracked and therefore its orbital location is completely unknown; nevertheless, this debris is still large enough to potentially cause severe damage or a failure of our satellites should a collision occur. If our constellation experiences additional satellite collisions with space debris or other spacecraft, our service could be impaired.

The space debris created by the February 2009 satellite collision may cause damage to other spacecraft positioned in a similar orbital altitude.

The 2009 collision of one of our satellites with a non-operational Russian satellite created a space debris field concentrated in the orbital altitude where the collision occurred, and thus increased the risk of space debris damaging or interfering with the operation of our satellites, which travel in this orbital altitude, as well as satellites owned by third parties, such as U.S. or foreign governments or agencies and other satellite operators. Although there are tools used by us and providers of tracking services, such as the U.S. Joint Space Operations Center, to detect, track and identify space debris, we or third parties may not be able to maneuver the satellites away from such debris in a timely manner. Any such collision could potentially expose us to significant losses and liability if we were found to be at fault.

If we experience operational disruptions with respect to our commercial gateways or operations center, we may not be able to provide service to our customers.

Our commercial satellite network traffic is supported by gateways in Tempe, Arizona, and Izhevsk, Russia, for traffic within Russian boundaries, and we operate our satellite constellation from our satellite network operations center in Leesburg, Virginia. Currently, we do not have a backup facility for our primary gateway in Arizona, and our facilities are subject to the risk of significant malfunctions or catastrophic loss due to unanticipated events and would be difficult to replace or repair and could require substantial lead-time to do so. Material changes in the operation of these facilities may be subject to prior FCC approval, and the FCC might not give such approval or may subject the approval to other conditions that could be unfavorable to our business. Our gateways and operations center may also experience service shutdowns or periods of reduced service in the future as a result of equipment failure, delays in deliveries or regulatory issues. Any such failure would impede our ability to provide service to our customers.

We may be negatively affected by global economic conditions.

Our operations and performance depend significantly on worldwide economic conditions. Uncertainty about global economic conditions poses a risk as individual consumers, businesses and governments may postpone spending in response to tighter credit, negative financial news, declines in income or asset values or budgetary constraints. Reduced demand would cause a decline in our revenue and make it more difficult for us to operate profitably, potentially compromising our ability to pursue our business plan. While we expect the number of our subscribers and revenue to continue to grow, we expect the future growth rate will be slower than our historical growth and may not continue in every quarter of every year. We expect our future growth rate will be affected by the sluggish global economy, increased competition, maturation of the satellite communications industry and the difficulty in sustaining high growth rates as we increase in size. Any substantial appreciation of the U.S. dollar may also negatively affect our growth by increasing the cost of our products and services in foreign countries.

If we fail to maintain proper and effective internal controls, our ability to produce accurate financial statements on a timely basis could be impaired.

We are subject to the reporting requirements of the Securities Exchange Act of 1934, the Sarbanes-Oxley Act of 2002, the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 and the rules and regulations of the SEC and The NASDAQ Global Select Market. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal controls over financial reporting. We perform system and process evaluation and testing of our internal controls over financial reporting to allow management to report on the effectiveness of our internal controls over financial reporting in our Annual Reports on Form 10-K, as required by Section 404 of the Sarbanes-Oxley Act. If we are not able to comply with the requirements of Section 404 of the Sarbanes-Oxley Act in a timely manner, or if we are unable to maintain proper and effective internal controls, we may not be able to produce timely and accurate financial statements, and we may conclude that our internal controls over financial reporting are not effective. If that were to happen, the market price of our stock could decline, and we could be subject to sanctions or investigations by The NASDAQ Global Select Market, the SEC or other regulatory authorities.

Maintaining effective internal controls over financial reporting is necessary for us to produce reliable financial statements. If we fail to maintain such controls, it could result in a material misstatement of our financial statements that would not be prevented or detected on a timely basis and which could cause investors and other users to lose confidence in our financial statements.

We could lose market share and revenue as a result of increasing competition from companies in the wireless communications industry, including cellular and other satellite operators, and from the extension of land-based communications services.

We face intense competition in all of our markets, which could result in a loss of customers and lower revenue and make it more difficult for us to enter new markets. We compete primarily on the basis of coverage, quality, portability and pricing of services and products.

The provision of satellite-based services and products is subject to downward price pressure when capacity exceeds demand or as a result of aggressive discounting by some operators under financial pressure to expand their respective market share. In addition, we may face competition from new competitors, new technologies or new equipment, including proposed new LEO constellations. For example, we may face competition for our land-based services in the United States from incipient ancillary terrestrial component, or ATC, service providers who are designing a satellite operating business and a terrestrial component around their spectrum holdings. In addition, some of our competitors have announced plans for the launch of additional satellites. As a result of competition, we may not be able to successfully retain our existing customers and attract new customers.

In addition to our satellite-based competitors, terrestrial voice and data service providers, both wireline and wireless, could further expand into rural and remote areas and provide the same general types of services and products that we provide through our satellite-based system. Although satellite communications services and terrestrial communications services are not perfect substitutes, the two compete in some markets and for some services. Consumers generally perceive terrestrial wireless voice communication products and services as cheaper and more convenient than those that are satellite-based. Many of our terrestrial competitors have greater resources, wider name recognition and newer technologies than we do. In addition, industry consolidation could hurt us by increasing the scale or scope of our competitors, thereby making it more difficult for us to compete.

Some of the hardware and software we use in operating our gateways are significantly customized and tailored to meet our requirements and specifications and could be difficult and expensive to service, upgrade or replace.

Some of the hardware and software we use in operating our gateways are significantly customized and tailored to meet our requirements and specifications and could be difficult and expensive to service, upgrade or replace. Although we maintain inventories of some spare parts, it nonetheless may be difficult, expensive or impossible to obtain replacement parts for the hardware due to a limited number of those parts being manufactured to our requirements and specifications. In addition, our business plan contemplates updating or replacing some of the hardware and software in our network as technology advances, but the complexity of our requirements and specifications may present us with technical and operational challenges that complicate or otherwise make it expensive or infeasible to carry out such upgrades and replacements. If we are not able to suitably service, upgrade or replace our equipment, our ability to provide our services and therefore to generate revenue could be harmed.

Rapid and significant technological changes in the satellite communications industry may impair our competitive position and require us to make significant additional capital expenditures.

The satellite communications industry is subject to rapid advances and innovations in technology. We may face competition in the future from companies using new technologies and new satellite systems. New technology could render our system obsolete or less competitive by satisfying customer demand in more attractive ways or through the introduction of incompatible standards. Particular technological developments that could adversely affect us include the deployment by our competitors of new satellites with greater power, flexibility, efficiency or capabilities than our first-generation satellites or Iridium NEXT, as well as continuing improvements

in terrestrial wireless technologies. For us to keep up with technological changes and remain competitive, we may need to make significant capital expenditures, including capital to design and launch new products and services on Iridium NEXT. Customer acceptance of the products and services that we offer will continually be affected by technology-based differences in our product and service offerings compared to those of our competitors. New technologies may also be protected by patents or other intellectual property laws and therefore may not be available to us. Any failure on our part to implement new technology within our system may compromise our ability to compete.

Use by our competitors of L-band spectrum for terrestrial services could interfere with our services.

In February 2003, the FCC adopted ATC rules that permit satellite service providers to establish terrestrial wireless networks in previously satellite-only bands, subject to certain requirements intended to ensure that terrestrial services remain ancillary to primary satellite operations. In 2011, Lightsquared (now known as Ligado Networks) was granted a waiver at the FCC to convert Ligado Network's L-band satellite spectrum to terrestrial use including a 10 MHz band close to the spectrum that we use for all of our services. That waiver was subsequently suspended in 2012 due to concerns about potential interference to GPS operations. Ligado Networks sought another waiver in 2015 to modify the ATC of its L-band mobile satellite service network with a new proposal to address GPS industry concerns. We oppose this waiver out of concern for the interference that Ligado Network's proposed operations would cause to our operations in the L-band.

In addition, in November 2012, Globalstar, Inc. filed a petition for rulemaking, proposing to deploy a terrestrial low-power service in its S-band spectrum and to deploy a high power terrestrial service (LTE) in both the L-band and S-band. We share 0.95 MHz of L-band spectrum (1617.775-1618.725 MHz) with the Globalstar system, which also operates in additional L-band (1610-1617.775 MHz) and S-band (2483.5-2495 MHz) spectrum. In December 2016, the FCC adopted rule changes that permit Globalstar to seek authorization to deploy a terrestrial low-power broadband network using its S-band spectrum. The FCC will consider separately Globalstar's additional request for rule changes concerning its deployment of a high power terrestrial service (LTE) technology in both its S-band (2483.5-2495 MHz) and L-band (1610-1617.775 MHz) spectrum and our February 2013 petition for access to an additional 1.775 MHz (1616-1617.775 MHz) of the L-band spectrum licensed to Globalstar.

The implementation of ATC services by satellite service providers in the United States or other countries may result in increased competition for the right to use L-band spectrum in the 1.6 GHz band, which we use to provide our services, and such competition may make it difficult for us to obtain or retain the spectrum resources we require for our existing and future services. In addition, the FCC's decision to permit ATC services was based on assumptions relating to the level of interference that the provision of ATC services would likely cause to other satellite service providers that use the L-band spectrum. If the FCC's assumptions prove inaccurate, or the level of ATC services provided exceeds those estimated by the FCC, such as the proposed use by Ligado Networks, ATC services could substantially interfere with our satellites and devices, which would adversely affect our services. Outside the United States, other countries have implemented, or are considering implementing, regulations to facilitate ATC-like services.

Our networks and those of our third-party service providers may be vulnerable to security risks.

We expect the secure transmission of confidential information over public networks to continue to be a critical element of our ability to compete for business, to manage our risks, and protect our customers and our reputation. Our network and those of our third-party service providers and our customers may be vulnerable to unauthorized access, computer viruses and other security problems. Persons who circumvent security measures could wrongfully obtain or use information on the network or cause interruptions, delays or malfunctions in our operations, any of which could harm our reputation, cause demand for our products and services to fall and compromise our ability to pursue our business plans. Recently, there have been reported a number of significant, widespread security breaches that have compromised network integrity for many companies and governmental agencies, in some cases reportedly originating from outside the United States. In addition, there are reportedly private products available in the market today which may attempt to unlawfully intercept communications made using our network. We may be required to expend significant resources to protect against the threat of security breaches or to remediate harm caused by a breach, including compliance with applicable data breach notification laws, and to alleviate problems, including reputational harm and litigation, caused by any breaches. In addition, our customer contracts may not adequately protect us against liability to third parties with whom our customers conduct business. Although we have implemented and intend to continue to implement industry-standard and other security measures, these measures may prove to be inadequate and result in incidents, including system failures and delays, that could limit network availability, which could harm our business and our reputation and result in substantial liability.

We are dependent on third parties to market and sell our products and services.

We select third-party distributors and rely on them to market and sell our products and services to end users and to determine the prices end users pay in some cases on an exclusive basis. We also depend on our distributors to develop innovative and improved solutions and applications integrating our product and service offerings. As a result of these arrangements, we are dependent on the performance of our distributors to generate most of our revenue. Our distributors operate independently of us, and we have limited control over their operations, which exposes us to significant risks. Distributors may not commit the necessary resources to market and

sell our products and services and may also market and sell competitive products and services. In addition, our distributors may not comply with the laws and regulatory requirements in their local jurisdictions, which could limit their ability to market or sell our products and services. If our distributors develop faulty or poorly performing products using our technology or services, we may be subject to claims, and our reputation could be harmed. If current or future distributors do not perform adequately, or if we are unable to locate competent distributors in particular countries and secure their services on favorable terms, we may be unable to increase or maintain our revenue in these markets or enter new markets, we may not realize our expected growth, and our brand image and reputation could be hurt.

In addition, we may lose distributors due to competition, consolidation, regulatory developments, business developments affecting our distributors or their customers, or for other reasons. In 2009, one of our largest competitors, Inmarsat, acquired our then largest distributor, Stratos Global Wireless, Inc., and in January 2014, Inmarsat acquired Globe Wireless, one of our service providers. Following each acquisition, Inmarsat essentially stopped promoting sales of our products and services, and they may further reduce their efforts in the future. Any future consolidation of our distributors would further increase our reliance on a few key distributors of our services and the amount of volume discounts that we may have to give those distributors. Our two largest distributors, Applied Satellite Technology LTD and Inmarsat, represented a total of 10% of our revenue for the year ended December 31, 2016 and our ten largest distributors represented, in the aggregate, 37% of our revenue for the year ended December 31, 2016. The loss of any of these distributors, or a decrease in the level of effort expended by any of them to promote our products and services, could reduce the distribution of our products and services as well as the development of new products and applications.

We rely on a limited number of key vendors for supply of equipment and services.

We currently rely on Benchmark Electronics Inc., or Benchmark, as the exclusive manufacturer of our current devices, including our mobile handsets, L-Band transceivers, SBD devices and Iridium Pilot terminals. Benchmark may choose to terminate its business relationship with us when its current contractual obligations are completed, or if we default under our current agreement. We also utilize sole source suppliers for some of the component parts of our devices. If Benchmark or any of our other suppliers were to terminate its relationship with us, we may not be able to find a replacement supplier in a timely manner, at an acceptable price or at all.

Our manufacturer and suppliers may become capacity-constrained as a result of a surge in demand, a natural disaster or other event, or one or more component suppliers may decide to cease production of various components of our products, resulting in a shortage or interruption in supplies or an inability to meet increased demand. Although we may be able to replace sole source suppliers, there could be a substantial period of time in which our products would not be available; any new relationship may involve higher costs and delays in development and delivery, and we may encounter technical challenges in successfully replicating the manufacturing processes. If our manufacturers or suppliers terminate their relationships with us, fail to provide equipment or services to us on a timely basis or fail to meet our performance expectations, we may be unable to provide products or services to our customers in a competitive manner, which could in turn negatively affect our financial results and our reputation.

We have also historically been dependent upon Boeing for operations and maintenance of our satellite network. In November 2016, we restructured our relationship with Boeing. We entered into an insourcing agreement, pursuant to which we hired, as of January 2017, the majority of the Boeing team that performed the operations and maintenance on our system. While the insourcing transition will allow us to more directly manage our network and optimize operational expenses going forward, we must now manage a larger employee base and retain and integrate the new employees. If we are not able to successfully manage that integration, we may not realize the expected benefits of this insourcing transaction.

We also entered into a separate development services contract with Boeing, which will dedicate key Boeing personnel to continue the design and growth required for bringing new services and capabilities to the Iridium NEXT network. Technological competence is critical to our business and depends, to a significant degree, on the work of technically skilled personnel, such as these Boeing contractors. If Boeing's performance falls below expected levels or if Boeing has difficulties retaining the personnel servicing our network development, the development of new products and services on Iridium NEXT could be compromised. In addition, if Boeing terminates its agreement with us, we may not be able to find a replacement provider on favorable terms or at all, which could impair our operations and performance.

We have been and may in the future become subject to claims that our products violate the patent or intellectual property rights of others, which could be costly and disruptive to us.

We operate in an industry that is susceptible to significant intellectual property litigation. As a result, we or our products may become subject to intellectual property infringement claims or litigation. The defense of intellectual property suits is both costly and time-consuming, even if ultimately successful, and may divert management's attention from other business concerns. An adverse determination in litigation to which we may become a party could, among other things:

- subject us to significant liabilities to third parties, including treble damages;

- require disputed rights to be licensed from a third party for royalties that may be substantial;
- require us to cease using technology that is important to our business; or
- prohibit us from selling some or all of our products or offering some or all of our services.

Conducting and expanding our operations outside the United States creates numerous risks, which may harm our operations and compromise our ability to expand our international operations.

We have significant operations outside the United States. We estimate that commercial data traffic originating outside the United States, excluding our Iridium OpenPort broadband data service traffic, accounted for 72% and 67% of total commercial data traffic for the years ended December 31, 2016 and 2015, respectively, while commercial voice traffic originating outside the United States, excluding Iridium OpenPort traffic, accounted for 88% of total commercial voice traffic for each of the years ended December 31, 2016 and 2015. We cannot provide the precise geographical distribution of revenue from end users because we do not contract directly with them. Instead, we determine the country in which we earn our revenue based on where we invoice our distributors. These distributors sell services directly or indirectly to end users, who may be located or use our products and services elsewhere. We and our distributors are also seeking authorization to sell our services in additional countries.

Conducting operations outside the United States involves numerous risks and, while expanding our international operations would advance our growth, it would also increase our exposure to these risks. For example, in 2013 we commenced the provision of satellite communications services in Russia through a local subsidiary and its authorized Russian service providers and subsequently constructed a dedicated gateway in Russia. The U.S. government has imposed economic and diplomatic sanctions on certain Russian corporations, banks, and citizens and might impose additional sanctions in the future. If such sanctions, or any Russian response to such sanctions, affects our operations in Russia, it could limit our growth in Russia or prevent us from continuing to operate there at all, which would reduce our revenues.

Other risks associated with the proposed expansion of our international operations include:

- difficulties in penetrating new markets due to established and entrenched competitors;
- difficulties in developing products and services that are tailored to the needs of local customers;
- lack of local acceptance or knowledge of our products and services;
 - lack of recognition of our products and services;
- unavailability of, or difficulties in establishing relationships with distributors;
- significant investments, including the development and deployment of dedicated gateways, as some countries require physical gateways within their jurisdiction to connect the traffic coming to and from their territory;
- instability of international economies and governments;
- changes in laws and policies affecting trade and investment in other jurisdictions, including the United Kingdom's proposed exit from the European Union;
- exposure to varying legal standards, including intellectual property protection in other jurisdictions;

- difficulties in obtaining required regulatory authorizations;
- difficulties in enforcing legal rights in other jurisdictions;
- local domestic ownership requirements;
- requirements that operational activities be performed in-country;
- changing and conflicting national and local regulatory requirements; and
- foreign currency exchange rates and exchange controls.

If any of these risks were to materialize, it could affect our ability to successfully compete and expand internationally.

Government organizations, foreign military and intelligence agencies, natural disaster aid associations and event-driven response agencies use our commercial voice and data satellite communications services. Accordingly, we may experience reductions in usage due to changing global circumstances, including as a result of reductions in U.S. and foreign personnel in Afghanistan and Iraq.

The prices for our products and services are typically denominated in U.S. dollars. Any appreciation of the U.S. dollar against other currencies will increase the cost of our products and services to our international customers and, as a result, may reduce the competitiveness of our international offerings and make it more difficult for us to grow internationally. Conversely, in some locations, primarily Russia, we conduct business in the local currency, and a depreciation of the local currency against the U.S. dollar will reduce the U.S. dollar value of our revenues from those countries. In recent years, Russia has experienced significant currency depreciation against the U.S. dollar.

We are currently unable to offer service in important regions of the world due to regulatory requirements, which limits our growth.

Our ability to provide service in some regions is limited by local regulations. Some countries have specific regulatory requirements such as local domestic ownership requirements or requirements for physical gateways within their jurisdiction to connect traffic coming to and from their territory. While we have had discussions with parties in these countries to satisfy these regulatory requirements, we may not be able to find an acceptable local partner or reach an agreement to develop additional gateways, or the cost of developing and deploying such gateways may be prohibitive, which could impair our ability to expand our product and service offerings in such areas and undermine our value for potential users who require service in these areas. Also, other countries where we already provide service may impose similar requirements, which could restrict our ability to continue to provide service in those countries. The inability to offer to sell our products and services in all major international markets could impair our international growth. In addition, the construction of such gateways in foreign countries may trigger and require us to comply with various U.S. regulatory requirements that could conflict with or contravene the laws or regulations of the local jurisdiction. Any of these developments could limit, delay or otherwise interfere with our ability to construct gateways or other infrastructure or network solutions around the world.

The U.S. government and Motorola Solutions may unilaterally require us to de-orbit our first-generation satellites upon the occurrence of specified events.

When Iridium Satellite purchased the assets of Iridium LLC, a non-affiliated debtor in possession, out of bankruptcy, Motorola and the U.S. government required specified de-orbit rights as a way to control potential liability exposure arising from future operation of our first-generation constellation. As a result, Iridium Satellite, Boeing, which then operated our constellation, Motorola and the U.S. government entered into an agreement giving the U.S. government the right, in its sole discretion, to require us to de-orbit our first-generation satellites upon the occurrence of specified events, including any time on or after January 1, 2015 or if more than four of our first-generation satellites have insufficient fuel to execute a 12-month de-orbit, both of which have already occurred. In addition, the U.S.

government has the right to require us to de-orbit any of our individual functioning first-generation satellites, including in-orbit spares, that have been in orbit for more than seven years, unless the U.S. government grants a postponement. All of our functioning first-generation satellites have been in orbit for more than seven years.

Motorola Solutions, as successor to Motorola also has the right to require us to de-orbit our first-generation satellites pursuant to our agreements and upon the occurrence of specified events.

We cannot guarantee that the U.S. government or Motorola Solutions will not unilaterally exercise their de-orbiting rights upon the occurrence of any of the specified events. If we were required to de-orbit our first-generation satellites prior to the deployment of an adequate number of Iridium NEXT satellites, we may be unable to continue to provide a commercially acceptable level of service.

We may be unable to obtain and maintain contractually required liability insurance, and the insurance we obtain may not cover all liabilities to which we may become subject.

Under our agreement with Motorola, we are required to maintain an in-orbit liability insurance policy with a de-orbiting endorsement. The current policy, together with the de-orbiting endorsement, covers amounts that we and other specified parties may become liable to pay for bodily injury and property damages to third parties related to processing, maintaining and operating our first-generation satellites and, in the case of the de-orbiting endorsement, a mass de-orbit of our first-generation satellites. Our current policy has a one-year term, which expires on December 8, 2017, and excludes coverage for all third-party damages relating to the 2009 collision of our satellite with a non-operational Russian satellite. The price, terms and availability of insurance have fluctuated significantly since we began offering commercial satellite services. The cost of obtaining insurance can vary as a result of either satellite failures or general conditions in the insurance industry. Higher premiums on insurance policies would increase our cost. In-orbit liability insurance policies on satellites may not continue to be available on commercially reasonable terms or at all. In addition to higher premiums, insurance policies may provide for higher deductibles, shorter coverage periods and additional policy exclusions. For example, our current de-orbit insurance covers only twelve months from attachment and therefore would not cover losses arising outside that timeframe. Our failure to renew our current in-orbit liability insurance policy or obtain a replacement policy would trigger

de-orbit rights with respect to our first-generation satellites held by the U.S. government and Boeing described in the immediately preceding risk factor, which, if exercised prior to the deployment of an adequate number of Iridium NEXT satellites, would harm our ability to provide a commercially acceptable level of service. In addition, even if we continue to maintain an in-orbit liability insurance policy, the coverage may not protect us against all third-party losses, which could be material.

Our current in-orbit liability insurance policy contains, and we expect any future policies would likewise contain, specified exclusions and material change limitations customary in the industry. These exclusions may relate to, among other things, losses resulting from in-orbit collisions such as the one we experienced in 2009, acts of war, insurrection, terrorism or military action, government confiscation, strikes, riots, civil commotions, labor disturbances, sabotage, unauthorized use of the satellites and nuclear or radioactive contamination, as well as claims directly or indirectly occasioned as a result of noise, pollution, electrical and electromagnetic interference and interference with the use of property.

In addition to our in-orbit liability insurance policy, we are required to purchase product liability insurance to cover the potential liability of Motorola Solutions, as the manufacturer of our first-generation satellites. We may not in the future be able to renew this product liability coverage on reasonable terms and conditions, or at all. Our failure to maintain this insurance could increase our exposure to third-party damages that may be caused by any of our satellites. If we are unable to obtain such insurance on commercially reasonable terms and the U.S. government has not agreed to cover the amounts that would have otherwise been paid by such insurance, Motorola Solutions could invoke its de-orbit rights which, if exercised prior to the deployment of an adequate number of Iridium NEXT satellites, would harm our ability to provide a commercially acceptable level of service.

Wireless devices' radio frequency emissions are the subject of regulation and litigation concerning their environmental effects, which includes alleged health and safety risks. As a result, we may be subject to new regulations, demand for our services may decrease, and we could face liability based on alleged health risks.

There has been adverse publicity concerning alleged health risks associated with radio frequency transmissions from portable hand-held telephones that have transmitting antennas. Lawsuits have been filed against participants in the wireless industry alleging a number of adverse health consequences, including cancer, as a result of wireless phone usage. Other claims allege consumer harm from failures to disclose information about radio frequency emissions or aspects of the regulatory regimes governing those emissions. Although we have not been party to any such lawsuits, we may be exposed to such litigation in the future. While we comply with applicable standards for radio frequency emissions and power and do not believe that there is valid scientific evidence that use of our devices poses a health risk, courts or governmental agencies could determine otherwise. Any such finding could reduce our revenue and profitability and expose us and other communications service providers or device sellers to litigation, which, even if frivolous or unsuccessful, could be costly to defend.

If consumers' health concerns over radio frequency emissions increase, they may be discouraged from using wireless handsets. Further, government authorities might increase regulation of wireless handsets as a result of these health concerns. Any actual or perceived risk from radio frequency emissions could reduce the number of our subscribers and demand for our products and services.

Our business is subject to extensive government regulation, which mandates how we may operate our business and may increase our cost of providing services and slow our expansion into new markets.

Our ownership and operation of a satellite communications system and the sale of products that operate on that system are subject to significant regulation in the United States, including by the FCC, the U.S. Department of Commerce and others, and in foreign jurisdictions by similar local authorities. The rules and regulations of these U.S. and foreign authorities may change, and such authorities may adopt regulations that limit or restrict our operations as presently conducted or currently contemplated. Such authorities may also make changes in the licenses of our competitors that affect our spectrum. Such changes may significantly affect our business. Further, because regulations in each country are different, we may not be aware if some of our distribution partners or persons with whom we or they do business do not hold the requisite licenses and approvals. Our failure to provide services in accordance with the terms of our licenses or our failure to operate our satellites or ground stations as required by our licenses and applicable laws and government regulations could result in the imposition of government sanctions on us, including the suspension or cancellation of our licenses. Our failure or delay in obtaining the approvals required to operate in other countries would limit or delay our ability to expand our operations into those countries. Our failure to obtain industry-standard certifications for our products could compromise our ability to generate revenue and conduct our business in other countries. Any imposition of sanctions, loss of license or failure to obtain the authorizations necessary to use our assigned radio frequency spectrum and to distribute our products in the United States or foreign jurisdictions could cause us to lose sales, hurt our reputation and impair our ability to pursue our business plan.

In addition, one of our subsidiaries, Iridium Carrier Services LLC, holds a common carrier radio license and is thus subject to regulation as a common carrier, including limitations and prior approval requirements with respect to direct or indirect foreign ownership. A change in the manner in which we provide service, or a failure to comply with any common carrier regulations that

apply to us or pay required fees, could result in sanctions including fines, loss of authorizations, or the denial of applications for new authorizations or the renewal of existing authorizations.

Security and emergency services regulations in the U.S. and other countries may affect our ability to operate our system and to expand into new markets.

Our operations are subject to regulations of the U.S. Department of Commerce's Bureau of Industry and Security relating to the export of satellites and related technical data as well as our subscriber equipment, the U.S. Treasury Department's Office of Foreign Assets Control relating to transactions involving entities sanctioned by the United States, and the U.S. State Department's Office of Defense Trade Controls relating to satellite launch. We are also required to provide U.S. and some foreign government law enforcement and security agencies with call interception services and related government assistance, in respect of which we face legal obligations and restrictions in various jurisdictions. Given our global operations and unique network architecture, these requirements and restrictions are not always easy to comply with or harmonize. In addition, some countries require providers of telecommunications services to connect specified emergency numbers to local emergency services. We have discussed and continue to discuss with authorities in various countries the procedures used to satisfy our obligations, and have had to, and may in the future need to, obtain amendments or waivers to licenses or obligations in various countries. Countries are not obligated to grant requested amendments or waivers, and there can be no assurance that relevant authorities will not suspend or revoke our licenses or take other legal actions to attempt to enforce the requirements of their respective jurisdictions.

These U.S. and foreign obligations and regulations may limit or delay our ability to offer products and services in a particular country. As new laws and regulations are issued, we may be required to modify our business plans or operations. In addition, changing and conflicting national and local regulatory requirements may cause us to be in compliance with local requirements in one country, while not being in compliance with the laws and regulations of another. If we fail to comply with regulations in the United States or any other country, we could be subject to substantial fines or sanctions that could make it difficult or impossible for us to operate in the United States or such other country, or we may need to make substantial additional expenditures to bring our systems, products and services into compliance with the requirements.

If the FCC revokes, modifies or fails to renew our licenses, or fails to grant a new license or modification, our ability to operate will be harmed or eliminated.

We hold FCC licenses, specifically a license for our first-generation satellite constellation, a license for the Iridium NEXT constellation, licenses for our U.S. gateway and other ground facilities and blanket earth station licenses for U.S. government customers and commercial subscribers, that are subject to revocation if we fail to satisfy specified conditions. The FCC licenses are also subject to modification by the FCC. Our first-generation satellite constellation license from the FCC has been extended until January 31, 2018. Our Iridium NEXT license expires fifteen years following the date we notify the FCC that the first satellite in the Iridium NEXT constellation has commenced

operations in its authorized orbit. Our U.S. gateway earth station and the U.S. government customer and commercial subscriber earth station licenses expire between September 2018 and the year 2026. There can be no assurance that the FCC will renew the FCC licenses we hold or grant new ones or modifications. If the FCC revokes, modifies or fails to renew the FCC licenses we hold, or fails to grant a new license or modification, or if we fail to satisfy any of the conditions of our respective FCC licenses, we may not be able to continue to provide mobile satellite communications services.

Pursuing strategic transactions may cause us to incur additional risks.

We may pursue acquisitions, joint ventures or other strategic transactions from time to time, such as the Boeing insourcing transaction. We may face costs and risks arising from any such transactions, including integrating a new business into our business or managing a joint venture. These risks may include adverse legal, organizational and financial consequences, loss of key customers and distributors and diversion of management's time.

In addition, any major business combination or similar strategic transaction would require approval under the Credit Facility and may require significant external financing. Depending on market conditions, investor perceptions of our company and other factors, we might not be able to obtain approvals under the Credit Facility or financing on acceptable terms, in acceptable amounts or at appropriate times to implement any such transaction. Any such financing, if obtained, may further dilute existing stockholders.

Spectrum values historically have been volatile, which could cause the value of our business to fluctuate.

Our business plan is evolving, and it may in the future include forming strategic partnerships to maximize value for our spectrum, network assets and combined service offerings in the United States and internationally. Values that we may be able to realize from such partnerships will depend in part on the value placed on our spectrum authorizations. Valuations of spectrum in other frequency bands historically have been volatile, and we cannot predict at what amount a future partner may be willing to value our spectrum and other assets. In addition, to the extent that the FCC takes action that makes additional spectrum available or promotes the more flexible use or greater availability of existing satellite or terrestrial spectrum allocations, for example by means of spectrum leasing or

new spectrum sales, the availability of such additional spectrum could reduce the value of our spectrum authorizations and, as a result, the value of our business.

Our ability to operate our company effectively could be impaired if we lose members of our senior management team or key technical personnel.

We depend on the continued service of key managerial and technical personnel and personnel with security clearances, as well as our ability to continue to attract and retain highly qualified personnel. We compete for such personnel with other companies, government entities, academic institutions and other organizations. The unexpected loss or interruption of the services of such personnel could compromise our ability to effectively manage our operations, execute our business plan and meet our strategic objectives.

The market price of our common stock may be volatile.

The trading price of our common stock may be subject to substantial fluctuations. Factors affecting the trading price of our common stock may include:

- failure in the performance of our first-generation or future satellites;
- further delays in the launch of Iridium NEXT;
- failure of Aireon to successfully develop and market its service;
- failure to comply with the terms of the Credit Facility;
- actual or anticipated variations in our operating results, including termination or expiration of one or more of our key contracts, or a change in sales levels under one or more of our key contracts;
- sales of a large number of shares of our common stock or the perception that such sales may occur;
- the dilutive effect of outstanding stock options and other equity awards;
- changes in financial estimates by industry analysts, or our failure to meet or exceed any such estimates, or changes in the recommendations of any industry analysts that elect to follow our common stock or the common stock of our competitors;
- impairment of intangible assets;
- actual or anticipated changes in economic, political or market conditions, such as recessions or international currency fluctuations;
- actual or anticipated changes in the regulatory environment affecting our industry;
- changes in the market valuations of our competitors;
- low trading volume; and
- announcements by our competitors regarding significant new products or services or significant acquisitions, strategic partnerships, divestitures, joint ventures or other strategic initiatives.

The trading price of our common stock might also decline in reaction to events that affect other companies in our industry even if these events do not directly affect us. If our stock, the market for other stocks in our industry, or the stock market in general experiences a loss of investor confidence, the trading price of our common stock could decline for reasons unrelated to our business, financial condition or results of operations.

We do not expect to pay dividends on our common stock in the foreseeable future.

We do not currently pay cash dividends on our common stock and, because we currently intend to retain all cash we generate to fund the growth of our business and the Credit Facility restricts the payment of dividends, we do not expect to pay dividends on our common stock in the foreseeable future.

Our common stock ranks junior to the Series A Preferred Stock and Series B Preferred Stock with respect to dividends and amounts payable in the event of our liquidation.

Our common stock ranks junior to the Series A Preferred Stock and Series B Preferred Stock with respect to the payment of dividends and amounts payable in the event of our liquidation, dissolution or winding-up. This means that, unless accumulated dividends have been paid or set aside for payment on all outstanding shares of Series A Preferred Stock and Series B Preferred Stock for all past completed dividend periods, no dividends may be declared or paid on our common stock. Likewise, in the event of our voluntary or involuntary liquidation, dissolution or winding-up, no distribution of our assets may be made to holders of our common stock until we have paid to holders of the Series A Preferred Stock and Series B Preferred Stock the applicable liquidation preference plus accrued and unpaid dividends. As a result, the value of your investment in our common stock may suffer in the event that sufficient funds are not available to first satisfy our obligations to the holders of our preferred stock in the event of our liquidation.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

We own or lease the facilities described in the following table:

Location	Country	Approximate Square Feet	Facilities	Owned/Leased
McLean, Virginia	USA	30,600	Corporate Headquarters	Leased
Chandler, Arizona	USA	197,000	Technical Support Center, Distribution Center, Warehouse and Satellite Teleport Network Facility	Leased
Leesburg, Virginia	USA	40,000	Satellite Network Operations Center	Owned
Tempe, Arizona	USA	31,000	System Gateway and Satellite Teleport Network Facility	Owned Building on Leased Land
Tempe, Arizona	USA	25,000	Operations and Finance Office Space	Leased
Fairbanks, Alaska	USA	4,000	Satellite Teleport Network Facility	Owned
Svalbard	Norway	1,800	Satellite Teleport Network Facility	Owned Building on Leased Land
Yellowknife, Northwest Territories	Canada	1,800	Satellite Teleport Network Facility	Owned Building on Leased Land
Iqaluit, Nunavut	Canada	1,800	Satellite Teleport Network Facility	Owned Building on Leased Land
Izhevsk, Udmurtia	Russia	8,785	System Gateway and Satellite Teleport Network Facility	Leased
Moscow	Russia	2,158	Sales and Administration Offices	Leased

Item 3. Legal Proceedings

Neither we nor any of our subsidiaries are currently subject to any material legal proceeding, nor, to our knowledge, is any material legal proceeding threatened against us or any of our subsidiaries.

Item 4. Mine Safety Disclosures

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities

Our common stock is currently listed on the NASDAQ Global Select Market under the symbol "IRDM." The following table sets forth, for the quarters indicated, the quarterly high and low sales prices of our common stock as reported on the NASDAQ Global Select Market.

	Common Stock	
	High	Low
Quarter Ended March 31, 2015	\$9.94	\$8.24
Quarter Ended June 30, 2015	11.36	9.00
Quarter Ended September 30, 2015	9.35	5.98
Quarter Ended December 31, 2015	8.99	5.85
Quarter Ended March 31, 2016	8.53	6.14
Quarter Ended June 30, 2016	8.88	7.15
Quarter Ended September 30, 2016	9.37	6.80
Quarter Ended December 31, 2016	11.15	7.50

On February 21, 2017, the closing price of our common stock was \$9.35. As of February 17, 2017 there were 74 holders of record of our common stock.

Dividend Policy

We have not paid any dividends on our common stock to date. The Credit Facility currently restricts us from declaring, making or paying dividends on our common stock, and we do not anticipate that we will declare any dividends on our common stock in the foreseeable future.

Stock Price Performance Graph

The graph below compares the cumulative total return of our common stock from December 31, 2011 through December 31, 2016 with the comparable cumulative return of three indices, the S&P 500 Index, the Dow Jones Industrial Average Index and the NASDAQ Telecommunications Index. The graph plots the growth in value of an initial investment of \$100 in each of our common stock, the S&P 500 Index, the Dow Jones Industrial Average Index and the NASDAQ Telecommunications Index over the indicated time periods. The stock price performance shown on the graph is not necessarily indicative of future price performance.

	12/31/2011	12/31/2012	12/31/2013	12/31/2014	12/31/2015	12/31/2016
Iridium Communications Inc.	\$ 100.00	\$ 87.16	\$ 81.06	\$ 126.46	\$ 109.08	\$ 124.51
S&P 500 Index	\$ 100.00	\$ 113.41	\$ 146.98	\$ 163.72	\$ 162.53	\$ 178.02
Dow Jones Industrial Average Index	\$ 100.00	\$ 107.26	\$ 135.68	\$ 145.88	\$ 142.62	\$ 161.76
NASDAQ Telecommunications Index	\$ 100.00	\$ 102.00	\$ 126.50	\$ 137.77	\$ 127.44	\$ 146.39

Item 6. Selected Financial Data

Iridium Communications Inc.

The following selected historical financial data for the years ended December 31, 2016, 2015, 2014, 2013 and 2012 was derived from our audited financial statements. The selected financial data below should be read in conjunction with our financial statements and related notes, and “Management’s Discussion and Analysis of Financial Condition and Results of Operations” included elsewhere in this Form 10-K. The selected financial data is historical data and is not necessarily indicative of our future results of operations.

Statement of Operations Data	For the Year Ended December 31,				
	2016	2015	2014	2013	2012
	(In thousands, except per share amounts)				
Revenue:					
Services	\$334,822	\$317,022	\$309,424	\$292,092	\$273,491
Subscriber equipment	74,211	73,615	78,152	73,303	93,866
Engineering and support services	24,607	20,741	20,981	17,254	16,163
Total revenue	\$433,640	\$411,378	\$408,557	\$382,649	\$383,520
Total operating expenses ⁽¹⁾	\$257,269	\$337,575	\$285,646	\$272,755	\$278,446
Operating income	\$176,371	\$73,803	\$122,911	\$109,894	\$105,074
Net income	\$111,032	\$7,123	\$74,989	\$62,517	\$64,631
Comprehensive income	\$114,649	\$980	\$72,758	\$62,185	\$64,499
Weighted average shares outstanding - basic	95,967	95,097	88,080	76,909	74,239
Weighted average shares outstanding - diluted	124,875	95,097	109,400	87,511	78,182
Net income (loss) per share - basic	\$1.00	\$(0.09)	\$0.71	\$0.72	\$0.85
Net income (loss) per share - diluted	\$0.89	\$(0.09)	\$0.69	\$0.71	\$0.83

Balance Sheet Data	As of December 31,				
	2016	2015	2014	2013	2012
	(In thousands)				
Total current assets	\$516,770	\$481,718	\$573,113	\$369,558	\$367,166
Total assets ^{(1) (2)}	\$3,499,625	\$3,071,174	\$2,773,237	\$2,179,760	\$1,792,545
Total long-term liabilities ⁽²⁾	\$2,072,673	\$1,740,839	\$1,439,023	\$1,138,766	\$827,335
Total stockholders' equity	\$1,343,758	\$1,228,721	\$1,231,864	\$939,495	\$876,558

⁽¹⁾ Includes goodwill impairment charge which decreased operating income and total assets by \$87.0 million for the year ended December 31, 2015.

⁽²⁾ As a result of implementing Accounting Standards Update No. 2015-03, Interest—Imputation of Interest (Subtopic 835-30), Simplifying the Presentation of Debt Issuance Costs, deferred financing costs were reclassified from total assets to total long-term liabilities to present Credit Facility, net, for all years presented.

For the Year Ended December 31,

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Other Data	2016	2015	2014	2013	2012
	(In thousands)				
Cash provided by (used in):					
Operating activities	\$225,199	\$217,479	\$214,872	\$183,048	\$174,023
Investing activities	\$(242,360)	\$(439,374)	\$(626,254)	\$(485,836)	\$(443,542)
Financing activities	\$202,151	\$197,066	\$438,844	\$234,712	\$387,571

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Background

We were initially formed in 2007 as GHL Acquisition Corp., a special purpose acquisition company. In 2009, we acquired all the outstanding equity in Iridium Holdings LLC and changed our name to Iridium Communications Inc.

Overview of Our Business

We are engaged primarily in providing mobile voice and data communications services using a constellation of orbiting satellites. We are the second largest provider of satellite-based mobile voice and data communications services based on revenue, and the only commercial provider of communications services offering true global coverage. Our satellite network provides communications services to regions of the world where telecommunications networks do not exist or are impaired, including extremely remote or rural land areas, airways, open ocean, 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 operational satellites with in-orbit spares and related ground infrastructure. We utilize an interlinked mesh architecture to route traffic across the satellite constellation using radio frequency crosslinks. This unique architecture minimizes the need for 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.

We sell our products and services to commercial end users through a wholesale distribution network, encompassing approximately 65 service providers, approximately 195 value-added resellers, or VARs, and approximately 80 value-added manufacturers, or VAMs, who either sell 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 for our products and services targeting specific lines of business.

At December 31, 2016, we had approximately 850,000 billable subscribers worldwide, an increase of 68,000, or 9%, from approximately 782,000 billable subscribers at December 31, 2015. We have a diverse customer base, including end users in the following lines of business: land mobile; machine-to-machine, or M2M; maritime; aviation; and government.

We recognize revenue from both the provision of services and the sale of equipment. Service revenue represented 77% of total revenue for each of the years ended December 31, 2016 and 2015. Voice, data and M2M data service revenue have historically generated higher gross margins than subscriber equipment revenue.

We are currently devoting a substantial part of our resources to develop Iridium NEXT, our next-generation satellite constellation, along with the development of new product and service offerings, upgrades to our current services, and hardware and software upgrades to maintain our ground infrastructure. We estimate the aggregate costs associated with the design, build and launch of Iridium NEXT and related ground infrastructure upgrades through 2018 to be approximately \$3 billion. We expect to fund the costs of Iridium NEXT with the substantial majority of the funds from our \$1.8 billion loan facility, or the Credit Facility, which was fully drawn in February 2017, as well as cash on hand and internally generated cash flows, including contracted cash flows from hosted payloads.

In 2015, we began construction on gateway and ground stations in Russia to support our voice and data satellite communications services to commercial and government subscribers through a local subsidiary and its authorized Russian service providers. Construction on the gateway and ground stations was completed in 2016.

We believe that our liquidity sources will provide sufficient funds for us to meet our liquidity requirements for at least the next 12 months.

Full Scale Development and Launch Services Agreements

In June 2010, we executed a primarily fixed price full scale development contract, or FSD, with Thales Alenia Space France, or Thales, for the design and manufacture of satellites for Iridium NEXT. The total price under the FSD will be approximately \$2.3 billion, and we expect our payment obligations under the FSD to extend through 2018. As of December 31, 2016, we had made total payments of \$1,753.6 million to Thales, of which \$1,490.6 million were from borrowings under the Credit Facility, which are classified within property and equipment, net, in our consolidated balance sheet included in this report. We have used the Credit Facility to pay 85% of each invoice received from Thales under the FSD with the remaining 15% funded from cash on hand. The Credit Facility was fully drawn in February 2017 and, as a result, we will now pay 100% of each invoice received from Thales from

cash and marketable securities on hand as well as internally generated cash flows, including contracted cash flows from hosted payloads.

In March 2010, we entered into an agreement with Space Exploration Technologies Corp., or SpaceX, as the primary launch services provider for Iridium NEXT. The contract price under the SpaceX agreement is \$468.1 million, which includes the exercise of our reflight option in the event of launch failure. The SpaceX Falcon 9 rocket is configured to carry ten Iridium NEXT satellites to orbit with each launch. In November 2016, we entered into an additional agreement with SpaceX for an eighth Falcon 9 launch for a contract price of \$67.9 million. Although we are the customer of record with SpaceX, we have contracted separately with GFZ German Research Centre for Geosciences, or GFZ, for \$31.8 million to share the launch of NASA's two Gravity Recovery and Climate Experiment Follow-On satellites on a specially designed dispenser on the Falcon 9 rocket. As of December 31, 2016, we had made aggregate payments of \$394.0 million to SpaceX, and received \$16.5 million from GFZ. We also maintain a \$1.5 million refundable deposit for the reservation of an additional future launch with SpaceX, which is not included in the total contract price.

In June 2011, we entered into an agreement with International Space Company Kosmotras, or Kosmotras, as a supplemental launch services provider for Iridium NEXT. The Kosmotras agreement originally provided for the purchase of up to six launches with options to purchase additional launches. Each launch can carry two satellites. In June 2013, we exercised an option for one launch to carry two Iridium NEXT satellites. If we do not exercise any additional options, the total cost under the Kosmotras agreement including this single launch will be \$51.8 million. As of December 31, 2016, we had made aggregate payments of \$36.8 million to Kosmotras, which were capitalized as construction in process within property and equipment, net. The option to purchase two dedicated launches expired as of December 31, 2013, and in June 2015, we agreed with Kosmotras to replace the remaining options with a new set of options to purchase six dedicated launches. Kosmotras has to date been unable to obtain permission to launch our satellites. We may be unable to recover the amounts already paid to Kosmotras.

Credit Facility

In October 2010, we entered into a credit facility with a syndicate of bank lenders, which we amended and restated in May 2014. We refer to this amended and restated credit facility, as further amended to date, as the Credit Facility. Ninety-five percent of our obligations under the Credit Facility are insured by Compagnie Française d'Assurance pour le Commerce Extérieur, or COFACE. The Credit Facility consists of two tranches, with draws and repayments applied pro rata in respect of each tranche:

•Tranche A – \$1,537,500,000 at a fixed rate of 4.96%; and

•Tranche B – \$262,500,000 at a floating rate equal to the London Interbank Offer Rate, or LIBOR, plus 1.95%.

In connection with each draw made under the Credit Facility, we borrowed an additional amount equal to 6.49% of such draw to cover the premium for the COFACE insurance. We also paid a commitment fee of 0.80% per year, in semi-annual installments, on any undrawn portion of the Credit Facility. The commitment fee on the undrawn portion of the Credit Facility for the year ended December 31, 2016 was \$1.3 million and is included in other income (expense) in our consolidated statement of operations and comprehensive income. Funds drawn under the Credit Facility have been used to pay 85% of each invoice issued by Thales under the FSD. The Credit Facility was fully drawn in February 2017.

Scheduled semi-annual principal repayments will begin six months after the earlier of (i) the successful deployment of a specified number of Iridium NEXT satellites or (ii) September 30, 2017. The Credit Facility will mature seven years after the start of the principal repayment period. During this repayment period, we will pay interest on the same date as the principal repayments. Prior to the repayment period, interest payments are due on a semi-annual basis in April and October. Interest incurred during the year ended December 31, 2016 was \$77.7 million. We capitalize all interest costs incurred pursuant to the Credit Facility during the construction period of the assets; accordingly, we capitalized \$77.7 million in interest incurred in 2016. We pay interest on each semi-annual due date through a combination of a cash payment and a deemed additional loan. The \$77.7 million in interest incurred during the year ended December 31, 2016 consisted of \$33.3 million payable in cash, of which \$19.2 million was paid during the year and \$14.1 million was accrued at year end, and \$44.4 million payable by deemed loans, all of which was paid during the year.

Following the completion of the Iridium NEXT constellation, we may prepay the borrowings subject to the payment of interest makeup costs. We may not subsequently borrow any amounts that we repay. We must repay the loans in full upon a delisting of our common stock, a change in control of our company or our ceasing to own 100% of any of the other obligors, or the sale of all or substantially all of our assets. We must apply all or a portion of specified capital raise proceeds, insurance proceeds, condemnation proceeds and proceeds from the disposal of any interests in Aireon to the prepayment of the loans. The Credit Facility includes customary representations, events of default, covenants and conditions precedent to our drawing of funds.

As of December 31, 2016, we had borrowed a total of \$1,777.8 million under the Credit Facility. The unused portion of the Credit Facility as of December 31, 2016 was \$22.2 million, and the Credit Facility was fully drawn in February 2017. Under the terms of the

Credit Facility, we were required to maintain a minimum cash reserve for debt service of \$113.0 million as of December 31, 2016, which is classified as restricted cash on our consolidated balance sheet. This minimum cash reserve requirement will increase over the term of the Credit Facility to \$189.0 million in 2017.

In addition to the minimum debt service reserve levels, financial covenants under the Credit Facility include:

- an available cash balance of at least \$25 million;
- a debt-to-equity ratio, which is calculated as the ratio of total net debt to the aggregate of total net debt and total stockholders' equity, of no more than 0.7 to 1, measured each June 30 and December 31;
- specified maximum levels of annual capital expenditures (excluding expenditures on the construction of Iridium NEXT satellites) through the year ending December 31, 2024;
- specified minimum levels of consolidated operational earnings before interest, taxes, depreciation and amortization, or operational EBITDA, for the 12-month periods ending each December 31 and June 30 through December 31, 2017;
- specified minimum cumulative cash flow requirements from customers who have hosted payloads on our satellites measured each December 31 and June 30 from June 30, 2016 through December 31, 2017;
- a debt service coverage ratio, measured during the repayment period, of not less than 1 to 1.5; and
- specified maximum leverage levels during the repayment period that decline from a ratio of 4.73 to 1 for the twelve months ending June 30, 2018 to a ratio of 2.36 to 1 for the twelve months ending December 31, 2024.

Our available cash balance, as defined by the Credit Facility, was \$382.0 million as of December 31, 2016. Our debt-to-equity ratio was 0.51 to 1 as of December 31, 2016. We were also in compliance with the operational EBITDA covenant, the annual capital expenditure covenant and the cumulative cash flow requirements from customers who have hosted payloads covenant as of December 31, 2016.

The covenants regarding capital expenditures, operational EBITDA and hosted payload cash flows are calculated in connection with a measurement, which we refer to as available cure amount, that is derived using a complex calculation based on overall cash flows, as adjusted by numerous measures specified in the Credit Facility. In a period in which our capital expenditures exceed, or our operational EBITDA or hosted payload cash flows falls short of, the amount specified in the respective covenant, we would be permitted to allocate available cure amount, if any, to prevent a breach of the applicable covenant. As of December 31, 2016, we had no available cure amount, although it was not necessary for us to apply any available cure amount to maintain compliance with the covenants. The available cure amount has fluctuated significantly from one measurement period to the next, and we expect that it will continue to do so.

The covenants also place limitations on our ability and that of our subsidiaries to carry out mergers and acquisitions, dispose of assets, grant security interests, declare, make or pay dividends, enter into transactions with affiliates incur additional indebtedness, or make loans, guarantees or indemnities. If we are not in compliance with the financial covenants under the Credit Facility, after any opportunity to cure such non-compliance, or we otherwise experience an event of default under the Credit Facility, the lenders may require repayment in full of all principal and interest

outstanding under the Credit Facility. It is unlikely we would have adequate funds to repay such amounts prior to the scheduled maturity of the Credit Facility. If we fail to repay such amounts, the lenders may foreclose on the assets we have pledged under the Credit Facility, which include substantially all of our assets and those of our domestic subsidiaries.

As of February 23, 2017, we have fully drawn the total \$1.8 billion under the Credit Facility.

Boeing Insourcing Agreement

Boeing has operated and maintained our satellite constellation under an operations and maintenance agreement since our inception. During 2016, Boeing provided these services to us pursuant to the terms of the Iridium NEXT support services agreement. Pursuant to this agreement, Boeing provided personnel services in support of the development of Iridium NEXT and agreed to operate and maintain Iridium NEXT, including a transitional period that began on January 1, 2015, during which Boeing supported a hybrid operations mode involving network elements from both the first-generation Iridium system and the Iridium NEXT system. Boeing provided these services on a time-and-materials fee basis.

In November 2016, we restructured our relationship with Boeing. We entered into an insourcing agreement, pursuant to which we hired, as of January 3, 2017, the majority of the Boeing team that performed the operations and maintenance on our system. This transition will allow us to more directly manage our network and optimize operational expenses going forward. As part of this arrangement, we agreed to pay Boeing a fee of \$5.5 million, of which one-half was paid in December 2016 and the remainder will be paid in December 2017. In addition, we entered into a separate development services contract with Boeing, which will dedicate key Boeing personnel to continue the design and growth required for bringing new services and capabilities to the Iridium NEXT network. After the completion of the Boeing insourcing, as of January 3, 2017, we had 393 full-time employees.

Material Trends and Uncertainties

Our industry and customer base has historically grown as a result of:

- demand for remote and reliable mobile communications services;
- increased demand for communications services by disaster and relief agencies, and emergency first responders;
- a broad wholesale distribution network with access to diverse and geographically dispersed niche markets;
- a growing number of new products and services and related applications;
- improved data transmission speeds for mobile satellite service offerings;
- regulatory mandates requiring the use of mobile satellite services;
- a general reduction in prices of mobile satellite services and subscriber equipment; and
- geographic market expansion through the ability to offer our services in additional countries.

Nonetheless, we face a number of challenges and uncertainties in operating our business, including:

- our ability to continue to develop and launch Iridium NEXT;
- our ability to develop new and innovative products and services for Iridium NEXT;
- our ability to generate sufficient internal cash flows, including contracted cash flows from hosted payloads, to fund a portion of the remaining costs associated with Iridium NEXT and to support our ongoing business;
- Aireon LLC's ability to successfully deploy and market its space-based ADS-B, global aviation monitoring service to be carried as a hosted payload on the Iridium NEXT system;
- Aireon's ability to raise sufficient funds to pay hosting fees to us;
- our ability to maintain the health, capacity, control and level of service of our first-generation satellites through the completion of Iridium NEXT;
- changes in general economic, business and industry conditions, including the effects of currency exchange rates;
- our reliance on a single primary commercial gateway and a primary satellite network operations center;
- competition from other mobile satellite service providers and, to a lesser extent, from the expansion of terrestrial-based cellular phone systems and related pricing pressures;
- market acceptance of our products;
- regulatory requirements in existing and new geographic markets;
- rapid and significant technological changes in the telecommunications industry;

reliance on our wholesale distribution network to market and sell our products, services and applications effectively;

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reliance on single-source suppliers for the manufacture of most of our subscriber equipment and for some of the components required in the manufacture of our end-user subscriber equipment and our ability to purchase parts that are periodically subject to shortages resulting from surges in demand, natural disasters or other events; and reliance on a few significant customers, particularly agencies of the U.S. government, for a substantial portion of our revenue, as a result of which the loss or decline in business with any of these customers may negatively impact our revenue and collectability of related accounts receivable.

Critical Accounting Policies and Estimates

The discussion and analysis of our financial condition and results of operations is based upon our consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States, or U.S. GAAP. The preparation of these financial statements requires the use of estimates and judgments that affect the reported amounts of assets, liabilities, revenue and expenses, and related disclosure of contingent assets and liabilities. On an ongoing basis, we evaluate our estimates, including those related to revenue recognition, collectability of accounts receivable, useful lives of property and equipment, long-lived assets, goodwill and other intangible assets, inventory, internally developed software, deferred financing costs, asset retirement obligations, income taxes, stock-based compensation, warranty expenses, loss contingencies, and other estimates. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

The accounting policies we believe to be most critical to understanding our financial results and condition and that require complex and subjective management judgments are discussed below. Our accounting policies are more fully described in Note 2 in Item 8 “Financial Statements and Supplementary Data.” Please see the notes to our consolidated financial statements for a full discussion of these significant accounting policies.

Revenue Recognition

For revenue arrangements with multiple elements in which we determine, based on judgment, that the elements qualify as separate units of accounting, we allocate the guaranteed minimum arrangement price among the various contract elements based on each element’s relative selling price. The selling price used for each deliverable is based on vendor-specific objective evidence when available, third-party evidence when vendor-specific evidence is not available, or the Company’s estimate of selling price when neither vendor-specific evidence nor third-party evidence is available. We determine vendor-specific objective evidence of selling price by assessing sales prices of subscriber equipment, airtime and other services when they are sold to customers on a stand-alone basis. Our determination of best estimate of selling price is consistent with our determination of vendor-specific objective evidence of selling price and we assess qualitative and quantitative market factors and entity-specific factors when estimating the selling price. We recognize revenue for each element based on the specific characteristics of that element.

We sell prepaid services in the form of e-vouchers and prepaid cards. A liability is established equal to the cash paid upon purchase for the e-voucher or prepaid card. We recognize revenue from the prepaid services upon the use of the e-voucher or prepaid card by the customer or, if unused, upon the expiration of the right to access the prepaid service. While the terms of prepaid e-vouchers can be extended by the purchase of additional e-vouchers, prepaid e-vouchers may not be extended beyond three or four years, dependent on the initial expiry period when purchased. We do not offer refunds for unused prepaid services.

Revenue associated with some of our fixed-price engineering services arrangements is recognized when the services are rendered, typically on a proportional performance method of accounting based on our estimate of total costs expected to complete the contract, and the related costs are expensed as incurred. We recognize revenue on cost-plus-fixed-fee arrangements to the extent of actual costs incurred plus an estimate of the applicable fees earned, where such estimated fees are determined using a partial performance method calculation. If actual results are not consistent with our estimates or assumptions, we may be exposed to changes to earned and unearned revenue that could be material to our results of operations.

Stock-Based Compensation

We account for stock-based compensation, which consists of stock options and restricted stock units, based on the grant date estimated fair value. In the case of restricted stock units, grant date fair value is equal to the closing price of our common stock on the date of grant. The expected vesting of our performance-based RSUs is based upon the probability that we achieve the defined performance goals. The level of achievement of performance goals, if any, is determined by the compensation committee. In the case of stock options, grant date fair value is calculated using the Black-Scholes option pricing model. We recognize stock-based compensation on a straight-line basis over the requisite service period. The Black-Scholes option pricing model requires us to make several assumptions, including expected volatility and expected term of the options. If any of the assumptions we use in the Black-Scholes option pricing model were to change significantly, stock-based compensation expense may differ materially in the future from that recorded in the current period. In addition, we are required to estimate the expected forfeiture rate and only recognize expense for those awards

expected to vest. We estimate the forfeiture rate based on historical experience. To the extent our actual forfeiture rate is different from our estimate, stock-based compensation expense is adjusted accordingly.

Income Taxes

We account for income taxes using the asset and liability approach. This approach requires that we recognize deferred tax assets and liabilities based on differences between the financial statement bases and tax bases of our assets and liabilities. Deferred tax assets and liabilities are recorded based upon enacted tax rates for the period in which the deferred tax items are expected to reverse. Changes in tax laws or tax rates in various jurisdictions are reflected in the period of change. Significant judgment is required in the calculation of our tax provision and the resulting tax liabilities as well as our ability to realize our deferred tax assets. Our estimates of future taxable income and any changes to such estimates can significantly affect our tax provision in a given period. Significant judgment is required in determining our ability to realize our deferred tax assets related to federal, state and foreign tax attributes within their carryforward periods including estimating the amount and timing of the future reversal of deferred tax items in our projections of future taxable income. A valuation allowance is established to reduce deferred tax assets to the amounts we expect to realize in the future. We also recognize tax benefits related to uncertain tax positions only when we estimate that it is “more likely than not” that the position will be sustainable based on its technical merits. If actual results are not consistent with our estimates and assumptions, this may result in material changes to our income tax provision.

Property and Equipment

Property and equipment are stated at cost, less accumulated depreciation and amortization. Property and equipment are depreciated or amortized over their estimated useful lives. We apply judgment in determining the useful lives based on factors such as engineering data, our long-term strategy for using the assets, contractual terms related to the assets, laws and regulations that could impact the useful lives of the assets and other economic factors. In evaluating the useful lives of our satellites, we assess the current estimated operational life of the satellites, including the potential impact of environmental factors on the satellites, ongoing operational enhancements and software upgrades. Additionally, we review engineering data relating to the operation and performance of our satellite network.

We depreciate our satellites over the shorter of their potential operational life or the period of their expected use. The appropriateness of the useful lives is evaluated on a quarterly basis or as events occur that require additional assessment. Our first-generation satellites are depreciated on a straight-line basis through the earlier of their estimated remaining useful life or the date they are expected to be replaced by Iridium NEXT satellites, which defines the period of their expected use, because we expect this will occur before the end of their operational lives.

In addition to the changes made in prior quarters, in the fourth quarter of 2016, we updated our analysis of the first-generation satellites' remaining useful lives based on the refinement of the launch schedule, health of the first-generation satellites, and deployment plan for our next-generation satellite constellation. As a result, the estimated useful lives of the first-generation satellites have been extended and are consistent with the expected deployment of Iridium NEXT. We began deployment of our next-generation satellite constellation in January 2017, and, based on the current launch schedule, we expect the final launch to occur in 2018. If our actual operational results are not consistent with our estimates and assumptions, we may experience changes in depreciation and amortization expense that could be material to our results of operations. In the event there are changes to the launch schedule of Iridium NEXT satellites, the period of intended use for our first-generation satellites could be affected, also resulting in changes to depreciation and amortization expense that could be material to our results of operations.

Assets under construction primarily consist of costs incurred associated with the design, development and launch of the Iridium NEXT satellites, upgrades to our current infrastructure and ground systems and internal software development costs. Once these assets are placed in service, they will be depreciated using the straight-line method over their respective estimated useful lives. We capitalize interest on the Credit Facility during the construction period of Iridium NEXT. Capitalized interest is added to the cost of our next-generation satellites.

Recoverability of Intangible Assets with Indefinite Lives

A portion of our intangible assets consists of our spectrum licenses and trade names which are indefinite-lived intangible assets. We reevaluate the indefinite life determination for these assets periodically to determine whether events and circumstances continue to support an indefinite life.

We assess the recoverability of indefinite-lived assets on an annual basis or when indicators of impairment exist. Historically, we have assessed the possibility of impairment by comparing the carrying amount of the asset to its estimated fair value. If the estimated fair value of the indefinite-lived asset is less than the carrying amount, an impairment loss is recognized. We made assumptions and applied judgment in estimating the fair value based on quoted market prices and various other valuation techniques, including replacement costs, discounted cash flows methods and other market multiple analyses. The various valuation techniques require

significant assumptions about future cash flows, replacement cost, revenue growth, capital expenditures, working capital fluctuations, asset life and incremental borrowing rates. In our annual analysis performed in 2016, we chose the optional qualitative assessment to test indefinite-lived intangible assets for impairment. The qualitative assessment permits companies to assess whether it is more likely than not that an indefinite-lived intangible asset is impaired. If a company concludes based on the qualitative assessment that it is not more likely than not that the fair value of an indefinite-lived intangible asset is less than its carrying amount, it would not have to quantitatively determine the assets' fair value. Based on the results of this analysis, it was not more likely than not that the intangible assets not subject to amortization were impaired. Therefore, a quantitative analysis was not necessary, and no impairment charge was recorded during the period.

Internally Developed Software

We capitalize the costs of acquiring, developing and testing software to meet our internal needs. Capitalization of costs associated with software obtained or developed for internal use commences when the preliminary project stage is complete and it is probable that the project will be completed and used to perform the function intended. Capitalized costs include external direct cost of materials and services consumed in developing or obtaining internal-use software as well as payroll and payroll-related costs for employees who are directly associated with, and devote time to, the internal-use software project. Capitalization of these costs ceases no later than the point in time at which the project is substantially complete and ready for its intended use. Internal use software costs are amortized once the software is placed in service using the straight-line method over periods ranging from three to seven years. Judgments and estimates are required in the determination of when development costs should be capitalized. We evaluate and estimate, based on engineering data, when the preliminary project stage is completed and the point when the project is substantially complete and ready for use.

Deferred Financing Costs

Direct and incremental costs incurred in connection with securing debt financing are deferred on our balance sheet and amortized as additional interest expense using the effective interest method over the term of the related debt. The effective interest rate calculation requires us to make assumptions and estimates in determining estimated periodic interest expense. The calculation includes assumptions and estimates with respect to future borrowing dates and amounts, repayment dates and amounts, and projected future LIBOR rates. If actual borrowing amounts and dates, repayment amounts and dates, and future LIBOR rates are not consistent with our estimates or assumptions, we may be exposed to changes that could be material to our property and equipment, net balance (since we are capitalizing interest expense as part of the cost of Iridium NEXT), deferred financing costs balance, depreciation expense, interest expense, income from operations and net income.

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Comparison of Our Results of Operations for the Year Ended December 31, 2016 and the Year Ended December 31, 2015

(\$ In thousands)	Year Ended December 31,				Change			
	2016	% of Total Revenue	2015	% of Total Revenue	Dollars	Percent		
Revenue:								
Service revenue								
Commercial	\$246,822	57 %	\$241,925	59 %	\$4,897	2 %		
Government	88,000	20 %	75,097	18 %	12,903	17 %		
Total service revenue	334,822	77 %	317,022	77 %	17,800	6 %		
Subscriber equipment	74,211	17 %	73,615	18 %	596	1 %		
Engineering and support services	24,607	6 %	20,741	5 %	3,866	19 %		
Total revenue	433,640	100 %	411,378	100 %	22,262	5 %		
Operating expenses:								
Cost of services (exclusive of depreciation and amortization)								
Cost of services (exclusive of depreciation and amortization)	64,958	15 %	60,306	15 %	4,652	8 %		
Cost of subscriber equipment	44,286	10 %	40,807	10 %	3,479	9 %		
Research and development	16,079	4 %	16,144	4 %	(65)	0 %		
Selling, general and administrative	82,552	19 %	81,445	20 %	1,107	1 %		
Depreciation and amortization	49,394	11 %	51,834	13 %	(2,440)	(5 %)		
Impairment of goodwill	-	0 %	87,039	21 %	(87,039)	100 %		
Total operating expenses	257,269	59 %	337,575	82 %	(80,306)	(24 %)		
Operating income	176,371	41 %	73,803	18 %	102,568	139 %		
Other income (expense):								
Interest income, net	2,934	1 %	3,069	1 %	(135)	(4 %)		
Undrawn credit facility fees	(1,346)	0 %	(3,289)	(1 %)	1,943	(59 %)		
Other income (expense), net	206	(1 %)	(468)	(1 %)	674	(144 %)		
Total other income (expense)	1,794	(1 %)	(688)	(1 %)	2,482	(361 %)		
Income before income taxes	178,165	40 %	73,115	17 %	105,050	144 %		
Provision for income taxes	(67,133)	(15 %)	(65,992)	(16 %)	(1,141)	2 %		
Net income	\$111,032	25 %	\$7,123	1 %	\$103,909	1,459 %		

Commercial Service Revenue

Year Ended December 31,				Change	
2016	2015				
(Revenue in millions and subscribers in thousands)					
Billable	Billable	Billable		Billable	
Revenue Subscribers ⁽¹⁾ ARPU ⁽²⁾	Revenue Subscribers ⁽¹⁾	Revenue	Subscribers	Revenue	Subscribers ARPU

					ARPU				
						(2)			
Commercial voice and data	\$ 180.5	353	\$ 42	\$ 180.6	351	\$ 42	\$(0.1)	2	\$ -
Commercial M2M data	66.3	413	14	61.3	359	15	5.0	54	(1)
Total Commercial	\$246.8	766		\$241.9	710		\$4.9	56	

(1) Billable subscriber numbers shown are at the end of the respective period.

(2) Average monthly revenue per unit, or ARPU, is calculated by dividing revenue in the respective period by the average of the number of billable subscribers at the beginning of the period and the number of billable subscribers at the end of the period and then dividing the result by the number of months in the period. ARPU excludes revenue from our non-subscriber satellite, timing, and location service that was launched in the second quarter of 2016.

For the year ended December 31, 2016, total commercial revenue increased \$4.9 million, or 2%, primarily due to the increase in M2M of \$5.0 million, or 8%, compared to the prior year. The increase in M2M is primarily due to a 15% increase in commercial M2M billable subscribers, offset by slightly lower ARPU. Commercial voice and data remained flat due to continued declines in telephony airtime usage substantially offset by increases in Iridium OpenPort services and push-to-talk, or PTT, services.

Government Service Revenue

	Year Ended December 31,		2015		Change	
	2016					
	(Revenue in millions and subscribers in thousands)					
	Billable		Billable		Billable	
	Revenue	Subscribers ⁽¹⁾	Revenue	Subscribers ⁽¹⁾	Revenue	Subscribers
Government service revenue	\$88.0	84	\$75.1	72	\$12.9	12

(1) Billable subscriber numbers shown are at the end of the respective period.

We provide Iridium airtime and airtime support to U.S. government and other authorized customers pursuant to a five-year EMSS contract executed in October 2013 and managed by DISA. The EMSS contract replaced our previous EMSS contract which we originally entered into in April 2008. Under the terms of this agreement, authorized customers utilize Iridium airtime services provided through the U.S. Department of Defense's, or 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. DTCS is a service that provides beyond-line-of-sight, netted tactical radio service for user-defined groups. The service fee under the EMSS contract is \$88 million per year for the remaining term.

Government service revenues for the year ended December 31, 2016 increased to \$88.0 million from \$75.1 million in the prior year as a result of the scheduled price increase under the EMSS contract.

Subscriber Equipment Revenue

Subscriber equipment revenue increased by \$0.6 million, or 1%, to \$74.2 million for the year ended December 31, 2016 compared to the prior year. This increase was primarily due to increased unit sales of Iridium Pilot[®] terminals and M2M devices partially offset by fewer sales of handsets and L-Band transceivers.

Engineering and Support Service Revenue

Year Ended		
December		
31,		
2016	2015	Change

	(In millions)		
Government	\$22.4	\$18.7	\$ 3.7
Commercial	2.2	2.0	0.2
Total	\$24.6	\$20.7	\$ 3.9

Engineering and support service revenue increased by \$3.9 million, or 19%, for the year ended December 31, 2016 compared to the prior year primarily as a result of a DoD contract entered into in late 2015 to adapt the Iridium Extreme® handset for DoD use.

Operating Expenses

Cost of Services (exclusive of depreciation and amortization)

Cost of services (exclusive of depreciation and amortization) includes the cost of network engineering and operations staff, including contractors, software maintenance, product support services and cost of services for government and commercial engineering and support service revenue.

Cost of services (exclusive of depreciation and amortization) increased by \$4.7 million, or 8%, for the year ended December 31, 2016 compared to the prior year, primarily due to an increase in scope of work for government sponsored contracts, partially offset by lower costs incurred to manage the first-generation satellites.

Cost of Subscriber Equipment

Cost of subscriber equipment includes the direct costs of equipment sold, which consist of manufacturing costs, allocation of overhead, and warranty costs.

Cost of subscriber equipment increased by \$3.5 million, or 9%, for the year ended December 31, 2016 compared to the prior year. The increase was primarily due to a decline in the warranty provision for our Iridium OpenPort terminal during the year ended December 31, 2015 that did not recur in the year ended December 31, 2016. The remaining cost increase is due to a higher volume of Iridium

Pilot terminal sales and M2M device sales, partially offset by decreased sales of handsets and L-Band transceivers and by reduced costs on certain products due to manufacturing cost efficiencies.

Selling, General and Administrative

Selling, general and administrative expenses include sales and marketing costs as well as legal, finance, information technology, facilities, billing and customer care expenses.

Selling, general and administrative expenses increased by \$1.1 million, or 1%, for the year ended December 31, 2016 compared to the prior year primarily due to increases in employee-related expenses and professional fees, partially offset by lower supplier transition expenses and lower non-income taxes.

Depreciation and Amortization

Depreciation and amortization expense decreased by \$2.4 million, or 5%, for the year ended December 31, 2016 compared to the prior year, primarily due to continued changes in the estimated useful lives of the first-generation satellites, partially offset by the addition of new assets and the impairment charges that we recorded during the second quarter of 2016 as a result of two satellites having ceased operations. We updated our analysis of the first-generation satellites' remaining useful lives throughout 2016. We will continue to evaluate the useful lives of our first-generation satellites through the full deployment of Iridium NEXT as the satellites are placed into service.

Other Expense

Undrawn Credit Facility Fees

The commitment fee on the undrawn portion of the Credit Facility was \$1.3 million for the year ended December 31, 2016 compared to \$3.3 million for the prior year. The decrease of the commitment fee on the undrawn portion directly relates to the increase in the amounts borrowed under the Credit Facility as we continue to finance the development of Iridium NEXT. As we are fully drawn on the Credit Facility as of February 2017, the undrawn portion and related fees will decrease to zero beginning in the second quarter of 2017.

Provision for Income Taxes

For the year ended December 31, 2016, our income tax provision was \$67.1 million compared to \$66.0 million for the prior year. Our effective tax rate was approximately 37.7% for the year ended December 31, 2016 compared to 90.3% for the prior year. The decrease in the effective tax rate was primarily related to the impact of a one-time non-cash impairment of goodwill in the prior year as well as an increased benefit related to the impact of the Arizona tax law changes (both tax rate and apportionment method) and state apportionment changes in other jurisdictions compared to the prior year. As our current estimates change in future periods, the impact on the deferred tax assets and liabilities may change correspondingly.

Net Income

Net income was \$111.0 million for the year ended December 31, 2016, an increase of \$103.9 million from the prior year. This increase in net income was driven by an \$87.0 million non-cash goodwill impairment charge taken in 2015 and the \$22.3 million increase in total revenue, which was primarily related to the \$12.9 million increase from the EMSS contract. The increase was partially offset by a \$5.0 million increase in costs of services as described above.

Comparison of Our Results of Operations for the Year Ended December 31, 2015 and Combined Results of Operations for the Year Ended December 31, 2014

(\$ In thousands)	Year Ended December 31,				Change	
	2015	% of Total Revenue	2014	% of Total Revenue	Dollars	Percent
Revenue:						
Service revenue						
Commercial	\$241,925	59 %	\$243,875	60 %	\$(1,950)	(1 %)
Government	75,097	18 %	65,549	16 %	9,548	15 %
Total service revenue	317,022	77 %	309,424	76 %	7,598	2 %
Subscriber equipment	73,615	18 %	78,152	19 %	(4,537)	(6 %)
Engineering and support services	20,741	5 %	20,981	5 %	(240)	(1 %)
Total revenue	411,378	100 %	408,557	100 %	2,821	1 %
Operating expenses:						
Cost of services (exclusive of depreciation						
and amortization)	60,306	15 %	62,085	15 %	(1,779)	(3 %)
Cost of subscriber equipment	40,807	10 %	54,569	14 %	(13,762)	(25 %)
Research and development	16,144	4 %	17,587	4 %	(1,443)	(8 %)
Selling, general and administrative	81,445	20 %	78,636	19 %	2,809	4 %
Depreciation and amortization	51,834	13 %	72,769	18 %	(20,935)	(29 %)
Impairment of goodwill	87,039	21 %	-	0 %	87,039	100 %
Total operating expenses	337,575	82 %	285,646	70 %	51,929	18 %
Operating income	73,803	18 %	122,911	30 %	(49,108)	(40 %)
Other income (expense):						
Interest income, net	3,069	1 %	3,640	1 %	(571)	(16 %)
Undrawn credit facility fees	(3,289)	(1 %)	(5,825)	(1 %)	2,536	(44 %)
Other expense, net	(468)	(1 %)	(4,274)	(2 %)	3,806	(89 %)
Total other expense	(688)	(1 %)	(6,459)	(2 %)	5,771	(89 %)
Income before income taxes	73,115	17 %	116,452	29 %	(43,337)	(37 %)
Provision for income taxes	(65,992)	(16 %)	(41,463)	(10 %)	(24,529)	59 %
Net income	\$7,123	1 %	\$74,989	18 %	\$(67,866)	(91 %)

Revenue

Total revenue increased to \$411.4.6 million for the year ended December 31, 2015 compared to \$408.6 million for the prior year. This increase in total revenue was primarily due to a \$7.6 million increase in service revenue. Government service revenue increased by \$9.5 million primarily due to the price increase in the Enhanced Mobile Satellite Services, or EMSS, fixed-price government contract. The increases were partially offset by a decrease in subscriber equipment revenue of \$4.5 million.

Commercial Service Revenue

	Year Ended December 31,						Change		
	2015			2014					
	(Revenue in millions and subscribers in thousands)								
	Billable			Billable			Billable		
	Revenue	Subscribers	⁽¹⁾ ARPU ⁽²⁾	Revenue	Subscribers	⁽¹⁾ ARPU ⁽²⁾	Revenue	Subscribers	ARPU
Commercial voice and data	\$180.6	351	\$ 42	\$185.5	354	\$ 45	\$(4.9)	(3)	\$ (3)
Commercial M2M data	61.3	359	15	58.4	325	16	2.9	34	(1)
Total Commercial	\$241.9	710		\$243.9	679		\$(2.0)	31	

(1) Billable subscriber numbers shown are at the end of the respective period.

(2) ARPU is calculated by dividing revenue in the respective period by the average of the number of billable subscribers at the beginning of the period and the number of billable subscribers at the end of the period and then dividing the result by the number of months in the period.

For the year ended December 31, 2015, commercial voice and data revenue decreased \$4.9 million, or 3%, primarily due to continued declines in airtime usage, partially offset by higher telephony access fees due to a higher weighted-average number of subscribers in 2015 than in 2014. Also offsetting the decline in airtime usage was higher Iridium OpenPort service revenue.

For the year ended December 31, 2015, commercial M2M data revenue increased by \$2.9 million, or 5%, compared to the prior year primarily due to a 10% increase in commercial M2M billable subscribers, offset by slightly lower ARPU.

Government Service Revenue

	Year Ended December 31,		2014		Change	
	(Revenue in millions and subscribers in thousands)					
	Billable Revenue	Subscribers ⁽¹⁾	Billable Revenue	Subscribers ⁽¹⁾	Billable Revenue	Subscribers
Government service revenue	\$75.1	72	\$65.5	60	\$9.6	12

(1) Billable subscriber numbers shown are at the end of the respective period.

Government service revenues for the year ended December 31, 2015 increased to \$75.1 million from \$65.5 million in the prior year as a result of the scheduled price increase under the EMSS contract. As we continue to innovate and better meet the needs of our customers, additional services not contemplated under the EMSS contract may be provided in future periods at an amount mutually agreed upon by both parties.

Subscriber Equipment Revenue

Subscriber equipment revenue decreased by \$4.5 million, or 6%, to \$73.6 million for the year ended December 31, 2015 compared to the prior year. This decrease was primarily due to decreased unit sales of established handsets, Iridium GO!® handsets, and Iridium Pilot® terminals. The decrease was partially offset by higher M2M device unit sales and the sales of our Iridium Extreme PTT handsets which were introduced in 2015.

Operating Expenses

Cost of Services (exclusive of depreciation and amortization)

Cost of services (exclusive of depreciation and amortization) decreased by \$1.8 million, or 3%, for the year ended December 31, 2015 compared to the prior year, primarily due to lower costs related to government contracts and satellite operations.

Cost of Subscriber Equipment

Cost of subscriber equipment decreased by \$13.8 million, or 25%, for the year ended December 31, 2015 compared to the prior year. The decrease was primarily due to an \$8.1 million decline in the warranty provision, primarily related to fewer expected returns of Iridium Pilot units and a decrease in the average repair costs compared to the prior year. The decrease in the warranty provision also included a \$0.8 million reduction in expenses resulting from an initiative to replace older Iridium OpenPort units. The remaining decrease in cost of subscriber equipment was due to lower overall sales volume of equipment. The decrease in cost was proportionally greater than the decrease in revenue due to equipment manufacturing efficiencies.

Research and Development

Research and development expenses decreased by \$1.4 million, or 8%, for the year ended December 31, 2015 compared to the prior year primarily due to the completion of certain product development activities such as PTT, partially offset by an increase in Iridium NEXT projects including development costs associated with enabling faster data speeds on our network and subscriber equipment.

Selling, General and Administrative

Selling, general and administrative expenses increased by \$2.8 million, or 4%, for the year ended December 31, 2015 compared to the prior year primarily due to an increase in non-income taxes and equipment supplier transition costs.

Depreciation and Amortization

Depreciation and amortization expense decreased by \$20.9 million, or 29%, for the year ended December 31, 2015 compared to the prior year. Of the total decrease for the year ended December 31, 2015, \$11.7 million was related to depreciation and the remaining \$9.2 million decrease related to amortization.

In addition to changes made during 2014, we updated our analysis of the first-generation satellites' remaining useful lives in each of the first three quarters of 2015. Based on the results of the analyses and the refinement of the Iridium NEXT launch schedule and deployment plan, the estimated useful lives of the first-generation satellites were extended and are consistent with the expected deployment of Iridium NEXT. These changes in estimated useful life resulted in a \$10.6 million decrease in depreciation expense for the year ended December 31, 2015 when compared to the prior year. We will continue to evaluate the useful lives of our first-generation satellites through the full deployment of Iridium NEXT as the satellites are placed into service. Also contributing to the decrease in depreciation expense was a \$2.2 million impairment charge recorded during the year ended December 31, 2014 related to three of our in-orbit satellites with which we lost communication during the year ended December 31, 2014. We have since replaced the lost satellites with in-orbit spares. We did not lose any satellites in 2015. The decreases described above were partially offset by increases in depreciation expense resulting from additions to property and equipment for ground infrastructure compatible with Iridium NEXT.

In addition, amortization expense decreased by \$9.2 million for the year ended December 31, 2015 compared to the prior year due to the completion of amortization of certain definite-lived intangibles in 2014. These definite-lived intangible assets included customer relationships, core developed technology and software from our 2009 acquisition of Iridium Holdings LLC. These assets were amortized over useful lives of five years.

Other Expense

Interest Income, Net

Interest income, net, decreased by \$0.6 million, or 16%, to \$3.1 million for the year ended December 31, 2015 compared to the prior year primarily due to more timely customer collections resulting in lower customer finance charges.

Undrawn Credit Facility Fees

The commitment fee on the undrawn portion of the Credit Facility was \$3.3 million for the year ended December 31, 2015 compared to \$5.8 million for the prior year. The decrease of the commitment fee on the undrawn portion directly relates to the increase in the amounts borrowed under the Credit Facility as we finance the development of Iridium NEXT.

Other Income (Expense), net

Other expense, net was \$0.5 million for the year ended December 31, 2015 compared to \$4.3 million for the prior year. This change primarily resulted from our share of the 2014 loss from our investment in Aireon LLC. Aireon is accounted for as an equity method investment. As of June 30, 2014, due to our cumulative recognition of our share of Aireon's reported losses, our investment balance in Aireon was zero. To the extent that Aireon continues to incur losses, we will suspend recognition of these losses on our condensed consolidated statement of operations until such time that future Aireon income exceeds cumulative accrued preferred dividends and accumulated suspended losses.

Provision for Income Taxes

For the year ended December 31, 2015, our income tax provision was \$66.0 million compared to \$41.5 million for the prior year. Our effective tax rate was approximately 90.3% for the year ended December 31, 2015 compared to 35.6% for the prior year. The change in the effective tax rate was primarily related to the impact of a one-time non-cash impairment of goodwill as well as lower benefit for the impact of the Arizona tax law changes (both tax rate and apportionment method). As our current estimates change in future periods, the impact on the deferred tax assets and liabilities may change correspondingly.

Net Income

Net income was \$7.1 million for the year ended December 31, 2015, a decrease of \$67.9 million, or 91%, from the prior year. This decrease in net income was driven by an \$87.0 million non-cash goodwill impairment charge and a \$24.5 million increase in our provision for income taxes. The decrease was partially offset by a \$7.6 million increase in service revenue, primarily due to the \$9.5 million favorable impact of the EMSS contract and a \$9.2 million favorable subscriber equipment margin. Also adding to the offset was the \$20.9 million decrease in depreciation and amortization primarily due to the change in our first-generation satellites' estimated remaining useful lives and completion of amortization related to certain definite-lived intangible assets in 2014.

Liquidity and Capital Resources

As of December 31, 2016, our total cash and cash equivalents balance was \$371.2 million, and our marketable securities balance was \$39.3 million. Our principal sources of liquidity are cash, cash equivalents and marketable securities, internally generated cash flows, and, until it was fully drawn in February 2017, the Credit Facility. Our principal liquidity requirements over the next twelve months are to meet capital expenditure needs, principally the continued deployment of Iridium NEXT, as well as for working capital, interest and debt service reserve payments on the Credit Facility, and dividends payable on our Series A Preferred Stock and Series B Preferred Stock.

We estimate the aggregate costs associated with the design, build and launch of Iridium NEXT and related infrastructure upgrades through 2018 to be approximately \$3 billion. Our funding plan for these costs includes the substantial majority of the funds available under the Credit Facility, which is now fully drawn as of February 2017, together with cash and marketable securities on hand, and internally generated cash flows, including contracted cash flows from hosted payloads. Now that our Credit Facility is fully drawn, we expect to pay each invoice received from Thales and all interest and debt service reserve payments under the Credit Facility from cash, cash equivalents and marketable securities on hand, and internally generated cash flows, including contracted cash flows from hosted payloads.

While the contracted cash flows from our primary hosted payload customer, Aireon, are interest-bearing if not paid on time, we expect those hosted payload payments will continue to be delayed. Aireon is working to secure contracts with ANSPs, including the FAA, for the sale of Aireon's space-based ADS-B services. Aireon is currently seeking to raise the capital it will need to fund its continued operations and our hosted payload payments. Its ability to fund our hosted payload payments in the previously anticipated timeframe has been adversely affected by delays in its sales efforts to these ANSPs, which we believe in part results from delays in the development, construction and launch of the Iridium NEXT system.

In anticipation of potential delays in receipt of the Aireon hosting payments, we entered into discussions with our Credit Facility lenders and Thales to delay or reduce our payment obligations. We have received terms from our lenders to delay our contributions to the cash reserve account for debt repayment, or DSR, and from Thales to delay some of the construction milestone payments that we otherwise anticipate making in 2017 and 2018 under our full scale development contract, or FSD; however, we would need full payment of the Aireon hosting fees or other financing arrangements by the first quarter of 2019 in order to make these deferred payments. The terms from our lenders also contemplate the temporary suspension of dividend payments on our Series A Preferred Stock and Series B Preferred Stock, but do not include any requirements that we raise additional equity. These terms would permit us to maintain liquidity well into 2108.

There can be no assurance that our internally generated cash flows, including those from hosted payloads on our Iridium NEXT satellites, will meet our current expectations. If we do not generate sufficient cash flows, or if the cost of implementing Iridium NEXT or the other elements of our business plan are higher than anticipated, we may need further external funding. Our ability to obtain additional funding may be adversely affected by a number of factors, including global economic conditions, and such funding may not be available on reasonable terms or at all. If we are not able to secure such funding in a timely manner, our ability to maintain our network, to design, build and launch Iridium NEXT and related ground infrastructure, products and services, and to pursue additional growth opportunities will be impaired, and we would likely need to delay some elements of our Iridium NEXT development. Our liquidity and our ability to fund our liquidity requirements also depend on our future financial performance, which is subject to general economic, financial, regulatory and other factors that are beyond our control.

Holders of Series A Preferred Stock and Series B Preferred Stock are entitled to receive cumulative cash dividends at an annual rate of \$7.00 and \$16.875 per share, respectively. Dividends are payable quarterly in arrears on each March 15, June 15, September 15 and December 15. For each full quarter that the Series A Preferred Stock or Series B Preferred Stock, as applicable, is outstanding, and assuming that no shares have been converted into common stock, we are required to pay cash dividends of \$1.75 million and \$2.1 million, respectively. We expect that we will satisfy dividend requirements, if and when declared, from internally generated cash flows.

As of December 31, 2016, we reported \$1,657.1 million in borrowings under the Credit Facility in our condensed consolidated balance sheet, net of \$120.7 million of deferred financing costs, for an aggregate balance of \$1,777.8 million outstanding under the Credit Facility. The unused portion of the Credit Facility as of December 31, 2016 was \$22.2 million. In February 2017, we borrowed the remaining portion of the Credit Facility. Pursuant to the Credit Facility, we maintain the DSRA. As of December 31, 2016, the DSRA balance was \$113.0 million, which is classified as restricted cash in our condensed consolidated balance sheet. The DSRA requirement is scheduled to increase to \$189.0 million in 2017. In addition to the minimum debt service levels, financial covenants under the Credit Facility, as amended to date, include:

an available cash balance of at least \$25 million;

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- a debt-to-equity ratio, which is calculated as the ratio of total net debt to the aggregate of total net debt and total stockholders' equity, of no more than 0.7 to 1, measured each June 30 and December 31;
- specified maximum levels of annual capital expenditures (excluding expenditures on the construction of Iridium NEXT satellites) through the year ending December 31, 2024;
- specified minimum levels of consolidated operational earnings before interest, taxes, depreciation and amortization, or operational EBITDA, for the 12-month periods ending each December 31 and June 30 through December 31, 2017;
- specified minimum cumulative cash flow requirements from customers who have hosted payloads on our satellites, measured each December 31 and June 30, from June 30, 2016 through December 31, 2017;
- a debt service coverage ratio, measured during the repayment period, of not less than 1 to 1.5; and
- specified maximum leverage levels during the repayment period that decline from a ratio of 4.73 to 1 for the twelve months ending June 30, 2018 to a ratio of 2.36 to 1 for the twelve months ending December 31, 2024.

Our available cash balance, as defined by the Credit Facility, was \$382.0 million as of December 31, 2016. Our debt-to-equity ratio was 0.51 to 1 as of December 31, 2016. We were also in compliance with the operational EBITDA and hosted payload cash flow covenants and the annual capital expenditure covenant as of December 31, 2016.

The covenants regarding capital expenditures, operational EBITDA and hosted payload cash flows are calculated in connection with a measurement, which we refer to as available cure amount, that is derived using a complex calculation based on overall cash flows, as adjusted by numerous measures specified in the Credit Facility. In a period in which our capital expenditures exceed, or our operational EBITDA or hosted payload cash flows falls short of, the amount specified in the respective covenant, we would be permitted to allocate available cure amount, if any, to prevent a breach of the applicable covenant. As of December 31, 2016, we had no available cure amount, although it was not necessary for us to apply any available cure amount to maintain compliance with the covenants. The available cure amount has fluctuated significantly from one measurement period to the next, and we expect that it will continue to do so.

The covenants also place limitations on our ability and that of our subsidiaries to carry out mergers and acquisitions, dispose of assets, grant security interests, declare, make or pay dividends, enter into transactions with affiliates, incur additional indebtedness, or make loans, guarantees or indemnities. If we are not in compliance with the financial covenants under the Credit Facility, after any opportunity to cure such non-compliance, or we otherwise experience an event of default under the Credit Facility, the lenders may require repayment in full of all principal and interest outstanding under the Credit Facility. It is unlikely we would have adequate funds to repay such amounts prior to the scheduled maturity of the Credit Facility. If we fail to repay such amounts, the lenders may foreclose on the assets we have pledged under the Credit Facility, which include substantially all of our assets and those of our domestic subsidiaries.

We believe that our liquidity sources will provide sufficient funds for us to meet our liquidity requirements for at least the next 12 months.

Cash and Indebtedness

At December 31, 2016, our total cash equivalents balance was \$371.2 million, our total marketable securities balance was \$39.3 million, and we had an aggregate of \$1,657.1 million of external indebtedness related to borrowings under the Credit Facility.

Cash Flows - Comparison of the Year Ended December 31, 2016 and the Year Ended December 31, 2015

The following table shows our consolidated cash flows from operating, investing and financing activities for the years ended December 31 (in millions):

Statement of Cash Flows	2016	2015	Change
Net cash provided by operating activities	\$225.2	\$217.5	\$7.7
Net cash used in investing activities	\$(242.4)	\$(439.4)	\$197.0
Net cash provided by financing activities	\$202.2	\$197.1	\$5.1

Cash Flows from Operating Activities

Net cash provided by operating activities for the year ended December 31, 2016 increased by \$7.7 million from the prior year. This increase was primarily due to improvements in net income, excluding the 2015 non-cash goodwill impairment, and a decrease in certain product inventory during 2016 as a result of improved inventory management. These changes were offset by payments for the in-orbit portion of insurance to support the Iridium NEXT launch campaign.

Cash Flows from Investing Activities

Net cash used in investing activities for the year ended December 31, 2016 decreased by \$197.0 million primarily due to the increase in net sales of marketable securities of \$107.9 million and the \$89.1 million decrease in capital expenditures related to the construction of Iridium NEXT.

Cash Flows from Financing Activities

Net cash provided by financing activities for the year ended December 31, 2016 increased by \$5.1 million primarily due to the \$21.1 million increase in borrowings under the credit facility, offset by the \$17.0 million increase in the restricted cash balance related to the DSRA.

Effect of exchange rate changes on cash and cash equivalents

The effect of exchange rate changes on cash and cash equivalents was an increase in cash of \$0.5 million for the year ended December 31, 2016 compared to the prior year. The exchange rate changes were primarily due to a modest strengthening of the Russian ruble against the U.S. dollar throughout 2016.

Cash Flows - Comparison of the Year Ended December 31, 2015 and the Year Ended December 31, 2014

The following table shows our consolidated cash flows from operating, investing and financing activities for the years ended December 31 (in millions):

Statement of Cash Flows	2015	2014	Change
Net cash provided by operating activities	\$217.5	\$214.9	\$2.6
Net cash used in investing activities	\$(439.4)	\$(626.3)	\$186.9
Net cash provided by financing activities	\$197.1	\$438.8	\$(241.7)

Cash Flows from Operating Activities

Net cash provided by operating activities for the year ended December 31, 2015 increased by \$2.6 million from the prior year. This increase was primarily due to changes in working capital requirements compared to the prior year.

Cash Flows from Investing Activities

Net cash used in investing activities for the year ended December 31, 2015 decreased by \$186.9 million primarily due to the increase in net sales of marketable securities by \$240.6 million, offset by a \$53.7 million increase in capital expenditures related to the construction of Iridium NEXT.

Cash Flows from Financing Activities

Net cash provided by financing activities for the year ended December 31, 2015 decreased by \$241.7 million primarily due to the receipt of net proceeds of \$219.7 million from the sale of our common stock and Series B Preferred Stock during the second quarter of 2014; no similar proceeds were received in 2015. In addition, borrowings under the Credit Facility decreased by \$21.8 million for the year ended December 31, 2015 compared to the prior year.

Contractual Obligations and Commitments

The following table summarizes our outstanding contractual obligations as of December 31, 2016 (in millions):

	Less than 1 year	1-3 Years	3-5 years	More than 5 years	Total
Contractual Obligations					
Payment obligations:					
Thales ⁽¹⁾	\$287.1	\$212.7	\$—	\$—	\$499.8
SpaceX ⁽²⁾	110.9	31.1	—	—	142.0
Launch and in-orbit insurers ⁽³⁾	59.5	26.9	—	—	86.4
Kosmotras ⁽⁴⁾	—	15.0	—	—	15.0
Boeing ⁽⁵⁾	8.8	12.0	12.0	—	32.8
Debt obligations: ⁽⁶⁾					
Principal	—	288.0	594.0	918.0	1,800.0
Contractual interest	85.8	161.7	128.2	80.0	455.7
Operating lease obligations ⁽⁷⁾	3.6	7.2	7.6	12.2	30.6
Uncertain tax positions ⁽⁸⁾	—	—	—	—	0.9
Unconditional purchase obligations ⁽⁹⁾	8.9	3.5	0.7	—	13.1
Total	\$564.6	\$758.1	\$742.5	\$1,010.2	\$3,076.3

- (1) Thales obligations consist of commitments under the FSD for the design and manufacture of satellites for Iridium NEXT. We previously used the Credit Facility to pay 85% of each invoice received from Thales under the FSD with the remaining 15% funded from cash on hand. The Credit Facility was fully drawn in February 2017, and as a result, we will pay 100% of each invoice received from Thales from cash and marketable securities on hand as well as internally generated cash flow, including contracted cash flows from hosted payloads. As of December 31, 2016, we had made aggregate payments of \$1,753.6 million to Thales. The timing of a portion of the contractual obligation payments to Thales are based on SpaceX's targeted launch schedule to complete the NEXT constellation in mid-2018.
- (2) SpaceX obligations consist of remaining payments to secure SpaceX as the primary launch services provider for Iridium NEXT. The total price for seven launches and a reflight option in the event of launch failure is \$468.1 million. In November 2016, we entered into an eighth launch with SpaceX to launch five spare satellites and share the services with GFZ. The total price under the SpaceX Agreement for the eighth launch is \$67.9 million. As of December 31, 2016, we had made aggregate payments of \$394.0 million to SpaceX. The timing of a portion of the contractual obligation payments to SpaceX are based on SpaceX's targeted launch schedule to complete the NEXT constellation in mid-2018.
- (3) The total premium is \$117.9 million, and as of December 31, 2016, we had made aggregate payments of \$31.5 million. The timing of a portion of the contractual obligation payments are based on SpaceX's targeted launch schedule to complete the NEXT constellation in mid-2018.
- (4) Kosmotras obligations consist of remaining payments to purchase one launch. In June 2013, we exercised an option for one launch to carry two Iridium NEXT satellites. If we do not exercise any additional options, the total cost under the contract including this single launch will be \$51.8 million. As of December 31, 2016, we had made aggregate payments of \$36.8 million to Kosmotras. The timing of a portion of the contractual obligation payments

- to Kosmotras are based on the earliest date we plan to include Kosmotras into our launch profile.
- (5) Boeing obligations represent a new five-year take-or-pay commitment with the execution of the Development Services Agreement and the final payment for the acquisition of the assembled workforce due in December 2017.
 - (6) Debt obligations include amounts drawn under the Credit Facility as of December 31, 2016. We included the \$22.2 million February 2017 draw. We have included interest payments to be made on our fixed and variable rate tranches of the Credit Facility. Interest payments for variable rate debt have been estimated based on the six-month LIBOR forward contracts. We did not include the increase to the DSRA of \$76.0 million, as required under the terms of the Credit Facility, from \$113.0 million, as of December 31, 2016, to \$189.0 million in 2017. The DSRA is classified as restricted cash on the consolidated balance sheet
 - (7) Operating lease obligations do not include payments to landlords covering real estate taxes, common area maintenance and other charges, as such fees are not determinable based upon the provisions of our lease agreements.
 - (8) As of December 31, 2016, we estimated our uncertain tax positions to be \$0.9 million, including penalties and interest. However, we are unable to reasonably estimate the period of the possible future payments for the remaining balance, and therefore the remaining balance has not been reflected in a specified period.
 - (9) Unconditional purchase obligations include our agreement with a supplier for the manufacturing of our devices and various commitments with other vendors that are enforceable, legally binding and have specified terms, including fixed or minimum quantities, minimum or variable price provisions, and a fixed timeline. Unconditional purchase obligations do not include agreements that are cancelable by us without penalty.

The contractual obligations table does not include future payments of dividends on the Series A Preferred Stock or Series B Preferred Stock. Holders of Series A Preferred Stock are entitled to receive cumulative cash dividends when, as and if declared from, and including, the date of original issue at a rate of 7.00% per annum of the \$100 liquidation preference per share, which is equivalent to an annual rate of \$7.00 per share. Holders of Series B Preferred Stock are entitled to receive cumulative cash dividends when, as and if declared from, and including, the date of original issue at a rate of 6.75% per annum of the \$250 liquidation preference per share, which is equivalent to an annual rate of \$16.875 per share. Dividends on both the Series A Preferred Stock and Series B Preferred Stock are payable quarterly in arrears, on March 15, June 15, September 15 and December 15 of each year. Neither the Series A Preferred Stock nor the Series B Preferred stock has a stated maturity date. Holders of Series A Preferred Stock and Series B Preferred Stock may convert some or all of their outstanding shares to common stock at the stated conversion rate. On or after October 3, 2017, we may at our option cause some or all of the shares of Series A Preferred Stock to be automatically converted into shares of common stock at the then prevailing conversion rate if specified conditions are satisfied. On or after May 15, 2019, we may, at our option, convert some or all of the Series B Preferred Stock into the number of shares of common stock that are issuable at the then-applicable conversion rate, subject to specified conditions. We cannot forecast the conversions, if any, of Series A Preferred Stock or Series B Preferred Stock to common stock and thus cannot forecast with certainty the amounts of future dividend payments on outstanding Series A Preferred Stock. As of December 31, 2016, there were 1,000,000 shares of Series A Preferred Stock and 500,000 shares of Series B Preferred Stock outstanding.

Off-Balance Sheet Arrangements

We do not currently have, nor have we had in the last three years, any relationships with unconsolidated entities or financial partnerships, such as entities referred to as structured finance or special purpose entities, which would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Seasonality

Our results of operations have been subject to seasonal usage changes for commercial customers, and our results will be affected by similar seasonality going forward. March through October are typically the peak months for commercial voice services revenue and related subscriber equipment sales. U.S. government revenue and commercial M2M revenue have been less subject to seasonal usage changes.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

The fixed price under the FSD with Thales is denominated in U.S. dollars. As a result, we do not bear any foreign currency exchange risk under the FSD.

We entered into the Credit Facility in October 2010 and have borrowed \$1,777.8 million under the Credit Facility as of December 31, 2016. A portion of the borrowings under the Credit Facility bears interest at a floating rate equal to the LIBOR plus 1.95% and will, accordingly, subject us to interest rate fluctuations in future periods. Had the currently outstanding borrowings under the Credit Facility been outstanding throughout the year ended December 31, 2016, a one-half percentage point increase or decrease in the LIBOR would not have had a material impact on our interest cost for the year.

Financial instruments that potentially subject us to concentrations of credit risk consist primarily of cash and cash equivalents, as well as accounts receivable. We maintain our cash and cash equivalents with financial institutions with high credit ratings and at times maintain the balance of our deposits in excess of federally insured limits. The majority of our cash is swept nightly into a money market fund invested in U.S. treasuries, Agency Mortgage Backed Securities and/or U.S. government guaranteed debt. Accounts receivable are due from both domestic and international customers. We perform credit evaluations of our customers' financial condition and record reserves to provide for estimated credit losses. Accounts payable are owed to both domestic and international vendors.

We also currently hold marketable securities consisting of commercial paper and fixed-income debt securities. As of December 31, 2016, a 100 basis point change in interest rates would not have had a material impact on the fair value of our marketable securities.

Item 8. Financial Statements and Supplementary Data

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Report of Ernst & Young LLP, Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of Iridium Communications Inc.

We have audited the accompanying consolidated balance sheets of Iridium Communications Inc. as of December 31, 2016 and 2015, and the related consolidated statements of operations and comprehensive income, changes in stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2016. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Iridium Communications Inc. at December 31, 2016 and 2015, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 1 to the consolidated financial statements, the Company changed its presentation of debt issuance costs as a result of the adoption of the amendments to the FASB Accounting Standards Codification resulting from Accounting Standards Update No. 2015-03, "Simplifying the Presentation of Debt Issuance Costs," effective January 1, 2016.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Iridium Communications Inc.'s internal control over financial reporting as of December 31, 2016, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 23, 2017, expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

McLean, Virginia

February 23, 2017

Iridium Communications Inc.

Consolidated Balance Sheets

(In thousands, except per share data)

	December 31, 2016	December 31, 2015
Assets		
Current assets:		
Cash and cash equivalents	\$371,167	\$185,665
Marketable securities	39,328	203,329
Accounts receivable, net	57,373	51,668
Inventory	18,204	27,926
Prepaid expenses and other current assets	30,698	13,130
Total current assets	516,770	481,718
Property and equipment, net	2,813,084	2,443,567
Restricted cash	113,139	91,112
Other assets	10,836	8,188
Intangible assets, net	45,796	46,589
Total assets	\$3,499,625	\$3,071,174
Liabilities and stockholders' equity		
Current liabilities:		
Accounts payable	\$11,131	\$31,525
Accrued expenses and other current liabilities	23,840	29,402
Interest payable	14,136	3,720
Deferred revenue	34,087	36,967
Total current liabilities	83,194	101,614
Accrued satellite operations and maintenance expense, net of current portion	13,138	14,182
Credit facility, net	1,657,145	1,388,766
Deferred income tax liabilities, net	361,656	296,832
Deferred revenue, net of current portion	36,417	28,567
Other long-term liabilities	4,317	12,492
Total liabilities	2,155,867	1,842,453
Commitments and contingencies		
Stockholders' equity:		
Series A Preferred Stock, \$0.0001 par value, 1,000 shares authorized, issued and outstanding	-	-
Series B Preferred Stock, \$0.0001 par value, 500 shares authorized, issued and outstanding	-	-
Common stock, \$0.001 par value, 300,000 shares authorized, 95,879 and 95,126 shares issued and outstanding, respectively	96	95

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Additional paid-in capital	1,060,311	1,044,488
Retained earnings	288,797	193,201
Accumulated other comprehensive loss, net of tax	(5,446)	(9,063)
Total stockholders' equity	1,343,758	1,228,721
Total liabilities and stockholders' equity	\$3,499,625	\$3,071,174

See notes to consolidated financial statements

Iridium Communications Inc.

Consolidated Statements of Operations and Comprehensive Income

(In thousands, except per share amounts)

	Year Ended December 31,		
	2016	2015	2014
Revenue:			
Services	\$334,822	\$317,022	\$309,424
Subscriber equipment	74,211	73,615	78,152
Engineering and support services	24,607	20,741	20,981
Total revenue	433,640	411,378	408,557
Operating expenses:			
Cost of services (exclusive of depreciation and amortization)	64,958	60,306	62,085
Cost of subscriber equipment	44,286	40,807	54,569
Research and development	16,079	16,144	17,587
Selling, general and administrative	82,552	81,445	78,636
Depreciation and amortization	49,394	51,834	72,769
Impairment of goodwill	-	87,039	-
Total operating expenses	257,269	337,575	285,646
Operating income	176,371	73,803	122,911
Other income (expense):			
Interest income, net	2,934	3,069	3,640
Undrawn credit facility fees	(1,346)	(3,289)	(5,825)
Other income (expense), net	206	(468)	(4,274)
Total other income (expense)	1,794	(688)	(6,459)
Income before income taxes	178,165	73,115	116,452
Provision for income taxes	(67,133)	(65,992)	(41,463)
Net income	111,032	7,123	74,989
Series A Preferred Stock dividends	7,000	7,000	7,000
Series B Preferred Stock dividends	8,436	8,436	5,320
Net income (loss) attributable to common stockholders	\$95,596	\$(8,313)	\$62,669
Weighted average shares outstanding - basic	95,967	95,097	88,080
Weighted average shares outstanding - diluted	124,875	95,097	109,400
Net income (loss) attributable to common stockholders per share - basic	\$1.00	\$(0.09)	\$0.71
Net income (loss) attributable to common stockholders per share - diluted	\$0.89	\$(0.09)	\$0.69
Comprehensive income:			
Net income	\$111,032	\$7,123	\$74,989
Foreign currency translation adjustments	3,487	(5,777)	(2,325)
Unrealized gain (loss) on marketable securities, net of tax	130	(366)	94
Comprehensive income	\$114,649	\$980	\$72,758

See notes to consolidated financial statements

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Iridium Communications Inc.

Consolidated Statements of Changes in Stockholders' Equity

(In thousands)

	Series A Convertible Preferred Stock		Series B Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)		Retained Earnings	Total Stockholders' Equity
	Shares	Amount	Shares	Amount	Shares	Amount					
Balance at December 31, 2013	1,000	\$ —	—	—	76,690	77	801,262	(689)	138,845	939,495	
Stock-based compensation	—	—	—	—	—	—	10,860	—	—	10,860	
Stock issued in connection with employee stock plan	—	—	—	—	535	1	1,507	—	—	1,508	
Stock withheld to cover employee taxes	—	—	—	—	—	—	(87)	—	—	(87)	
Issuance of Series B Preferred Stock, net of issuance costs	—	—	500	—	—	—	120,753	—	—	120,753	
Issuance of common stock, net of issuance costs	—	—	—	—	16,680	16	98,881	—	—	98,897	
Net income	—	—	—	—	—	—	—	—	74,989	74,989	
Dividends on Series A Preferred Stock	—	—	—	—	—	—	—	—	(7,000)	(7,000)	
Dividends on Series B Preferred Stock	—	—	—	—	—	—	—	—	(5,320)	(5,320)	
Cumulative translation adjustments, net of tax	—	—	—	—	—	—	—	(2,325)	—	(2,325)	
Unrealized gain on marketable securities, net of tax	—	—	—	—	—	—	—	94	—	94	
Balance at December 31, 2014	1,000	—	500	—	93,905	94	1,033,176	(2,920)	201,514	1,231,864	
Stock-based compensation	—	—	—	—	—	—	9,649	—	—	9,649	
Stock issued in connection with	—	—	—	—	1,221	1	2,154	—	—	2,155	

employee stock plan											
Stock withheld to cover employee taxes	—	—	—	—	—	(886)	)	—	—	(886)	
Excess tax benefit from exercise of stock-based compensation	—	—	—	—	—	395	—	—	—	395	
Net income	—	—	—	—	—	—	—	7,123	7,123		
Dividends on Series A Preferred Stock	—	—	—	—	—	—	—	(7,000)	(7,000))	
Dividends on Series B Preferred Stock	—	—	—	—	—	—	—	(8,436)	(8,436))	
Cumulative translation adjustments, net of tax	—	—	—	—	—	—	—	(5,777)	—	(5,777)	
Unrealized loss on marketable securities, net of tax	—	—	—	—	—	—	—	(366)	—	(366)	
Balance at December 31, 2015	1,000	—	500	—	95,126	95	1,044,488	(9,063)	)	193,201	1,228,721
Stock-based compensation	—	—	—	—	—	—	15,973	—	—	—	15,973
Stock issued in connection with employee stock plan	—	—	—	—	753	1	548	—	—	—	549
Stock withheld to cover employee taxes	—	—	—	—	—	—	(627)	)	—	—	(627)
Excess tax benefit from exercise of stock-based compensation	—	—	—	—	—	—	(71)	)	—	—	(71)
Net income	—	—	—	—	—	—	—	—	—	111,032	111,032
Dividends on Series A Preferred Stock	—	—	—	—	—	—	—	—	—	(7,000)	(7,000)
Dividends on Series B Preferred Stock	—	—	—	—	—	—	—	—	—	(8,436)	(8,436)
Cumulative translation adjustments, net of tax	—	—	—	—	—	—	—	3,487	—	—	3,487
Unrealized gain on marketable securities, net of tax	—	—	—	—	—	—	—	130	—	—	130
Balance at December 31, 2016	1,000	\$ -	500	\$ -	95,879	\$ 96	\$ 1,060,311	\$ (5,446))	\$ 288,797	\$ 1,343,758

See notes to consolidated financial statements

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Iridium Communications Inc.

Consolidated Statements of Cash Flows

(In thousands)

	Year Ended December 31,		
	2016	2015	2014
Cash flows from operating activities:			
Net income	\$ 111,032	\$ 7,123	\$ 74,989
Adjustments to reconcile net income to net cash provided by operating activities:			
Non-cash items included in net income			
Deferred income taxes	63,808	63,376	40,226
Depreciation and amortization	49,394	51,834	72,769
Impairment of goodwill	-	87,039	-
Stock-based compensation (net of amounts capitalized)	13,708	8,603	9,601
Excess tax benefit from stock-based compensation	-	(806)	-
Provision for doubtful accounts	703	252	13
Provision for obsolete inventory	1,053	723	931
Loss on equity method investment	-	-	4,130
Amortization of premiums on marketable securities	888	2,030	709
Non-cash foreign currency losses, net	166	196	962
Changes in operating assets and liabilities			
Accounts receivable	(6,037)	(1,843)	3,855
Inventory	9,029	(169)	251
Prepaid expenses and other current assets	(16,613)	(3,644)	1,520
Income tax receivable	-	(144)	679
Other assets	(2,128)	(1,253)	(2,926)
Accounts payable	3,209	3,110	(2,636)
Accrued expenses and other current liabilities	(6,416)	(7,815)	634
Deferred revenue	4,115	9,038	10,603
Accrued satellite and network operation expense, net of current portion	(1,045)	(869)	(1,338)
Other long-term liabilities	333	698	(100)
Net cash provided by operating activities	225,199	217,479	214,872
Cash flows from investing activities:			
Capital expenditures	(405,687)	(494,810)	(441,065)
Purchases of marketable securities	(19,865)	(204,672)	(275,819)
Sales and maturities of marketable securities	183,192	260,108	90,630
Net cash used in investing activities	(242,360)	(439,374)	(626,254)
Cash flows from financing activities:			
Borrowings under the Credit Facility	251,498	230,421	252,198
Payment of deferred financing fees	(11,806)	(14,984)	(17,580)
Restricted cash deposits	(22,027)	(5,009)	(15,889)
Releases from restricted cash	-	-	11,009
Proceeds from exercise of stock options	549	2,154	1,508

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Tax payment upon settlement of stock awards	(627)	(886)	(83)
Excess tax benefits from stock-based compensation	-	806	-
Proceeds from issuance of Series B Preferred Stock, net of issuance costs	-	-	120,753
Proceeds from issuance of common stock, net of issuance costs	-	-	98,897
Payment of Series A Preferred Stock dividends	(7,000)	(7,000)	(7,000)
Payment of Series B Preferred Stock dividends	(8,436)	(8,436)	(4,969)
Net cash provided by financing activities	202,151	197,066	438,844
Effect of exchange rate changes on cash and cash equivalents	512	(755)	(2,555)
Net increase (decrease) in cash and cash equivalents	185,502	(25,584)	24,907
Cash and cash equivalents, beginning of period	185,665	211,249	186,342
Cash and cash equivalents, end of period	\$371,167	\$185,665	\$211,249

See notes to consolidated financial statements

Iridium Communications Inc.

Consolidated Statements of Cash Flows, continued

(In thousands)

	Year Ended December 31,		
	2016	2015	2014
Supplemental cash flow information:			
Interest paid	\$22,910	\$18,878	\$15,009
Income taxes paid, net	\$1,391	\$3,429	\$184
Supplemental disclosure of non-cash investing activities:			
Property and equipment received but not paid for yet	\$2,753	\$26,770	\$16,566
Interest capitalized but not paid	\$14,136	\$12,232	\$9,589
Capitalized amortization of deferred financing costs	\$28,688	\$18,372	\$11,174
Capitalized paid-in-kind interest	\$52,873	\$43,073	\$34,147
Capitalized stock-based compensation	\$2,265	\$1,046	\$1,259
Supplemental disclosure of non-cash financing activities:			
Dividends accrued on Series A Preferred Stock	\$292	\$292	\$292
Dividends accrued on Series B Preferred Stock	\$351	\$351	\$351

See notes to consolidated financial statements

Iridium Communications Inc.

Notes to Consolidated Financial Statements

December 31, 2016

1. Organization and Business

Iridium Communications Inc. (the “Company”), a Delaware corporation, offers voice and data communications services and products to businesses, U.S. and international government agencies and other customers on a global basis. The Company is a provider of mobile voice and data communications services via a constellation of low earth orbiting satellites. The Company holds various licenses and authorizations from the U.S. Federal Communications Commission (the “FCC”) and from foreign regulatory bodies that permit the Company to conduct its business, including the operation of its satellite constellation.

2. Significant Accounting Policies and Basis of Presentation

Principles of Consolidation and Basis of Presentation

The Company has prepared the consolidated financial statements in accordance with accounting principles generally accepted in the United States (“U.S. GAAP”). The accompanying consolidated financial statements include the accounts of (i) the Company, (ii) its wholly owned subsidiaries, and (iii) all less than wholly owned subsidiaries that the Company controls. All intercompany transactions and balances have been eliminated.

Adopted Accounting Pronouncements

In April 2015, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) No. 2015-03, Interest—Imputation of Interest (Subtopic 835-30), Simplifying the Presentation of Debt Issuance Costs (“ASU 2015-03”). ASU 2015-03 requires that debt issuance costs related to a recognized debt liability be presented in the balance sheet as a direct deduction from the carrying amount of that debt liability, consistent with debt discounts. The recognition and measurement guidance for debt issuance costs is not affected by the amendment. Effective January 1, 2016, the Company applied the new guidance retrospectively to all prior periods presented in the accompanying financial statements. The adoption had no effect on the Company’s condensed consolidated statements of operations and comprehensive income, and condensed consolidated statements of cash flows for each of the periods ended December 31, 2016 and 2015. The implementation of this accounting standard resulted in a reduction in the deferred financing costs asset and in the credit facility as of December 31, 2016 and December 31, 2015, respectively, as shown below.

2016

2015

	(In thousands)	
Credit facility	\$1,777,789	\$1,521,822
Deferred financing costs	(120,644)	(133,056)
Credit facility, net	\$1,657,145	\$1,388,766

Recent Accounting Developments

In March 2016, the FASB issued ASU No. 2016-09, Compensation—Stock Compensation, Improvements to Employee Share-Based Payment Accounting (“ASU 2016-09”). ASU 2016-09 addresses multiple changes. The amendment requires all income tax effects of awards to be recognized in the income statement when the awards vest or are settled. It also will allow an employer to repurchase more of an employee’s shares for tax withholding purposes without triggering liability accounting and to make a policy election to account for forfeitures as they occur. This ASU is effective for public business entities for fiscal years beginning after December 15, 2016, and interim periods within those fiscal years. The Company will be required to make the disclosures about a change in accounting principle, but will not have to quantify the income statement effect of the change in the period of adoption. The Company anticipates adopting relevant changes prospectively and expects the impact to its condensed consolidated statements of operations and comprehensive income to be immaterial.

In February 2016, the FASB issued ASU No. 2016-02, Leases (“ASU 2016-02”). ASU 2016-02 requires lessees to put most leases on their balance sheets but recognize expenses on their income statements in a manner similar to current accounting. This ASU is effective for public business entities in fiscal years beginning after December 15, 2018, including interim periods within those years. Early adoption is permitted and reporting organizations are required to use a modified retrospective approach for leases that exist or are entered into after the beginning of the earliest comparative period in the financial statements. The Company is currently evaluating the effect ASU 2016-02 may have on its condensed consolidated financial statements and related disclosures, but recognizing the lease liability and related right-of-use asset will impact its balance sheet.

In July 2015, the FASB issued ASU No. 2015-11, Simplifying the Measurement of Inventory (“ASU 2015-11”). ASU 2015-11 requires that inventory within the scope of the guidance be measured at the lower of cost and net realizable value. Inventory measured using last-in, first-out and retail inventory method are excluded from this new guidance. This ASU replaces the concept of market with the single measurement of net realizable value and is intended to create efficiencies for preparers and more closely aligns U.S. GAAP with IFRS. This ASU is effective for public business entities in fiscal years beginning after December 15, 2016, including interim periods within those years. The Company will apply this guidance prospectively beginning January 1, 2017, as required. The Company does not anticipate a material impact on its inventory balances or cost of equipment expenses.

In May 2014, the FASB and the International Accounting Standards Board jointly issued a comprehensive new revenue recognition standard, Accounting Standards Update No. 2014-09, Revenue from Contracts with Customers (“ASU 2014-09”) that will supersede nearly all existing revenue recognition guidance under U.S. GAAP. Under the new standard, revenue is recognized when a customer obtains control of promised goods or services and is recognized in an amount that reflects the consideration which the entity expects to receive in exchange for those goods or services. In addition, the standard requires disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The FASB has issued several amendments to the standard, including clarification on accounting for licenses of intellectual property, identifying performance obligations, and most recently, technical corrections on the interpretation of the new guidance. In July 2015, the FASB voted to defer the effective date of ASU 2014-09 for public entities to be effective for annual and interim periods beginning after December 15, 2017. Early adoption would be permitted no earlier than the original effective date beginning after December 15, 2016. ASU 2014-09 becomes effective for the Company in the first quarter of fiscal 2018 and the Company anticipates using the full retrospective transition method.

The Company has established a project team in order to analyze the effect of the standard on its revenue streams by reviewing its current accounting policies and practices to identify potential differences which would result from applying the requirements of the new standard to its revenue contracts. The Company has identified each revenue stream and is continuing to assess all potential effects of the standard. The Company has not yet completed its review of the effect of this guidance.

Use of Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of income and expenses during the reporting period. Actual results could differ materially from those estimates.

Fair Value Measurements

The Company evaluates assets and liabilities subject to fair value measurements on a recurring and non-recurring basis to determine the appropriate level to classify them for each reporting period. This determination requires significant judgments to be made by management of the Company. The instruments identified as subject to fair value measurements on a recurring basis are cash and cash equivalents, marketable securities, prepaid expenses and other current assets, accounts receivable, accounts payable and accrued expenses and other current liabilities. Fair value is the price that would be received from the sale of an asset or paid to transfer a liability assuming an orderly transaction in the most advantageous market at the measurement date. U.S. GAAP establishes a hierarchical disclosure framework which prioritizes and ranks the level of observability of inputs used in measuring fair value. The fair value hierarchy consists of the following tiers:

Level 1, defined as observable inputs such as quoted prices in active markets for identical assets or liabilities;

Level 2, defined as observable inputs other than Level 1 prices such as quoted prices for similar assets or liabilities; quoted prices in markets that are not active; or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; and

Level 3, defined as unobservable inputs in which little or no market data exists, therefore requiring an entity to develop its own assumptions.

The carrying values of short-term financial instruments (primarily cash and cash equivalents, prepaid expenses and other current assets, accounts receivable, accounts payable, and accrued expenses and other current liabilities) approximate their fair values because of their short-term nature. The fair value of the Company's investments in money market funds approximates its carrying value; such instruments are classified as Level 1 and are included in cash and cash equivalents on the accompanying consolidated balance sheets. The fair value of the Company's investments in commercial paper and short-term U.S. agency securities with original maturities of less than ninety days approximates their carrying value; such instruments are classified as Level 2 and are included in cash and cash equivalents on the accompanying consolidated balance sheets.

The fair value of the Company's investments in fixed-income debt securities and commercial paper with original maturities of greater than ninety days are obtained using similar investments traded on active securities exchanges and are classified as Level 2. For fixed

income securities that do not have quoted prices in active markets, the Company uses third-party vendors to price its debt securities resulting in classification as Level 2. All fixed-income securities are included in marketable securities on the accompanying consolidated balance sheets.

Concentrations of Credit Risk

Financial instruments that potentially subject the Company to concentrations of credit risk consist primarily of cash and cash equivalents, marketable securities, and receivables. The majority of cash is swept nightly into a money market fund invested in U.S. treasuries, Agency Mortgage Backed Securities and/or U.S. Government guaranteed debt. While the Company maintains its cash and cash equivalents with financial institutions with high credit ratings, it often maintains those deposits in federally insured financial institutions in excess of federally insured (FDIC) limits. The Company's marketable securities are highly-rated corporate and foreign fixed-income debt securities and commercial paper with an original maturity in excess of ninety days. The Company performs credit evaluations of its customers' financial condition and records reserves to provide for estimated credit losses. Accounts receivable are due from both domestic and international customers.

Cash, Cash Equivalents and Restricted Cash

The Company considers all highly liquid investments with original maturities of ninety days or less to be cash equivalents. These investments, along with cash deposited in institutional money market funds, regular interest bearing depository accounts and non-interest bearing depository accounts, are classified as cash and cash equivalents on the accompanying consolidated balance sheets. The Company is required to maintain a minimum cash reserve for debt service related to its \$1.8 billion loan facility (the "Credit Facility"). As of December 31, 2016 and 2015, the Company's restricted cash balance, which includes a minimum cash reserve for debt service related to the Credit Facility and the interest earned on these amounts, was \$113.0 million and \$91.0 million, respectively. For further discussion on the cash reserve for debt service related to the Credit Facility, see the Credit Facility footnote below.

Marketable Securities

Marketable securities consist of fixed-income debt securities and commercial paper with an original maturity in excess of ninety days. These investments are classified as available-for-sale and are included in marketable securities within current assets on the accompanying consolidated balance sheets. All investments are carried at fair value. Unrealized gains and losses, net of taxes, are reported as a component of other comprehensive income or loss. The specific identification method is used to determine the cost basis of the marketable securities sold. There were no material realized gains or losses on the sale of marketable securities for the years ended December 31, 2016 and 2015. The Company regularly monitors and evaluates the fair value of its investments to identify other-than-temporary declines in value. The Company determined that any decline in fair value of these investments is temporary as the Company does not intend to sell these securities and it is not likely that the Company will be required to sell the securities before the recovery of their amortized cost basis.

Accounts Receivable

Trade accounts receivable are recorded at the invoiced amount and are subject to late fee penalties. Management develops its estimate of an allowance for uncollectible receivables based on the Company's experience with specific customers, aging of outstanding invoices, its understanding of customers' current economic circumstances and its own judgment as to the likelihood that the Company will ultimately receive payment. The Company writes off its accounts receivable when balances ultimately are deemed uncollectible. The allowance for doubtful accounts was \$1.0 million and \$0.6 million as of December 31, 2016 and 2015, respectively.

Foreign Currencies

The functional currency of the Company's foreign consolidated subsidiaries is the local currency. Assets and liabilities of its foreign subsidiaries are translated to U.S. dollars based on exchange rates at the end of the reporting period. Income and expense items are translated at the weighted-average exchange rates prevailing during the reporting period. Translation adjustments are accumulated in a separate component of stockholders' equity. Transaction gains or losses are classified as other income (expense), net in the accompanying consolidated statements of operations and comprehensive income.

Internally Developed Software

The Company capitalizes the costs of acquiring, developing and testing software to meet its internal needs. Capitalization of costs associated with software obtained or developed for internal use commences when the preliminary project stage is complete and it is probable that the project will be completed and used to perform the function intended. Capitalized costs include only (i) external direct cost of materials and services consumed in developing or obtaining internal-use software and (ii) payroll and payroll-related costs for employees who are directly associated with, and devote time to, the internal-use software project. Capitalization of such costs ceases no later than the point at which the project is substantially complete and ready for its intended use. Internal use software costs are amortized once the software is placed in service using the straight-line method over periods ranging from three to seven years.

Deferred Financing Costs

Direct and incremental costs incurred in connection with securing debt financing are deferred and are amortized as additional interest expense using the effective interest method over the term of the related debt. As of December 31, 2016 and 2015, the Company had deferred approximately \$120.7 million and \$133.1 million, respectively, of direct and incremental financing costs, net of amortization, associated with securing debt financing for Iridium NEXT, the Company's next-generation satellite constellation.

Capitalized Interest

Interest costs associated with financing the Company's assets during the construction period of Iridium NEXT have been capitalized. Capitalized interest costs for the years ended December 31, 2016, 2015 and 2014 were \$106.4 million, \$83.1 million and \$62.0 million, respectively.

Inventory

Inventory consists primarily of finished goods, although the Company at times also maintains an inventory of raw materials from third-party manufacturers. The Company outsources manufacturing of subscriber equipment to a third-party manufacturer and purchases accessories from third-party suppliers. The Company's cost of inventory includes an allocation of overhead, including payroll and payroll-related costs of employees directly involved in bringing inventory to its existing condition, and freight. Inventories are valued using the average cost method and are carried at the lower of cost or market. Accordingly, the Company recorded expenses of \$1.1 million, \$0.7 million and \$0.9 million, for the years ended December 31, 2016, 2015 and 2014, respectively, included within the cost of subscriber equipment for excess and obsolete inventory. The expenses for the year ended December 31, 2016 were primarily related to certain handset parts and accessories; the expenses for the year ended December 31, 2015 were primarily related to Iridium Pilot equipment; and the expenses for the year ended December 31, 2014 were primarily related to Iridium 9505 handset parts and accessories.

The Company has a manufacturing agreement with Benchmark Electronics Inc. ("Benchmark") to manufacture subscriber equipment. Pursuant to the agreement, the Company may be required to purchase excess materials if the materials are not used in production within the periods specified in the agreement. Benchmark will then repurchase such materials from the Company at the same price paid by the Company, as required for the production of the subscriber equipment.

Stock-Based Compensation

The Company accounts for stock-based compensation at fair value. The fair value of stock options is determined at the grant date using the Black-Scholes option pricing model. The fair value of restricted stock units ("RSUs") is equal to the closing price of the underlying common stock on the grant date. The fair value of an award that is ultimately expected to vest is recognized on a straight-line basis over the requisite service or performance period and is classified in the consolidated statements of operations and comprehensive income in a manner consistent with the classification of the recipient's compensation. The expected vesting of the Company's performance-based RSUs is based upon the probability that the Company achieves the defined performance goals. The level of achievement of performance goals, if any, is determined by the compensation committee. Stock-based awards to non-employee consultants are expensed at their fair value as services are provided according to the terms of their agreements and are classified in selling, general and administrative expenses in the accompanying consolidated statements of operations and comprehensive income. Classification of stock-based compensation for the years ended December 31, 2016 and 2015 is as follows:

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	2016	2015
	(In thousands)	
Property and equipment, net	\$ 1,906	\$ 998
Inventory	359	48
Cost of subscriber equipment	56	135
Cost of services (exclusive of depreciation and amortization)	1,655	721
Research and development	457	221
Selling, general and administrative	11,540	7,526
Total stock-based compensation	\$ 15,973	\$ 9,649

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Property and Equipment

Property and equipment is carried at cost less accumulated depreciation. Depreciation is calculated using the straight-line method over the following estimated useful lives:

First-generation satellites	15-19 years
Ground system	5-7 years
Equipment	3-5 years
Internally developed software and purchased software	3-7 years
Building	39 years
Building improvements	5-39 years
Leasehold improvements	shorter of useful life or remaining lease term

The estimated useful lives of the Company's first-generation satellites reflect the period of expected use for each satellite. Satellites are depreciated on a straight-line basis through the date they will be replaced by next-generation satellites. The Company began deployment of its next-generation satellite constellation ("Iridium NEXT") in January 2017, and, based on the current launch schedule, the Company expects the final launch to occur in 2018. The Company's next-generation satellites will be depreciated on a straight-line basis over the estimated useful life which is currently estimated to be 12.5 years.

The Company calculates depreciation expense using the straight-line method and evaluates the appropriateness of the useful life used in this calculation on a quarterly basis or as events occur that require additional assessment. In addition to the changes made in prior years, in 2016, the Company updated its estimate of the first-generation satellites' remaining useful lives based on the continued refinement of the launch schedule, health of the existing constellation, and deployment plan for the Company's next-generation satellite constellation. As a result, the estimated useful lives of the first-generation satellites have been extended and are consistent with the expected deployment of the next-generation satellites. The \$2.4 million decrease in depreciation expense for the year ended December 31, 2016 compared to the prior year is primarily related to the continued refinement in the estimated useful lives, partially offset by the addition of new assets and the impairment of two lost satellites during the second quarter of 2016. For the year ended December 31, 2016, the impact of the change in useful lives of the first-generation satellites resulted in an increase in basic and diluted net income per share of \$0.04 and \$0.03, respectively. The impact for the year ended December 31, 2015, resulted in an increase in both basic and diluted net loss per share by \$0.01.

Repairs and maintenance costs are expensed as incurred.

Long-Lived Assets

The Company assesses its long-lived assets for impairment when indicators of impairment exist. Recoverability of assets is measured by comparing the carrying amounts of the assets to the future undiscounted cash flows expected to be generated by the assets. Any impairment loss would be measured as the excess of the assets' carrying amount over their fair value.

The Company lost communication with three of its first-generation satellites in 2014. As a result, impairment charges totaling \$2.2 million were recorded within depreciation expense during 2014. The Company replaced the lost satellites with in-orbit spares. No satellite loss occurred during 2015. During the second quarter of 2016 two first-generation satellites ceased operations. As a result, impairment charges totaling \$0.3 million were recorded within depreciation

expense during 2016. The Company does not believe the loss of these satellites in 2016 is an indicator of impairment of the remaining individual first-generation satellites or the constellation as of December 31, 2016.

Goodwill and Other Intangible Assets

Goodwill

Goodwill is the excess of the acquisition cost of businesses over the fair value of the identifiable net assets acquired. Impairment testing for goodwill is performed during the fourth quarter of each annual period or more frequently if indicators of potential impairment exist. Goodwill impairment is determined using a two-step process. The first step involves a comparison of the estimated fair value of a reporting unit to its carrying amount, including goodwill. If the estimated fair value of a reporting unit exceeds its carrying amount, goodwill of the reporting unit is not impaired and the second step of the impairment test is not necessary. If the carrying amount of a reporting unit exceeds its estimated fair value, then the second step of the goodwill impairment test must be performed. To measure the amount of impairment loss, if any, the implied fair value of goodwill is determined in the same manner as the amount of goodwill recognized in a business combination. Specifically, the estimated fair value of the reporting unit is allocated to all of the assets and liabilities of that unit (including any unrecognized intangible assets) as if the reporting unit had been acquired in a business combination and the fair value of the reporting unit was the price paid to acquire the reporting unit. If the carrying amount of

the reporting unit's goodwill exceeds the implied fair value of that goodwill, an impairment loss is recognized in an amount equal to that excess.

The Company operates in a single reporting unit, and the possibility of impairment is assessed by comparing the carrying amount of the reporting unit to its estimated fair value. The most recent annual assessment of goodwill and indefinite-lived assets was performed on October 1, 2015 (the "2015 Analysis").

Historically, the Company has determined the estimated fair value of the reporting unit based on a combination of the market approach using comparable public companies (guideline company method) and the income approach using discounted cash flows. These valuation techniques have involved the use of estimates and assumptions. However, as a result of a decrease in the Company's stock price and related market capitalization (one-year low) around the test date of the 2015 Analysis, management determined that the Company's market capitalization represented the best estimate of fair value of the reporting unit as of the test date.

Upon completion of step one of the 2015 Analysis, the Company determined the carrying value of the reporting unit exceeded its fair value as a result of a decrease in the Company's stock price and related market capitalization. The Company performed a step two analysis to compare the carrying amount of goodwill to the implied fair value of that goodwill where the Company determined the estimated fair values of the assets and liabilities of its single reporting unit. The implied fair value of goodwill for the Company's single reporting unit was determined in the same manner as utilized to recognize goodwill in a business combination. The implied fair value of goodwill was measured as the excess of the fair value of the Company's single reporting unit over the fair value of its assets and liabilities. As a result of the step two test, the Company recorded a non-cash goodwill impairment charge of \$87.0 million during the fourth quarter of 2015. The Company did not record an impairment of goodwill during the year ended December 31, 2014. The Company had no goodwill as of December 31, 2016 and 2015.

Intangible Assets Not Subject to Amortization

A portion of the Company's intangible assets are spectrum, licenses, and trade names, which are indefinite-lived intangible assets. The Company reevaluates the useful life determination for these assets each reporting period to determine whether events and circumstances continue to support an indefinite useful life. The most recent annual assessment of indefinite-lived assets was performed as of October 1, 2016 (the "2016 Analysis"). In this 2016 Analysis, the Company chose the optional qualitative assessment to test indefinite-lived intangible assets for impairment. The qualitative assessment permits companies to assess whether it is more likely than not that an indefinite-lived intangible asset is impaired. If a company concludes based on the qualitative assessment that it is not more likely than not that the fair value of an indefinite-lived intangible asset is less than its carrying amount, it would not have to quantitatively determine the assets' fair value. Based on the results of the 2016 Analysis, it was not more likely than not that the intangible assets not subject to amortization were impaired. Therefore, a quantitative analysis was not necessary, and no impairment charge was recorded during the period.

Intangible Assets Subject to Amortization

The Company's intangible assets that do have finite lives, consisting of intellectual property, are amortized over their useful lives and reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of the asset may not be recoverable. If any indicators were present, the Company would test for recoverability by comparing the carrying amount of the asset to the net undiscounted cash flows expected to be generated from the asset. If those net undiscounted cash flows do not exceed the carrying amount (i.e., the asset is not recoverable), the Company would perform the next step, which is to determine the fair value of the asset and record an impairment loss, if any. The Company evaluates the useful lives for these intangible assets each reporting period to determine whether events and circumstances warrant a revision in their remaining useful lives.

Asset Retirement Obligations

Liabilities arising from legal obligations associated with the retirement of long-lived assets are required to be measured at fair value and recorded as a liability. Upon initial recognition of a liability for retirement obligations, a company must record an asset, which is depreciated over the life of the asset to be retired.

As of December 31, 2016, under certain circumstances, each of the U.S. government, The Boeing Company (“Boeing”), and Motorola Solutions, Inc. (“Motorola Solutions”) has the right to require the de-orbit of the Company’s satellite constellation. One such right the U.S. government holds is to require the Company to de-orbit the satellite constellation at any time after January 1, 2015. In the event the Company was required to effect a mass de-orbit, pursuant to the amended and restated operations and maintenance agreement (the “O&M Agreement”) by and between the Company and Boeing, the Company would be required to pay Boeing \$18.4 million, plus an amount equivalent to the premium for mass de-orbit insurance coverage payable to the insurer (\$2.5 million as of December 31, 2016). The Company has concluded that each of the foregoing de-orbit rights meets the definition of an asset retirement obligation. However, the Company currently does not believe the U.S. government, Boeing or Motorola Solutions will exercise their respective de-orbit rights. As a result, the Company believes the likelihood of any future cash outflows associated with the mass de-orbit

obligation is remote and has recorded an asset retirement obligation with respect to the potential mass de-orbit of approximately \$0.2 million at December 31, 2016, which is included in other long-term liabilities on the accompanying consolidated balance sheet.

There are other circumstances in which the Company could be required, either by the U.S. government or for technical reasons, to de-orbit an individual satellite; however, the Company believes that such costs would not be significant relative to the costs associated with the ordinary operations of the satellite constellation.

Revenue Recognition

The Company derives its revenue primarily as a wholesaler of satellite communications products and services. The primary types of revenue include (i) service revenue (access and usage-based airtime fees), (ii) subscriber equipment revenue, and (iii) revenue generated by providing engineering and support services to commercial and government customers.

Wholesaler of satellite communications products and services

Pursuant to wholesale agreements, the Company sells its products and services to service providers who, in turn, sell the products and services to other distributors or directly to the end users. The Company recognizes revenue when services are performed or delivery has occurred, evidence of an arrangement exists, the fee is fixed or determinable, and collection is reasonably assured, as follows:

Contracts with multiple elements

At times, the Company sells services and equipment through multi-element arrangements that bundle equipment, airtime and other services. For multi-element revenue arrangements when the Company sells services and equipment in bundled arrangements and determines that it has separate units of accounting, the Company allocates the bundled contract price among the various contract deliverables based on each deliverable's relative selling price. The selling price used for each deliverable is based on vendor-specific objective evidence when available, third-party evidence when vendor-specific objective evidence is not available, or the estimated selling price when neither vendor-specific evidence nor third party evidence is available. The Company determines vendor-specific objective evidence of selling price by assessing sales prices of subscriber equipment, airtime and other services when they are sold to customers on a stand-alone basis. The Company's determination of best estimate of selling price is consistent with its determination of vendor-specific objective evidence of selling price, and the Company assesses qualitative and quantitative market factors and entity-specific factors when estimating the selling price. When the Company determines the elements are not separate units of accounting, the Company recognizes revenue on a combined basis as the last element is delivered.

Service revenue sold on a stand-alone basis

Service revenue is generated from the Company's service providers through usage of its satellite system and through fixed monthly access fees per user charged to service providers. Revenue for usage is recognized when usage occurs. Revenue for fixed-per-user access fees is recognized ratably over the period in which the services are provided to the end user. The Company sells prepaid services in the form of e-vouchers and prepaid cards. A liability is established equal to the cash paid upon purchase for the e-voucher or prepaid card. The Company recognizes revenue from the prepaid services upon the use of the e-voucher or prepaid card by the customer or upon the expiration of the right to access the prepaid service. While the terms of prepaid e-vouchers can be extended by the purchase of additional e-vouchers, prepaid e-vouchers may not be extended beyond three or four years, dependent on the initial expiry period when purchased. The Company does not offer refunds for unused prepaid services.

Subscriber equipment sold on a stand-alone basis

The Company recognizes subscriber equipment sales and the related costs when title to the equipment (and the risks and rewards of ownership) passes to the customer, typically upon shipment.

Services sold to the U.S. government

The Company provides airtime and airtime support to U.S. government and other authorized customers pursuant to the Enhanced Mobile Satellite Services (“EMSS”) contract managed by the Defense Information Systems Agency (“DISA”). Effective October 22, 2013, the Company executed a new five-year EMSS contract, managed by DISA. Under the terms of this new agreement, authorized customers continue to utilize airtime services, provided through the U.S. Department of Defense’s (“DoD”) dedicated gateway. These services include unlimited global secure and unsecure voice, low and high-speed data, paging, broadcast and Distributed Tactical Communications Services (“DTCS”) services for an unlimited number of DoD and other federal subscribers. The fixed-price rate for the remaining contract years, which run from October 22 through the following October 21 of each year, is \$88 million per year. Under this contract, revenue is based on the annual fee for the fixed-price contract with unlimited subscribers, and is recognized on a straight-line basis over each contractual year.

The U.S. government purchases its subscriber equipment from third-party distributors and not directly from the Company.

Government engineering and support services

The Company provides maintenance services to the U.S. government's dedicated gateway. This revenue is recognized ratably over the periods in which the services are provided; the related costs are expensed as incurred.

Other government and commercial engineering and support services

The Company also provides engineering services to assist customers in developing new technologies for use on the Company's satellite system. The revenue associated with these services is recorded when the services are rendered, typically on a proportional performance method of accounting based on the Company's estimate of total costs expected to complete the contract, and the related costs are expensed as incurred. Revenue on cost-plus-fixed-fee contracts is recognized to the extent of estimated costs incurred plus the applicable fees earned. The Company considers fixed fees under cost-plus-fixed-fee contracts to be earned in proportion to the allowable costs incurred in performance of the contract.

Warranty Expense

The Company provides the first end-user purchaser of its subscriber equipment a warranty for one to five years from the date of purchase by such first end-user, depending on the product. The Company maintains a warranty reserve based on historical experience of warranty costs and expected occurrences of warranty claims on equipment. Costs associated with warranties, including equipment replacements, repairs, freight, and program administration, are recorded as cost of subscriber equipment in the accompanying consolidated statements of operations and comprehensive income. The Company's warranty provision for the year ended December 31, 2016 increased by \$2.3 million compared to the prior year. This increase was primarily the result of increased sales of Iridium Pilot.

Changes in the warranty reserve for the years ended December 31, 2016 and 2015 were as follows:

	2016	2015
	(In thousands)	
Balance at beginning of the period	\$3,320	\$7,381
Provision	604	(1,715)
Utilization	(1,594)	(2,346)
Balance at end of the period	\$2,330	\$3,320

Research and Development

Research and development costs are charged to expense in the period in which they are incurred.

Advertising Costs

Costs associated with advertising and promotions are expensed as incurred. Advertising expenses were \$0.5 million for each of the years ended December 31, 2016, 2015 and 2014.

Income Taxes

The Company accounts for income taxes using the asset and liability approach, which requires the recognition of tax benefits or expenses for temporary differences between the financial reporting and tax bases of assets and liabilities. A valuation allowance is established when necessary to reduce deferred tax assets to the amounts expected to be realized. The Company also recognizes a tax benefit from uncertain tax positions only if it is “more likely than not” that the position is sustainable based on its technical merits. The Company’s policy is to recognize interest and penalties on uncertain tax positions as a component of income tax expense.

Net Income (Loss) Per Share

The Company calculates basic net income (loss) per share by dividing net income (loss) attributable to common stockholders by the weighted-average number of shares of common stock outstanding during the period. Diluted net income (loss) per share takes into account the effect of potential dilutive common shares when the effect is dilutive. The effect of potential dilutive common shares, including common stock issuable upon exercise of outstanding stock options and stock purchase warrants, is computed using the treasury stock method. The effect of potential dilutive common shares from the conversion of the outstanding convertible preferred securities is computed using the as-if converted method at the stated conversion rate. The Company’s unvested RSUs awarded to the board of directors contain non-forfeitable rights to dividends and therefore are considered to be participating securities in periods of

net income. The calculation of basic and diluted net income (loss) per share excludes net income attributable to these unvested RSUs from the numerator and excludes the impact of these unvested RSUs from the denominator.

3. Cash and Cash Equivalents and Marketable Securities

Cash and Cash Equivalents

The following table summarizes the Company's cash and cash equivalents as of December 31, 2016 and 2015:

	2016	2015	Recurring Fair Value Measurement
	(In thousands)		
Cash and cash equivalents:			
Cash	\$102,194	\$67,005	
Money market funds	266,478	118,660	Level 1
Commercial paper	2,495	—	Level 2
Total cash and cash equivalents	\$371,167	\$185,665	

Marketable Securities

The following tables summarize the Company's marketable securities as of December 31, 2016 and 2015:

	As of December 31, 2016				Recurring Fair Value Measurement	
	Gross		Gross			Estimated
	Amortized		Unrealized			
	Cost	Unrealized Gains	Unrealized Losses	Fair Value		
	(In thousands)					
Fixed-income debt securities	\$30,037	\$ 14	\$ (11	) \$ 30,040	Level 2
U.S. Treasury notes	9,283	7	(2	) 9,288	Level 2
Total marketable securities	\$39,320	\$ 21	\$ (13	) \$ 39,328	

	As of December 31, 2015				Recurring Fair Value Measurement	
	Gross		Gross			Estimated
	Amortized		Unrealized			
	Cost	Unrealized Gains	Unrealized Losses	Fair Value		
	(In thousands)					
Fixed-income debt securities	\$181,636	\$ 4	\$ (200	) \$ 181,440	Level 2
Commercial paper	9,821	—	(1) 9,820	Level 2	
U.S. Treasury notes	12,079	—	(10) 12,069	Level 2	

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Total marketable securities \$203,536 \$ 4 \$ (211) \$203,329

The following table presents the contractual maturities of the fixed income debt securities, commercial paper and U.S. Treasury notes held as of December 31, 2016 and 2015:

	December 31, 2016		December 31, 2015	
	Amortized Cost (In thousands)	Fair Value (In thousands)	Amortized Cost (In thousands)	Fair Value (In thousands)
Mature within one year	\$32,776	\$32,788	\$169,728	\$169,619
Mature after one year and within three years	6,544	6,540	33,808	33,710
Total	\$39,320	\$39,328	\$203,536	\$203,329

The decrease in marketable securities from December 31, 2015 to December 31, 2016 is due to the Company selling some of its investments during 2016 and utilizing the proceeds to support the construction of Iridium NEXT.

4. Equity Transactions

Preferred Stock

The Company is authorized to issue 2.0 million shares of preferred stock with a par value of \$0.0001 per share. As described below, the Company issued 1.0 million shares of preferred stock in the fourth quarter of 2012 and 0.5 million shares of preferred stock in the second quarter of 2014. The remaining 0.5 million authorized shares of preferred stock remain undesignated and unissued as of December 31, 2016.

Series A Cumulative Perpetual Convertible Preferred Stock

In the fourth quarter of 2012, the Company issued 1.0 million shares of its 7.00% Series A Cumulative Perpetual Convertible Preferred Stock (the "Series A Preferred Stock") in a private offering. The Company received proceeds of \$96.5 million from the sale of the Series A Preferred Stock, net of the aggregate \$3.5 million in initial purchaser discount and offering costs. The net proceeds of this offering were used to partially fund the construction and deployment of Iridium NEXT and for other general corporate purposes.

Holder of Series A Preferred Stock are entitled to receive cumulative cash dividends at a rate of 7.00% per annum of the \$100 liquidation preference per share (equivalent to an annual rate of \$7.00 per share). Dividends are payable quarterly in arrears on each March 15, June 15, September 15 and December 15. The Series A Preferred Stock does not have a stated maturity date and is not subject to any sinking fund or mandatory redemption provisions. The Series A Preferred Stock ranks senior to the Company's common stock and on parity with the Company's 6.75% Series B Cumulative Perpetual Convertible Preferred Stock (the "Series B Preferred Stock") with respect to dividend rights and rights upon the Company's liquidation, dissolution or winding-up. Holders of Series A Preferred Stock generally have no voting rights except for limited voting rights if the Company fails to pay dividends for six or more quarterly periods (whether or not consecutive) and in other specified circumstances. Holders of Series A Preferred Stock may convert some or all of their outstanding Series A Preferred Stock at an initial conversion rate of 10.6022 shares of common stock per \$100 liquidation preference, which is equivalent to an initial conversion price of approximately \$9.43 per share of common stock (subject to adjustment in certain events).

In both 2016 and 2015, the Company paid \$7.0 million in cash dividends to the holders of Series A Preferred Stock. As of December 31, 2016, the Company had accrued \$0.3 million in cash dividends for the holders of the Series A Preferred Stock, which is included within accrued expenses and other current liabilities on the accompanying consolidated balance sheet.

On or after October 3, 2017, the Company may, at its option, convert some or all of the Series A Preferred Stock into the number of shares of common stock that are issuable at the then-applicable conversion rate, subject to specified conditions. On or prior to October 3, 2017, the holders of Series A Preferred Stock will have a special right to convert some or all of the Series A Preferred Stock into shares of common stock in the event of fundamental changes described in the Certificate of Designations for the Series A Preferred Stock, subject to specified conditions and limitations. In certain circumstances, the Company may also elect to settle conversions in cash as a result of these fundamental changes.

Series B Cumulative Perpetual Convertible Preferred Stock

In May 2014, the Company issued 500,000 shares of its Series B Preferred Stock in an underwritten public offering at a price to the public of \$250 per share. The purchase price received by the Company, equal to \$242.50 per share,

reflected an underwriting discount of \$7.50 per share. The Company received proceeds of \$120.8 million from the sale of the Series B Preferred Stock, net of the \$3.8 million underwriting discount and \$0.4 million of offering costs.

Holders of Series B Preferred Stock are entitled to receive cumulative cash dividends at a rate of 6.75% per annum of the \$250 liquidation preference per share (equivalent to an annual rate of \$16.875 per share). Dividends are payable quarterly in arrears on each March 15, June 15, September 15 and December 15. The Series B Preferred Stock does not have a stated maturity date and is not subject to any sinking fund or mandatory redemption provisions. The Series B Preferred Stock ranks senior to the Company's common stock and pari passu with respect to the Company's Series A Preferred Stock with respect to dividend rights and rights upon the Company's voluntary or involuntary liquidation, dissolution or winding-up. Holders of Series B Preferred Stock generally have no voting rights except for limited voting rights if the Company fails to pay dividends for six or more quarterly periods (whether or not consecutive) and in other specified circumstances. Holders of Series B Preferred Stock may convert some or all of their outstanding Series B Preferred Stock at an initial conversion rate of 33.456 shares of common stock per \$250 liquidation preference, which is equivalent to an initial conversion price of approximately \$7.47 per share of common stock (subject to adjustment in certain events).

In both 2016 and 2015, the Company paid \$8.4 million in cash dividends to the holders of Series B Preferred Stock. As of December 31, 2016, the Company had accrued \$0.4 million in cash dividends for the holders of the Series B Preferred Stock, which is included within accrued expenses and other current liabilities on the accompanying consolidated balance sheet.

On or after May 15, 2019, the Company may, at its option, convert some or all of the Series B Preferred Stock into the number of shares of common stock that are issuable at the then-applicable conversion rate, subject to specified conditions. On or prior to May 15, 2019, in the event of certain specified fundamental changes, holders of the Series B Preferred Stock will have the right to convert some or all of their shares of Series B Preferred Stock into the greater of (i) a number of shares of the Company's common stock as subject to adjustment plus the make-whole premium, if any, and (ii) a number of shares of the Company's common stock equal to the lesser of (a) the liquidation preference divided by the market value of the Company's common stock on the effective date of such fundamental change and (b) 81.9672 (subject to adjustment). In certain circumstances, the Company may elect to cash settle any conversions in connection with a fundamental change.

Common Stock

Registered Direct Public Offering

In May 2014, the Company issued 7,692,308 shares of its common stock in a registered direct public offering to certain investment funds affiliated with Baron Capital Group Inc. ("Baron") at a price of \$6.50 per share for aggregate gross proceeds of \$50.0 million. The Company received proceeds of \$49.9 million from the sale of the common stock to Baron, net of offering costs of \$0.1 million.

Under the stock purchase agreement entered into with Baron, Baron was entitled to receive additional shares if, during the 90-day period following the date of the stock purchase agreement, the Company issued or sold securities below specified prices. As a result of the Company's public offering of common stock, described below, and its public offering of Series B Preferred Stock, described above, the Company delivered 504,413 additional shares of common stock to Baron on August 6, 2014.

Underwritten Public Offering

Concurrently with its public offering of Series B Preferred Stock in May 2014, the Company issued 8,483,608 shares of its common stock in an underwritten public offering, including 1,106,558 shares upon the underwriters' exercise of their overallotment option in full, at a price to the public of \$6.10 per share. The Company received proceeds of \$49.0 million, net of \$2.6 million of underwriting discount and \$0.2 million of offering costs.

The net proceeds of these common stock offerings and the Series B Preferred Stock offering are being used to partially fund the construction and deployment of Iridium NEXT and for other general corporate purposes.

5. Debt

Credit Facility

In October 2010, the Company entered into a \$1.8 billion credit facility with a syndicate of bank lenders, which was amended and restated in May 2014 (as further amended to date, the “Credit Facility”). Ninety-five percent of the Company’s obligations under the Credit Facility are insured by Compagnie Française d’Assurance pour le Commerce Extérieur (“COFACE”), the French export credit agency. The Credit Facility is comprised of two tranches, with draws and repayments applied pro rata in respect of each tranche:

•Tranche A – \$1,537,500,000 at a fixed rate of 4.96%; and

•Tranche B – \$262,500,000 at a floating rate equal to the London Interbank Offer Rate (“LIBOR”) plus 1.95%.

Interest is payable on a semi-annual basis in April and October of each year. Prior to being fully drawn on the Credit Facility, which occurred in February 2017, a portion of interest was paid via a deemed loan and added to the related tranche principal, and the remainder was payable in cash. The amount of interest paid via a deemed loan for each tranche was as follows:

- Tranche A – fixed rate of 3.56%;
and

•Tranche B – LIBOR plus 0.55%.

For the years ended December 31, 2016, 2015 and 2014, the Company incurred total interest of \$77.7 million, \$64.6 million and \$50.8 million, respectively, of which \$44.4 million, \$44.9 million and \$35.3 million, respectively, is payable via a deemed loan and the remainder is payable in cash on the scheduled semi-annual payment dates.

In connection with each draw it made under the Credit Facility, the Company also borrowed an amount equal to 6.49% of such draw to cover the premium for the COFACE insurance policy. The Company also paid a commitment fee of 0.80% per year, in semi-annual installments, on any undrawn portion of the Credit Facility through February 2017, when the Credit Facility was fully drawn.

Funds drawn under the Credit Facility have been used to pay for (i) 85% of the costs under a fixed price full scale development contract (the "FSD") with Thales Alenia Space France ("Thales") for the design and manufacture of satellites for Iridium NEXT until the Credit Facility was fully drawn in February 2017 (ii) the premium for the COFACE policy, and (iii) the payment of a portion of interest during a part of the construction and launch phase of Iridium NEXT.

Scheduled semi-annual principal repayments will begin six months after the earlier of (i) the successful deployment of a specified number of Iridium NEXT satellites or (ii) September 30, 2017. During this repayment period, interest will be paid on the same date as the principal repayments. All interest costs incurred related to the Credit Facility have been capitalized during the construction period of the assets. During the construction period, the Company pays interest on each semi-annual due date through a combination of a cash payment and a deemed additional loan. The following tables present interest activity for the Credit Facility for the years ended December 31, 2016 and 2015 payable via cash or deemed loan:

	2016		
	Cash	Deemed Loan	Total
	(In thousands)		
Beginning interest payable	\$3,720	\$8,514	\$12,234
Interest incurred	33,326	44,359	77,685
Interest payments	(22,910)	(52,873)	(75,783)
Ending interest payable	\$14,136	\$-	\$14,136

	2015		
	Cash	Deemed Loan	Total
	(In thousands)		
Beginning interest payable	\$2,936	\$6,653	\$9,589
Interest incurred	19,662	44,934	64,596
Interest payments	(18,878)	(43,073)	(61,951)
Ending interest payable	\$3,720	\$8,514	\$12,234

As of December 31, 2016, the Company had borrowed a total of \$1,777.8 million under the Credit Facility. The unused portion of the Credit Facility as of December 31, 2016 was \$22.2 million, and that amount was fully drawn in February 2017. Future payments with respect to the Credit Facility balance existing at December 31, 2016, plus the February 2017 draw of \$22.2 million, by year and in the aggregate, is as follows:

Year ending December 31, Amount

	(In thousands)
2017	\$-
2018	85,500
2019	202,500
2020	288,000
2021	306,000
Thereafter	918,000
Total	\$1,800,000

Under the terms of the Credit Facility, the Company is required to maintain a minimum cash reserve for debt service of \$113.0 million as of December 31, 2016, which increases to \$189.0 million in 2017, and is classified as restricted cash on the accompanying consolidated balance sheet. The Company recognized the semi-annual commitment fee on the undrawn portion of the Credit Facility of \$1.3 million, \$3.3 million and \$5.8 million for the years ended December 31, 2016, 2015 and 2014, respectively. The Credit Facility will mature seven years after the start of the repayment period.

Obligations under the Credit Facility are secured on a senior basis by a lien on substantially all of the Company's assets. In addition to the minimum debt service reserve levels, financial covenants under the Credit Facility include:

• an available cash balance of at least \$25 million;

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- a debt-to-equity ratio, which is calculated as the ratio of total net debt to the aggregate of total net debt and total stockholders' equity, of no more than 0.7 to 1, measured each June 30 and December 31;
- specified maximum levels of annual capital expenditures (excluding expenditures on the construction of Iridium NEXT satellites) through the year ending December 31, 2024;
- specified minimum levels of consolidated operational earnings before interest, taxes, depreciation and amortization, or operational EBITDA, for the 12-month periods ending each December 31 and June 30 through December 31, 2017;
- specified minimum cumulative cash flow requirements from customers who have hosted payloads on the Company's satellites, measured each December 31 and June 30, from June 30, 2016 through December 31, 2017;
- a debt service coverage ratio, measured during the repayment period, of not less than 1 to 1.5; and
- specified maximum leverage levels during the repayment period that decline from a ratio of 4.73 to 1 for the twelve months ending June 30, 2018 to a ratio of 2.36 to 1 for the twelve months ending December 31, 2024.

The Company's available cash balance, as defined by the Credit Facility, was \$382.0 million as of December 31, 2016. The Company's debt-to-equity ratio was 0.51 to 1 as of December 31, 2016. The Company was in compliance with the operational EBITDA covenant, the annual capital expenditure covenant and the cumulative cash flow requirements from customers who have hosted payloads covenant as of December 31, 2016.

The covenants regarding capital expenditures, operational EBITDA and hosted payload cash flows are calculated in connection with a measurement, which the Company refers to as available cure amount, that is derived using a complex calculation based on overall cash flows, as adjusted by numerous measures specified in the Credit Facility. In a period in which the Company's capital expenditures exceed, or the Company's operational EBITDA or hosted payload cash flows falls short of, the amount specified in the respective covenant, the Company would be permitted to allocate available cure amount, if any, to prevent a breach of the applicable covenant. As of December 31, 2016, the Company had no available cure amount, although it was not necessary to apply any available cure amount to maintain compliance with the covenants. The available cure amount has fluctuated significantly from one measurement period to the next, and the Company expects that it will continue to do so.

The covenants also place limitations on the Company's ability and that of its subsidiaries to carry out mergers and acquisitions, dispose of assets, grant security interests, declare, make or pay dividends, enter into transactions with affiliates, incur additional indebtedness, or make loans, guarantees or indemnities. If the Company is not in compliance with the financial covenants under the Credit Facility, after any opportunity to cure such non-compliance, or the Company otherwise experiences an event of default under the Credit Facility, the lenders may require repayment in full of all principal and interest outstanding under the Credit Facility. It is unlikely the Company would have adequate funds to repay such amounts prior to the scheduled maturity of the Credit Facility. If the Company fails to repay such amounts, the lenders may foreclose on the assets the Company has pledged under the Credit Facility, which include substantially all of its assets and those of its domestic subsidiaries.

Pursuant to the Company's hosting agreement with its subsidiary, Aireon LLC, Aireon is obligated to pay the Company \$200 million for the placement of the Aireon payload on each of the Iridium NEXT satellites. In anticipation of potential delays in receipt of the Aireon hosting payments, the Company entered into discussions with its Credit Facility lenders and Thales for deferral of certain payments.

The Company believes that liquidity sources will provide sufficient funds for the Company to meet its liquidity requirements for at least the next 12 months.

6. Boeing Operations and Maintenance (O&M) Agreements

On July 21, 2010, the Company and Boeing entered into the O&M Agreement, pursuant to which Boeing agreed to provide continuing steady-state operations and maintenance services with respect to the satellite network operations center, telemetry, tracking and control stations and the first-generation satellites (including engineering, systems analysis, and operations and maintenance services). Boeing had, and Motorola Solutions and the U.S. government each currently have, the unilateral right to commence the de-orbit of the Company's first-generation satellites upon the occurrence of certain enumerated events. The O&M Agreement incorporated a mass de-orbit plan for the first-generation satellites, which, if exercised, would have cost the Company approximately \$18.4 million to be paid to Boeing, plus an amount equivalent to the premium of the mass de-orbit insurance coverage to be paid to the insurer.

On July 21, 2010, the Company and Boeing entered into an agreement pursuant to which Boeing would operate and maintain Iridium NEXT (the "Iridium NEXT Support Services Agreement"). On January 1, 2015, Boeing supported a hybrid operations mode involving network elements from both the first-generation satellites and the Iridium NEXT system. Boeing provided those services on

a time-and-materials fee basis. Obligations to Boeing represented the not to exceed (“NTE”) price for services under the Iridium NEXT Support Services Agreement.

The Company incurred expenses of \$29.0 million, \$30.7 million and \$32.1 million relating to satellite operations and maintenance costs for the years ended December 31, 2016, 2015 and 2014, respectively, included in cost of services (exclusive of depreciation and amortization) in the consolidated statements of operations and comprehensive income.

On November 28, 2016, the Company entered into an Insourcing Agreement with Boeing for the Company to hire, effective January 3, 2017, the majority of Boeing employees and third party contractors who were responsible for the operations and maintenance of the Company’s satellite constellation and ground infrastructure. Pursuant to the Insourcing Agreement, the Company is obligated to pay Boeing \$5.5 million, of which \$2.75 million was paid during the year ended December 31, 2016 and the remaining \$2.75 million will be paid in December 2017. Concurrent with the hiring of the assembled workforce on January 3, 2017, the Company and Boeing terminated both the O&M Agreement and the Iridium NEXT Support Service Agreement and entered into a new Development Services Agreement (“DSA”) with a \$6.0 million annual take-or-pay commitment through 2021. As a result of the termination of certain Boeing agreements under the Insourcing Agreement, Boeing no longer has a unilateral right to commence the de-orbit of the Company’s first-generation satellites. The assembled workforce will be recorded as a definite-lived intangible asset in the first quarter of 2017 and will be amortized over an estimated useful life of 7 years. Additionally, by terminating the O&M Agreement, the Company will recognize a \$14.4 million gain from the derecognition of a purchase accounting liability created from GHIL’s acquisition of Iridium in 2009 related to the fair value of the contractual arrangement with Boeing as of that date and the remainder of a credit from Boeing in the July 2010 Boeing O&M contract negotiations.

7. Property and Equipment

Property and equipment consisted of the following as of December 31, 2016 and 2015:

	2016	2015
	(In thousands)	
Satellite system	\$314,228	\$323,607
Ground system	63,519	41,629
Equipment	34,139	30,189
Internally developed software and purchased software	127,498	116,960
Building and leasehold improvements	32,099	31,589
	571,483	543,974
Less: accumulated depreciation	(422,098)	(385,860)
	149,385	158,114
Land	8,037	8,037
Construction in process:		
Iridium NEXT systems under construction	2,639,824	2,252,290
Other construction in process	15,838	25,126
Total property and equipment, net of accumulated	\$2,813,084	\$2,443,567

depreciation

Other construction in process consisted of the following as of December 31, 2016 and 2015:

	2016	2015
	(In thousands)	
Internally developed software	\$ 14,218	\$ 7,708
Equipment	1,546	1,981
Ground system	74	15,143
Building and leasehold improvements	—	294
Total other construction in process	\$ 15,838	\$ 25,126

Depreciation expense for the years ended December 31, 2016, 2015 and 2014 was \$48.6 million, \$51.0 million and \$62.7 million, respectively.

8. Intangible Assets

The Company had identifiable intangible assets as follows as of December 31, 2016 and 2015:

	December 31, 2016			
	Useful Lives	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
	(In thousands)			
Indefinite life intangible assets:				
Trade names	Indefinite	\$ 21,195	\$ —	\$ 21,195
Spectrum and licenses	Indefinite	14,030	—	14,030
Total		35,225	—	35,225
Definite life intangible assets:				
Intellectual property	20 years	16,439	(5,868)	10,571
Total		16,439	(5,868)	10,571
Total intangible assets		\$ 51,664	\$ (5,868)	\$ 45,796
	December 31, 2015			
	Useful Lives	Gross Carrying Value	Accumulated Amortization	Net Carrying Value
	(In thousands)			
Indefinite life intangible assets:				
Trade names	Indefinite	\$ 21,195	\$ —	\$ 21,195
Spectrum and licenses	Indefinite	14,030	—	14,030
Total		35,225	—	35,225
Definite life intangible assets:				
Intellectual property	19.5 years	16,439	(5,075)	11,364
Total		16,439	(5,075)	11,364
Total intangible assets		\$ 51,664	\$ (5,075)	\$ 46,589

The Company evaluated the useful life of the remaining definite-lived intangible assets in 2016 to reflect the refinement of the Iridium NEXT launch schedule and deployment plan. This resulted in a change in the weighted-average amortization period of intangible assets from 19.5 years for the year ended December 31, 2015 to 20.0 years for the year ended December 31, 2016. Amortization expense was \$0.8 million, \$0.8 million and \$10.0 million for the years ended December 31, 2016, 2015 and 2014, respectively.

Future amortization expense with respect to intangible assets existing at December 31, 2016, by year and in the aggregate, is as follows:

Year ending December 31,	Amount (In thousands)
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2017	\$	783
2018		783
2019		783
2020		783
2021		783
Thereafter		6,656
Total estimated future amortization expense	\$	10,571

9. Commitments and Contingencies

Thales

In June 2010, the Company executed a primarily fixed-price FSD with Thales for the design and build of satellites for Iridium NEXT. The total price under the FSD is \$2.3 billion, and the Company expects payment obligations under the FSD to extend through 2018. As of December 31, 2016, the Company had made aggregate payments of \$1,753.6 million to Thales, of which \$1,490.6 million were from borrowings under the Credit Facility and were capitalized as construction in progress within property and equipment, net in the accompanying consolidated balance sheet. The Company's obligations to Thales that are currently scheduled for the years ending

December 31, 2017 and 2018 are in the amounts of \$287.1 million and \$212.7 million, respectively. The timing of a portion of the Company's obligations to Thales is based on SpaceX's targeted launch schedule to complete the NEXT constellation in mid-2018. During 2016, the Company used the Credit Facility to pay 85% of each invoice received from Thales under the FSD, with the remaining 15% funded from cash on hand. The Credit Facility was fully drawn in February 2017, and as a result, the Company will pay 100% of each invoice received from Thales from cash and marketable securities on hand as well as internally generated cash flows, including contracted cash flows from hosted payloads.

SpaceX

In March 2010, the Company entered into an agreement with Space Exploration Technologies Corp. ("SpaceX") to secure SpaceX as the primary launch services provider for Iridium NEXT (as amended to date, the "SpaceX Agreement"). The total price under the SpaceX Agreement for seven launches and a reflight option in the event of launch failure is \$468.1 million. The SpaceX Falcon 9 rocket is configured to carry ten Iridium NEXT satellites to orbit for each of the initial seven launches. In November 2016, the Company entered into an agreement for an eighth launch with SpaceX to launch five spare satellites and share the launch services with GFZ German Research Centre for Geosciences ("GFZ"). The total price under the SpaceX Agreement for the eighth launch is \$67.9 million. GFZ will pay Iridium \$31.8 million to share the launch services to launch NASA's two Gravity Recovery and Climate Experiment Follow-On satellites. As of December 31, 2016, the Company made aggregate payments of \$394.0 million to SpaceX, which were capitalized as construction in progress within property and equipment, net in the accompanying consolidated balance sheet. Additionally, the Company received \$16.5 million from GFZ as of December 31, 2016. The Company maintains a \$1.5 million refundable deposit with SpaceX for the reservation of an additional future launch, which is not included in the total contract price. The Company's obligations to SpaceX currently scheduled for the years ending December 31, 2017, 2018 and 2019 are \$110.9 million, \$20.9 million and \$10.2 million, respectively. The timing of a portion of the Company's obligations to SpaceX is based on SpaceX's targeted launch schedule to complete the NEXT constellation in mid-2018.

Kosmotras

In June 2011, the Company entered into an agreement with International Space Company Kosmotras ("Kosmotras") as a supplemental launch service provider for Iridium NEXT (the "Kosmotras Agreement"). In June 2013, the Company exercised an option for one launch to carry two Iridium NEXT satellites. If the Company does not exercise any additional options, the total cost under the contract including this single launch will be \$51.8 million. As of December 31, 2016, the Company had made aggregate payments of \$36.8 million to Kosmotras, which were capitalized within property and equipment, net in the accompanying consolidated balance sheet. In June 2015, the Company agreed with Kosmotras to replace the remaining options with a new set of options to purchase up to six dedicated launches. Kosmotras has been unable to obtain permission to launch the Company's satellites to date. The Company may be unable to recover the amounts already paid to Kosmotras. The Company's obligations to Kosmotras currently expected in the year ending December 31, 2018 are \$15.0 million. The timing of a portion of the Company's obligations to Kosmotras is based on the earliest date the Company plans to include Kosmotras into its launch profile.

Iridium NEXT Launch and In-Orbit Insurance

The Credit Facility requires the Company to obtain insurance covering the launch and first 12 months of operation of the Iridium NEXT satellites. The launch and in-orbit insurance the Company has obtained contains elements, consistent with the terms of the Credit Facility, of self-insurance and deductibles, providing reimbursement only after a specified number of satellite failures. As a result, a failure of one or more of the Company's satellites, or the

occurrence of equipment failures and other related problems, could constitute an uninsured loss or require the payment of additional premiums and could harm the Company's financial condition. Furthermore, launch and in-orbit insurance does not cover lost revenue.

The total premium is \$117.9 million and as of December 31, 2016, the Company had made aggregate payments of \$31.5 million. The Company's insurance obligations scheduled for the years ending December 31, 2017 and 2018 are \$59.5 million and \$26.9 million, respectively. The timing of a portion of the contractual obligation payments are based on SpaceX's targeted launch schedule to complete the NEXT constellation in mid-2018.

Unconditional Purchase Obligations

The Company has a manufacturing agreement with Benchmark. Pursuant to the agreement, the Company may be required to purchase certain materials if the materials are not used in production within the periods specified in the agreement. Benchmark will then repurchase such materials from the Company at the same price paid by the Company, as required for the production of the devices. As of December 31, 2016 and 2015, the Company had \$0.5 million and \$2.9 million, respectively, of such materials, and the amounts

were included in inventory on the accompanying consolidated balance sheets. The Company's obligation to Benchmark for the year ending December 31, 2017 is \$3.4 million.

As of December 31, 2016, the aggregate unconditional purchase obligations were \$45.9 million, which include the Company's commitments with Boeing and Benchmark. The unconditional purchase obligations scheduled for the years ending December 31, 2017 through 2021 are \$17.7 million, \$8.2 million, \$7.3 million, \$6.7 million and \$6.0 million, respectively. The Boeing obligations represent the new take-or-pay commitment with the execution of the DSA and final payment for the acquisition of the assembled workforce.

In-Orbit Insurance

Due to various contractual requirements, the Company is required to maintain a third-party liability in-orbit insurance policy on its first-generation satellites with a de-orbiting endorsement to cover potential claims relating to operating or de-orbiting the satellite constellation or individual satellites. The policy covers the Company, Boeing as former operator, Motorola Solutions (the original system architect and prior owner), contractors and subcontractors of the insured, the U.S. government and certain other sovereign nations.

The current policy has a renewable one-year term, which is scheduled to expire on December 8, 2017. The policy coverage is separated into Sections A, B, and C.

Section A coverage is currently in effect and covers product liability over Motorola's position as manufacturer of the first-generation satellites. Liability limits for claims under Section A are \$1.0 billion per occurrence and in the aggregate. There is no deductible for claims.

Section B coverage is currently in effect and covers risks in connection with in-orbit satellites and for the de-orbit of individual satellites. Liability limits for claims under Section B are \$500 million per occurrence and in the aggregate for space vehicle liability and \$500 million and \$1.0 billion per occurrence and in the aggregate, respectively, with respect to de-orbiting. The balance of the unamortized premium payment for Sections A and B coverage as of December 31, 2016 is included in prepaid expenses and other current assets in the accompanying consolidated balance sheet. The deductible for claims under Section B is \$250,000 per occurrence.

Section C coverage is effective once requested by the Company (the "Attachment Date") and covers risks in connection with a mass decommissioning of the first-generation satellites. Liability limits for claims under Section C are \$500 million and \$1.0 billion per occurrence and in the aggregate, respectively. The term of the coverage under Section C is 12 months from the Attachment Date. The premium for Section C coverage is \$2.5 million and is payable on or before the Attachment Date. As of December 31, 2016, the Company had not requested Section C coverage since no mass decommissioning activities are currently anticipated. The deductible for claims under Section C is \$250,000 per occurrence.

Operating Leases

The Company leases land, office space, and office and computer equipment under noncancelable operating lease agreements. Most of the leases contain renewal options of 1 to 10 years. The Company's obligations under the current terms of these leases extend through 2026.

Additionally, several of the Company's leases contain clauses for rent escalation including, but not limited to, a pro-rata share of increased operating and real estate tax expenses. Rent expense is recognized on a straight-line basis over the lease term. The Company leases facilities located in Chandler, Arizona; Tempe, Arizona; McLean, Virginia; Canada; Russia; and Norway. Future minimum lease payments, by year and in the aggregate, under noncancelable operating leases at December 31, 2016, are as follows:

Year ending December 31,	Operating Leases (In thousands)
2017	\$ 3,589
2018	3,554
2019	3,644
2020	3,734
2021	3,827
Thereafter	12,251
Total	\$ 30,599

Rent expense for the years ended December 31, 2016, 2015 and 2014 was \$3.1 million, \$3.4 million and \$3.3 million, respectively.

Contingencies

The Company is not aware of any actions that it expects to have a material adverse impact on its business, financial results or financial condition.

10. Stock-Based Compensation

During 2015, the Company's stockholders approved the 2015 Equity Incentive Plan (the "2015 Plan") to provide stock-based awards, including nonqualified stock options, incentive stock options, restricted stock and other equity securities, as incentives and rewards for employees, consultants and non-employee directors.

Stock Option Awards

The stock option awards granted to employees generally (i) have a term of ten years, (ii) vest over a four-year period with 25% vesting after the first year of service and the remainder vesting ratably on a quarterly basis thereafter, (iii) are contingent upon employment on the vesting date, and (iv) have an exercise price equal to the fair value of the underlying shares at the date of grant. The stock option awards granted to the Company's board of directors generally (i) represent a portion of their annual compensation, (ii) have a term of ten years, (iii) vest over the calendar year with 25% vesting on the last day of each calendar quarter, (iv) are contingent upon continued service on the vesting date, and (v) have an exercise price equal to the fair value of the underlying shares at the date of grant. The fair value of each option is estimated on the date of grant using the Black-Scholes option pricing model. Expected volatility for options granted was based on the actual historical volatility of the Company's stock price. The expected term of the award was calculated using the simplified method. The Company does not anticipate paying dividends during the expected term of the grants; therefore, the dividend rate was assumed to be zero. The risk-free interest rate assumed is based upon U.S. Treasury Bond interest rates with similar terms at similar dates. To the extent the Company's actual forfeiture rate is different from its estimate of forfeitures, the stock-based compensation may differ in future periods.

In 2016, the Company granted stock options to new hires and promoted employees only. The Company's board of directors and non-employee consultants were granted restricted stock unit awards.

During 2016, 2015 and 2014, the Company granted approximately 249,000, 744,000 and 987,000 stock options, respectively, to its employees, with an estimated aggregate grant-date fair value of \$0.9 million, \$2.9 million and \$3.0 million, respectively.

During 2015 and 2014, certain members of the Company's board of directors elected to receive a portion of their annual compensation in the form of stock options in an aggregate amount of approximately 103,000 and 132,000 stock options, respectively. These options vested quarterly through the end of the calendar year in which they were granted. Additionally, in October 2015, certain members of the Company's board of directors were granted 7,500 stock options, related to their service as part of a newly created Government Advisory Committee, and vested through the end of 2015. The estimated aggregate grant-date fair value of the options granted to directors in each of 2015 and

2014 was \$0.4 million.

During 2015 and 2014, the Company granted 30,000 and 45,000 stock options, respectively, to its non-employee consultants, with an estimated aggregate grant-date fair value of \$0.2 million for each year, respectively. The stock options granted to consultants are generally subject to service-based vesting and vest quarterly over a two-year service period. The fair value of the consultant options is the then-current fair value attributable to the vesting portions of the awards, calculated using the Black-Scholes option pricing model.

Assumptions used in determining the fair value of the Company's options were as follows:

	Year Ended December 31,		
	2016	2015	2014
Expected volatility	40% - 42%	39% - 42%	41% - 43%
Expected term (years)	6.00 - 9.25	5.25 - 10.00	5.25 - 10.00
Expected dividends	0%	0%	0%
Risk free interest rate	1.15% - 2.45%	1.50% - 2.35%	1.10% - 2.35%

A summary of the activity of the Company's stock options for the year ended December 31, 2016 is as follows:

	Shares	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (Years)	Aggregate Intrinsic Value
	(In thousands, except data)	Per Share	years and per share	
Options outstanding at January 1, 2016	7,120	\$ 7.86		
Granted	249	\$ 8.13		
Cancelled or expired	(39)	\$ 8.92		
Exercised	(73)	\$ 7.33		
Forfeited	(55)	\$ 7.62		
Options outstanding at December 31, 2016	7,202	\$ 7.87	5.45	\$ 12,473
Options exercisable at December 31, 2016	6,169	\$ 7.83	5.02	\$ 10,924
Options exercisable and expected to vest at December 31, 2016	7,188	\$ 7.87	5.13	\$ 12,442

The Company recognized \$2.5 million, \$3.4 million and \$4.3 million of stock-based compensation expense related to stock options in the years ended December 31, 2016, 2015 and 2014, respectively.

The weighted-average grant-date fair value of options granted during the years ended December 31, 2016, 2015 and 2014 was \$3.47, \$3.95 and \$2.97 per share, respectively.

As of December 31, 2016, the total unrecognized cost related to non-vested options was approximately \$3.1 million. This cost is expected to be recognized over a weighted-average period of 2.0 years. The total fair value of the shares vested during the years ended December 31, 2016, 2015 and 2014 was approximately \$2.9 million, \$3.6 million and \$4.6 million, respectively.

Restricted Stock Unit Awards

Members of the Company's board of directors may elect to receive a portion of their annual compensation in the form of RSUs. An aggregate amount of approximately 126,000 service-based RSUs were granted in January 2016 with an estimated grant date fair value of \$1.0 million. These RSUs vest in full on the first anniversary of the grant date. In January 2015 and 2014, an aggregate amount of approximately 62,000 and 108,000 RSUs were granted, respectively, with an estimated grant date fair value of \$0.6 million and \$0.7 million, respectively. These RSUs vested over a one-year period, with 25% vesting on the last day of each calendar quarter. In addition, 15,000 RSUs were granted in July 2015 to new directors, with an estimated aggregate grant-date fair value of \$0.1 million, and vested through the end of 2015, with 33% vesting immediately upon grant and 33% and 34% vesting on the last day of each remaining calendar quarter in 2015.

During the years ended December 31, 2016, 2015 and 2014, the Company granted approximately 573,000, 596,000 and 786,000 service-based RSUs, respectively, to its employees, with an estimated grant date fair value of \$4.0

million, \$5.6 million and \$5.1 million, respectively. Employee service-based RSUs generally vest over a four-year service period, with 25% vesting on the first anniversary of the grant date and the remainder vesting ratably on a quarterly basis thereafter.

In March 2016, the Company awarded approximately 1,335,000 performance-based RSUs to the Company's executives and employees (the "2016 Bonus RSUs"), with an estimated grant date fair value of \$9.4 million. The Company records stock-based compensation expense related to performance-based RSUs when it is considered probable that the performance conditions will be met. Vesting of the 2016 Bonus RSUs is dependent upon the Company's achievement of defined performance goals for the 2016 fiscal year. Management believes it is probable that certain RSUs will vest. The level of achievement, if any, of performance goals will be determined by the compensation committee of the Company's board of directors and, if such goals are achieved, the 2016 Bonus RSUs will vest, subject to continued employment, on the anniversary of the grant date in March 2017. Similarly, in June 2014, the Company awarded approximately 323,000 performance-based RSUs to its executives and employees (the "2014 Bonus RSUs"). Vesting of the 2014 Bonus RSUs was dependent upon the Company's achievement of defined performance goals for the 2014 fiscal year. The level of achievement was determined by the compensation committee. Approximately 304,000 of the 2014 Bonus RSUs were vested and released in March 2015 at an estimated aggregate fair value of \$2.4 million, which was recognized as compensation expense over the service period.

Additionally, in March 2016, 2015 and 2014, the Company awarded approximately 119,000, 161,000 and 207,000 performance-based RSUs, respectively, to the Company's executives (the "March Performance RSUs"). Vesting of each March Performance RSU award

is dependent upon the Company's achievement of defined performance goals over a two-year period. Management believes it is probable that certain RSUs will vest. The number of March Performance RSUs that will ultimately vest will range from 0% to 150% of the original grant based on the level of achievement of the performance goals. If the Company achieves the performance goals, 50% of the March Performance RSUs will vest on the second anniversary of the grant date and the remaining 50% will vest on the third anniversary of the grant date, in each case, subject to the executives continued service as of the vesting date. The estimated aggregate grant date fair values of the March Performance RSUs granted in 2016 and 2015 was \$0.8 million and \$1.5 million, respectively. The level of achievement of performance goals in connection with the 2014 March Performance RSUs was determined by the compensation committee in March 2016. Approximately 155,000 of the 2014 March Performance RSUs were vested and released in March 2016 at an estimated aggregate fair value of \$1.0 million, and the remaining 155,000 will vest at the end of March 2017.

In June 2016, the Company granted approximately 35,000 RSUs to non-employee consultants with an estimated grant date fair value of \$0.3 million. The non-employee consultant RSUs are subject to service-based vesting and will vest 50% on the first anniversary of the grant date and quarterly thereafter through the second anniversary of the grant date.

A summary of the Company's activity for the year ended December 31, 2016 for outstanding RSUs is as follows:

	RSUs (In thousands)	Weighted- Average Grant Date Fair Value Per RSU
Outstanding at January 1, 2016	1,944	\$ 7.76
Granted	2,297	\$ 7.09
Forfeited Released	(152)	\$ 7.44