UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 20-F

(Ma □	rk One) REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934
	OR
X	ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
	For the fiscal year ended December 31, 2017
	OR
	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
	OR
	SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
	Commission file number: 001-35878

INTELSAT S.A.

(Exact name of Registrant as specified in its charter)

N/A

(Translation of Registrant's name into English)

Grand Duchy of Luxembourg (Jurisdiction of incorporation or organization)

4 rue Albert Borschette
Luxembourg
Grand-Duchy of Luxembourg
L-1246
(Address of principal executive offices)

Michelle V. Bryan, Esq. Executive Vice President, General Counsel and Chief Administrative Officer

Intelsat S.A.
4, rue Albert Borschette
L-1246 Luxembourg
Telephone: +352 27-84-1600
Fax: +352 27-84-1690

(Name, Telephone, E-Mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

<u>Title of Each Class</u> Common Shares, nominal value \$0.01 per share Name of Each Exchange On Which Registered
New York Stock Exchange

Securities registered or to be registered pursuant to Section 12(g) of the Act: None $\,$

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: None

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of Report.	of the period covered by the Annual
119,555,279 common shares, nominal value \$0.01 per share	
Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Ac	t. Yes □ No 🗷
If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports p Securities Exchange Act of 1934. Yes \square No \square	ursuant to Section 13 or 15(d) of the
Note—checking the box above will not relieve any registrant required to file reports pursuant to Section 13 or 15(d from their obligations under those Sections.) of the Securities Exchange Act of 1934
Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of t during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and requirements for the past 90 days. Yes \boxtimes No \square	
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Website, if a be submitted and posted pursuant to Rule 405 of Regulation S-T ($\S232.405$ of this chapter) during the preceding 12 the registrant was required to submit and post such files). Yes \square No \square	ny, every Interactive Data File required to 2 months (or for such shorter period that
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, definition of "large accelerated filer," "accelerated filer," and "emerging growth company" in Rule 12b-2 of the Excelerated filer,	
Large accelerated filer □	Accelerated Filer
Non-accelerated filer	Emerging growth company
If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by ch to use the extended transition period for complying with any new or revised financial accounting standards* provide Exchange Act. \Box	
* The term "new or revised financial accounting standard" refers to any update issued by the Financial Accoun Standards Codification after April 5, 2012.	ting Standards Board to its Accounting
Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements include	ed in this filing:
U.S. GAAP International Financial Reporting Standards as issued by the International Accounting Standards Board □	Other \Box
If "Other" has been checked in response to the previous question indicate by check mark which financial statement follow. Item 17 \Box Item 18 \Box	item the registrant has elected to
If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-	2 of the Exchange Act). Yes □ No 🗷

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FORWARD-LOOKING STATEMENTS

Some of the statements in this Annual Report on Form 20-F, or Annual Report, and oral statements made from time to time by our representatives constitute forward-looking statements that do not directly or exclusively relate to historical facts. The Private Securities Litigation Reform Act of 1995 provides a "safe harbor" for certain forward-looking statements as long as they are identified as forward-looking and are accompanied by meaningful cautionary statements identifying important factors that could cause actual results to differ materially from the expectations expressed or implied in the forward-looking statements.

When used in this Annual Report, the words "may," "will," "might," "should," "expect," "plan," "anticipate," "project," "believe," "estimate," "predict," "intend," "potential," "outlook" and "continue," and the negative of these terms, and other similar expressions are intended to identify forwardlooking statements and information. Examples of these forward-looking statements include, but are not limited to, statements regarding the following: our belief that the growing worldwide demand for reliable broadband connectivity everywhere at all times, together with our leadership position in our attractive sector, global scale, efficient operating and financial profile, diversified customer sets and sizeable contracted backlog, provide us with a platform for longterm success; our belief that the new and differentiated capacity of our next generation Intelsat Epic NG satellites will provide inventory to help offset recent trends of pricing pressure in our network services business; our outlook that the increased volume of services provided by our Intelsat EpicNG fleet is expected to stabilize business activity in the network services sector; our expectation that over time incremental demand for capacity to support the new 4K format, also known as ultra-high definition, could compensate for reductions in demand related to use of new compression technologies in our media business; our expectation that our investment in a new generation of ground hardware will simplify access to satellite communications, potentially opening much larger and faster growing sectors than those traditionally served by our industry; our belief that employing a disciplined yield management approach, and focusing our marketing and distribution strategies around our four primary customer sets will drive stability in our core business; our expectation that designing and deploying differentiated managed service offerings in targeted verticals, leveraging the scale, higher performance and better economics of our Intelsat EpicNG fleet will drive revenue growth; our intentions of further use of our partnerships and investments in adjacent markets and other inorganic opportunities to access innovations, continue to transform our capabilities and utilize broader solutions, including integrated solutions such as those to be offered by our partner, OneWeb, to enhance our service offerings to customers and drive revenue growth; our ability to efficiently incorporate new technologies into our network to capture growth; our intention to maximize our revenues and returns generated by our assets by developing and managing our capacity in a disciplined and efficient manner; our projection that our government business will benefit from the increasing demands for mobility services from the U.S. government for aeronautical and ground mobile requirements; our intention to leverage our satellite launches and maximize the value of our spectrum rights, including the pursuit of partnerships to optimize new satellite business cases and the exploration of joint-use of certain spectrum with the wireless sector in certain geographies; our intent to consider select acquisitions of complementary businesses or technologies that enhance our product and geographic portfolio; our belief that developing differentiated services and investing in new technology will allow us to unlock opportunities that are essential, but have been slow to develop due to cost and/or technology challenges; the trends that we believe will impact our revenue and operating expenses in the future; our assessments regarding how long satellites that have experienced anomalies in the past should be able to provide service on their transponders; our assessment of the risks of future anomalies occurring on our satellites; our plans for satellite launches in the near-term; our expected capital expenditures in 2018 and during the next several years; our belief that the diversity of our revenue and customer base allows us to recognize trends, capture new growth opportunities, and gain experience that can be transferred to customers in other regions; our belief that the scale of our fleet can reduce the financial impact of any satellite or launch failures and protect against service interruption; and the impact on our financial position or results of operations of pending legal proceedings.

Forward-looking statements reflect our intentions, plans, expectations, anticipations, projections, estimations, predictions, outlook, assumptions and beliefs about future events. These forward-looking statements speak only as of their dates and are not guarantees of future performance or results and are subject to risks, uncertainties and other factors, many of which are outside of our control. These factors could cause actual results or developments to differ materially from the expectations expressed or implied in the forward-looking statements and include known and unknown risks. Known risks include, among others, the risks discussed in Item 3D—Risk Factors, the political, economic and legal conditions in the markets we are targeting for communications services or in which we operate and other risks and uncertainties inherent in the telecommunications business in general and the satellite communications business in particular.

Other factors that may cause results or developments to differ materially from historical results or developments or the forward-looking statements made in this Annual Report include, but are not limited to:

- risks associated with operating our in-orbit satellites;
- satellite launch failures, satellite launch and construction delays and in-orbit failures or reduced satellite performance;

- potential changes in the number of companies offering commercial satellite launch services and the number of commercial satellite launch opportunities available in any given time period that could impact our ability to timely schedule future launches and the prices we pay for such launches;
- our ability to obtain new satellite insurance policies with financially viable insurance carriers on commercially reasonable terms or at all, as well as the ability of our insurance carriers to fulfill their obligations;
- possible future losses on satellites that are not adequately covered by insurance;
- U.S. and other government regulation;
- changes in our contracted backlog or expected contracted backlog for future services;
- pricing pressure and overcapacity in the markets in which we compete;
- our ability to access capital markets for debt or equity;
- · the competitive environment in which we operate;
- · customer defaults on their obligations to us;
- · our international operations and other uncertainties associated with doing business internationally;
- · litigation; and
- other risks discussed under Item 3D—Risk Factors.

Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee our future results, level of activity, performance or achievements. Because actual results could differ materially from our intentions, plans, expectations, anticipations, projections, estimations, predictions, outlook, assumptions and beliefs about the future, you are urged not to rely on forward-looking statements in this Annual Report and to view all forward-looking statements made in this Annual Report with caution. We do not undertake any obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

INDUSTRY AND MARKET DATA

This Annual Report includes information with respect to regional and sector share and industry conditions from third-party sources, public filings and based upon our estimates using such sources when available. While we believe that such information and estimates are reasonable and reliable, we have not independently verified the data from third-party sources, including Euroconsult Satellite Communications & Broadcasting Markets Survey, 24th Edition (September 2017), NSR Government & Military Satellite Communications, 14th Edition (December 2017), NSR Global Satellite Capacity Supply & Demand, 14th Edition (June 2017), NSR Linear TV via Satellite, 9th Edition (March 2017), NSR Wireless Backhaul via Satellite, 11th Edition (March 2017), the World Bank Group, and Seradata Spacetrak. Unless otherwise specified, all references contained in this Annual Report to these third-party sources are as of the dates of these sources stated above. Similarly, our internal research is based upon our understanding of industry conditions, and such information has not been verified by independent sources. Specifically, when we refer to the relative size, regions served, number of customers contracted, experience and financial performance of our business as compared to other companies in our sector, our assertions are based upon public filings of other operators and comparisons provided by third-party sources, as outlined above.

Throughout this Annual Report, unless otherwise indicated, references to market positions are based on third-party market research. If a regional position or statement as to industry conditions is based on internal research, it is identified as management's belief. Throughout this Annual Report, unless otherwise indicated, statements as to our relative positions as a provider of services to customers and regions are based upon our relative share. For additional information regarding our regional share with respect to our customer sets, services and regions, and the bases upon which we determine our share, see Item 4B—Business Overview.

PART I

Item 1. Identity of Directors, Senior Management and Advisers

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information

In this Annual Report unless otherwise indicated or the context otherwise requires, (1) the terms "we," "us," "our," "the Company" and "Intelsat" refer to Intelsat S.A., and its subsidiaries on a consolidated basis, (2) the term "Intelsat Holdings" refers to our indirect subsidiary, Intelsat Holdings S.A., (3) the term "Intelsat Investments" refers to Intelsat Investments S.A., Intelsat Holdings' direct wholly-owned subsidiary, (4) the term "Intelsat Luxembourg" refers to Intelsat (Luxembourg) S.A., Intelsat Investments' direct wholly-owned subsidiary, (5) the terms "Intelsat Connect" and "ICF" refer to Intelsat Connect Finance S.A., Intelsat Luxembourg's direct wholly-owned subsidiary, (6) the term "Intelsat Jackson" refers to Intelsat Jackson Holdings S.A., Intelsat Connect's direct wholly-owned subsidiary, and (7) the term "Intelsat" refers to specific Intelsat-satellites. We refer to Intelsat General Corporation, one of our subsidiaries, as "Intelsat General." In this Annual Report, unless the context otherwise requires, all references to transponder capacity or demand refer to transponder capacity or demand in the C-band and Ku-band only.

A. Selected Financial Data

The following selected historical consolidated financial data should be read in conjunction with, and is qualified by reference to, Item 5—Operating and Financial Review and Prospects and our audited consolidated financial statements and their notes included elsewhere in this Annual Report. The consolidated statement of operations data and consolidated cash flow data for the years ended December 31, 2015, 2016 and 2017, and the consolidated balance sheet data as of December 31, 2016 and 2017 have been derived from audited consolidated financial statements included elsewhere in this Annual Report. The consolidated statement of operations data and consolidated cash flow data for the years ended December 31, 2013 and 2014 and the consolidated balance sheet data as of December 31, 2013, 2014 and 2015, have been derived from audited consolidated financial statements that are not included in this Annual Report.

	Year Ended December 31,									
	2013 2014 2015 2016								2017	
	(in thousands, except per share amounts)									
Consolidated Statement of Operations Data	0.0	(02 (22	Ф	2 472 296	Φ.	2 2 5 2 5 2 1	e.	2 100 047	e.	2 1 40 612
Revenue	\$ 2,	,603,623	Э	2,472,386	\$	2,352,521	\$	2,188,047	Þ	2,148,612
Operating expenses: Direct costs of revenue (excluding depreciation and amortization)		375,769		348,348		328,501		341,147		222.216
Selling, general and administrative		288,467		197,407		199,412		231,397		322,216 204,015
Impairment of goodwill and other intangibles		200,407		197,407		4,165,400		231,397		204,013
Depreciation and amortization		736,567		679,351		687,729		694,891		707,824
Gain on satellite insurance recoveries		/		0/9,331		087,729		694,891		/0/,824
		(9,618)	_	1 22 5 1 2 6	_		_		_	
Total operating expenses		,391,185	_	1,225,106	_	5,381,042	_	1,267,435	_	1,234,055
Income (loss) from operations		,212,438		1,247,280	(3,028,521)		920,612		914,557
Interest expense, net		,122,261		944,787		890,279		938,501		1,020,770
Gain (loss) on early extinguishment of debt	((368,089)		(40,423)		7,061		1,030,092		(4,109)
Other income (expense), net		(4,918)		(2,593)		(6,201)		(2,105)		6,638
Income (loss) before income taxes	((282,830)		259,477	(3,917,940)		1,010,098		(103,684)
Provision for (benefit from) income taxes		(30,837)		22,971		1,513		15,986		71,130
Net income (loss)		(251,993)		236,506	(3,919,453)		994,112		(174,814)
Net income attributable to noncontrolling interest	,	(3,687)		(3,974)	((3,934)		(3,915)		(3,914)
Net income (loss) attributable to Intelsat S.A.		(255,680)	_	232,532		3,923,387)	_	990,197	_	(178,728)
			_				_	990,197	_	(176,726)
Cumulative preferred dividends		(10,196)	_	(9,917)		(9,919)	_	 _	_	
Net income (loss) attributable to common shareholders	\$ ((265,876)	\$	222,615	\$ (3,933,306)	\$	990,197	\$	(178,728)
Other Data										
Capital expenditures		600,792	\$	645,424	\$	724,362	\$	714,570	\$	461,627
Other payments for satellites	\$	—	\$	_	\$	_	\$	18,333	\$	35,396
Basic income (loss) per common share attributable to Intelsat S.A.	\$	(2.70)	\$	2.09	\$	(36.68)	\$	8.65	\$	(1.50)
Diluted income (loss) per common share attributable to Intelsat										
S.A.	\$	(2.70)	\$	1.99	\$	(36.68)	\$	8.36	\$	(1.50)
Basic weighted average shares outstanding (in millions)		98.5		106.5		107.2		114.5		118.9
Diluted weighted average shares outstanding (in millions)		98.5		116.6		107.2		118.5		118.9
Dividends declared per 5.75% series A mandatory convertible										
junior non-voting preferred share	\$	2.96	\$	2.87	\$	2.88	\$	_	\$	
Consolidated Cash Flow Data										
Net cash provided by operating activities	\$	716,892	\$	1,046,170	\$	910,031	\$	683,506	\$	464,230
Net cash used in investing activities	,	(134,061)		(645,250)		(749,354)		(730,589)		(468,297)
Net cash provided by (used in) financing activities	((516,523)		(519,003)		(102,986)		541,596		(137,858)
Consolidated Balance Sheet Data										
Cash and cash equivalents, net of restricted cash	\$	247,790	\$	123,147	\$	171,541	\$	666,024	\$	525,215
Restricted cash		_		_		_		_		16,176
Satellites and other property and equipment, net	5,	,805,540		5,880,264		5,998,317		6,185,842		5,923,619
Total assets	16,	,408,217	1	6,326,434	1	2,253,590	1	2,942,009	1	2,610,036
Total debt	15,	,105,961	1	4,668,221	1	4,611,379	1	4,198,084	1	4,208,658
Shareholders' deficit	((975,353)		(776,268)		4,649,565)		3,634,145)		(3,807,870)
Net assets	(934,667)		(742,567)	(-	4,620,353)	(3,609,998)	(3,788,564)
Number of common shares (in millions)		106.0		106.7		107.6		118.0		119.6
Number of 5.75% series A mandatory convertible junior										
non-voting preferred shares (in millions)		3.5		3.5		3.5		_		_

B. Capitalization and Indebtedness

Not applicable.

C. Reasons for the Offer and Use of Proceeds

Not applicable.

D. Risk Factors

The risks described below are not the only ones that we may face. Additional risks that are not currently known to us or that we currently consider immaterial may also impair our business, financial condition or results of operations.

Risk Factors Relating to Our Business

We are subject to significant competition from within the fixed satellite services ("FSS") sector, from alternative satellite service providers and from other providers of communications capacity, such as fiber optic cable capacity. Competition from other telecommunications providers could have a material adverse effect on our business and could prevent us from implementing our business strategy and expanding our operations as planned.

We face significant competition in the FSS sector in different regions around the world. We compete against other satellite operators and against suppliers of ground-based communications capacity. The increasing availability of satellite capacity and capacity from other forms of communications technology has historically created an excess supply of telecommunications capacity in certain regions from time to time. We believe such an imbalance could again occur in certain regions, particularly as we and other operators begin to introduce next generation high-throughput satellite technology to our fleets. Additionally, there is emerging interest from new entrants to launch new constellations in different orbits that could potentially compete with portions of our business. Increased competition in the FSS sector could lower prices, which could reduce our operating margins and the cash available to fund our operations and service our debt obligations. In addition, there has been a trend toward consolidation of major FSS providers as customers increasingly demand more robust distribution platforms with network redundancies and worldwide reach, and we expect to face increased competition as a result of this trend. Our direct competitors are likely to continue developing and launching satellites with greater power and more transponders, which may create satellite capacity at lower costs. In order to compete effectively, we invest in similar technology.

We also believe that there are many companies that are seeking ways to improve the ability of existing land-based infrastructure, such as fiber optic cable, to transmit signals. Any significant improvement or increase in the amount of land-based capacity, particularly with respect to the existing fiber optic cable infrastructure and point-to-point applications, may cause our video and network services customers to shift their transmissions to land-based capacity or make it more difficult for us to obtain new customers. If fiber optic cable networks or other ground-based high-capacity transmission systems are available to service a particular point, that capacity, when available, is generally less expensive than satellite capacity. As land-based telecommunications services expand, demand for some satellite-based services may be reduced.

In addition, we face challenges to our business apart from these industry trends that our competition may not face. A portion of our revenue has historically been derived from channel services, and from other point-to-point services which comprise a portion of our transponder services. Because fiber optic cable capacity is generally available at lower prices than satellite capacity, competition from fiber optic cable providers has historically caused a migration of our point-to-point customers from satellite to fiber optic cable on certain routes, resulting in erosion in our revenue from point-to-point services over the last ten years. Some other FSS operators have service mixes that are less weighted towards point-to-point connectivity than our current service mix. We have been addressing this erosion and sustaining our business by expanding our customer base in point-to-multipoint services, such as video, and growing our presence in serving wireless communications providers and the mobility sector.

Failure to compete effectively with other FSS operators and to adapt to new competition and new technologies or failure to implement our business strategy while maintaining our existing business could result in a loss of revenue and a decline in profitability, a decrease in the value of our business and a downgrade of our credit ratings, which could restrict our access to the capital markets.

The market for FSS may not grow or may shrink, and therefore we may not be able to attract new customers, retain our existing customers or implement our strategies to grow our business. In addition, pricing pressures may have an adverse impact on FSS sector revenue.

The FSS sector, as a whole, has experienced growth over the past few years. However, the future market for FSS may not grow or may shrink. Competing technologies, such as fiber optic cable, continue to adversely affect the point-to-point segment of the FSS sector. In the point-to-multipoint segment, economic downturns, the transition of video traffic from analog to digital and continuing improvements in compression technology, which allow for improved transmission efficiency, have negatively impacted demand for certain fixed satellite services. Developments that we expect to support the growth of the satellite services industry, such as continued growth in data traffic and the proliferation of direct-to-home ("DTH") platforms, high definition television ("HDTV") and niche programming, may fail to materialize or may not occur in the manner or to the extent we anticipate. Any of these industry dynamics could negatively affect our operations and financial condition.

Because the market for FSS may not grow or may shrink, we may not be able to attract customers for the services that we are providing as part of our strategy to sustain and grow our business. Reduced growth in the FSS sector may also adversely affect our ability to retain our existing customers. A shrinking market could reduce the number and value of our customer contracts and would have a material adverse effect on our business and results of operations. In addition, there could be a substantial negative impact on our credit ratings and our ability to access the capital markets.

The FSS sector has in the past experienced periods of pricing pressures that have resulted in reduced revenues of FSS operators. Current pricing pressures and potential pricing pressures in the future could have a significant negative impact on our revenues and financial condition.

We have a substantial amount of indebtedness, which may adversely affect our cash flow and our ability to operate our business, remain in compliance with debt covenants and make payments on our indebtedness.

As of December 31, 2017, on a consolidated basis, we had approximately \$14.5 billion principal amount of third-party indebtedness outstanding, approximately \$4.9 billion of which was secured debt. Our subsidiaries were the issuers or borrowers of this debt as follows: (a) Intelsat (Luxembourg) S.A. ("Intelsat Luxembourg"), had approximately \$14.5 billion principal amount of total third-party indebtedness outstanding on a consolidated basis, approximately \$4.9 billion of which was secured debt, (b) Intelsat Connect Finance S.A. ("ICF"), had approximately \$731.9 million principal amount of total third-party indebtedness outstanding on a stand-alone basis, and (c) Intelsat Jackson Holdings S.A. ("Intelsat Jackson"), had approximately \$11.8 billion principal amount of total third-party indebtedness outstanding on a consolidated basis, approximately \$4.9 billion of which was secured debt. Intelsat Luxembourg debt, ICF debt and Intelsat Jackson debt are included in our consolidated debt.

The indentures and credit agreements governing a substantial portion of the outstanding debt of Intelsat Luxembourg, ICF and Intelsat Jackson and their respective subsidiaries permit each of these companies to make payments to their respective direct and indirect parent companies to fund the cash interest payments on such indebtedness, so long as no default or event of default shall have occurred and be continuing or would occur as a consequence thereof.

Our substantial indebtedness could have important consequences. For example, it could:

- make it more difficult for us to satisfy obligations with respect to indebtedness, and any failure to comply with the obligations of any of our debt
 instruments, including financial and other restrictive covenants, could result in an event of default under the indentures governing our notes and
 the agreements governing such other indebtedness;
- require us to dedicate a substantial portion of available cash flow to pay principal and interest on our outstanding debt, which will reduce the funds available for working capital, capital expenditures, acquisitions and other general corporate purposes;
- · limit flexibility in planning for and reacting to changes in our business and in the industry in which we operate;
- · increase our vulnerability to general adverse economic and industry conditions and to deterioration in operating results;
- limit our ability to engage in strategic transactions or implement our business strategies;
- limit our ability to borrow additional funds, or to refinance, repay or restructure our existing indebtedness; and
- place us at a disadvantage compared to any competitors that have less debt.

Any of the factors listed above could materially and adversely affect our business and our results of operations. Furthermore, our interest expense could increase if interest rates rise because certain portions of our debt bear interest at floating rates. Although we have hedged the full amount of our floating rate debt of \$2.4 billion for the upcoming 3 years for increases in the 3-month London InterBank Offered Rate ("LIBOR") to a rate above 2%, any increases in 3-month LIBOR from current levels to 2% would cause our interest expense to increase. Our interest expense could also increase when we refinance debt. If we do not have sufficient cash flow to service our debt, we may be required to refinance all or part of our existing debt, sell assets, borrow more money or sell securities, none of which we can guarantee we will be able to do.

We may be able to incur significant additional indebtedness in the future. Although the agreements governing our indebtedness contain restrictions on the incurrence of certain additional indebtedness, these restrictions are subject to a number of important qualifications and exceptions, and the indebtedness incurred in compliance with these restrictions could be substantial. If we incur new indebtedness, the related risks, including those described above, could intensify.

To service our third-party indebtedness, we will require a significant amount of cash. Our ability to generate cash depends on many factors beyond our control, and any failure to meet our third-party debt service obligations could harm our business, financial condition and results of operations.

On a pro forma basis after giving effect to an amendment to Intelsat Jackson's secured credit facility effected on January 2, 2018, our estimated payment obligations with respect to third-party indebtedness (i.e., not held by ICF or any of our other subsidiaries) for 2018, comprise approximately \$1.1 billion of interest payments, excluding payments related to satellite performance incentives due to satellite manufacturers. Of this amount, \$830 million is attributable to Intelsat Jackson, \$155 million is attributable to Intelsat Luxembourg and \$91 million is attributable to ICF.

Our ability to satisfy our debt obligations will depend principally upon our future operating performance. As a result, prevailing economic conditions and financial, business and other factors, many of which are beyond our control, will affect our ability to make payments on our indebtedness. If we do not generate sufficient cash flow from operations to satisfy our debt service obligations, or if our subsidiaries are prohibited from paying dividends or making distributions because of restrictions in the agreements governing their indebtedness or otherwise, we may have to pursue alternative financing plans, such as refinancing or restructuring our indebtedness, selling assets, reducing or delaying capital investments or seeking to raise additional capital. Our ability to refinance or restructure our debt will depend on the capital markets and our financial condition at such time. Any refinancing of our debt could be at higher interest rates and may require us to comply with more onerous covenants, which could further restrict our business operations. In addition, the terms of our and our subsidiaries' existing or future debt instruments, including the Intelsat Jackson Secured Credit Agreement and the indentures governing Intelsat Luxembourg's, Intelsat Jackson's and ICF's outstanding notes, may restrict us from adopting some of these alternatives. Furthermore, the Sponsors (as defined below in Item 4A—History and Development of the Company—The Sponsors Acquisition Transactions) have no obligation to provide us with debt or equity financing in the future. Our inability to generate sufficient cash flow to satisfy our debt service obligations, or to refinance our obligations on commercially reasonable terms would have an adverse effect, which could be material, on our business, financial position, results of operations and cash flows.

The terms of the Intelsat Jackson Secured Credit Agreement, the indentures governing our existing notes and the terms of our other indebtedness may restrict our current and future operations, particularly our ability to respond to changes in our business or to take certain actions.

On January 12, 2011, Intelsat Jackson, our wholly-owned subsidiary, entered into a secured credit agreement (as amended, the "Intelsat Jackson Secured Credit Agreement"). The Intelsat Jackson Secured Credit Agreement, the indentures governing our existing notes and the terms of our other outstanding indebtedness contain, and any future indebtedness of ours would likely contain, a number of restrictive covenants imposing significant operating and financial restrictions on Intelsat S.A. and some or all of its subsidiaries, including restrictions that may limit our ability to engage in acts that may be in our long-term best interests. The Intelsat Jackson Secured Credit Agreement includes two financial covenants. Intelsat Jackson must maintain a consolidated secured debt to consolidated EBITDA ratio of less than or equal to 3.50 to 1.00 at the end of each fiscal quarter as well as a consolidated EBITDA to consolidated interest expense ratio of greater than or equal to 1.75 to 1.00 at the end of each fiscal quarter, in each case as such financial measures are defined in the Intelsat Jackson Secured Credit Agreement.

In addition, the Intelsat Jackson Secured Credit Agreement requires Intelsat Jackson to use a portion of the proceeds of certain asset sales, in excess of a specified amount, that are not reinvested in its business to repay indebtedness under the agreement.

The Intelsat Jackson Secured Credit Agreement, the indentures governing our existing notes and the terms of our other outstanding indebtedness include covenants restricting, among other things, the ability of Intelsat S.A. and its subsidiaries to:

• incur or guarantee additional debt or issue disqualified stock;

- pay dividends (including to fund cash interest payments at different entity levels), or make redemptions, repurchases or distributions, with respect
 to ordinary shares or capital stock;
- create or incur certain liens;
- · make certain loans or investments;
- · engage in mergers, acquisitions, amalgamations, asset sales and sale and leaseback transactions; and
- engage in transactions with affiliates.

In addition, under certain circumstances as described in the Intelsat Jackson Secured Credit Agreement, Intelsat could be required to apply a certain percentage of its Excess Cash Flow (as defined in such agreement), if any, after operational needs for each fiscal year towards the repayment of outstanding term loans, subject to certain deductions.

These covenants are subject to a number of qualifications and exceptions. The operating and financial restrictions and covenants in our existing debt agreements and any future financing agreements may adversely affect our ability to finance future operations or capital needs or to engage in other business activities. A breach of any of the restrictive covenants in the Intelsat Jackson Secured Credit Agreement including the two financial maintenance covenants referred to above could result in a default under such agreement. If any such default occurs, the lenders under the Intelsat Jackson Secured Credit Agreement may elect to declare all outstanding borrowings, together with accrued interest and other fees, to be immediately due and payable, enforce their security interest or require us to apply all available cash to repay these borrowings. If this occurred under the Intelsat Jackson Secured Credit Agreement, this would result in an event of default under our existing notes. If Intelsat Jackson were unable to repay outstanding borrowings when due, the lenders under the Intelsat Jackson Secured Credit Agreement would have the right to proceed against the collateral granted to them to secure the debt owed to them. If the debt under the Intelsat Jackson Secured Credit Agreement were to be accelerated, our assets might not be sufficient to repay such debt in full or to repay our notes and our other debt.

Our business is capital intensive and requires us to make long-term capital expenditure decisions, and we may not be able to raise adequate capital to finance our business strategies, or we may be able to do so only on terms that significantly restrict our ability to operate our business.

Implementation of our business strategy requires a substantial outlay of capital. As we pursue our business strategies and seek to respond to opportunities and trends in our industry, our actual capital expenditures may differ from our expected capital expenditures and there can be no assurance that we will be able to satisfy our capital requirements in the future. The nature of our business also requires us to make capital expenditure decisions in anticipation of customer demand, and we may not be able to correctly predict customer demand. We have only a fixed amount of transponder capacity available to serve a particular region. If our customer demand exceeds our transponder capacity, we may not be able to fully capture the growth in demand in the region served by that capacity. We currently expect that our liquidity requirements in 2018 will be satisfied by cash on hand and cash generated from our operations. However, if we determine we need to obtain additional funds through external financing and are unable to do so, we may be prevented from fully implementing our business strategy.

The availability and cost to us of external financing depend on a number of factors, including general market conditions, our financial performance and our credit rating. Both our credit rating and our ability to obtain financing generally may be influenced by the supply and demand characteristics of the telecommunications sector in general and of the FSS sector in particular. Declines in our expected future revenue under contracts with customers and challenging business conditions faced by our customers are among factors that may adversely affect our credit. Other factors that could impact our credit include the amount of debt in our current capital structure, activities associated with our strategic initiatives, our expected future cash flows and the capital expenditures required to execute our business strategy. The overall impact on our financial condition of any transaction that we pursue may be negative or may be negatively perceived by the financial markets and ratings agencies and may result in adverse rating agency actions with respect to our credit rating. A disruption in the capital markets, a deterioration in our financial performance or a credit rating downgrade could limit our ability to obtain financing or could result in any such financing being available only at greater cost or on more restrictive terms than might otherwise be available. Our debt agreements also impose restrictions on our operation of our business and could make it more difficult for us to obtain further external financing if required. See—The terms of the Intelsat Jackson Secured Credit Agreement, the indentures governing our existing notes and the terms of our other indebtedness may restrict our current and future operations, particularly our ability to respond to changes in our business or to take certain actions.

Long-term disruptions in the capital and credit markets as a result of uncertainty due to recent recessions, changing or increased regulation or failures of significant financial institutions could adversely affect our access to capital. If financial market disruptions intensify, it may become difficult for us to raise additional capital or refinance debt when needed, on acceptable terms or at all. Any disruption could require us to take measures to conserve cash until the markets stabilize or until alternative credit arrangements or other funding for our business needs can be arranged. Such measures could include deferring capital expenditures and reducing or eliminating other discretionary uses of cash, which could adversely impact our business and our ability to execute our business strategies.

Our financial condition could be materially and adversely affected if we were to suffer a satellite loss that is not adequately covered by insurance.

We currently carry in-orbit insurance only with respect to a small portion of our satellite fleet, generally for a short period of time following launch. As of December 31, 2017, five of the approximately 50 satellites in our current and future fleet were covered by in-orbit insurance. Amounts recoverable from in-orbit insurance coverage may initially be comparable to amounts recoverable with respect to launch insurance coverage; however, such amounts generally decrease over time and are typically based on our declining potential repayment obligations with respect to certain customer prepayments made prior to or during the manufacture of certain satellites, or the declining book value of the satellite.

As our satellite insurance policies expire, we may elect to reduce or eliminate insurance coverage relating to certain of our satellites to the extent permitted by our debt agreements if, in our view, exclusions make such policies ineffective or the costs of coverage make such insurance impractical and we believe that we can more reasonably protect our business through the use of in-orbit spare satellites, backup transponders and self-insurance. A partial or complete failure of a revenue-producing satellite, whether insured or not, could require additional, unplanned capital expenditures, an acceleration of planned capital expenditures, interruptions in service, a reduction in contracted backlog and lost revenue and could have a material adverse effect on our business, financial condition and results of operations. We do not currently insure against lost revenue in the event of total or partial loss of a satellite.

We also maintain third-party liability insurance on some of our satellites to cover damage caused by our satellites. This insurance, however, may not be adequate or available to cover all third-party liability damages that may be caused by any of our satellites, and we may not in the future be able to renew our third-party liability coverage on reasonable terms and conditions, if at all.

We may become subject to unanticipated tax liabilities that may have a material adverse effect on our results of operations.

Intelsat S.A. and certain of its subsidiaries are Luxembourg-based companies and are subject to Luxembourg taxation for corporations. We believe that a significant portion of the income derived from our communications network will not be subject to tax in certain countries in which we own assets or conduct activities or in which our customers are located, including the United States and the United Kingdom. However, this belief is based on the presently anticipated nature and conduct of our business and on our current position under the tax laws of the countries in which we own assets or conduct activities. This position is subject to review and possible challenge by taxing authorities and to possible changes in law that may have a retroactive effect.

In addition, we conduct business with customers and counterparties in multiple countries and jurisdictions. Our overall tax burden is affected by tax legislation in these jurisdictions and the terms of income tax treaties between these countries and the countries in which our subsidiaries are qualified residents for treaty purposes as in effect from time to time. Tax legislation in these countries and jurisdictions may be amended and treaties are regularly renegotiated by the contracting countries and, in each case, may change. If tax legislation or treaties were to change, we could become subject to additional taxes, including retroactive tax claims or assessments of withholding on amounts payable to us or other taxes assessed at the source, in excess of the taxation we anticipate based on business contracts and practices and the current tax regimes. The extent to which certain taxing jurisdictions may require us to pay tax or to make payments in lieu of tax cannot be determined in advance. Our results of operations could be materially adversely affected if we become subject to a significant amount of unanticipated tax liabilities.

We are subject to political, economic, regulatory and other risks due to the international nature of our operations.

We provide communications services in approximately 200 countries and territories. Accordingly, we may be subject to greater risks than other companies as a result of the international nature of our business operations. We could be harmed financially and operationally by tariffs, taxes, government sanctions and regulatory actions, and other trade barriers that may be imposed on our services, or by political and economic instability in the countries in which we provide services, for instance in countries heavily reliant on revenues from natural resources. If we ever need to pursue legal remedies against our customers or our business partners located outside of Luxembourg, the United States or the United Kingdom, it may be difficult for us to enforce our rights against them depending on their location.

Substantially all of our ongoing technical operations are conducted and/or managed in the United States, Luxembourg and Germany. However, providers of satellite launch services, upon which we are reliant to place our satellites into orbit, locate their operations in other countries, including Kazakhstan. Political disruptions in this country could increase the risk of launching the satellites that provide capacity for our operations, which could result in financial harm to us.

Our business is subject to foreign currency risk.

Almost all of our customers pay for our services in U.S. dollars, although we are exposed to some risk related to customers who do not pay in U.S. dollars. Fluctuations in the value of non-U.S. currencies may make payment in U.S. dollars more expensive for our non-U.S. customers, and in certain circumstances, cause us to renegotiate prices or other terms in contracts in order to retain such customers. For instance, our Russian customers and others may face difficulties paying for our services because of recent deterioration in the Russian currency and the relative strength of the U.S. dollar compared to many other currencies. In addition, our non-U.S. customers may have difficulty obtaining U.S. currency and/or remitting payment due to currency exchange controls.

Our Sponsors own a significant amount of our common shares and may have conflicts of interest with us in the future.

Our Sponsors (as defined below in Item 4A—History and Development of the Company—The Sponsors Acquisition Transactions) hold in the aggregate approximately 65% of our common shares. By virtue of their share ownership, the Sponsors may be able to influence decisions to enter into any corporate transaction or other matter that requires the approval of shareholders. Additionally, the Sponsors are in the business of making investments in companies and, although they do not currently hold interests in any business that competes directly or indirectly with us, may from time to time acquire and hold interests in businesses that compete with us. The Sponsors may also pursue acquisition opportunities that may be complementary to our business, and, as a result, those acquisition opportunities may not be available to us.

We have several large customers and the loss of, or default by, these customers could materially reduce our revenue and materially adversely affect our business.

A limited number of customers provide a substantial portion of our revenue and contracted backlog. For the year ended December 31, 2017, our ten largest customers and their affiliates represented approximately 34% of our revenue. The loss of, or default by, our larger customers could adversely affect our current and future revenue and operating margins.

Some customers have in the past defaulted and, although we monitor our larger customers' financial performance and seek deposits, guarantees and other methods of protection against default where possible, our customers may in the future default on their obligations to us due to bankruptcy, lack of liquidity, operational failure, devaluation of local currency or other reasons. Defaults by any of our larger customers or by a group of smaller customers who, collectively, represent a significant portion of our revenue could adversely affect our revenue, operating margins and cash flows. If our contracted backlog is reduced due to the financial difficulties of our customers, our revenue, operating margins and cash flows would be further negatively impacted.

Reductions or changes in U.S. government spending, including the U.S. defense budget, could reduce our revenue and adversely affect our business.

The U.S. government, through the U.S. Department of Defense and other agencies, is one of our largest customers. Spending authorizations for defense-related and other programs by the U.S. government have fluctuated in the past, and future levels of expenditures and authorizations for these programs may decrease, remain constant or shift to programs in areas where we do not currently provide services. We provide services to the U.S. government and its agencies through contracts that are conditioned upon the continuing availability of Congressional appropriations. Congress usually appropriates funds on a fiscal year basis, even though contract performance may extend over many years. In recent years, there has been a pattern of delays in the finalization and approval of the U.S. government budget, which can create uncertainty over the extent of future U.S. government demand for our services. Furthermore, in light of the current geopolitical situation, with reductions in U.S. operational presence in Iraq, Afghanistan and potentially the Middle East more generally, there may be additional future declines in the U.S. government's demand for and use of our services. To the extent the U.S. government and its agencies reduce spending on commercial satellite services, this could adversely affect our revenue and operating margins.

The loss of the services of key personnel could have a material adverse effect on our business.

Our executive officers and other members of our senior management have been a critical element of our success. These individuals have substantial experience and expertise in our business and have made significant contributions to its growth and success. We have entered into employment agreements with each of our executive officers, including David McGlade, our Executive Chairman, Stephen Spengler, our Chief Executive Officer, Michelle Bryan, our Executive Vice President, General Counsel and Chief Administrative Officer, Michael DeMarco, our Executive Vice President, Operations, Samer Halawi, our Executive Vice President and Chief Commercial Officer, and Jacques Kerrest, our Executive Vice President and Chief Financial Officer, and certain targeted retention mechanisms; however, these agreements and mechanisms do not guarantee that these executives will remain with us. The unexpected loss of services of one or more of our executive officers or members of senior management could have a material adverse effect on our business.

Risk Factors Relating to Our Industry

We may experience in-orbit satellite failures or degradations in performance that could impair the commercial performance of our satellites, which could lead to lost revenue, an increase in our cash operating expenses, lower operating income or lost backlog.

Satellites utilize highly complex technology and operate in the harsh environment of space and, accordingly, are subject to significant operational risks while in orbit. These risks include malfunctions, commonly referred to as anomalies that have occurred in our satellites and the satellites of other operators as a result of:

- the satellite manufacturer's error, whether due to the use of new and largely unproven technology or due to a design, manufacturing or assembly
 defect that was not discovered before launch;
- problems with the power systems of the satellites, including:
 - circuit failures or other array degradation causing reductions in the power output of the solar arrays on the satellites, which could cause us to
 lose some of our capacity, require us to forego the use of some transponders initially and to turn off additional transponders in later years;
 and/or
 - failure of the cells within the batteries, whose sole purpose is to power the payload and spacecraft operations during the daily eclipse periods which occur for brief periods of time during two 40-day periods around March 21 and September 21 of each year; and/or
- problems with the control systems of the satellites, including:
 - failure of the primary and/or backup satellite control processor ("SCP"); and/or
 - failure of one or more gyroscope and/or associated electronics that are used to provide satellite attitude information during maneuvers;
- · problems with the propulsion systems of the satellites, including:
 - · failure of the primary and/or backup thrusters; and/or
 - failure of the Xenon-Ion Propulsion System ("XIPS") used on certain Boeing satellites, which is an electronic propulsion system that maintains the spacecraft's proper in-orbit position; and/or
- general failures resulting from operating satellites in the harsh space environment, such as premature component failure or wear out of
 mechanisms.

We have experienced anomalies in each of the categories described above. Although we work closely with the satellite manufacturers to determine and eliminate the cause of these anomalies in new satellites and provide for on-satellite backups for certain critical components to minimize or eliminate service disruptions in the event of failure, we may experience anomalies in the future, whether of the types described above or arising from the failure of other systems or components. These anomalies can manifest themselves in scale from minor reductions of equipment redundancy to marginal reductions in capacity to complete satellite failure. Some of our satellites have experienced significant anomalies in the past and some have components that are now known to be susceptible to similar significant anomalies. Each of these is discussed in Item 4B—Business Overview—Satellite Health and Technology. An on-satellite backup for certain components may not be available upon the occurrence of such an anomaly.

Any single anomaly or series of anomalies could materially and adversely affect our operations, our revenues, our relationships with our current customers and our ability to attract new customers for our satellite services. In particular, future anomalies may result in the loss of individual transponders on a satellite, a single beam or multiple beams, a group of transponders on that satellite or the entire satellite, depending on the nature of the anomaly and the availability of on-satellite backups. Anomalies and our estimates of their future effects may also cause a reduction of the expected service life of a satellite and contracted backlog. Anomalies may also cause a reduction of the revenue generated by that satellite or the recognition of an impairment loss, and in some circumstances could lead to claims from third parties for damages, if a satellite experiencing an anomaly were to cause physical damage to another satellite, create interference to the transmissions on another satellite, cause other satellite operators to incur expenses to avoid such physical damage or interference or lower operating income as a result of an impairment charge. Finally, the occurrence of anomalies may adversely affect our ability to insure our satellites at commercially reasonable premiums, if at all. While some anomalies are covered by insurance policies, others are not or may not be covered. See—Risk Factors Relating to Our Business—Our financial condition could be materially and adversely affected if we were to suffer a satellite loss that is not adequately covered by insurance.

Many of the technical problems we have experienced on our current fleet have been component failures and anomalies. Our Intelsat 804 satellite experienced a sudden and unexpected electrical power system anomaly that resulted in the total loss of the satellite in January 2005. The Intelsat 804 satellite was an LM 7000 series satellite, and as of December 31, 2017, we operated one other satellite in the LM 7000 series, Intelsat 805. We believe that the Intelsat 804 satellite failure was most likely caused by a high current event in the battery circuitry triggered by an electrostatic discharge that propagated to cause the sudden failure of the high voltage power system.

Our Galaxy 15 satellite experienced an anomaly in April 2010 resulting in our inability to command the satellite. We transitioned all media traffic on this satellite to our Galaxy 12 satellite, which was our designated in-orbit spare satellite for the North America region. Galaxy 15 is a Star-2 satellite manufactured by Orbital Sciences Corporation. On December 23, 2010, we recovered command of the spacecraft and subsequently completed diagnostic testing and uploading of software updates that protect against future anomalies of this type. As of December 31, 2017, Galaxy 15 continues to provide normal service.

We may also experience additional anomalies relating to the failure of the SCP in our BSS 601 satellite, various anomalies associated with XIPS in our BSS 601 HP satellites or a progressive degradation of the solar arrays in certain of our BSS 702 satellites.

Three of the BSS 601 satellites that we operated in the past, as well as BSS 601 satellites operated by others, have experienced a failure of the primary and backup SCPs. On February 1, 2010, our Intelsat 4 satellite experienced an anomaly of its backup SCP and was taken out of service. This event did not have a material impact on our operations or financial results. As of December 31, 2017, we operate only one BSS 601 satellite, Intelsat 26.

Certain of the BSS 601 HP satellites have experienced various problems associated with their XIPS. We currently operate four BSS 601 HP satellites of this type, three of which have experienced failures of both XIPS and the other has experienced a partial loss of its XIPS. We may in the future experience similar problems associated with XIPS or other propulsion systems on our satellites.

Two of the three BSS 702 HP satellites that we operate, as well as BSS 702 HP satellites of a similar design operated by others, have experienced a progressive degradation of their solar arrays causing a reduction in output power. Along with the manufacturer, we continually monitor the problem to determine its cause and its expected effect. The power reduction may require us to permanently turn off certain transponders on the affected satellites to allow for the continued operation of other transponders, which could result in a loss of revenues, or may result in a reduction of the satellite's service life. In 2004, based on a review of available data, we reduced our estimate of the service lives of both satellites due to the continued degradation.

On April 22, 2011, our Intelsat 28 satellite, formerly known as the Intelsat New Dawn satellite, was launched into orbit. Subsequent to the launch, the satellite experienced an anomaly during the deployment of its west antenna reflector, which controls communications in the C-band frequency. The anomaly had not been experienced previously on other STAR satellites manufactured by Orbital Sciences Corporation, including those in our fleet. The New Dawn joint venture filed a partial loss claim with its insurers relating to the C-band antenna reflector anomaly and all of the insurance proceeds from the partial loss claim were received in 2011. The Ku-band antenna reflector deployed and that portion of the satellite is operating as planned, entering service in June 2011. A Failure Review Board established to determine the cause of the anomaly completed its investigation in July 2011 and concluded that the deployment anomaly of the C-band reflector was most likely due to a malfunction of the reflector sunshield. As a result, the sunshield interfered with the ejection release mechanism, and prevented the deployment of the C-band antenna. The Failure Review Board also recommended corrective actions for Orbital Sciences Corporation satellites not yet launched to prevent reoccurrence of the anomaly. Appropriate corrective actions were implemented on Intelsat 18, which was successfully launched on October 5, 2011, and on Intelsat 23, which was launched in October 2012.

During launch operations of Intelsat 19 on June 1, 2012, the satellite experienced damage to its south solar array. Although both solar arrays are deployed, the power available to the satellite is less than is required to operate 100% of the payload capacity. The Independent Oversight Board, formed by Space Systems/Loral, LLC ("SSL") and Sea Launch to investigate the solar array deployment anomaly, concluded that the anomaly occurred before the spacecraft separated from the launch vehicle during the ascent phase of the launch, and originated in one of the satellite's two solar array wings due to a rare combination of factors in the panel fabrication that was unrelated to the launch vehicle. While the satellite is operational, the anomaly resulted in structural and electrical damage to one solar array wing, which reduced the amount of power available for payload operation. Additionally, we filed a partial loss claim with our insurers relating to the solar array anomaly. We received \$84.8 million of insurance proceeds related to the claim in 2013. As planned, Intelsat 19 replaced Intelsat 8 at 166°E, in August 2012.

During orbit raising of Intelsat 33e in September 2016, the satellite experienced a malfunction of the main satellite thruster. Orbit raising was subsequently completed using a different set of satellite thrusters. The anomaly resulted in a delay of approximately three months in reaching the geostationary orbit, as well as a reduction in the projected lifetime of the satellite. Intelsat 33e entered service in January 2017. In addition, in February 2017, measurements indicated higher than expected fuel use while performing stationkeeping maneuvers. There is no evidence of any impact to the communications payload. A Failure Review Board has been established to determine the cause of the primary thruster failure and a separate team to investigate the fuel use anomaly. Intelsat has filed a loss claim with insurers relating to the reduction of life.

We may experience a launch failure or other satellite damage or destruction during launch, which could result in a total or partial satellite loss. A new satellite could also fail to reach its designated orbital location after launch. Any such loss of a satellite could negatively impact our business plans and could reduce our revenue.

Satellites are subject to certain risks related to failed launches. Launch failures result in significant delays in the deployment of satellites because of the need both to construct replacement satellites, which can take 24 months or longer, and to obtain other launch opportunities. Such significant delays could materially and adversely affect our operations and our revenue. In addition, significant delays could give customers who have purchased or reserved capacity on that satellite a right to terminate their service contracts relating to the satellite. We may not be able to accommodate affected customers on other satellites until a replacement satellite is available. A customer's termination of its service contracts with us as a result of a launch failure would reduce our contracted backlog. Delay caused by launch failures may also preclude us from pursuing new business opportunities and undermine our ability to implement our business strategy.

Launch vehicles may also under-perform, in which case the satellite may still be placed into service by using its onboard propulsion systems to reach the desired orbital location, resulting in a reduction in its service life. In addition, although we have had launch insurance on all of our launches to date, if we were not able to obtain launch insurance on commercially reasonable terms and a launch failure were to occur, we would directly suffer the loss of the cost of the satellite and related costs, which could be more than \$300 million.

On February 1, 2013, the launch vehicle for our Intelsat 27 satellite failed shortly after liftoff and the satellite was completely destroyed. A Failure Review Board was established and subsequently concluded that the launch failed due to the mechanical failure of one of the first stage engine's thrust control components. The satellite and launch vehicle were fully insured, and all of the insurance proceeds from the loss claim were received in 2013.

Since 1980, we and the entities we have acquired have launched 121 satellites. Including the Intelsat 27 satellite, seven of these satellites were destroyed as a result of launch failures, all but one of which occurred prior to 2000. In addition, certain launch vehicles that we have used or are scheduled to use have experienced launch failures in the past. Launch failure rates vary according to the launch vehicle used. Our capital expenditure guidance for 2018 through 2020 assumes investment in seven satellites in the launch, manufacturing and design phase, including a satellite launched in 2017. We have placed manufacturing contracts for two of the six satellites in the manufacturing and design phase. We also have two other satellites in development, which will not require capital expenditure.

New or proposed satellites are subject to construction and launch delays, the occurrence of which can materially and adversely affect our operations.

The construction and launch of satellites are subject to certain delays. Such delays can result from delays in the construction of satellites and launch vehicles, the periodic unavailability of reliable launch opportunities, possible delays in obtaining regulatory approvals and launch failures. We have in the past experienced delays in satellite construction and launch which have adversely affected our operations. Future delays may have the same effect. A significant delay in the future delivery of any satellite may also adversely affect our marketing plan for the satellite. If satellite construction schedules are not met, a launch opportunity may not be available at the time a satellite is ready to be launched. Further, any significant delay in the commencement of service of any of our satellites could enable customers who pre-purchased or agreed to utilize transponder capacity on the satellite to terminate their contracts and could affect our plans to replace an in-orbit satellite prior to the end of its service life. The failure to implement our satellite deployment plan on schedule could have a material adverse effect on our financial condition and results of operations. Delays in the launch of a satellite intended to replace an existing satellite that result in the existing satellite reaching its end of life before being replaced could result in loss of business to the extent an in-orbit backup is not available.

Our dependence on outside contractors could result in increased costs and delays related to the launch of our new satellites, which would in turn adversely affect our business, operating results and financial condition.

There are a limited number of companies that we are able to use to launch our satellites and a limited number of commercial satellite launch opportunities available in any given time period. Adverse events with respect to our launch service providers, such as satellite launch failures or financial difficulties (which some of these providers have previously experienced), could result in increased costs or delays in the launch of our satellites. General economic conditions may also affect the ability of launch providers to provide launch services on commercially reasonable terms or to fulfill their obligations in terms of launch dates, pricing, or both. In the event that our launch service providers are unable to fulfill their obligations, we may have difficulty procuring alternative services in a timely manner and may incur significant additional expenses as a result. Any such increased costs and delays could have a material adverse effect on our business, operating results and financial condition.

A natural disaster could diminish our ability to provide communications service.

Natural disasters could damage or destroy our ground stations, resulting in a disruption of service to our customers. We currently have the technology to help safeguard our antennas and protect our ground stations during natural disasters such as a hurricane, but the collateral effects of disasters such as flooding may impair the functioning of our ground equipment. If a future natural disaster impairs or destroys any of our ground facilities, we may be unable to provide service to our customers in the affected area for a period of time and may incur an impairment charge lowering our operating income.

Risk Factors Relating to Regulation

We are subject to orbital slot and spectrum access requirements of the International Telecommunication Union ("ITU") and regulatory and licensing requirements in each of the countries in which we provide services, and our business is sensitive to regulatory changes internationally and in those countries.

The telecommunications industry is highly regulated, and we depend on access to orbital slots and spectrum resources to provide satellite services. The ITU and national regulators allocate spectrum for satellite services, and may change these allocations, which could change or limit how Intelsat's current satellites are able to be used. In addition, in connection with providing satellite capacity, ground network uplinks, downlinks and other value-added services to our customers, we need to maintain regulatory approvals, and from time to time obtain new regulatory approvals, from various countries. Obtaining and maintaining these approvals can involve significant time and expense. If we cannot obtain or are delayed in obtaining the required regulatory approvals, we may not be able to provide these services to our customers or expand into new services. In addition, the laws and regulations to which we are subject could change at any time, thus making it more difficult for us to obtain new regulatory approvals or causing our existing approvals to be revoked or adversely modified. Because the regulatory schemes vary by country, we may also be subject to regulations of which we are not presently aware and could be subject to sanctions by a foreign government that could materially and adversely affect our operations in that country. If we cannot comply with the laws and regulations that apply to us, we could lose our revenue from services provided to the countries and territories covered by these laws and regulations and be subject to criminal or civil sanctions.

If we do not maintain regulatory authorizations for our existing satellites and associated ground facilities or obtain authorizations for our future satellites and associated ground facilities, we may not be able to operate our existing satellites or expand our operations.

The operation of our existing satellites is authorized and regulated by the U.S. Federal Communications Commission ("FCC"), the U.K. Office of Communications ("Ofcom") and the U.K. Space Agency ("UKSA"), the National Information & Communications Technology Authority of Papua New Guinea ("NICTA"), the Ministry of Internal Affairs and Communications of Japan, and the Bundesnetzagentur ("BNetzA") in Germany.

We believe our current operations are in compliance with FCC and non-U.S. licensing jurisdiction requirements. However, if we do not maintain the authorizations necessary to operate our existing satellites, we will not be able to operate the satellites covered by those authorizations, unless we obtain authorization from another licensing jurisdiction. Some of our authorizations provide waivers of technical regulations. If we do not maintain these waivers, we will be subject to operational restrictions or interference that will affect our use of existing satellites. Loss of a satellite authorization could cause us to lose the revenue from services provided by that satellite at a particular orbital location to the extent these services cannot be provided by satellites at other orbital locations.

Our launch and operation of planned satellites require additional regulatory authorizations from the FCC or a non-U.S. licensing jurisdiction. Likewise, if any of our current operations are deemed not in compliance with applicable regulatory requirements, we may be subject to various sanctions, including fines, loss of authorizations, or denial of applications for new authorizations or renewal of existing authorizations. It is not uncommon for licenses for new satellites to be granted just prior to launch, and we expect to receive such licenses for all planned satellites. If we do not obtain required authorizations in the future, we will not be able to operate our planned satellites. If we obtain a required authorization but we do not meet milestones regarding the construction, launch and operation of a satellite by deadlines that may be established in the authorization, we may lose our authorization to operate a satellite using certain frequencies in an orbital location. Any authorizations we obtain may also impose operational restrictions or permit interference that could affect our use of planned satellites.

If we do not occupy unused orbital locations by specified deadlines, or do not maintain satellites in orbital locations we currently use, those orbital locations may become available for other satellite operators to use.

If we are unable to place satellites into currently unused orbital locations by specified deadlines and in a manner that satisfies the ITU or national regulatory requirements, or if we are unable to maintain satellites at the orbital locations that we currently use, we may lose our rights and/or priority to use these orbital locations, and the locations with ITU priority could become available for other satellite operators to use. The loss of one or more of our orbital locations could negatively affect our plans and our ability to implement our business strategy.

Coordination results may adversely affect our ability to use a satellite at a given orbital location for our proposed service or coverage area.

We are required to record frequencies and orbital locations used by our satellites with the ITU and to coordinate with other satellite operators and national administrations the use of these frequencies and orbital locations in order to avoid interference to or from other satellites. The results of coordination may adversely affect our use of satellites at particular orbital locations, as well as the type of applications or services that we can accommodate. If we are unable to coordinate our satellites by specified deadlines, we may not be able to use a satellite at a given orbital location for our proposed service or coverage area. The use of our satellites may also be temporarily or permanently adversely affected if the operation of adjacent satellite networks does not conform to coordination agreements resulting in the acceptable interference levels being exceeded (e.g., due to operational errors associated with the transmissions to adjacent satellite networks).

Our failure to maintain or obtain authorizations under the U.S. export control and trade sanctions laws and regulations could have a material adverse effect on our business.

The export of satellites and technical data related to satellites, earth station equipment and provision of services are subject to U.S. Department of State, U.S. Department of Commerce and U.S. Department of Treasury regulations. If we do not maintain our existing authorizations or obtain necessary future authorizations under the export control laws and regulations of the United States, we may be unable to export technical data or equipment to non-U.S. persons and companies, including to our own non-U.S. employees, as required to fulfill existing contracts. If we do not maintain our existing authorizations or obtain necessary future authorizations under the trade sanctions laws and regulations of the United States, we may not be able to provide satellite capacity and related administrative services to certain countries subject to U.S. sanctions. Our ability to acquire new satellites, launch new satellites or operate our satellites could also be negatively affected if our suppliers do not obtain required U.S. export authorizations.

If we do not maintain required security clearances from, and comply with our agreements with, the U.S. Department of Defense, or if we do not comply with U.S. law, we may not be able to continue to perform our obligations under U.S. government contracts.

To participate in classified U.S. government programs, we sought and obtained security clearances for one of our subsidiaries from the U.S. Department of Defense. Given our foreign ownership, we entered into a proxy agreement with the U.S. government that limits our ability to control the operations of this subsidiary, as required under the national security laws and regulations of the United States. If we do not maintain these security clearances, we will not be able to perform our obligations under any classified U.S. government contracts to which our subsidiary is a party, the U.S. government would have the right to terminate our contracts requiring access to classified information and we will not be able to enter into new classified contracts. As a result, our business could be materially and adversely affected. Further, if we materially violate the terms of the proxy agreement or if we are found to have materially violated U.S. law, we or the subsidiary holding the security clearances may be suspended or barred from performing any U.S. government contracts, whether classified or unclassified, and we could be subject to civil or criminal penalties.

Item 4. Information on the Company

A. History and Development of the Company

The Company

Our legal and commercial name is Intelsat S.A. The Company was organized as a public limited liability company (*société anonyme*) under the laws of the Grand-Duchy of Luxembourg on July 8, 2011. Our principal executive office is located at 4, rue Albert Borschette, L-1246, Luxembourg, telephone number +352 27 84 1600. The Company is registered with the Luxembourg *Registre de Commerce et des Sociétés* under number B162135.

Our History

Intelsat, Ltd. was the successor entity to the International Telecommunications Satellite Organization (the "IGO"), and a Bermuda company. The IGO was a public intergovernmental organization created on an interim basis by its initial member states in 1964 and formally established in February 1973 upon entry into force of an intergovernmental agreement. The member states that were party to the treaty governing the IGO designated certain entities to market and use the IGO's communications system within their territories and to hold investment share in the IGO.

The Privatization

In November 2000, the IGO's Assembly of Parties unanimously approved our management's specific plan for our privatization and set the date of privatization for July 18, 2001. On July 18, 2001, substantially all of the assets and liabilities of the IGO were transferred to Intelsat, Ltd., which was domiciled as a Bermuda company.

The IGO, referred to post-privatization as the International Telecommunications Satellite Organization ("ITSO"), was established and was to exist as an intergovernmental organization for a period of at least 12 years after July 18, 2001, and then could be terminated by a decision of a governing body of ITSO called the Assembly of Parties. The Assembly of Parties voted in 2012 to continue ITSO until at least 2021. Pursuant to a Public Services Agreement among ITSO and Intelsat, Ltd. and certain of our subsidiaries, we have an obligation to provide our services in a manner consistent with the core principles of global coverage and connectivity, lifeline connectivity and non-discriminatory access, and ITSO monitors our implementation of this obligation.

The 2005 Acquisition Transactions

On January 28, 2005, Intelsat, Ltd. was acquired by Intelsat Holdings, Ltd. ("Intelsat Holdings") for total cash consideration of approximately \$3.2 billion, with pre-acquisition debt of approximately \$1.9 billion remaining outstanding. Intelsat Holdings was initially formed as a Bermuda company.

The PanAmSat Acquisition Transactions

In August 2005, Intelsat (Bermuda), Ltd. ("Intelsat Bermuda"), our indirect wholly-owned subsidiary now known as Intelsat (Luxembourg) S.A., PanAmSat Holding Corporation ("PanAmSat") and Proton Acquisition Corporation, a wholly-owned subsidiary of Intelsat Bermuda, signed a definitive merger agreement pursuant to which on July 3, 2006, Intelsat Bermuda acquired all of the outstanding equity interests in PanAmSat for \$25.00 per common share in cash, or approximately \$3.2 billion in the aggregate (plus approximately \$0.00927 per share as the pro rata share of undeclared regular quarterly dividends).

The Sponsors Acquisition Transactions

On February 4, 2008, Serafina Acquisition Limited completed its acquisition of 100% of the equity ownership of Intelsat Holdings for total cash consideration of approximately \$5.0 billion, pursuant to a share purchase agreement among Serafina Acquisition Limited, Intelsat Holdings, certain shareholders of Intelsat Holdings and Serafina Holdings Limited ("Serafina Holdings") (the "Sponsors Acquisition Transactions"). Serafina Holdings is an entity formed by funds controlled by BC Partners Holdings Limited (the "BCEC Funds") and certain other investors. Subsequent to the execution of the share purchase agreement, two investment funds controlled by Silver Lake Partners, L.P. ("Silver Lake Partners") and other equity investors joined the BCEC Funds as the equity sponsors of Serafina Holdings. We refer to the BCEC Funds, the Silver Lake Partners funds and the other equity sponsors collectively as the "Sponsors". As a result of completion of the Sponsors Acquisition Transactions and related financing transactions, we and our subsidiaries assumed aggregate net incremental debt of approximately \$3.7 billion.

The Luxembourg Migration

On December 15, 2009, Intelsat, Ltd. and certain of its parent holding companies and subsidiaries migrated their jurisdiction of organization from Bermuda to Luxembourg (the "Migration"). As a result of the Migration, our headquarters are located in Luxembourg. Each company that migrated has continued its corporate and legal personality in Luxembourg. Subsequent to the Migration, Intelsat Global, Ltd. became known as Intelsat Global S.A., Intelsat Global Subsidiary, Ltd. became known as Intelsat Global Subsidiary S.A., Intelsat Holdings, Ltd. became known as Intelsat Holdings, Ltd. became known as Intelsat Jackson Holdings, Ltd. became known as Intelsat Jackson Holdings, Ltd. became known as Intelsat Jackson Holdings S.A.

The Initial Public Offering

On April 23, 2013, we completed our initial public offering, in which we issued 22,222,222 common shares, and a concurrent public offering, in which we issued 3,450,000 5.75% Series A mandatory convertible junior non-voting preferred shares (the "Series A Preferred Shares"), at public offering prices of \$18.00 and \$50.00 per share, respectively (the initial public offering together with the concurrent public offering, the "IPO"), for total proceeds of \$572.5 million (or approximately \$550 million after underwriting discounts and commissions). In connection with the IPO, on April 16, 2013, the name of the Company was changed from Intelsat Global Holdings S.A. to Intelsat S.A. In May 2016, all of the outstanding Series A Preferred Shares were converted in accordance with their terms into common shares.

B. Business Overview

Overview

We operate one of the world's largest satellite services businesses, providing a critical layer in the global communications infrastructure.

We provide diversified communications services to the world's leading media companies, fixed and wireless telecommunications operators, data networking service providers for enterprise and mobile applications in the air and on the seas, multinational corporations and Internet Service Providers ("ISPs"). We are also the leading provider of commercial satellite communication services to the U.S. government and other select military organizations and their contractors. Our network solutions are a critical component of our customers' infrastructures and business models. Generally, our customers need the specialized connectivity that satellites provide so long as they are in business or pursuing their mission. In recent years, mobility services providers have contracted for services on our fleet that support broadband connections for passengers on commercial flights and cruise ships, connectivity that in some cases is only available through our network. In addition, our satellite neighborhoods provide our media customers with efficient and reliable broadcast distribution that maximizes audience reach, a technical and economic benefit that is difficult for terrestrial services to match. In developing regions, our satellite solutions often provide higher reliability than is available from local terrestrial telecommunications services and allow our customers to reach geographies that they would otherwise be unable to serve.

In the future, we expect our Globalized Network to be an integral part of machine-to-machine networks, especially those requiring massive software updates best delivered via broadcast, such as networks connecting cars and other vehicles. As we invest in new constellations, such as our Intelsat EpicNG high-throughput satellite platform and low earth orbit ("LEO") satellites, and new ground technologies, such as electronic antennas, we are creating a portfolio of solutions that will be interoperable with other telecommunications technologies and seamlessly integrated with other telecommunications solutions to address the immense connectivity requirements of a fully-connected and converged landscape.

We hold the largest collection of rights to well-placed orbital slots in the most valuable C- and Ku-band spectrums. From these locations, our satellites are able to offer services in the established regions historically using the most satellite capacity, as well as the higher growth emerging regions, where approximately 54% of our capacity is currently focused.

We believe our global scale, Globalized Network, leadership position and valuable customer relationships enable us to benefit from growing demand for reliable broadband connectivity, resulting from trends such as:

- Global distribution of television entertainment and news programming to fixed and mobile devices;
- Completion and extension of international, national and regional data networks, fixed and wireless, notably in emerging regions, and the upgrade of those networks to 3G/4G/5G as content is increasingly consumed on mobile devices;
- Universal access to broadband connectivity through fixed and mobile networks for consumers, corporations, government and other organizations;
- Increasing deployment of in-flight and on-board broadband access for consumer and business applications in the commercial, business aviation and maritime sectors:
- · Requirements for cost-efficient space-based network solutions for fixed and mobile government and military applications; and
- Global demand for services which enable connected devices, such as machine-to-machine communications and the Internet of Things ("IoT"), particularly with respect to connected car applications.

We believe that we have the largest, most reliable and most technologically advanced communications network in the world. Our global communications system features a fleet of approximately 50 geosynchronous satellites that covers more than 99% of the world's populated regions. Our satellites primarily provide services in the C- and Ku-band frequencies, which form the largest part of the FSS sector.

Our next generation high-throughput satellites, known as Intelsat EpicNG, are designed specifically to reduce cost of service by optimizing performance and efficiency to the user. Our goal is to transform our network as we incorporate these next generation technologies, an objective we expect to complete in late 2018 with the launch of the sixth Intelsat EpicNG satellite. We expect we will be able to provide commercial customers with services that allow them to innovate and develop new high bandwidth applications, in turn transforming their businesses and expanding the territories that they can profitably serve. Our new fleet is designed to commercial-grade standards. This allows us to offer committed information rates for our service provider customers, as compared to satellite networks designed primarily to provide consumer "best effort"-grade services.

Our satellite capacity is complemented by our suite of IntelsatOne® managed services, including our internet Protocol/Multiprotocol Label Switching ("MPLS") terrestrial network comprised of leased fiber optic cable, access to Internet points of presence ("PoPs"), multiplexed video and data platforms and owned and operated teleports, and a growing network of partner teleports. Our satellite-based network solutions offer distinct technical and economic benefits to our target customers and provide a number of advantages over terrestrial communications systems, including the following:

- Fast, scalable, secure and high performance infrastructure deployments;
- Superior end-to-end network availability as compared to the availability of terrestrial networks, due to fewer potential points of failure;
- · Highly reliable bandwidth and consistent application performance, as satellite beams effectively blanket service regions;
- Ability to extend beyond terrestrial network end points or to provide an alternative path to terrestrial infrastructure;
- Efficient content distribution through the ability to broadcast high quality signals from a single location to many locations simultaneously;
- Maximizing potential distribution of television programming, video neighborhoods, or capacity at orbital locations with a large number of
 consumer dishes or cable headend dishes pointed to them; and
- Rapidly deployable communications infrastructure for disaster recovery.

We believe that our hybrid satellite-terrestrial network, combined with the world's largest collection of FSS spectrum rights, is a unique and valuable asset.

Our network architecture is flexible and, coupled with our global scale, provides strong capital and operating efficiency. In certain circumstances we are able to re-deploy capacity, moving satellites or repositioning beams to capture demand. In 2017, we launched three of our next generation Intelsat Epic^{NG} satellites. Two of the three satellites were placed into service in 2017: Intelsat 32e and Intelsat 35e. The third, Intelsat 37e, will be placed into service in the first quarter of 2018. Our technology has utility across a number of requirements with minimal customization to address diverse applications.

We have a reputation for operational and engineering excellence, built on our experience of over 50 years in the communications sector. Our network delivered 99.995% network availability on all satellites to our customers in 2017. We operate our global network from a fully-integrated, centralized satellite operations facility, with regional sales and marketing offices located close to our customers. The operational flexibility of our network is an important element of our differentiation and our ability to grow.

As of December 31, 2017, our contracted backlog, which is our expected future revenue under existing customer contracts, was approximately \$7.8 billion, roughly four times our 2017 annual revenue. For the year ended December 31, 2017, we generated revenue of \$2.1 billion and net loss attributable to Intelsat S.A. of \$178.7 million. Our Adjusted EBITDA, which consists of EBITDA as adjusted to exclude or include certain unusual items, certain other operating expense items and certain other adjustments, was \$1.7 billion, or 77% of revenue, for the year ended December 31, 2017.

In 2016, and to a lesser extent in 2017, the satellite sector encountered pricing pressure in certain regions and applications, which affected our business. In addition, older point-to-point and trunking services have renewed at a much lower rate than our other services, pressuring revenue. Overall, we believe we benefit from a number of characteristics that allow us to effectively manage our business despite these competitive and geo-economic pressures:

- Significant long-term contracted backlog, providing a foundation for predictable revenue streams;
- The entry into service of our next generation Intelsat Epic^{NG} platform. Our Intelsat Epic^{NG} platform was designed to support new services representing \$3.2 billion of potential incremental growth by 2022 from expanded enterprise, wireless infrastructure, mobility, IoT and government applications;
- High operating leverage, which has allowed us to generate an average Adjusted EBITDA margin of 77% in the past three years; and
- A stable, efficient and sustainable tax profile for our global business.

We believe that our leadership position in our attractive sector, global scale, efficient operating and financial profile, diversified customer sets and sizeable contracted backlog, together with the growing worldwide demand for reliable broadband connectivity everywhere at all times, provide us with a platform for long-term success.

Our Sector

Satellite services are an integral and growing part of the global communications infrastructure. Through unique capabilities, such as the ability to effectively blanket service regions, to offer point-to-multipoint distribution and to provide a flexible architecture, satellite services complement, and for certain applications are preferable to, terrestrial telecommunications services, including fiber and wireless technologies. The FSS sector, excluding all consumer broadband, is expected to generate revenues of approximately \$13.3 billion in 2018, and transponder service revenue is expected to grow by a compound annual growth rate ("CAGR") of 4.1% from 2017 to 2022 according to a study issued in 2017 by NSR, a leading international market research and consulting firm specializing in satellite and wireless technology and applications.

In recent years, the addressable market for FSS has expanded to include mobile applications because of satellite's ability to provide the broadband access required by high bandwidth mobile platforms, such as for consumer broadband services on commercial ships and aircraft, as well as military mobility applications, including unmanned aerial vehicles. Some of these services can also be provided by geosynchronous (geostationary) equatorial orbit ("GEO") fleets delivering mobile satellite services ("MSS") and Ka-band satellites that provide mobility as well as consumer broadband services.

Satellite services provide secure bandwidth capacity ideal for global in-theater communications since military operations often occur in locations without reliable communications infrastructure. According to a study by NSR, global revenue from government and military applications is expected to grow at a CAGR of 7.9% from 2017 to 2022.

Our sector is noted for having favorable operating characteristics, including long-term contracts, high renewal rates and strong cash flows. The fundamentals of the sector are attractive, given the global need for connectivity everywhere and explosion of global content. The expected growth in demand for satellite-based solutions, combined with the high operating margins which are characteristic of the sector, provides a resilient business model.

There is a finite number of geostationary orbital slots in which FSS satellites can be located, and many orbital locations are already occupied by operational satellites pursuant to complex regulatory processes involving many international and national governmental bodies. These satellites typically are operated under coordination agreements designed to avoid interference with other operators' satellites. See—Regulation below for a more detailed discussion of regulatory processes relating to the operation of satellites.

A resurgence of interest in LEO and mid-earth orbit constellations is resulting in the potential for new satellite-based solutions that will complement and, in some cases, compete with our services. We are an investor in one such constellation, with which we plan to offer integrated solutions. See—Our Strategy below. We believe that the ability of our GEO satellites to offer highly efficient point-to-multipoint services, and to concentrate throughput over areas of highest demand, provides us with competitive benefits that will be sustained even as new services come to market.

Today, there are only four FSS operators, including us, providing global services, which is important as multinationals and governments seek a one-stop solution for obtaining global connectivity. In addition, there are a number of operators with fewer satellites that provide regional and/or national services. We currently hold the largest number of rights to orbital slots in the most valuable C- and Ku-band spectrums.

We believe a number of fundamental trends in our sector are creating increasing demand for satellite services:

- Connectivity and broadband access are essential elements of infrastructure supporting the rapid economic growth of developing nations, whether fixed telecommunications, wireless or enterprise connectivity. Wireless telecommunications companies often use satellite-based solutions to extend networks into areas where geographic or low population density makes it economically unfeasible to deploy other technology. Further deployments of wireless telecom infrastructure and the migration from 2G to 3G, 4G and 5G networks, which carry content and data, in addition to voice, also create demand for satellite bandwidth. Globally dispersed organizations often turn to satellite-based infrastructure to provide better access, reliability and control. Similarly, regional businesses require access to broadband services, creating demand for our service provider customers. Penetration of broadband connectivity in less developed regions has been growing rapidly and is expected to continue. Over the past 10 years, broadband penetration, including satellite connectivity, in the East Asia & Pacific Ocean regions grew at a 14% CAGR, in the Latin America & Caribbean region at a 17% CAGR, and in the Middle East & North Africa regions at a 24% CAGR, according to the World Bank.
- Mobility applications, such as maritime communications and aeronautical broadband services for commercial and government applications, are
 fueling demand for mobile connectivity. Commercial applications, such as broadband services for consumer air flights and cruise ships, as well as
 broadband requirements from the maritime and oil and gas sectors, provide increased demand for satellite-based services. Global satellite services
 revenue related to demand for broadband mobility applications from land, aeronautical and maritime is expected to grow at a CAGR of 20.5% for
 the period from 2017 to 2022, according to NSR.
- Globalization of economic activities is increasing the geographic expansion of corporations and the communications networks that support them, while creating new audiences for content. Globalization also increases the communications requirements for governments supporting embassy and military applications.
- The emergence of new content consumers resulting from economic growth in developing regions leads to increased demand for free-to-air and pay-TV content, including cable and DTH. Demand for capacity to support DTH applications is expected to grow at a CAGR of 1.7% for the period from 2017 to 2022, according to NSR.
- Proliferation of formats and new sources of entertainment content result in increased bandwidth requirements, as content owners seek to
 maximize distribution to multiple viewing audiences across multiple technologies. HDTV, the introduction of ultra-high definition ("UHD")
 television, internet distribution of traditional television programming known as "Over the Top" or "OTT", and video to mobile devices are all
 examples of the expanding format and distribution requirements of media programmers, the implementation of which varies greatly from
 developed to emerging regions. In its 2017 study, NSR forecasted that the aggregate number of standard definition ("SD"), high definition ("HD"),
 and UHD television channels distributed worldwide for cable, broadcast and DTH is expected to grow at a CAGR of 2.9% for the period from 2017
 to 2022.
- Connected Devices, such as those contemplated by machine-to-machine communications, the IoT and other future technology trends, will require
 ubiquitous coverage that might be best provided by satellite technology for certain applications in certain regions, and also for applications where
 ubiquitous, global access is required, such as enabling software downloads for connected cars marketed by the automotive sector. This represents
 an important potential source of longer-term demand.

In total, transponder service revenue (excluding consumer broadband) is expected to grow at a CAGR of 4.1% for the period from 2017 to 2022, according to NSR.

Our Customer Sets and Growing Applications

We focus on business-to-business services that indirectly enable enterprise, government and consumer applications through our customers. Our customer contracts offer four different service types: transponder services, managed services, channel services and mobile satellite services and other. See Item 5—Operating and Financial Review and Prospects—Revenue for further discussion of our service types. Characteristics of our customer sets are summarized below:

Customer Set	Representative Customers	Year	R	Annual evenue (1) (2)	% of 2017 Total Revenue (2)	% of 2017 Total Backlog (1) (2)	Backlog to 2017 Revenue Multiple
Network Services	Marlink, BT, Orange, Speedcast, Global	2015	\$	1,056			
	Eagle, Verizon, Vodafone, America Movil,	2016	\$	900			
	Gogo, Panasonic Avionics, Telecom Italia Mobile	2017	\$	852	40%	27%	2.5x
Media	Discovery Communications, Fox Broadcasting Company	2015	\$	882			
	Entertainment Group, MultiChoice, Home	2016	\$	868			
	Box Office, AT&T, The Walt Disney Company, Turner	2017	\$	910	42%	65%	5.5x
Government	Australian Defence Force, U.S. Department	2015	\$	385			
	of Defense, U.S. Department of State,	2016	\$	387			
	Leonardo	2017	\$	353	16%	6%	1.4x

- (1) Dollars in millions; backlog as of December 31, 2017.
- (2) Does not include satellite-related services and other.

We provide satellite capacity and related communications services for the transmission of video, data and voice signals. Our customer contracts cover on- and off-network capacity with primarily three different service types:

On-Network:

- Transponder services
- Managed services

Off-Network:

- Transponder services
- Mobile satellite services and other

We also perform satellite-related consulting services and technical services for various third parties, such as operating satellites for other satellite owners. We no longer proactively market a fourth service, known as channel services, although we still earn modest revenues from this type of on-network service.

Media

Media customers are our largest customer set and accounted for 42% of our revenue for the year ended December 31, 2017 and \$5.0 billion of our contracted backlog as of December 31, 2017. Our business generated from the media sector is generally characterized by non-cancellable, long-term contracts with terms of up to 15 years with premier customers, including national and global broadcasters, content providers and distributors, television programmers and DTH platform operators.

We are the world's largest provider of satellite capacity for media services, according to Euroconsult, with a 20% global share. We have delivered television programming to the world since the launch of our first satellite, Early Bird, in 1965. We provide satellite capacity for the transmission of entertainment, news, sports and educational programming for approximately 320 broadcasters, content providers and DTH platform operators worldwide. We have well-established relationships with our media customers, and in some cases have distributed their content on our satellites for over 25 years.

Broadcasters, content providers and television programmers seek efficient distribution of their content to make it easily obtainable by affiliates, cable operators and DTH platforms; satellites' point-to-multipoint capability is difficult to replicate via terrestrial alternatives. Our strong cable distribution neighborhoods offer media customers high penetration of regional and national audiences.

Broadcasters, content providers and television programmers also select us because our global capabilities enable the distribution or retrieval of content to or from virtually any point on earth. For instance, we regularly provide fully integrated global distribution networks for content providers that need to distribute their products across multiple continents. DTH platform operators use our services because of our attractive orbital locations and because the scale and flexibility of our fleet can improve speed to market and lower their operating risk, as we have multiple satellites serving every region.

We believe that we enjoy a strong reputation for delivering the high network reliability required to serve the demanding media sector.

Our fully integrated satellite, fiber and teleport facilities provide enhanced quality control for programmers. In addition to basic satellite services, we offer bundled, value-added services under our IntelsatOne® brand that include managed fiber services, digital encoding of video channels and up-linking and down-linking services to and from our satellites and teleport facilities. Our IntelsatOne® bundled services address programmers' interests in delivering content to multiple distribution channels, such as television and Internet, and their needs for launching programs to new regions in a cost-efficient manner.

Highlights of our media business include the following:

- 28 of our satellites host premium video neighborhoods, offering programmers superior audience penetration, with eight serving the United States, five serving Europe, eight serving Latin America, three serving Asia and four serving Africa and the Middle East;
- We are a leading provider of services used in global content distribution to media customers, according to Euroconsult. Our top 10 video distribution customers buy service on our network, on average, across two or more geographic regions, demonstrating the value provided by the global reach of our network;
- We believe that we are the leading provider of satellite service capacity for the distribution of cable television programming in North America, with thousands of cable headends pointed to our satellites. Our Galaxy 13 satellite provided the first HD neighborhood in North America, and today, our Galaxy fleet distributes nearly 350 HD channels; globally, we distribute over 5,400 TV channels, including approximately 1,160 HD channels;
- We are a leading provider of satellite services for DTH providers, according to NSR, delivering programming to over 45 million subscribers and supporting more than 30 DTH platforms around the world, including AT&T DIRECTV in Latin America, Orion Express in Russia, Telefonica in Brazil, MultiChoice in Africa, and Canal+ in multiple regions;
- We are a leading provider of services used in video contribution managed occasional use services, supporting coverage of major events for news and sports organizations, according to NSR. For instance, we have carried programming on a global basis for every Olympiad since 1968, including use of our new Intelsat 29e satellite for transmission of certain programming for the 2016 Olympics in Rio de Janeiro, Brazil; and
- In its 2017 study, NSR forecasted that the number of SD, HD, and UHD television channels distributed worldwide for cable, broadcast and DTH is expected to grow at a CAGR of 2.9% for the period from 2017 to 2022.

In 2018 and 2019, we expect some pressure on our North American media business due to the implementation of compression technologies, which reduce bandwidth requirements. In time, we expect incremental demand for capacity to support the new 4K format, also known as UHD, which could compensate for reductions in demand related to compression.

Network Services

Network services is our second largest customer set and accounted for 40% of our revenue for the year ended December 31, 2017 and \$2.2 billion of our contracted backlog as of December 31, 2017. Our business generated from the network services sector is generally characterized by non-cancellable contracts, typically up to five years in length, with many of the world's leading communications providers. This includes fixed and wireless telecommunications companies, such as global carriers and regional and national providers in emerging regions, corporate network service providers, such as VSAT services providers to vertical markets including banks, value-added services providers, such as those serving the aeronautical and maritime industries, as well as multinational corporations and other organizations operating globally.

According to Euroconsult, we are the world's largest provider of satellites capacity for network services, with a 29% global share. Our satellite services, comprised of satellite capacity, and terrestrial network comprised of leased fiber, teleports and data networking platforms, enable the transmission of video and data to and from virtually any point on the surface of the earth. Basic communications and broadband connectivity in developed and emerging regions are meaningful contributors to economic growth. We provide an essential element of the communications infrastructure, enabling the rapid expansion of wireless services that support businesses, communities and governments in many emerging regions.

Our network services offerings are an essential component of our customers' services, providing backbone infrastructure, expanded service areas and connectivity where reliability or geography is a challenge. We believe that we are a preferred provider because of our global service capability and our expertise in delivering services with enterprise-grade network availability and efficient network control.

Furthermore, as mobile communications have become essential to global networking and internet use, our satellite solutions, such as those provided by the Intelsat EpicNG platform, are being used for mobility applications. This includes services ranging from maritime enterprise VSAT data services to consumer broadband connectivity for cruise ships. In addition to maritime applications, Intelsat's satellite solutions are used by service providers to deliver broadband connectivity for in-flight entertainment and wi-fi services for the aeronautical industry.

Our IntelsatOne® managed services, including our new IntelsatOne® Flex service, involve regional shared data networking platforms at our teleports that are connected to approximately 40 of our satellites. As a result, our customers can quickly establish highly reliable services across multiple regions, yet operate them on a centralized basis. Our satellite-based solutions allow customers to rapidly expand their service territories, flexibly customize the access speed and capabilities for their existing networks and efficiently address new customer and end-user requirements.

Our leading position in network services has been pressured by new capacity from other satellite operators and improved access to fiber links, changing the competitive environment in certain regions. The increase in satellite supply has resulted in significant declines in pricing. In addition, the increase in the availability of fiber has resulted in the accelerated retirement of our channel business, which essentially reached end of lifecycle at 2015 year end, and our international point-to-point trunking services, which we expect to be a continuing source of decline through 2018. The new and differentiated capacity of our next generation Intelsat EpicNG satellites is providing inventory to help offset these recent trends, targeting wireless infrastructure, mobility and enterprise applications. As the volume of services sold on our Intelsat EpicNG fleet increases over time, we believe that the level of business activity in this sector will stabilize.

Highlights of our network services business include the following:

- Our largest network services customer type is enterprise networking. We are the world's largest provider of satellite capacity for satellite-based private data networks, including VSAT networks, according to Euroconsult;
- Infrastructure for wireless operator services represents our second largest network services customer type. We believe we are the leading provider of satellite capacity for cellular backhaul applications in emerging regions, connecting cellular access points to the global telecommunications network, a global segment expected to generate over \$1 billion in revenue in 2018, according to NSR. Approximately 100 of our customers use our satellite-based backhaul services as a core component of their network infrastructure due to unreliable or non-existent terrestrial infrastructure. Our cellular backhaul customers include 9 of the top 10 mobile groups worldwide, which serve one-third of the world's subscribers;
- The fastest growing customer type in our network services business is mobility services for the aeronautical and maritime sectors. We believe we hold a leading share of the aeronautical broadband services powering in-flight passenger connectivity. FSS revenue growth related to capacity demand for broadband aeronautical services is expected to grow from approximately \$167 million to \$870 million annually, for the period from 2017 to 2022, at a CAGR of 39%. We believe we also hold a leading share in the provision of FSS bandwidth for maritime passenger broadband connectivity. Of the world's largest cruise vessels, Intelsat's services are incorporated in the broadband infrastructure for over 80% of approximately 300 ships, in substantially all cases as the exclusive or primary source of satellite services;
- Approximately 125 value-added network operators use our IntelsatOne® broadband hybrid infrastructure to deliver their regional and global services. Applications for these services include corporate networks for multinationals, internet access and broadband for maritime and commercial aeronautical applications. C, Ku, Ka-band and HTS revenue from capacity demand for mobility applications is expected to grow at a CAGR of 20.5% for the period from 2017 to 2022, according to NSR; and
- The fixed enterprise VSAT sector (excluding all non-GEO HTS bandwidth) is expected to generate capacity revenues of approximately \$2.7 billion in 2018, and capacity revenues are expected to grow at a CAGR of 8.5% from 2017 to 2022, according to NSR.

Government

We are the leading provider of commercial satellite services to the government sector, according to NSR, with a 28% share of the U.S. government's use of commercial satellite capacity worldwide. With more than 50 years of experience serving this customer set, we have built a reputation as a trusted partner for the provision of highly customized, secure and mission critical satellite-based solutions. The government sector accounted for 16% of our revenue for the year ended December 31, 2017 and \$483 million of our contracted backlog as of December 31, 2017.

Our satellite communication services business generated from the U.S. government sector is generally characterized by single year contracts that are cancellable by the customer upon payment of termination for convenience charges, and include annual options to renew for periods of up to four additional years. In addition to communication services, our backlog includes some longer-term services, such as hosted payloads, which are characterized by contracts with service periods extending up to the 15 year life of the satellite, cancellable upon payment of termination penalties defined by the respective contracts.

Our customer base includes the U.S. government's military and civilian agencies, global government militaries, and commercial customers serving the defense sector. We consider each party within the U.S. Department of Defense and other U.S. government agencies that has the ability to initiate a purchase requisition and select a contractor to provide services to be a separate customer, although such party may not be the party that awards us the contract for the services.

We attribute our strength in serving U.S. military and government users to our global infrastructure of satellites, including the addition of the high-performance Intelsat EpicNG fleet, and our IntelsatOne® network of teleports and fiber that complement the U.S. government's own communications networks. Our fleet provides flexible, secure and resilient global network capacity, and critical surge capabilities. Our Intelsat EpicNG satellites provide high-throughput and performance that is highly attractive for aeronautical surveillance applications, offering HD video from small antennas, enabling use of a smaller airframe. In some instances, we provide our U.S. government customers managed, end-to-end secure networks, combining our resources in space and on the ground, for fixed and mobile applications.

In responding to certain unique customer requirements, we also procure and integrate satellite services provided by other satellite operators, either to supplement our capacity or to obtain capacity in frequencies not available on our fleet, such as L-band, X-band and other spectrums not available on our network. These off-network services are primarily low risk in nature, typically with the terms and conditions of the third-party capacity and services we procure matched to contractual commitments from our customer. We are an attractive supplier to the government sector because of our ability to leverage not only our assets but also other space-based solutions, providing a single contracting source for multiple, integrated technologies.

Highlights of our government business include the following:

- The reliability and scale of our fleet and planned launches of new and replacement satellites allow us to address changing demand for satellite coverage and to provide mission-critical communications capabilities. For example, we currently support multiple manned systems in the Middle East and Afghanistan for one of our customers. The service is provided across the Intelsat EpicNG platform to support the war fighter;
- The U.S. government and military is one of the largest users of commercial satellites for U.S. government and military applications on a global basis. In 2017, we served approximately 100 customers consisting of U.S. government customers, resellers to U.S. government customers or integrators; and
- According to a study by NSR, global revenue from FSS used for U.S. government and military applications is expected to grow at a CAGR of 7.9% for the period from 2017 to 2022.

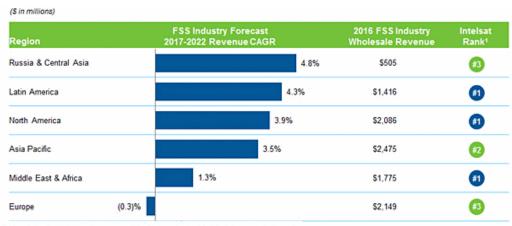
Overall, business activity in this customer set reflects the current tempo of our end-customers' operations and the budgetary constraints of the U.S. government; visibility into the U.S. government's planned contract awards remains low and the pace of new business and subsequent awards remains flat. In 2018, approximately 15% of our government business is scheduled for renewal and replacement of the underlying contracts, which could result in lower revenues should certain of the contracts be awarded at current market pricing levels.

Over the mid-term, we believe our reputation as a provider of secure solutions, our global fleet including our new high-performance Intelsat Epic NG platform, our well-established customer relationships, our ability to provide turn-key services and our demonstrated willingness to reposition or procure capacity to support specific requirements position us to successfully compete for commercial satellite solutions for bandwidth-intensive military and civilian applications. We expect our government business to benefit over time from the increasing demands for mobility services from the U.S. government for aeronautical and ground mobile requirements, especially as our next generation Intelsat Epic NG services are deployed across regions where the U.S. government has active ground forces.

Our Diverse Business

Our revenue and backlog diversity spans customer sets and applications, as discussed above, as well as geographic regions and satellites. We believe our diversity allows us to recognize trends to capture new growth opportunities, and gain experience that can be transferred to customers in different regions. For further details regarding geographic distribution of our revenue, see Note 17 to our consolidated financial statements included elsewhere in this Annual Report.

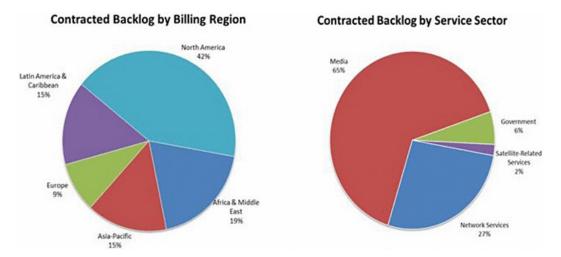
We believe we are the sector leader by transponder share in three of the geographic regions covered by our network, and our leading positions align to the regions identified by industry analysts as those that either purchase the most satellite capacity or are regions with high growth prospects, such as Latin America and North America.



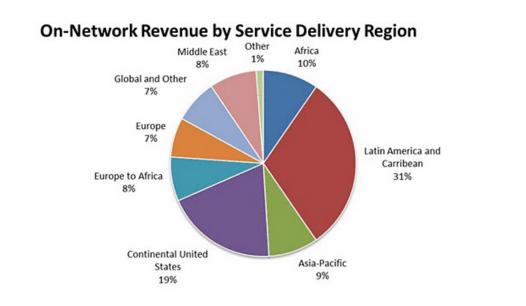
Source: Euroconsult 2017 – Satellite Communications & Broadcasting Market Survey, includes both traditional and HTS capacity 1) For each region, ranking is determined by Euroconsult's estimated 2016 revenue's

The scale of our fleet can also reduce the financial impact of satellite failures and protect against service interruption. No single satellite generated more than 6% of our revenue and no single customer accounted for more than 9% of our revenue for the year ended December 31, 2017.

The following chart shows the geographic diversity of our contracted backlog as of December 31, 2017 by region and service sector, based upon the billing address of the customer.



The majority of our on-network revenue aligns to emerging regions, based upon the position of our satellites and beams. The following chart shows the breakdown of our on-network revenue by the region in which the service is delivered as of December 31, 2017:



Our Strategy: Transforming Our Business and Our Sector

We are transforming our business and sector, investing in and deploying innovative new technologies that will change the types of applications that we can serve and increase our share of the global demand for broadband connectivity everywhere—for all communities and for all devices.

Our strategy is built around four competitive advantages that strengthen our ability to reach our goals:

- Our global footprint, which is essential given that the fastest growing applications, such as mobility, require consistent global platforms;
- Scale, with customer relationships in nearly 200 countries and territories, which is important to new opportunities, such as connected car and
 machine-to-machine, where service providers will look for global access. The ability to serve these applications on a global basis creates new
 satellite-based communication solutions with multi-billion dollar revenue potential, particularly as machines are increasingly dependent upon
 software which can be updated through satellite broadcasts;

- Our innovative technology, which is already in-orbit and is gaining further depth and resilience as we complete our current high-throughput investment program through 2018, and our expertise in integrating this new technology into network solutions, providing our customers first-to-market advantage and experience; and
- · Our portfolio of spectrum rights, which provides unmatched flexibility and agility as we look at new opportunities.

Our strategy is to seek revenue growth with the following actions:

- Drive stability in our core business, employing a disciplined yield management approach and focusing our marketing and distribution strategies
 around our four primary customer sets of broadband, mobility, media and government;
- Design and deploy differentiated managed service offerings in targeted growth verticals in broadband, mobility, media and government, leveraging the scale, higher performance and better economics of our Intelsat EpicNG fleet and the flexibility of our innovative terrestrial network; and
- Further our use of partnerships and investments in adjacent markets and other inorganic opportunities to access innovations across the value chain, transforming our capabilities with broader solutions including LEO/GEO integrated solutions such as those to be offered by our partner, OneWeb, and value-added services, making satellite-based solutions an attractive and simple source of connectivity.

We will deploy capital investment and spectrum strategies with longer-term outcomes to achieve the transformation of our business with the following actions:

- Improve our operating and capital efficiency, including use of technology to extend the life of assets, access ground investments that complement our space-based assets through partnerships and other relationships for improved return on our investment, and develop and invest in technology that will streamline the provisioning of our service offerings; and
- Maximize the value of our spectrum rights; pursue partnerships to optimize new satellite business cases and explore the use of joint-use of
 certain spectrum with the wireless sector in certain geographies.

We believe that developing differentiated services and investing in related technology will allow us to unlock opportunities that are essential to providing global broadband availability, but have been slow to develop due to cost and/or technology challenges. Our new services and technologies will also open new sectors that are much larger, and growing much faster, than the sectors we support today. Examples include:

- Providing network infrastructure for 2G/3G/4G/5G wireless in developing regions;
- Providing broadband connectivities that enable non-traditional telecommunications providers to deliver wi-fi services in underserved regions;
- Providing flexible broadband services for enterprise networks and for commercial and government-related aeronautical, maritime and other mobile applications, and using our high-throughput platform and global footprint to provide differentiated services;
- · Optimizing content distribution networks that support UHD, OTT programming and other multiscreen viewing applications; and
- Providing ubiquitous broadband for global deployment of connected devices, such as the connected car, and the continuing formation of the

Competition

We compete in the communications market for the provision of video, data and voice connectivity worldwide. Communications services are provided using various communications technologies, including satellite networks, which provide services as a substitute for, or as a complement to, the capabilities of terrestrial networks. We also face competition from suppliers of terrestrial communications capacity.

We operate on a global scale. Our competition includes providers of FSS of varying size. We compete with other satellite operators for both point-to-multipoint and point-to-point services.

We also compete with providers of terrestrial fiber optic cable capacity on certain routes and networks, principally for point-to-point services. The primary use of fiber optic cable is carrying high-volume communications traffic from point to point, and fiber capacity is available at substantially lower prices than satellite capacity once operational. Consequently, the growth in fiber optic cable capacity has led voice, data and video contribution customers that require service between major city hubs to migrate from satellite to fiber optic cable. However, satellite capacity remains competitive for signals that need to be transmitted beyond the main termination points of fiber optic cable for point-to-multipoint transmissions, such as for video broadcast, and for signals seeking to bypass congested terrestrial networks. See—Our Sector for a description of the FSS sector generally and the advantages of satellite communications.

In the last four years, a number of providers of commercial satellite services, selling traditional and high-throughput capacity, entered the African market, significantly increasing the amount of FSS capacity. Concurrent with this market dynamic, the region benefitted from newly established sea and land fiber connectivity. These two events have resulted in heightened competition in this region, the effect of which has been significant price reductions for both fiber and satellite connectivity used for fixed and mobile data networking applications. As a result, Intelsat's revenues have been reduced as services were terminated by customers moving to fiber alternatives, and also as contracts were renewed at lower prices. As contracts come up for renewal for a small portion of our remaining business, we will continue to adjust pricing to current market rates.

We also face competition from resellers of satellite and fiber capacity. Resellers purchase FSS or fiber capacity from current or future providers and then resell the capacity to their customers.

Sales, Marketing and Distribution Channels

We strive to maintain a close working relationship with our customers. Our primary sales and marketing operations are located in the United Kingdom and the United States. In addition, we have established local sales and marketing support offices in the following countries around the world:

- Australia
- Brazil
- China
- France
- Germany
- India

- Mexico
- Russian Federation
- Senegal
- · Singapore
- South Africa
- · United Arab Emirates
- Japan

By establishing local offices closer to our customers and staffing those offices with experienced personnel, we believe that we are able to provide flexible and responsive service and technical support to our customers. Our sales and marketing organization reflects our corporate focus on our three principal customer sets of network services, media and government. Our sales team includes technical marketing and sales engineering application expertise and a sales approach focused on creating integrated solutions for our customers' communications requirements.

We use a range of direct and wholesale distribution methods to sell our services, depending upon the region, the vertical application, regulatory requirements and customer application.

Our Network

Our global network is comprised of approximately 50 satellites and ground facilities, including teleports, access to internet PoPs and leased fiber that support our commercial services and the operation and control of our satellites.

Our customers depend on our global communications network and our operational and engineering leadership. Highlights of our network include:

- · Prime orbital locations, reflecting a valuable portfolio of coordinated fixed satellite spectrum rights;
- Highly reliable services, including transponder availability of 99.995% on all satellites for the year ended December 31, 2017;
- Flexibility to relocate satellites to other orbital locations as we manage fleet replacement, demand patterns change or in response to new customer requirements;
- · Design features and steerable beams on many of our satellites that enable us to reconfigure capacity to provide different areas of coverage; and

· Resilience, with multiple satellites serving each region, allowing for improved restoration alternatives should a satellite anomaly occur.

As we design our new satellites, we work closely with our strategic customers to incorporate technology and service coverage that provide them with a cost-effective platform for their respective requirements.

The table below provides a summary of our satellite fleet as of December 31, 2017, except where noted.

Satellite	Manufacturer	Orbital Location	Launch Date	Estimated End of Service Life (1)
Station Kept in Primary Orbital Role (2):				
Intelsat 901	SSL (5)	162°W	Jun-01	Q-2 2018
Intelsat 902	SSL	62°E	Aug-01	Q-3 2019
Intelsat 905	SSL	155.5°W	Jun-02	Q-4 2019
Galaxy 3C	BSS (4)	84.95°W	Jun-02	Q-1 2023
Intelsat 906	SSL	64.15°E	Sep-02	Q-3 2020
Intelsat 907	SSL	152.5°W	Feb-03	Q-1 2020
Galaxy 23 (6)	SSL	59°W	Aug-03	Q-1 2023
Galaxy 13/Horizons 1 (7)	BSS	53°W	Oct-03	Q-1 2023
Intelsat 1002 (8)	AIRBUS	179°W	Jun-04	Q-3 2021
Galaxy 28	SSL	91°W	Jun-05	Q-3 2022
Galaxy 14	ORB (9)	55°W	Aug-05	Q-2 2021
Galaxy 15	ORB	47°W	Oct-05	Q-3 2023
Galaxy 16	SSL	81°W	Jun-06	Q-4 2027
Galaxy 17	Thales (10)	89°W	May-07	Q-1 2024
Intelsat 11	ORB	137.015°W	Oct-07	Q-3 2022
Horizons 2 (11)	ORB	84.85°E	Dec-07	Q-4 2024
Galaxy 18	SSL	57°W	May-08	Q-2 2026
Intelsat 25	SSL	148.5°W	Jul-08	Q-3 2024
Galaxy 19	SSL	83°W	Sep-08	Q-3 2026
Intelsat 14	SSL	135°W	Nov-09	Q-3 2027
Intelsat 15	ORB	85.15°E	Nov-09	Q-3 2026
Intelsat 16	ORB	103.8°W	Feb-10	Q-1 2028
Intelsat 17	SSL	66°E	Nov-10	Q-2 2027
Intelsat 28 (12)	ORB	32.8°E	Apr-11	Q-4 2024
Intelsat 18	ORB	180°E	Oct-11	Q-3 2028
Intelsat 22 (13)	BSS	72.1°E	Mar-12	Q-2 2028
Intelsat 19	SSL	166°E	Jun-12	Q-2 2028
Intelsat 20	SSL	68.5°E	Aug-12	Q-3 2030
Intelsat 21	BSS	122°W	Aug-12	Q-3 2030
Intelsat 23	ORB	127°W	Oct-12	Q-4 2030
Intelsat 30	SSL	84.95°W	Oct-14	Q-4 2032
Intelsat 34	SSL	124.5°W	Aug-15	Q-3 2033
Intelsat 29e	BSS	130°W	Jan-16	Q-2 2031
Intelsat 31	SSL	84.95°W	Jun-16	Q-2 2034
Intelsat 36	SSL	68.5°E	Aug-16	Q-3 2032
Intelsat 33e	BSS	60°E	Aug-16	Q-1 2028

Intelsat 35e	BSS	145.5°W	Jul-17	Q-3 2033
Station Kept Satellites, Redeployed (14):				
Galaxy 25	SSL	86.9°W	May-97	Q-2 2019
Galaxy 11	BSS	44.9°E	Dec-99	Q-4 2018
Intelsat 904	SSL	45.1°E	Feb-02	Q-4 2018
Galaxy 12	ORB	51°W	Apr-03	Q-1 2019
Inclined Orbit:				
Intelsat 26	BSS	65.8°E	Feb-97	Q-2 2018
Intelsat 5	BSS	156.9°E	Aug-97	Q-4 2020
Intelsat 805	LM (3)	169°E	Jun-98	Q-4 2019
Intelsat 9	BSS	150.5°W	Jul-00	Q-3 2020
Intelsat 12	SSL	45°E	Oct-00	Q-3 2019
Intelsat 1R	BSS	157.1°E	Nov-00	Q-2 2023
Intelsat 10	BSS	47.5°E	May-01	Q-3 2026
Intelsat 903	SSL	148.5°W	Mar-02	Q-4 2030

- (1) Engineering estimates of the service life as of December 31, 2017 as determined by remaining fuel levels, consumption rates and other considerations (including power) and assuming no relocation of the satellite. Such estimates are subject to change based upon a number of factors, including updated operating data from manufacturers.
- (2) Primary orbital roles are those that are populated with station-kept satellites, generally, but not always, in their initial service positions, and where our general expectation is to provide continuity of service over the long-term.
- (3) Lockheed Martin Corporation.
- (4) Boeing Satellite Systems, Inc., formerly Hughes Aircraft Company.
- (5) Space Systems/Loral, LLC ("SSL").
- (6) EchoStar Communications Corporation owns all of this satellite's Ku-band transponders and a portion of the common elements of the satellite.
- (7) Horizons Satellite Holdings, LLC ("Horizons Holdings"), our joint venture with JSAT International, Inc. ("JSAT"), owns and operates the Ku-band payload on this satellite. We are the exclusive owner of the C-band payload.
- (8) Telenor owns 18 Ku-band transponders (measured in equivalent 36 MHz transponders) on this satellite. EADS Astrium was renamed AIRBUS Defence & Space.
- (9) Orbital Sciences Corporation.
- (10) Thales Alenia Space.
- (11) Horizons Holdings owns the payload on this satellite and we operate the payload for the joint venture.
- (12) Intelsat 28 was formerly known as Intelsat New Dawn.
- (13) Intelsat 22 includes a UHF payload owned by the Australian Defence Force.
- (14) Certain of our orbital roles are populated with satellites that generally, but not always, have been redeployed from their primary orbital role but still have significant remaining station-kept life.

Satellite Systems

There are three primary types of commercial communications satellite systems: low-earth orbit systems, medium-earth orbit systems and geosynchronous systems. All of our satellites are geosynchronous satellites and are located approximately 22,200 miles, or 35,800 kilometers, above the equator. These satellites can receive radio frequency communications from an origination point, relay those signals over great distances and distribute those signals to a single receiver or multiple receivers within the coverage areas of the satellites' transmission beams.

Geosynchronous satellites send these signals using various parts of the radio frequency spectrum. The spectrum available for use at each orbital location includes the following frequency bands in which most commercial satellite services are offered today:

- *C-band*—low power, broad beams requiring use of relatively larger antennae, valued as spectrum least susceptible to transmission impairments such as rain;
- Ku-band—high power, narrow to medium size beams facilitating use of smaller antennae favored by businesses; and
- *Ka-band*—very high power, very narrow beams facilitating use of very small transmit/receive antennae, but somewhat less reliable due to high transmission weather-related impairments. The Ka-band is utilized for various applications, including consumer broadband services.

Substantially all of the station-kept satellites in our fleet are designed to provide capacity using the C- and/or Ku-bands of this spectrum.

A geosynchronous satellite is referred to as geostationary, or station-kept, when it is operated within an assigned orbital control, or station-keeping box, which is defined by a specific range of latitudes and longitudes. Geostationary satellites revolve around the earth with a speed that corresponds to that of the earth's rotation and appear to remain above a fixed point on the earth's surface at all times. Geosynchronous satellites that are not station-kept are in inclined orbit. The daily north-south motion of a satellite in inclined orbit exceeds the specified range of latitudes of its assigned station-keeping box, and the satellite appears to oscillate slowly, moving above and below the equator every day. An operator will typically operate a satellite in inclined orbit toward the end of its service life because the operator is able to save significant amounts of fuel by not controlling the north-south position of the satellite and is thereby able to substantially extend the service life of the satellite. The types of services and customers that can access an inclined orbit satellite have traditionally been limited due to the movement of the satellite relative to a fixed ground antenna. However, recent technology innovations now allow the use of inclined orbit capacity for certain applications. As a result, we anticipate demand for inclined orbit capacity may increase over the next few years if these applications are successfully introduced. As of December 31, 2017, eight of our satellites were operating in an inclined orbit, with most continuing to earn revenue beyond our original estimated life for each of these satellites.

In-Orbit Satellites

We believe that our strong operational performance is due primarily to our satellite procurement and operations philosophy. Our operations and engineering staff is involved from the design through the decommissioning of each satellite that we procure. Our staff works at the manufacturers' and launchers' sites to monitor progress, allowing us to maintain close technical collaboration with our contractors during the process of designing, manufacturing and launching a satellite. We continue our engineering involvement throughout the operating lifetime of each satellite. Extensive monitoring of earth station operations, around-the-clock satellite control and network operations support ensure our consistent operational quality, as well as timely corrections when problems occur. In addition, we have in place contingency plans for technical problems that may occur during the lifetime of a satellite.

These features also contribute to the resilience of our network, which enables us to ensure the continuity of service that is important for our customers and to retain revenue in the event that we need to move customers to alternative capacity. The design flexibility of some of our satellites enables us to meet customer demand and respond to changing market conditions.

As of December 31, 2017, our in-orbit fleet of satellites had approximately 1050 and 900 36-MHz equivalent transponders available for transmitting in the C-band and the Ku-band, respectively. These totals measure transponders on station-kept satellites. The average system fill factor for our satellites, which represents the percentage of our total available transponder capacity that is in use or that is reserved at a given time (including guaranteed reservations for service), was 78%, 78%, 78% and 79% in the quarters ended March 31, June 30, September 30, and December 31, 2017, respectively. The factors resulting in the trends in average system fill factor over this period were primarily related to a net decline of in-use transponders related to the release of restoration capacity following the resolution of an anomaly, the non-renewal and terminations of certain services and a decision to relocate a satellite, which resulted in it being temporarily out of service, partially offset by new and expanded customer services. Total available capacity decreased slightly over this period as a result of a new satellite launch offset by satellites deorbited and satellites temporarily out of service due to relocation at the end of the period.

The design life of a satellite is the length of time that the satellite's hardware is designed by the manufacturer to remain operational under normal operating conditions. In contrast, a satellite's orbital maneuver life is the length of time the satellite has enough fuel to remain operational. A satellite's service life is based upon fuel levels and other considerations, including power. Satellites launched in the recent past are generally expected to remain in service for the lesser of maneuver life and 16 years. Satellites typically have enough fuel to maintain between 16 and 18 years of station-kept operations. The average remaining service life of our satellites was approximately 7.7 years as of December 31, 2017, weighted on the basis of nominally available capacity for the station-kept satellites we own.

Satellites on Order

As of December 31, 2017, we had placed orders for the following two satellites. Generally, these satellites are being built over a period of three years.

Satellite	Manufacturer	Role	Earliest Launch Date	Launch Provider
Intelsat 39	SSL	Large capacity satellite with a combination of C-band and Ku-band beams to be located at the 62°E, certain of which are customized for the digital inclusion requirements of an Asian nation	2019	Arianespace
Galaxy 30	Orbital ATK	Next generation North American video distribution platform	2020	Arianespace

Expected

In addition to these ordered satellites, we have custom payloads being built on third party-owned satellites, including Intelsat 38. Intelsat 38 is expected to be launched in the second quarter of 2018 and will be located at 45°E. Further, we have a joint venture satellite, Horizons 3e, which is in development and will be located at 169°E; the satellite is planned for launch in late 2018.

Future Satellites

We would expect to replace other existing satellites, as necessary, with satellites that meet customer needs and that have a compelling economic rationale. We periodically conduct evaluations to determine the current and projected strategic and economic value of our existing and any planned satellites and to guide us in redeploying satellite resources as appropriate.

Network Operations and Current Ground Facilities

We control and operate each of our satellites and manage the communications services for which each satellite is used from the time of its initial deployment through the end of its operational life, and we believe that our technical skill in performing these critical operations differentiates us from our competition. We provide most of these services from our satellite operations centers in McLean, Virginia and Long Beach, California, and our customer service center in Ellenwood, Georgia. In the event of a natural disaster or other situation disabling one of the facilities, each satellite operations center has the functional ability to provide instantaneous restoration of services on behalf of the other, demonstrating the efficiency and effectiveness of our network. Utilizing state of the art satellite command and control hardware and software, our satellite operations centers analyze telemetry from our satellites in order to monitor their status and track their location.

Our satellite operations centers use a network of ground facilities to perform their functions. This network includes 19 earth stations that provide tracking, telemetry and commanding ("TT&C") services for our satellites and various other earth stations worldwide. Through our ground facilities, we constantly monitor signal quality, protect bandwidth from piracy or other interference and maintain customer installed equipment.

Our customer service center located in Ellenwood, Georgia includes an RF Operations Center, a Managed Services Operations Center and an Intelsat Secured Operations Center. This facility is responsible for managing the communications services that we provide to our customers and is the first point of contact for customers needing assistance in using our network. We also maintain a back-up operations facility and data center a relatively short distance from our McLean, Virginia facility in Hagerstown, Maryland. This facility provides back-up emergency operational services in the event that our Ellenwood, Georgia customer service center experiences an interruption.

We have invested heavily in our fully integrated IntelsatOne® terrestrial network which complements our satellite network. Our network includes teleport, leased fiber and network performance monitoring systems and enables us to provide end-to-end managed solutions to our customers. In addition to leased fiber connecting high-density routes, our ground network also features strategically located PoPs, which are drop-off points for our customers' traffic that are close to major interconnection hubs for telecommunications applications, video transmissions and trunking to the internet backbone. Our terrestrial network is an all IP network environment that results in improved ground support of high bandwidth applications such as HD video. The network architecture allows us to converge our media and network services terrestrial network infrastructures, resulting in reduced costs, and provides opportunities for generating additional revenue from existing and new customers by bundling combinations of media and network services products that can be offered through a single access circuit into our network.

Capacity Sparing and Backup and General Satellite Risk Management

As part of our satellite risk management, we continually evaluate, and design plans to mitigate, the areas of greatest risk within our fleet, especially for those satellites with known technical risks. We believe that the availability of spare transponder services capacity, together with the overlapping coverage areas of our satellites and flexible satellite design features described in—Our Network—Satellite Systems above, are important aspects of our ability to provide reliable service to our customers. In addition, these factors could help us to mitigate the financial impact to our operations attributable to the occurrence of a major satellite anomaly, including the loss of a satellite. Although we do not maintain backup for all of our transponder services operating capacity, we generally maintain some form of backup capacity for each satellite designated as being in primary operating service. Our restoration backup capacity may include any one or more of the following:

- · designated reserve transponders on the satellite or other on-board backup systems or designed-in redundancies,
- · an in-orbit spare satellite, or
- · interim restoration capacity on other satellites.

In addition, we provide some capacity on a preemptible basis and could preempt the use of this capacity to provide backup capacity in the event of a loss of a satellite.

We typically obtain launch insurance for our satellites before launch and will decide whether or not to obtain such insurance taking into consideration launch insurance rates, terms of available coverage and alternative risk management strategies, including the availability of backup satellites and transponders in the event of a launch failure. Launch insurance coverage is typically in an amount equal to the fully capitalized cost of the satellite, which generally includes the construction costs, the portion of the insurance premium related to launch, the cost of the launch services and capitalized interest (but may exclude any unpaid incentive payments to the manufacturer).

As of December 31, 2017, five of the satellites in our current and future fleet were covered by in-orbit insurance. In-orbit insurance coverage may initially be for an amount comparable to launch insurance levels, generally decreases over time and is typically based on the declining book value of the satellite. We do not currently insure against lost revenue in the event of a total or partial loss of a satellite.

Satellite Health and Technology

Our satellite fleet is diversified by manufacturer and satellite type, and is generally healthy, with 99.995% transponder availability on all satellites during the year ended December 31, 2017. We have experienced some technical problems with our current fleet but have been able to minimize the impact of these problems on our customers, our operations and our business in recent years. Many of these problems have been component failures and anomalies that have had little long-term impact to date on the overall transponder availability in our satellite fleet. All of our satellites have been designed to accommodate an anticipated rate of equipment failures with adequate redundancy to meet or exceed their orbital design lives, and to date, this redundancy design scheme has proven effective. After each anomaly we have generally restored services for our customers on the affected satellite, provided alternative capacity on other satellites in our fleet, or provided capacity that we purchased from other satellite operators.

Significant Anomalies

On January 14, 2005, our Intelsat 804 satellite experienced a sudden and unexpected electrical power system anomaly that resulted in the total loss of the satellite. Intelsat 804 was a Lockheed Martin 7000 series (the "LM 7000 series") satellite, and as of December 31, 2017 we operated one other satellite in the LM 7000 series, Intelsat 805. Based on the report of the Failure Review Board that we established with Lockheed Martin Corporation, we believe that the Intelsat 804 failure was not likely to have been caused by an Intelsat 804 specific workmanship or hardware element, but was most likely caused by a high current event in the battery circuitry triggered by an electrostatic discharge that propagated to cause the sudden failure of the high voltage power system. We therefore believe that although this risk exists for our other LM 7000 series satellite, the risk of any individual satellite having a similar anomaly is low.

On April 5, 2010, our Galaxy 15 satellite experienced an anomaly resulting in our inability to command the satellite. Galaxy 15 is a Star-2 satellite manufactured by Orbital Sciences Corporation. On December 23, 2010, we recovered command of the spacecraft and we have since uploaded flight software code to protect against future anomalies of this type. As of December 31, 2017, Galaxy 15 continues to provide normal service.

On April 22, 2011, our Intelsat 28 satellite, formerly known as the Intelsat New Dawn satellite, was launched into orbit. Subsequent to the launch, the satellite experienced an anomaly during the deployment of its west antenna reflector, which controls communications in the C-band frequency. The anomaly had not been experienced previously on other STAR satellites manufactured by Orbital Sciences Corporation, including those in our fleet. The New Dawn joint venture filed a partial loss claim with its insurers relating to the C-band antenna reflector anomaly and all of the insurance proceeds from the partial loss claim were received in 2011. The Ku-band antenna reflector deployed and that portion of the satellite is operating as planned, entering service in June 2011. A Failure Review Board established to determine the cause of the anomaly, completed its investigation in July 2011 and concluded that the deployment anomaly of the C-band reflector was most likely due to a malfunction of the reflector sunshield. As a result, the

sunshield interfered with the ejection release mechanism, and prevented the deployment of the C-band antenna. The Failure Review Board also recommended corrective actions for Orbital Sciences Corporation satellites not yet launched to prevent reoccurrence of the anomaly. Appropriate corrective actions were implemented on Intelsat 18, which was successfully launched on October 5, 2011, and on Intelsat 23, which was launched in October 2012.

During launch operations of Intelsat 19 on June 1, 2012, the satellite experienced damage to its south solar array. Although both solar arrays are deployed, the power available to the satellite is less than is required to operate 100% of the payload capacity. An Independent Oversight Board ("IOB") was formed by SSL and Sea Launch to investigate the solar array deployment anomaly. The IOB concluded that the anomaly occurred before the spacecraft separated from the launch vehicle, during the ascent phase of the launch, and originated in one of the satellite's two solar array wings due to a rare combination of factors in the panel fabrication and was unrelated to the launch vehicle. While the satellite is operational, the anomaly resulted in structural and electrical damage to one solar array wing, which reduced the amount of power available for payload operation. Additionally, we filed a partial loss claim with our insurers relating to the solar array anomaly. We received \$84.8 million of insurance proceeds related to the claim in 2013. As planned, Intelsat 19 replaced Intelsat 8 at 166°E, in August 2012.

On February 1, 2013, the launch vehicle for our Intelsat 27 satellite failed shortly after liftoff and the satellite was completely destroyed. A Failure Review Board was established and subsequently concluded that the launch failed due to the mechanical failure of one of the first stage engine's thrust control components. The satellite and launch vehicle were fully insured, and we received \$406.2 million of insurance proceeds in 2013.

During orbit raising of Intelsat 33e in September 2016, the satellite experienced a malfunction of the main satellite thruster. Orbit raising was subsequently completed using a different set of satellite thrusters. The anomaly resulted in a delay of approximately three months in reaching the geostationary orbit, as well as a reduction in the projected lifetime of the satellite. Intelsat 33e entered service in January 2017. In addition, in February 2017, measurements indicated higher than expected fuel use while performing stationkeeping maneuvers. There is no evidence of any impact to the communications payload. A Failure Review Board has been established to determine the cause of the primary thruster failure and a separate team to investigate the fuel use anomaly. Intelsat has filed claims with insurers relating to the reduction of life.

Other Anomalies

We have also identified four other types of common anomalies among the satellite models in our fleet, which have had an operational impact in the past and could, if they materialize, have an impact in the future. These are:

- failure of the on-board SCP in Boeing 601 ("BSS 601") satellites;
- failure of the on-board XIPS used to maintain the in-orbit position of Boeing 601 High Power Series ("BSS 601 HP") satellites;
- · accelerated solar array degradation in early Boeing 702 High Power Series ("BSS 702 HP") satellites; and
- failure of gyroscopes on certain SSL satellites.

SCP Failures. Many of our satellites use an on-board SCP to provide automatic on-board control of many operational functions. SCPs are a critical component in the operation of such satellites. Each such satellite has a backup SCP, which is available in the event of a failure of the primary SCP. Certain BSS 601 satellites have experienced SCP failures. The risk of SCP failure appears to decline as these satellites age.

As of December 31, 2017, we operated one BSS 601 satellite, Intelsat 26. This satellite was identified as having heightened susceptibility to the SCP problem. Intelsat 26 has been in continuous operation since 1997. Both primary and backup SCPs on this satellite are monitored regularly and remain fully functional. Accordingly, we believe it is unlikely that additional SCP failures will occur; however, should they occur, we do not anticipate an interruption in business or early replacement of this satellite as a result.

BSS 601 HP XIPS. The BSS 601 HP satellite uses XIPS as its primary propulsion system. There are two separate XIPS on each satellite, each one of which is capable of maintaining the satellite in its orbital position. The BSS 601 HP satellite also has a completely independent chemical propulsion system as a backup to the XIPS. As a result, the failure of a XIPS on a BSS 601 HP satellite typically would have no effect on the satellite's performance or its operating life. However, the failure of both XIPS would require the use of the backup chemical propulsion system, which could result in a shorter operating life for the satellite depending on the amount of chemical fuel remaining. XIPS failures do not typically result in a catastrophic failure of the satellite or affect the communications capability of the satellite.

As of December 31, 2017, we operated four BSS 601 HP satellites, Intelsat 5, Intelsat 9, and Intelsat 10, which are now in inclined orbit, and Galaxy 13/Horizons 1. Galaxy 13/Horizons 1 has one XIPS system available as its primary propulsion system. Intelsat 5, Intelsat 9 and Intelsat 10 have experienced the failure of both XIPS and are operating on their backup chemical propulsion systems. Intelsat 5 was redeployed in 2012 following its replacement by Intelsat 8, which was subsequently replaced by Intelsat 19. Also in 2012, Intelsat 9 and Intelsat 10 were redeployed following their replacements by Intelsat 21 and Intelsat 20, respectively. No assurance can be given that we will not have further XIPS failures that result in shortened satellite lives. We have decommissioned three satellites that had experienced failure of both XIPS. Intelsat 6B was replaced by Intelsat 11 during the first quarter of 2008, Galaxy 10R was replaced by Galaxy 18 during the second quarter of 2008, and Galaxy 4R was decommissioned in March 2009.

BSS 702 HP Solar Arrays. All of our satellites have solar arrays that power their operating systems and transponders and recharge the batteries used when solar power is not available. Solar array performance typically degrades over time in a predictable manner. Additional power margins and other operational flexibility are designed into satellites to allow for such degradation without loss of performance or operating life. Certain BSS 702 HP satellites have experienced greater than anticipated degradation of their solar arrays resulting from the design of the solar arrays. Such degradation, if continued, results in a shortened operating life of a satellite or the need to reduce the use of the communications payload.

As of December 31, 2017, we operated three BSS 702 HP satellites, two of which are affected by accelerated solar array degradation, Galaxy 11 and Intelsat 1R. Service to customers has not been affected, and we expect that both of these satellites will continue to serve customers until we replace or supplement them with new satellites. Along with the manufacturer, we continually monitor the problem to determine its cause and its expected effect. Due to this continued degradation, Galaxy 11 was redeployed following its replacement by Intelsat 34. Intelsat 1R was redeployed following its replacement by Intelsat 14. The third BSS 702 HP satellite that we operated as of December 31, 2017, Galaxy 3C, was launched after the solar array anomaly was identified, and it has a substantially different solar array design intended to eliminate the problem. This satellite has been in service since September 2002 and has not experienced similar degradation problems.

SSL gyroscopes. Some of our satellites use gyroscopes to provide 3-axes attitude information during orbit inclination maneuvers. Certain SSL satellites use gyroscopes that have been identified as having a higher probability of failing. There are four gyroscopes on each of these SSL satellites, three of which are needed for normal operation, and the fourth is a spare. The failure of a single gyroscope on a given satellite would have no effect on the satellite's performance or its operating life. A failure of two or more gyroscopes on a given satellite would require us to use an alternative method for inclination control. This alternative method would likely result in a reduction in the remaining life of the satellite. As of December 31, 2017, we operated 11 SSL satellites that use these gyroscopes, two of which are in inclined orbit. While in inclined orbit, inclination maneuvers are no longer required. Of the 9 satellites in station-kept orbit, three satellites had two or more gyro failures and are being operated through an alternative method for inclination control.

Regulation

As an operator of a privately owned global satellite system, we are subject to U.S. government regulation, regulation by foreign national telecommunications authorities and the ITU frequency coordination process and regulations.

U.S. Government Regulation

FCC Regulation. The majority of the satellites in our current constellation are licensed and regulated by the FCC. We have final or temporary FCC authorization for all of our U.S.-licensed operating satellites. The special temporary authorizations ("STAs") in effect relating to our satellites cover various time periods, and thus the number held at any given time varies. In some cases, we have sought STAs because we needed temporary operational authority while we are awaiting grant of identical permanent authority. In others, we sought STAs because the activity was temporary in nature, and thus no permanent authority was needed. Historically, we have been able to obtain the STAs that we have needed on a timely basis. FCC satellite licenses have a fifteen-year term. At the end of a license term, we can request an extension to continue operating a satellite. In addition, our FCC satellite licenses that relate to use of those orbital locations and associated frequencies that were transferred to the United States at the time of our privatization in July 2001 are conditioned on our remaining a signatory to the Public Services Agreement with ITSO. Furthermore, any transfer of these licenses by us to a successor-in-interest is only permitted if such successor-in-interest has undertaken to perform our obligations under the Public Services Agreement. Some of our authorizations contain waivers of technical regulations. Many of our technical waivers were required when our satellites were initially licensed by the United States at privatization in 2001 because, as satellites previously operated by an intergovernmental entity, they had not been built in compliance with certain U.S. regulations. Since privatization, several replacement satellites for satellites licensed at privatization also have needed technical waivers as they are technically similar to the satellites they are replacing.

Changes to our satellite system generally require prior FCC approval. From time to time, we have pending applications for permanent or temporary changes in orbital locations, frequencies and technical design. From time to time, we also file applications for replacement or additional satellites. Replacement satellite applications are eligible for streamlined processing if they seek authority for the same orbital location, frequency bands and coverage area as an existing satellite and will be brought into use at approximately the same time, but no later than, the existing satellite is retired. The FCC processes satellite applications for new orbital locations or frequencies on a first come, first served basis. The FCC requires licensees of new, non-replacement, geostationary satellites to post a bond and to comply with a milestone to launch and operate the satellite within five years of the license grant. The bond starts at \$1 million and increases, pro rata, in proportion to the time that has elapsed since the license was granted to the time of the launch and operate milestone. At the end of the five-year period, the bond amount will be \$3 million. A satellite licensee that does not satisfy the launch and operate milestone will lose its license and must forfeit the bond absent circumstances warranting a milestone extension under the FCC's rules and policies. An operator that elects to relinquish its license prior to the five-year launch and operate milestone will forfeit the amount of accrued bond as of the date the license is relinquished. We hold other FCC licenses, including earth station licenses associated with technical facilities located in several states. We must pay FCC filing fees in connection with our space station and earth station applications, and we must also pay annual regulatory fees to the FCC. Violations of the FCC's rules can result in various sanctions including fines, loss of authorizations or the denial of applications for new authorizations or the renewal of existing authorizations.

One of our subsidiaries holds a Section 214 authorization. However, we currently do not sell services as a common carrier. Therefore, we are not subject to rate regulation or the obligation not to discriminate among customers.

U.S. Export Control Requirements and Sanctions Regulation. Intelsat must comply with U.S. export control and trade sanctions laws and regulations as follows:

Under the Export Control Reform ("ECR") effort, authorized by Congress and the President, the control of commercial communications satellites along with their associated ground control equipment, related software, and technology was moved, effective November 10, 2014, from the International Traffic in Arms Regulations ("ITAR") to the Export Administration Regulations ("EAR"). Originally there was a two year timeframe allowed for companies to make this change. This transition timeframe expired in November 2017. Intelsat has transitioned our export authorizations in response to the new regulatory licensing requirements created by this reform. Intelsat has moved all programs to EAR authorizations, as needed.

The Arms Export Control Act, implemented by ITAR and administered by the U.S. Department of State's Directorate of Defense Trade Controls ("DDTC"), regulates the export of certain satellites with defined military and government end use capabilities and characteristics, certain associated hardware, defense services, and technical information relating to satellites to non-U.S. persons (including satellite manufacturers, component suppliers, launch services providers, insurers, customers, Intelsat employees, and other non-U.S. persons). Intelsat has made the regulatory transition from the ITAR to the EAR, and a small portion of our controlled technology remains under ITAR. Intelsat does not currently have any active ITAR licenses. Standard satellite operations were de-controlled as part of the regulatory update, and that technology is now being exported without the need for authorization. Certain of Intelsat's contracts for consulting, manufacture, launch, and insurance of Intelsat's and third-party satellites involve the export to non-U.S. persons of technical data and/or hardware; these exports are those that were regulated by the ITAR are now controlled under the EAR, and have been transitioned to EAR authorizations. We believe that we do not currently need any ITAR authorizations in order to fulfill our obligations under contracts with non-U.S. entities.

The Export Administration Act/International Emergency Economic Powers Act, implemented by the EAR and administered by the U.S. Department of Commerce's Bureau of Industry and Security ("BIS"), regulates exports of non-ITAR, dual-use, controlled items, which as a result of ECR now includes commercial communications satellites, associated ground equipment, related software, and technology. The EAR also controls non-ITAR equipment exported to earth stations in our ground network located outside of the United States and to customers as needed. Intelsat uses EAR approved licensing exceptions for many of our export controlled programs, and EAR licenses as required. It is our practice to obtain all licenses necessary, or correctly document the license exception authorized, for the furnishing of original or spare equipment for the operation of our TT&C ground stations, other network stations, and customer locations in a timely manner in order to facilitate the shipment of this equipment when needed.

Trade sanctions laws and regulations administered by the U.S. Department of Treasury's Office of Foreign Assets Control ("OFAC") regulate the provision of services to certain countries subject to U.S. trade sanctions. As required, Intelsat holds the authorizations needed to provide satellite capacity and related administrative services to U.S.-sanctioned countries.

U.S. Department of Defense Security Clearances. To participate in classified U.S. government programs, we entered into a proxy agreement with the U.S. government that allows one of our subsidiaries to obtain security clearances from the U.S. Department of Defense as required under the national security laws and regulations of the United States. Such a proxy agreement is required to insulate the subsidiary performing this work from inappropriate foreign influence and control by Intelsat S.A., a Luxembourg

company with significant non-U.S. investments and employees. Security clearances are subject to ongoing scrutiny by the issuing agency, as well as renewal every five years. Intelsat must maintain the security clearances obtained from the U.S. Department of Defense, or else lose the ability to perform our obligations under any classified U.S. government contracts to which our subsidiary is a party. Under those circumstances, the U.S. government would have the right to terminate our contracts requiring access to classified information and we would not be able to enter into new classified contracts. Compliance with the proxy agreement is regularly monitored by the U.S. Department of Defense and reviewed at least annually, and if we materially violate the terms of the proxy agreement, the subsidiary holding the security clearances may be suspended or debarred from performing any U.S. government contracts, whether classified or unclassified. Our current proxy agreement is subject to extension every five years with the agreement of the U.S. Department of Defense.

Regulation by Non-U.S. National Telecommunications Authorities

U.K. Regulation. The United Kingdom is the licensing jurisdiction for the Intelsat 12 and Intelsat 26 satellites, as well as the BSS portion of the Ku-band on the Intelsat 805 satellite. Satellite operators in the United Kingdom are regulated by the Ofcom and by the UKSA.

Papua New Guinea Regulation. NICTA regulates the use of certain spectrum and orbital resources associated with some of our satellites. Specifically, the following satellites were operated under the regulation of NICTA for all or part of, the year ended December 31, 2017: Galaxy 23, Intelsat 26, Intelsat 30, Intelsat 31, Intelsat 29e, Intelsat 33e, and Intelsat 36. We are required to pay annual fees to NICTA in connection with the spectrum and orbital resources utilized by these satellites, as well as for other satellite network filings we have the right to use. In 2003, the FCC added the C-band payload of the Galaxy 23 satellite, which is licensed by NICTA, to its "Permitted Space Station List," enabling use of the payload to provide non-DTH services in the United States.

German Regulation. We hold licenses from the BNetzA for several earth stations in Germany, as well as authorizations to use spectrum and orbital resources associated with the operation of the Intelsat 10, Intelsat 12, Intelsat 904 and Galaxy 11 satellites and with future satellites. We are required to pay annual fees to BNetzA in connection with the spectrum and orbital resources utilized by these satellites, as well as for other satellite network filings we have the right to use.

Australian Regulation. We hold licenses from the Australian Communications and Media Authority ("ACMA") for several earth stations in Australia, as well as a Nominated Carrier Declaration.

Japanese Regulation. We hold licenses from the Ministry of Internal Affairs and Communications for several earth stations in Japan, as well as a Carrier registration. We and JSAT are the sole members of Horizons Holdings, and in 2002 the Japanese telecommunications ministry authorized Horizons to operate the Ku-band payload on the Galaxy 13/Horizons 1 satellite. In 2003, the FCC added this Ku-band payload to its "Permitted Space Station List," enabling Horizons to use the payload to provide non-DTH services in the United States. In May 2004, the FCC expanded this authority to include one-way DTH services. We are the exclusive owner of the C-band payload on Galaxy 13/Horizons 1, which the FCC has licensed us to operate.

Other National Telecommunications Authorities. As a provider of satellite capacity, we are also subject to the national communications and broadcasting laws and regulations of many other countries in which we operate. In addition, in some cases our ability to operate a satellite in a non-U.S. jurisdiction also arises from a contractual arrangement with a third party. Some countries require us to obtain a license or other form of written authorization from the regulator prior to offering satellite capacity services. We have obtained these licenses or written authorizations in all countries that have required us to obtain them. As satellites are launched or relocated, we determine whether such licenses or written authorizations are required and, if so, we obtain them. Most countries allow authorized telecommunications providers to own their own transmission facilities and to purchase satellite capacity without restriction, facilitating customer access to our services. Other countries maintain strict monopoly regimes or otherwise regulate the provision of our services. In order to provide services in these countries, we may need to negotiate an operating agreement with a monopoly entity that covers the types of services to be offered by each party, the contractual terms for service and each party's rates. As we have developed our ground network and expanded our service offerings, we have been required to obtain additional licenses and authorizations. To date, we believe that we have identified and complied with all of the regulatory requirements applicable to us in connection with our ground network and expanded services.

The International Telecommunication Union Frequency Coordination Process and Associated Regulations

Our use of orbital locations is subject to the frequency coordination and recording process of the ITU. In order to protect satellite networks from harmful radio frequency interference from other satellite networks, the ITU maintains a Master International Frequency Register ("MIFR") of radio frequency assignments and their associated orbital locations. Each ITU notifying administration is required by treaty to give notice of, coordinate and record its proposed use of radio frequency assignments and associated orbital locations with the ITU's Radiocommunication Bureau.

When a frequency assignment is recorded in the MIFR, the ITU publishes this information so that all potential users of frequencies and orbital locations are aware of the need to protect the recorded assignments associated with a given orbital location from subsequent or nonconforming interfering uses by Member States of the ITU. The ITU's Radio Regulations do not contain mandatory dispute resolution or enforcement mechanisms. The Radio Regulations' arbitration procedure is voluntary and neither the ITU specifically, nor international law generally, provides clear remedies if this voluntary process fails. Only nation states have full standing as ITU members. Therefore, we must rely on governments to represent our interests before the ITU, including obtaining new rights to use orbital locations and resolving disputes relating to the ITU's regulations.

An operator may submit an ITU satellite network filing to the FCC for forwarding to the ITU prior to the operator filing a complete FCC license application. Submission of such an ITU filing will reserve for the operator a place in the FCC's first come, first served licensing queue provided the operator posts a \$500,000 bond. If the operator fails within two years to file a complete FCC license application for the orbital location, frequencies and polarization proposed in the ITU satellite network filing, the bond will be forfeited.

Environmental Matters

Our operations are subject to various laws and regulations relating to the protection of the environment, including those governing the management, storage and disposal of hazardous materials and the cleanup of contamination. As an owner or operator of property and in connection with current and historical operations at some of our sites, we could incur significant costs, including cleanup costs, fines, sanctions and third-party claims, as a result of violations of or liabilities under environmental laws and regulations. For instance, some of our operations require continuous power supply, and, as a result, current and past operations at our teleports and other technical facilities include fuel storage and batteries for back-up power generators. We believe, however, that our operations are in substantial compliance with environmental laws and regulations.

C. Organizational Structure

Intelsat S.A. is a holding company with 58 subsidiaries incorporated in the U.S., Luxembourg, Bermuda, Australia, Brazil, China, Hong Kong, Cayman Islands, France, Germany, Gibraltar, India, Ireland, Mexico, the Russian Federation, Singapore, South Africa, and the United Kingdom as of December 31, 2017. All of the aforementioned subsidiaries are wholly-owned by us. A list of our significant subsidiaries as of December 31, 2017 is set forth in Exhibit 8.1 to this Annual Report.

D. Property, Plant and Equipment

We lease approximately 217,650 square feet of office space in McLean, Virginia for our U.S. administrative headquarters and primary satellite operations center. The building also houses the majority of our sales and marketing support staff and other administrative personnel. The lease for the building expires on July 31, 2029.

We own a facility in Ellenwood, Georgia in which our primary customer service center is located, together with our Atlanta Teleport. The facility has approximately 130,000 square feet of office space and operations facilities, which are based in two buildings and multiple antenna shelters and 66 antennas on the property. See Item 4B—Business Overview—Our Network—Network Operations and Current Ground Facilities for a description of this facility.

We also leased approximately 2,761 square feet in Bethesda, Maryland, where the employees of our Intelsat General subsidiary were previously located. The lease has been extended through April 2018.

Our backup satellite operations center is located at a facility that we own in Long Beach, California, which includes approximately 68,875 square feet for administrative and operational facilities. We have entered into two lease agreements for 20,900 square feet with two third-party tenants.

We use a worldwide terrestrial ground network to operate our satellite fleet and to manage the communications services that we provide to our customers. This network is comprised of 61 owned and leased earth station and teleport facilities around the world, including 19 teleports that allows us to perform TT&C services.

The eight teleports in our terrestrial ground network that we own are located in Hagerstown, Maryland, Ellenwood, Georgia, Castle Rock, Colorado, Fillmore, Napa and Riverside, California, Paumalu, Hawaii and Fuchsstadt, Germany. We lease facilities at 53 other locations for satellite and commercial operations worldwide. We also contract with the owners of some of these facilities for the provision of additional services. The locations of other earth stations in our ground network include Argentina, Australia, Bahrain, Brazil, Canada, Chile, Colombia, Germany, India, Italy, Kazakhstan, Kenya, Mongolia, the Netherlands, New Zealand, Nigeria, Norway, Peru, South Korea, South Africa, Taiwan, the United Arab Emirates, and the United States. Our network also consists of the leased communications links that connect the earth stations to our satellite operations center located at our McLean, Virginia location and to our back-up operations facility.

We have established PoPs connected by leased fiber at key traffic exchange points around the world, including Atlanta, Los Angeles, New York, McLean, Miami, Palo Alto and London. We lease our facilities at these traffic exchange points. We have also established video PoPs connected by leased fiber at key video exchange points around the world, including Johannesburg, Los Angeles, Denver, New York, Washington, D.C., Miami and London. We lease our facilities at these video exchange points. We use our teleports and PoPs in combination with our satellite network to provide our customers with managed data and video services.

We lease office space in Luxembourg and London, England. Our Luxembourg office serves as the global headquarters for us and our Luxembourg parents and subsidiaries. Our London office houses the employees of Intelsat Global Sales and Marketing Ltd., our sales and marketing subsidiary, and administrative support, and functions as our global sales headquarters.

We also lease office space in Florida, Australia, Brazil, China, France, Germany, India, Japan, Kenya, Mexico, the Russian Federation, Singapore, South Africa, Senegal and the United Arab Emirates for our local sales and marketing and administrative support offices.

The leases relating to our TT&C earth stations, teleports, PoPs and office space expire at various times. We do not believe that any such properties are individually material to our business or operations, and we expect that we could find suitable properties to replace such locations if the leases were not renewed at the end of their respective terms.

Item 4A. Unresolved Staff Comments

Not applicable.

Item 5. Operating and Financial Review and Prospects

This discussion should be read together with Item 34—Selected Financial Data and our consolidated financial statements and their notes included elsewhere in this Annual Report. Our consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States, or U.S. GAAP, and, unless otherwise indicated, the other financial information contained in this Annual Report has also been prepared in accordance with U.S. GAAP. See "Forward-Looking Statements" and Item 3D—Risk Factors, for a discussion of factors that could cause our future financial condition and results of operations to be different from those discussed below. Certain monetary amounts, percentages and other figures included in this Annual Report have been subject to rounding adjustments. Accordingly, figures shown as totals in certain tables may not be the arithmetic aggregation of the figures that precede them, and figures expressed as percentages in the text may not total 100% or, as applicable, when aggregated may not be the arithmetic aggregation of the percentages that precede them. Unless otherwise indicated, all references to "dollars" and "\$" in this Annual Report are to, and all monetary amounts in this Annual Report are presented in, U.S. dollars.

Overview

We operate one of the world's largest satellite services businesses, providing a critical layer in the global communications infrastructure.

We provide diversified communications services to the world's leading media companies, fixed and wireless telecommunications operators, data networking service providers for enterprise and mobile applications in the air and on the seas, multinational corporations and ISPs. We are also the leading provider of commercial satellite capacity to the U.S. government and other select military organizations and their contractors.

Our customers use our Global Network for a broad range of applications, from global distribution of content for media companies to providing the transmission layer for commercial aeronautical consumer broadband connectivity, to enabling essential network backbones for telecommunications providers in high-growth emerging regions.

Our network solutions are a critical component of our customers' infrastructures and business models. Generally, our customers need the specialized connectivity that satellites provide so long as they are in business or pursuing their mission. In recent years, mobility services providers have contracted for services on our fleet that support broadband connections for passengers on commercial flights and cruise ships, connectivity that in some cases is only available through our network. In addition, our satellite neighborhoods provide our media customers with efficient and reliable broadcast distribution that maximizes audience reach, a technical and economic benefit that is difficult for terrestrial services to match. In developing regions, our satellite solutions often provide higher reliability than is available from local terrestrial telecommunications services and allow our customers to reach geographies that they would otherwise be unable to serve.

Critical Accounting Policies

The preparation of financial statements in accordance with U.S. GAAP requires management to make estimates and assumptions that affect reported amounts and related disclosures. We consider an accounting estimate to be critical if: (1) it requires assumptions to be made that were uncertain at the time the estimate was made; and (2) changes in the estimate, or selection of different estimates, could have a material effect on our consolidated results of operations or financial condition.

We believe that some of the more important estimates and related assumptions that affect our financial condition and results of operations are in the areas of revenue recognition, the allowance for doubtful accounts, satellites and other property and equipment, asset impairments, share-based compensation, income taxes, fair value measurements and pension and other postretirement benefits. There were no accounting policies adopted during 2016 or 2017 that had a material effect on our financial condition or results of operations.

While we believe that our estimates, assumptions, and judgments are reasonable, they are based on information presently available. Actual results may differ significantly. Additionally, changes in our assumptions, estimates or assessments as a result of unforeseen events or otherwise could have a material impact on our financial position or results of operations.

Revenue Recognition, Accounts Receivable and Allowance for Doubtful Accounts

Revenue Recognition. We earn revenue primarily from satellite utilization services and, to a lesser extent, from providing managed services to our customers. In general, we recognize revenue in the period during which the services are provided. While the majority of our revenue transactions contain standard business terms and conditions, there are certain transactions that contain non-standard business terms and conditions. Additionally, we may enter into certain sales transactions that involve multiple element arrangements (arrangements with more than one deliverable). As a result, significant contract interpretation is sometimes required to determine the appropriate accounting for these transactions, including:

- whether an arrangement contains a service contract or a lease;
- · whether an arrangement should be reported gross as a principal versus net as an agent;
- how the arrangement consideration should be allocated among potential multiple elements, and when to recognize revenue related to those elements.

In addition, our revenue recognition policy requires an assessment as to whether collection is reasonably assured, which requires us to evaluate the creditworthiness of our customers. Changes in judgments in making these assumptions and estimates could materially impact the timing and/or amount of revenue recognition.

Allowance for Doubtful Accounts. Our allowance for doubtful accounts is determined through a subjective evaluation of the aging of our accounts receivable, and considers such factors as the likelihood of collection based upon an evaluation of the customer's creditworthiness, the customer's payment history and other conditions or circumstances that may affect the likelihood of payment, such as political and economic conditions in the country in which the customer is located. If our estimate of the likelihood of collection is not accurate, we may experience lower revenue or a change in our provision for doubtful accounts. When we determine that the collection of payments is not reasonably assured at the time the service is provided, we defer recognition of the revenue until such time as collection is believed to be reasonably assured or the payment is received.

Satellites and Other Property and Equipment

Satellites and other property and equipment are depreciated and amortized on a straight-line basis over their estimated useful lives. The remaining depreciable lives of our satellites range from less than one year to 17 years as of December 31, 2017. We make estimates of the useful lives of our satellites for depreciation purposes based upon an analysis of each satellite's performance, including its orbital design life and its estimated service life. The orbital design life of a satellite is the length of time that the manufacturer has contractually committed that the satellite's hardware will remain operational under normal operating conditions. In contrast, a satellite's service life is the length of time the satellite is expected to remain operational as determined by remaining fuel levels and consumption rates. Our in-orbit satellites generally have orbital design lives ranging from ten to 15 years and service lives as high as 20 years. The useful depreciable lives of our satellites generally exceed the orbital design lives and are less than the service lives. Although the service lives of our satellites have historically extended beyond their depreciable lives, this trend may not continue. We periodically review the remaining estimated useful lives of our satellites to determine if any revisions to our estimates are necessary based on the health of the individual satellites. Changes in our estimate of the useful lives of our satellites could have a material effect on our financial position or results of operations.

We charge to operations the carrying value of any satellite lost as a result of a launch or in-orbit failure upon the occurrence of the loss. In the event of a partial failure, we record an impairment charge to operations upon the occurrence of the loss if the undiscounted future cash flows are less than the carrying value of the satellite. We measure the impairment charge as the excess of the carrying value of the satellite over its estimated fair value as determined by the present value of estimated expected future cash flows using a discount rate commensurate with the risks involved. We reduce the charge to operations resulting from either a complete or a partial failure by the amount of any insurance proceeds received or expected to be received by us, and by the amount of any deferred satellite performance incentives that are no longer applicable following the failure. See—Asset Impairment Assessments below for further discussion.

Asset Impairment Assessments

Goodwill. We account for goodwill and other intangible assets in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC" or the "Codification") Topic 350—Intangibles—Goodwill and Other. Under this topic, goodwill acquired in a business combination and determined to have an indefinite useful life is not amortized but is tested for impairment annually or more often if an event or circumstances indicate that an impairment loss has been incurred. We are required to identify reporting units for impairment analysis. We have identified only one reporting unit for the goodwill impairment test. Additionally, our identifiable intangible assets with estimable useful lives are amortized based on the expected pattern of consumption for each respective asset.

Assumptions and Approach Used. We make our qualitative evaluation considering, among other things, general macroeconomic conditions, industry and market considerations, cost factors, overall financial performance and other relevant entity-specific events.

Based on our examination of the qualitative factors at December 31, 2016, we concluded that there was not a likelihood of more than 50% that the fair value of our reporting unit was less than its carrying value; therefore, no further testing of goodwill was required.

At December 31, 2017, we reassessed the different qualitative factors and updated our assessment. Based on our review, since the fixed and mobile satellite services industry is under pressure (pricing over-supply, value-chain inefficiencies) and since comparable companies have demonstrated negative to minimal revenue growth with equities underperforming, we determined that a quantitative assessment of goodwill was appropriate.

We determined the estimated fair value of our reporting unit using discounted cash flow analysis, along with independent source data related to the comparative market multiples and, when available, recent transactions, each of which is considered a Level 3 input within the fair value hierarchy under FASB ASC Topic 820, Fair Value Measurements and Disclosure ("FASB ASC 820"). The discounted cash flows were derived from a five-year projection of cash flows plus a residual value, with the resulting projected cash flows discounted at an appropriate weighted average cost of capital.

In estimating the undiscounted cash flows, we primarily used our internally prepared budgets and forecast information. The key assumptions included in our model were projected growth rates, cost of capital, effective tax rates, and industry and economic trends. A change in the estimated future cash flows or other assumptions could change our estimated fair values and result in future impairments. Based on our quantitative analysis as described above, we concluded that there was no impairment for goodwill at December 31, 2017.

Orbital Locations. Intelsat is authorized by governments to operate satellites at certain orbital locations—i.e., longitudinal coordinates along the Clarke Belt. The Clarke Belt is the part of space approximately 35,800 kilometers above the plane of the equator where geostationary orbit may be achieved. Various governments acquire rights to these orbital locations through filings made with the ITU, a sub-organization of the United Nations. We will continue to have rights to operate satellites at our orbital locations so long as we maintain our authorizations to do so. See "Part I—Item 3D—Risk Factors—Risk Factors Relating to Regulation".

Our rights to operate at orbital locations can be used and sold individually; however, since satellites and customers can be and are moved from one orbital location to another, our rights are used in conjunction with each other as a network that can be adapted to meet the changing needs of our customers and market demands. Due to the interchangeable nature of orbital locations, the aggregate value of all of the orbital locations is used to measure the extent of impairment, if any.

We determined the estimated fair value as of December 31, 2015 of our rights to operate at orbital locations using the build-up method to determine the cash flows for the income approach, with the resulting projected cash flows discounted at an appropriate weighted average cost of capital. In instances where the build-up method did not generate positive value for the rights to operate at an orbital location, but the rights were expected to generate revenue, we assigned a value based upon independent source data for recent transactions relating to similar orbital locations, which are all considered Level 3 inputs within the fair value hierarchy under FASB ASC 820.

At December 31, 2016 and December 31, 2017, we determined, based on an examination of qualitative factors, that there was no impairment.

Trade Name. We have implemented the relief from royalty method to determine the estimated fair value of the Intelsat trade name. The relief from royalty analysis is comprised of two major steps: i) a determination of the hypothetical royalty rate, and ii) the subsequent application of the royalty rate to projected revenue. In determining the hypothetical royalty rate utilized in the relief from royalty approach, we considered comparable license agreements, operating earnings benchmark rule of thumb, an excess earnings analysis to determine aggregate intangible asset earnings, and other qualitative factors, each of which is considered a Level 3 input within the fair value hierarchy under FASB ASC 820.

At December 31, 2016 and December 31, 2017, we determined, based on an examination of qualitative factors, that there was no impairment.

Long-Lived and Amortizable Intangible Assets. We review our long-lived and amortizable intangible assets to assess whether an impairment has occurred in accordance with the guidance provided under FASB ASC Topic 360—Property, Plant and Equipment, whenever events or changes in circumstances indicate, in our judgment, that the carrying amount of an asset may not be recoverable. These indicators of impairment can include, but are not limited to, the following:

- satellite anomalies, such as a partial or full loss of power;
- under-performance of an asset as compared to expectations; and
- shortened useful lives due to changes in the way an asset is used or expected to be used.

The recoverability of an asset to be held and used is measured by a comparison of the carrying amount of the asset to the estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of the asset exceeds its estimated undiscounted future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset exceeds its fair value, determined by either a quoted market price, if any, or a value determined by utilizing discounted cash flow techniques. Additionally, when assets are expected to be used in future periods, a shortened depreciable life may be utilized if appropriate, resulting in accelerated depreciation.

Assumptions and Approach Used. We employ a discounted future cash flow approach to estimate the fair value of our long lived intangible assets when an impairment assessment is required.

Share-Based Compensation

Awards are measured at the grant date based on the fair value as calculated using the Black-Scholes option pricing model for share options, a Monte Carlo simulation model for awards with market conditions, or the closing market price at the grant date for awards of shares or restricted shares units. The expense is recognized over the requisite service period, based on attainment of certain vesting requirements.

The determination of the value of certain awards requires considerable judgment, including estimating expected volatility, expected term and risk-free rate. The Company's expected volatility is based on the average volatility rates of similar actively-traded companies over the range of each award's estimated expected term, which is based on the midpoint between the expected vesting time and the remaining contractual life. The risk-free rate is derived from the applicable Constant Maturity Treasury rate.

Income Taxes

We account for income taxes in accordance with the guidance provided under the Income Taxes topic of the Codification ("FASB ASC 740"). We are subject to income taxes in Luxembourg as well as a number of foreign jurisdictions, including the United States. Significant judgment is required in the calculation of our tax provision and the resultant tax liabilities and in the recoverability of our deferred tax assets that arise from temporary differences between the tax and financial statement recognition of revenue and expense and net operating loss and credit carryforwards.

We regularly assess the likelihood that our deferred tax assets can be recovered. A valuation allowance is required when it is more likely than not that all or a portion of the deferred tax asset will not be realized. We evaluate the recoverability of our deferred tax assets based in part on the existence of deferred tax liabilities that can be used to realize the deferred tax assets.

During the ordinary course of business, there are many transactions and calculations for which the ultimate tax determination is uncertain. We evaluate our tax positions to determine if it is more likely than not that a tax position is sustainable, based solely on its technical merits and presuming the taxing authorities have full knowledge of the position, and access to all relevant facts and information. When a tax position does not meet the more likely than not standard, we record a liability for the entire amount of the unrecognized tax benefit. Additionally, for those tax positions that are determined more likely than not to be sustainable, we measure the tax position at the largest amount of benefit more likely than not (determined by cumulative probability) to be realized upon settlement with the taxing authority.

Fair Value Measurements

FASB ASC 820 requires disclosure of the extent to which fair value is used to measure financial assets and liabilities, the inputs utilized in calculating valuation measurements, and the effect of the measurement of significant unobservable inputs on earnings, or changes in net assets, as of the measurement date. FASB ASC 820 defines fair value as the price that would be received in the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date, and establishes a three-level valuation hierarchy based upon the transparency of inputs utilized in the measurement and valuation of financial assets or liabilities as of the measurement date:

- Level 1—unadjusted quoted prices for identical assets or liabilities in active markets;
- Level 2—quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that
 are not active, and inputs other than quoted market prices that are observable or that can be corroborated by observable market data by
 correlation; and
- Level 3—unobservable inputs based upon the reporting entity's internally developed assumptions which market participants would use in pricing the asset or liability.

We performed an evaluation of our financial assets and liabilities under the fair value framework of FASB ASC 820. As a result of that evaluation, we concluded that investments in marketable securities held under our pension plans, interest rate financial derivative instruments, embedded derivatives and a warrant to purchase preferred stock were items as to which disclosures were required under FASB ASC 820.

We determined that the valuation measurement inputs of marketable securities held under our pension plans represent unadjusted quoted prices in active markets and, accordingly, have classified such investments within Level 1 of the FASB ASC 820 hierarchy framework.

The valuation of our interest rate derivative instruments reflects the fair value of premiums paid, taking into account observable inputs, including current interest rates, the market expectation for future interest rates volatility and current creditworthiness of the counterparties. As a result, we have determined that our derivative valuations in their entirety are classified within Level 2 of the fair value hierarchy.

We valued a warrant using a valuation technique which reflects the risk free rate, time to maturity and volatility of comparable companies. We identified the inputs used to calculate the fair value as Level 3 inputs and concluded that the valuation in its entirety was classified as Level 3 within the fair value hierarchy.

We valued the contingent put option embedded within Intelsat Connect Finance's 12 ½% Senior Notes due April 2022 (the "2022 ICF Notes") using a valuation technique which reflects the estimated date and probability of a change in control, the fair value of the 2022 ICF Notes, and a credit valuation adjustment reflecting our credit spreads. We identified the inputs used to calculate the fair value as Level 3 inputs and concluded that the valuation in its entirety was classified as Level 3 within the fair value hierarchy.

Pension and Other Postretirement Benefits

We maintain a noncontributory defined benefit retirement plan covering substantially all of our employees hired prior to July 19, 2001. The cost of providing benefits to eligible participants under the defined benefit retirement plan is calculated using the plan's benefit formulas, which take into account the participants' remuneration, dates of hire, years of eligible service, and certain actuarial assumptions. In addition, as part of the overall medical plan, we provide postretirement medical benefits to certain current retirees who meet the criteria under the medical plan for postretirement benefit eligibility.

Expenses for our defined benefit retirement plan and for postretirement medical benefits that are provided under our medical plan are developed from actuarial valuations. Any significant decline in the fair value of our defined benefit retirement plan assets or other adverse changes to the significant assumptions used to determine the plan's funded status would negatively impact its funded status and could result in increased funding in future periods.

Key assumptions, including discount rates used in determining the present value of future benefit payments and expected return on plan assets, are reviewed and updated on an annual basis. The discount rates reflect market rates for high-quality corporate bonds. We consider current market conditions, including changes in interest rates, in making assumptions. The Society of Actuaries ("SOA") issued new mortality and mortality improvement tables in 2014, and modified those tables in 2016 and 2017. Our December 31, 2017 valuation used mortality and improvement tables based on the SOA tables, adjusted to reflect (1) an ultimate rate of mortality

improvement consistent with both historical experience and U.S. Social Security long-term projections, and (2) a shorter transition period to reach the ultimate rate, which is consistent with historical patterns. In establishing the expected return on assets assumption, we review the asset allocations considering plan maturity and develop return assumptions based on different asset classes. The return assumptions are established after reviewing historical returns of broader market indexes, as well as historical performance of the investments in the plan.

Recently Issued Accounting Pronouncements

In May 2014, the FASB issued Accounting Standard Update ("ASU") 2014-09, Revenue from Contracts with Customers (Topic 606) ("ASC 606"), which will supersede the revenue recognition requirements in FASB ASC Topic 605 – Revenue Recognition. The guidance in ASU 2014-09 clarifies the principles for recognizing revenue and improves financial reporting by creating a common revenue standard for U.S. GAAP and International Financial Reporting Standards. The FASB issued several amendments to the standard, including clarification of accounting for licenses of intellectual property and identifying performance obligations.

The Company formed an implementation team to evaluate and direct the implementation of the new revenue recognition standard and related amendments. This evaluation also included the impact of the new standard on relevant controls, systems and business processes. The team assessed contracts entered into with key customers and other forms of agreements with customers globally and evaluated the provisions under the five-step model specified by the new guidance. Based on our assessment, the adoption of the new standard will impact the determination of transaction price for prepayment contracts, accounting of incremental costs for obtaining a contract, allocation of the transaction price to performance obligations in multiple element arrangements and will require additional disclosures.

We have identified all contracts with prepayment provisions and determined that certain long-term contracts with prepayments contain a significant financing component primarily due to the length of time between when payment is received and when the transfer of services to the customer occurs. Further, we currently expense sales incentives under our sales incentive program as incurred. Under the new standard, we will be required to defer and amortize a portion of these incentive costs over the life of the contract.

Lastly, prior to the adoption of the new standard, equipment revenue was required to be limited to the amount that was not contingent upon the delivery of additional items meeting other specified performance conditions. Under ASC 606, we are required to allocate the total contract revenue to various performance obligations such as equipment and service. As a result, we expect to recognize more equipment revenue upon customer acceptance, and recognize less revenue over the contract term than under previous accounting rules. However, total revenue over the full contract term will be unchanged and there will be no change to customer billing, the timing of cash flows, or the presentation of cash flows.

We will adopt the new revenue standard effective January 1, 2018, using the modified retrospective transition method applied to those contracts for which not substantially all revenue was recognized under legacy U.S. GAAP. Upon adoption, we will recognize the cumulative effect as an adjustment to our opening accumulated deficit, with a corresponding increase to contract liabilities for our existing contracts with prepayment provisions. On an ongoing basis, the adjustment related to contracts with a significant financing component will result in an increase in revenue as well as an increase in interest expense. Additionally, contract acquisition costs associated with our sales incentive program in future periods will be capitalized and amortized over the respective contract life and equipment revenue will be recognized at a point in time upon customer acceptance.

Based on currently available information, we estimate the following opening balance sheet impact (all amounts are approximate, and they do not include any income tax effect):

Effect on Accumulated Deficit as of January 1, 2018:

Opening Balance Sheet Impact	Dollars in millions - increase/ (decrease)
Prepayments contracts	\$345 - \$355
Multiple elements arrangements	(\$5 - \$15)
Contract acquisition costs	(\$5 - \$10)

In January 2016, the FASB issued ASU 2016-01, *Financial Instruments – Overall (Topic 825)*, to require equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee) to be measured at fair value with changes in fair value recognized in net income. An entity may choose to measure equity investments that do not have readily determinable fair values at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. ASU 2016-10 is effective for interim and annual periods beginning after December 15, 2017. The amendments related to equity investments without readily determinable fair values

(including disclosure requirements) should be applied prospectively to equity investments that exist as of the date of adoptions. Our cost method investments recorded in other assets in our consolidated balance sheets had a total carrying value of \$29.0 million and \$54.7 million as of December 31, 2016 and 2017, respectively. We are in the process of evaluating the impact that ASU 2016-01 will have on our consolidated financial statements and disclosures.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, to increase transparency and comparability by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. ASU 2016-02 is effective for interim and annual periods beginning after December 15, 2018, on a modified retrospective basis with early adoption allowed. We are in the process of evaluating the impact that ASU 2016-02 will have on our consolidated financial statements and associated disclosures.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, which changes how companies measure and recognize credit impairment for any financial assets. The standard will require companies to immediately recognize an estimate of credit losses expected to occur over the remaining life of the financial assets that are within the scope of the standard. ASU 2016-13 is effective for interim and annual periods beginning after December 15, 2019 for public business entities that are SEC filers, on a modified retrospective basis. Early adoption is permitted for interim and annual periods beginning after December 15, 2018. We are in the process of evaluating the impact that ASU 2016-13 will have on our consolidated financial statements and associated disclosures.

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments, which addresses specific issues relating to diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. Additionally, in November 2016, the FASB issued ASU 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash (a consensus of the FASB Emerging Issues Task Force), which requires that amounts described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. ASU 2016-15 and ASU 2016-18 are effective for interim and annual periods beginning after December 15, 2017 for public business entities, on a retrospective basis. Early adoption is permitted for both standards in any interim or annual period, and for ASU 2016-15 with a condition that the entire ASU is adopted in the same period. We do not expect the adoption of ASU 2016-15 to have a material impact on our consolidated financial statements and associated disclosures. The amendments in ASU 2016-18 will change the presentation of cash flows from restricted cash from supplemental disclosure of non-cash financing activities to cash flows from financing activities in our consolidated statement of cash flows. During the year ended December 31, 2016, the amendments in ASU 2016-18 would have resulted in reclassification of \$480.2 million, currently presented as debt financing activities. During the year ended December 31, 2017, the amendments in ASU 2016-18 would have resulted in elimination of \$16.2 million, currently presented as restricted cash - letters of credit collateral under supplemental disclosure of non-cash financing activities, and elimination of \$16.2 million financing outflow from restricted cash for collateral.

In October 2016, the FASB issued ASU 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory*, which is intended to improve the accounting for the income tax consequences of intra-entity transfers of assets other than inventory. The amendments in ASU 2016-16 eliminate the current requirement to defer the recognition of current and deferred income taxes for an intra-entity asset transfer until the asset has been sold to an outside party. ASU 2016-16 is effective for interim and annual periods beginning after December 15, 2017 for public business entities, on a modified retrospective basis. Early adoption is permitted as of the beginning of an annual reporting period for which interim or annual financial statements have not been issued. We plan to adopt the amendments in the first quarter of 2018 and expect the effect of ASU 2016-16 to be a cumulative benefit to accumulated deficit on January 1, 2018. Based on our existing intercompany structure, we expect the benefit to accumulated deficit to be approximately \$170 million. The benefit relates to certain deferred intercompany gains/losses, mostly in connection with a series of intercompany transactions in 2011 and 2017 and related steps that reorganized the ownership of our assets among our subsidiaries.

In January 2017, the FASB issued ASU 2017-04, Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment, which is intended to simplify the subsequent measurement of goodwill. The amendments in ASU 2017-04 modify the concept of impairment from the condition that exists when the carrying amount of goodwill exceeds its fair value to the condition that exists when the carrying amount of a reporting unit exceeds its fair value. An entity will no longer determine goodwill impairment by calculating the implied fair value of goodwill by assigning the fair value of a reporting unit to all of its assets and liabilities, as if that reporting unit had been acquired in a business combination. ASU 2017-04 will be effective for interim and annual goodwill impairment tests in fiscal years beginning after December 15, 2019 for public business entities, on a prospective basis. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. When adopted, we will measure impairment using the difference between the carrying amount and the fair value of the reporting unit, if required.

In March 2017, the FASB issued ASU 2017-07, Compensation-Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost, which is intended to improve the presentation of net periodic pension cost and net periodic postretirement benefit cost in the financial statements. ASU 2017-07 requires that an employer disaggregate the service cost component from the other components of net benefit cost and report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. ASU 2017-07 is effective for interim and annual periods beginning after December 15, 2017 for public business entities. Early adoption is permitted as of the beginning of an annual period for which interim or annual financial statements have not been issued. We are in the process of evaluating the impact that ASU 2017-07 will have on our consolidated financial statements and associated disclosures.

In May 2017, the FASB issued ASU 2017-09, Compensation-Stock Compensation (Topic 718): Scope of Modification Accounting, which is intended to clarify when to account for a change to the terms or conditions of a share-based payment award as a modification. Under ASU 2017-09 modification accounting is required only if the fair value (or calculated intrinsic value, if those amounts are being used to measure the award under ASC 718), the vesting conditions, or the classification of the award changes as a result of the change in terms or conditions. ASU 2017-09 is effective for all entities for annual periods, and interim periods within those annual periods, beginning after December 15, 2017. Early adoption is permitted, including adoption in any interim period for which financial statements have not yet been issued or made available for issuance. The amendment should be applied prospectively to an award modified on or after the adoption date. We do not anticipate this ASU will have a material impact on our consolidated financial statements and associated disclosures. We will continue to evaluate the impact of ASU 2017-09 as any modifications will occur.

In February 2018, the FASB issued ASU 2018-02, *Income Statement – Reporting Comprehensive Income (Topic 220)*, which allows for an optional reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act. Consequently, the amendments eliminate the stranded tax effects resulting from the Tax Cuts and Jobs Act for those entities that elect the optional reclassification. The amendments in this update will also require certain disclosures about stranded tax effects. ASU 2018-02 is effective for all entities for interim and annual periods beginning after December 15, 2018. We are in the process of evaluating the impact that ASU 2018-02 will have on our consolidated financial statements and associated disclosures.

Revenue

Revenue Overview

We earn revenue primarily by providing services over satellite transponder capacity to our customers. Our customers generally obtain satellite capacity from us by placing an order pursuant to one of several master customer service agreements. The master customer agreements and related service orders under which we sell services specify, among other things, the amount of satellite capacity to be provided, whether service will be non-preemptible or preemptible and the service term. Most services are full time in nature, with service terms ranging from one year to as long as 16 years. Occasional use services used for video applications can be for much shorter periods, including increments of one hour. Our master customer service agreements offer different service types, including transponder services, managed services, and channel, which are all services that are provided on, or used to provide access to, our global network. We refer to these services as on-network services. Our customer agreements also cover services that we procure from third parties and resell, which we refer to as off-network services. These services can include transponder services and other satellite-based transmission services sourced from other operators, often in frequencies not available on our network, and other operational fees related to satellite operations provided on behalf of third-party satellites. The following table describes our primary service types:

Service Type Description

On-Network Revenues:

Transponder Services

Managed Services

Channel

Commitments by customers to receive service via, or to utilize capacity on, particular designated transponders according to specified technical and commercial terms. Transponder services also include revenues from hosted payload capacity. Transponder services are marketed to each of our primary customer sets as follows:

- Network Services: fixed and wireless telecom operators, data network operators, enterprise operators of private data networks, and valueadded network operators for fixed and mobile broadband network infrastructure.
- Media: broadcasters (for distribution of programming and full time contribution, or gathering, of content), programmers and DTH operators.
- Government: civilian and defense organizations, for use in implementing private fixed and mobile networks, or for the provision of capacity or capabilities through hosted payloads.

Hybrid services primarily using IntelsatOne®, including our IntelsatOne® Flex broadband platform, which combine satellite capacity, teleport facilities, satellite communications hardware such as broadband hubs or video multiplexers and fiber optic cable and other ground facilities to provide managed and monitored broadband, trunking, video and private network services to customers. Managed services are marketed to each of our customer sets as follows:

- Network Services: enterprises, cellular operators and fixed and mobile value-added service providers which deliver end-services such as private data networks, wireless infrastructure and maritime and aeronautical broadband.
- Media: programmers outsourcing elements of their transmission infrastructure and part time occasional use services used primarily by news and sports organizations to gather content from remote locations.
- Government: users seeking secured, integrated, end-to-end solutions.

Standardized services of predetermined bandwidth and technical characteristics primarily used for point-to-point bilateral services for telecommunications providers. Channel is not considered a core service offering due to changing market requirements and the proliferation of fiber alternatives for point-to-point customer applications. Channel services are exclusively marketed to traditional telecommunications providers in our network services customer set.

Service Type

Off-Network and Other Revenues:

Transponder, Mobile Satellite Services and Other

Capacity for voice, data and video services provided by third-party commercial satellite operators for which the desired frequency type or geographic coverage is not available on our network. These services include L-band MSS, for which Intelsat General is a reseller. In addition,

follows:

 Government: direct government users, and government contractors working on programs where aggregation of capacity is required.

this revenue category includes the sale of customer premises equipment and other hardware, as well as certain fees related to services provided to other satellite operators. These products are primarily marketed as

Services include a number of satellite-related consulting and technical services that involve the lifecycle of satellite operations and related infrastructure, from satellite and launch vehicle procurement through TT&C services and related equipment sales. These services are typically marketed to other satellite operators.

We market our services on a global basis, with almost every populated region of the world contributing to our revenue. The diversity of our revenue allows us to benefit from changing market conditions and lowers our risk from revenue fluctuations in our service applications and geographic regions.

Trends Impacting Our Revenue

Satellite-related Services

Our revenue at any given time is dependent upon a number of factors, including, but not limited to, demand for our services from existing and emerging applications; the supply of capacity available on our fleet and those of our competitors in a given region, and the substitution of competing technologies such as fiber optic cable networks. See Item 4B—Business Overview—Our Sector for a discussion of the global trends creating demand for our services. Trends in revenue can be impacted by:

- Growth in demand from wireless telecommunications companies seeking to complete or enhance broadband infrastructure, particularly those
 operating in developing regions or regions with geographic challenges;
- Growth in demand for broadband connectivity for enterprises and government organizations, providing fixed and mobile services and valueadded applications on a global basis;
- Lower overall pricing for satellite-based services, resulting from oversupply of wide beam capacity or due to introduction of high throughput technology, which is designed to achieve a lower cost per unit;
- Lower demand for satellite-based solutions, resulting from fiber substitution;
- Satellite capacity needed to provide broadband connectivity for mobile networks on ships, planes and oil and gas platforms;
- · New DTH television platforms and channel growth on existing platforms, which use our capacity for program distribution;
- Global demand for television content in standard, HD and UHD television formats, which uses our satellite network and IntelsatOne® terrestrial services for distribution, in some regions offset by next generation compression technologies;
- Increased popularity of OTT content distribution, which will increase the demand for broadband infrastructure in the developing world, but could decrease demand in developed markets over the mid to long-term as niche and ethnic programming transitions from satellite to internet distribution;
- Use of commercial satellite services by governments for military and other operations, which has partially slowed as a result of the tempo of military operations and recent changes in the U.S. budget; and
- Our use of third-party or off-network services to satisfy government demand for capacity not available on our network. These services are low risk
 in nature, with no required up-front investment and terms and conditions of the procured capacity which typically match the contractual
 commitments from our customers. Demand for certain of these off-network services has declined with reductions in troop deployment in regions
 of conflict.

See Item 4B—Business Overview—Our Customer Sets and Growing Applications for a discussion of our customers' uses of our services and see Item 4B—Business Overview—Our Strategy for a discussion of our strategies with respect to marketing to our various customer sets.

Customer Applications

Our transponder services, managed services, MSS and channel are used by our customers for three primary customer applications: network service applications, media applications and government applications.

Pricing

Pricing of our services is based upon a number of factors, including, but not limited to, the region served by the capacity, the power and other characteristics of the satellite beam, the amount of demand for the capacity available on a particular satellite and the total supply of capacity serving any particular region. In 2015, pricing trends were stable to lower, especially in the second half of the year with respect to capacity used for network services applications, and to a lesser degree with respect to government applications. The most significant price reductions in 2015 were accompanied by high volume commitments. Regions beyond Africa and the Middle East experienced an increase in supply, including high-throughput services in other spectrum bands, resulting in pricing pressure in many of our other regions and applications. In 2016, pricing trends were fairly stable throughout the year, albeit lower than 2015, with a slight decline in network services and government applications offset by stronger media application pricing. In 2017, pricing trends were fairly stable throughout the year, albeit lower than 2016, with lower pricing on high volume commitments on our Intelsat EpicNG HTS fleet, which drove Ku-band pricing down slightly, whereas C-band pricing trends were steady across the year. According to Euroconsult, the annual average price per transponder for C- and Ku- band capacity is forecasted to be on a slight downward trend globally from \$1.34 million to \$1.19 million per 36 MHz transponder over the period from 2017 to 2022, reflecting increasing supply from new satellite entrants, among other factors. HTS capacity, which is designed to attain a lower cost point, facilitating market expansion into new applications, is expected to have similar rates of yield decline over time as increased supply enters the market.

The pricing of our services is generally fixed for the duration of the service commitment. New and renewing service commitments are priced to reflect regional demand and other factors as discussed above.

Operating Expenses

Direct Costs of Revenue (Excluding Depreciation and Amortization)

Direct costs of revenue relate to costs associated with the operation and control of our satellites, our communications network and engineering support, and the purchase of off-network capacity. Direct costs of revenue consist principally of salaries and related employment costs, in-orbit insurance, earth station operating costs and facilities costs. Our direct costs of revenue fluctuate based on the number and type of services offered and under development, particularly as sales of off-network transponder services and sales of customer premises equipment fluctuate. We expect our direct costs of revenue to increase as we add customers and expand our managed services and use of off-network capacity.

Selling, General and Administrative Expenses

Selling, general and administrative expenses relate to costs associated with our sales and marketing staff and our administrative staff, which include legal, finance, corporate information technology and human resources. Staff expenses consist primarily of salaries and related employment costs, including stock compensation, travel costs and office occupancy costs. Selling, general and administrative expenses also include building maintenance and rent expenses and the provision for uncollectible accounts. Selling, general and administrative expenses generally fluctuate with the number of customers served and the number and types of services offered. These expenses also include research and development expenses, and fees for professional services.

Depreciation and Amortization

Our capital assets consist primarily of our satellites and associated ground network infrastructure. Included in capitalized satellite costs are the costs for satellite construction, satellite launch services, insurance premiums for satellite launch and the in-orbit testing period, the net present value of deferred satellite performance incentives payable to satellite manufacturers, and capitalized interest incurred during the satellite construction period.

Capital assets are depreciated or amortized on a straight-line basis over their estimated useful lives. The remaining depreciable lives of our satellites range from less than one year to 16 years as of December 31, 2017.

Contracted Backlog

We benefit from strong visibility of our future revenues. Our contracted backlog is our expected future revenue under existing customer contracts, and includes both cancellable and non-cancellable contracts. Our contracted backlog was approximately \$7.8 billion as of December 31, 2017, approximately 89% of which related to contracts that were non-cancellable and approximately 9% related to contracts that were cancellable subject to substantial termination fees. As of December 31, 2017, the weighted average remaining customer contract life was approximately 4 years. We expect to deliver services associated with approximately \$1.8 billion, or approximately 22%, of our December 31, 2017 contracted backlog during the year ending December 31, 2018, of which \$3.4 million is from our channel services, a product near the end of its lifecycle. The amount included in backlog represents the full service charge for the duration of the contract and does not include termination fees. The amount of the termination fees, which is not included in the backlog amount, is generally calculated as a percentage of the remaining backlog associated with the contract. In certain cases of breach for non-payment or customer financial distress or bankruptcy, we may not be able to recover the full value of certain contracts or termination fees. Our contracted backlog includes 100% of the backlog of our consolidated ownership interests, which is consistent with the accounting for our ownership interest in these entities.

Our contracted backlog as of December 31, 2017 was as follows (in millions):

Period	Amount
2018	\$1,755.6
2019	1,283.2
2020	1,042.7
2021	739.9
2022	599.4
2023 and thereafter	2,413.3
Total	\$7,834.1

Our contracted backlog by service type as of December 31, 2017 was as follows (in millions, except percentages):

Service Type	Amount	Percent
Transponder services	\$6,211.8	79%
Managed services	1,376.5	18%
Off-Network and Other	240.5	3%
Channel	5.3	0%
Total	\$7,834.1	100%

We believe this backlog and the resulting predictable cash flows in the FSS sector make our net cash provided by operating activities less volatile than that of typical companies outside our industry.

A. Operating Results Years Ended December 31, 2016 and 2017

The following table sets forth our comparative statements of operations for the periods shown with the increase (decrease) and percentage changes, except those deemed not meaningful ("NM"), between the periods presented (in thousands, except percentages):

Year Ended December 31, 2016

Compared to Year Ended December 31, 2017 Year Ended Year Ended December 31, December 31, Increase Percentage 2016 2017 (Decrease) Change Revenue \$ 2,188,047 \$ 2,148,612 (39,435) (2)% Operating expenses: Direct costs of revenue (excluding depreciation and amortization) 341,147 322,216 (18,931)(6) 231,397 204,015 (27,382)Selling, general and administrative (12)Depreciation and amortization 694,891 707,824 12,933 2 1,267,435 Total operating expenses 1,234,055 (33,380)(3) 920,612 914,557 (6,055)Income from operations (1) Interest expense, net 938,501 1,020,770 82,269 9 Gain (loss) on early extinguishment of debt 1,030,092 (4,109)(1,034,201)NM Other income (expense), net (2,105)6,638 8,743 NM Income (loss) before income taxes 1,010,098 (1,113,782)NM (103,684)Provision for income taxes 15,986 71,130 55,144 NM Net income (loss) 994,112 (174,814)(1,168,926)NM Net income attributable to noncontrolling interest (3,914) (3,915)(1) (0)990,197 Net income (loss) attributable to Intelsat S.A. \$ (178,728) \$(1,168,925) NM

Revenue

The following table sets forth our comparative revenue by service type, with Off-Network and Other Revenues shown separately from On-Network Revenues for the periods below (in thousands, except percentages):

	Year Ended December 31, 2016	Year Ended December 31, 2017	Increase (Decrease)	Percentage Change
On-Network Revenues				
Transponder services	\$ 1,561,108	\$ 1,543,384	\$ (17,724)	(1)%
Managed services	414,758	412,147	(2,611)	(1)
Channel	9,134	5,405	(3,729)	(41)
Total on-network revenues	1,985,000	1,960,936	(24,064)	(1)
Off-Network and Other Revenues				
Transponder, MSS and other off-network services	157,212	141,845	(15,367)	(10)
Satellite-related services	45,835	45,831	(4)	(0)
Total off-network and other revenues	203,047	187,676	(15,371)	(8)
Total	\$ 2,188,047	\$ 2,148,612	\$ (39,435)	(2)%

Total revenue for the year ended December 31, 2017 decreased by \$39.4 million, or 2%, as compared to the year ended December 31, 2016. By service type, our revenues decreased due to the following:

On-Network Revenues:

- Transponder services—an aggregate decrease of \$17.7 million, primarily due to a \$54.6 million decrease in revenue from network services customers, partially offset by a \$33.6 million increase in revenue from media customers and a \$3.3 million increase in revenue from government customers. The network services decline was mainly due to non-renewals and renewal pricing at lower rates for wide-beam enterprise and wireless infrastructure services. The network services decline also reflects non-renewals of point-to-point connectivity, which is shifting to fiber alternatives. The increase in media revenue resulted primarily from the growth of DTH services in the Africa and Latin America and Caribbean regions, partially offset by declines in the North America, Europe and Middle East regions. The increase in government revenues is related to new revenues for mobility and other applications.
- Managed services—an aggregate decrease of \$2.6 million, primarily due to a decrease of \$13.9 million in revenue from network services customers largely for point-to-point trunking applications which are switching to fiber alternatives, a decrease of \$12.4 million in revenue from our government customers for managed services largely related to government trunking and managed network applications related to a previously disclosed termination of a maritime contract, and a \$4.1 million decrease in occasional use video services. These declines were partially offset by an increase of \$22.5 million in revenue from network services customers for broadband solutions largely related to maritime and aeronautical mobility applications and a \$6.6 million increase in managed video solutions in large part due to advanced payments forfeited and fees paid by a customer upon partial termination of services.
- Channel—an aggregate decrease of \$3.7 million related to a continued decline due to the migration of international point-to-point satellite
 traffic to fiber optic cable, a trend we expect will continue.

Off-Network and Other Revenues:

- Transponder, MSS and other off-network services—an aggregate decrease of \$15.4 million, primarily due to the previously disclosed
 termination of a maritime government contract, partially offset by increased revenue from services provided for a media customer on a third-party
 satellite.
- Satellite-related services—remained effectively unchanged from the prior year.

Operating Expenses

Direct Costs of Revenue (Excluding Depreciation and Amortization)

Direct costs of revenue decreased by \$18.9 million, or 6%, to \$322.2 million for the year ended December 31, 2017, as compared to the year ended December 31, 2016. The decrease was primarily due to the following:

- a decrease of \$22.2 million largely due to lower cost of sales for customer premises equipment and lower third-party costs for off-network services associated with our government business; and
- a decrease of \$8.2 million in staff-related expenses; partially offset by
- an increase of \$7.0 million due to increases in direct costs associated with capacity provided through an Intelsat payload on a third-party satellite

Selling, General and Administrative

Selling, general and administrative expenses decreased by \$27.4 million, or 12%, to \$204.0 million for the year ended December 31, 2017, as compared to the year ended December 31, 2016. The decrease was primarily due to the following:

- · a decrease of \$28.7 million in bad debt expense primarily related to two customers in the Latin America and Caribbean region; and
- a decrease of \$14.5 million in staff-related expenses; partially offset by
- an increase of \$19.0 million in professional fees primarily due to our liability management initiatives and other costs related to the OneWeb/SoftBank Transactions referred to below.

Depreciation and Amortization

Depreciation and amortization expense increased by \$12.9 million, or 2%, to \$707.8 million for the year ended December 31, 2017, as compared to the year ended December 31, 2016. Significant items impacting depreciation and amortization included:

- an increase of \$83.3 million in depreciation expense resulting from the impact of satellites placed in service; and
- an increase of \$8.2 million in depreciation expense resulting from the impact of certain ground segment assets placed in service; partially offset by
- a decrease of \$72.6 million in depreciation expense due to the timing of certain satellites becoming fully depreciated, and other satellite related expenses; and
- a decrease of \$6.2 million in amortization expense primarily due to changes in the pattern of consumption of amortizable intangible assets, as
 these assets primarily include acquired backlog, which relates to contracts covering varying periods that expire over time, and acquired customer
 relationships, for which the value diminishes over time.

Interest Expense, Net

Interest expense, net consists of gross interest expense we incur together with gains and losses on interest rate hedging transactions (which reflect the change in their fair value), offset by interest income earned and the amount of interest we capitalize related to assets under construction. As of December 31, 2017, we held interest rate caps with an aggregate notional amount of \$2.4 billion to mitigate the risk of interest rate increase on the floating-rate term loans under our senior secured credit facilities. The caps have not been designated as hedges for accounting purposes.

Interest expense, net increased by \$82.3 million, or 9%, to \$1.0 billion for the year ended December 31, 2017, as compared to the year ended December 31, 2016. The increase in interest expense, net was principally due to:

- a net increase of \$44.3 million in interest expense primarily driven by our new debt issuances with higher interest rates, partially offset by certain debt repurchases and exchanges in 2016 and 2017; and
- a net increase of \$35.3 million from lower capitalized interest, primarily resulting from decreased levels of satellites and related assets under construction.

The non-cash portion of total interest expense, net was \$48.7 million for the year ended December 31, 2017. The non-cash interest expense was due to the amortization of deferred financing fees and the amortization and accretion of discounts and premiums.

Gain (Loss) on Early Extinguishment of Debt

Loss on early extinguishment of debt was \$4.1 million for the year ended December 31, 2017, as compared to a gain of \$1.0 billion for the year ended December 31, 2016. The loss and gain were related to certain debt transactions that occurred during each of the respective years (see—Liquidity and Capital Resources—Long-Term Debt). The respective loss and gain consisted of the difference between the carrying value of the debt redeemed or exchanged and the fair value of the debt issued, if applicable, and total cash amount paid (including related fees and expenses), together with write-offs of unamortized debt issuance costs.

Other Income (Expense), Net

Other income, net was \$6.6 million for the twelve months ended December 31, 2017, as compared to other expense, net of \$2.1 million for the twelve months ended December 31, 2016. The variance of \$8.7 million was primarily driven by a \$5.3 million foreign exchange fluctuation related to our business conducted in Brazilian *reais* and Euros, and a \$3.1 million increase in other miscellaneous income related to activities that are not associated with our core operations.

Provision for Income Taxes

Our income tax expense increased by \$55.1 million to \$71.1 million for the year ended December 31, 2017, as compared to \$16.0 million for the year ended December 31, 2016. The increase was principally due to valuation allowances recorded on certain deferred tax assets, partially offset by tax benefits related to the tax rate change for our U.S. subsidiaries as a result of the U.S. Tax Cuts and Jobs Act which was enacted on December 22, 2017.

Cash paid for income taxes, net of refunds, totaled \$33.7 million and \$22.7 million for the years ended December 31, 2017 and 2016, respectively.

Net Income (Loss) Attributable to Intelsat S.A.

Net loss attributable to Intelsat S.A was \$178.7 million for the year ended December 31, 2017, as compared to net income attributable to Intelsat S.A. of \$990.2 million for the year ended December 31, 2016. The change reflects the various items discussed above.

Operating Results Years Ended December 31, 2015 and 2016

The following table sets forth our comparative statements of operations for the periods shown with the increase (decrease) and percentage changes, except those deemed not meaningful ("NM"), between the periods presented (in thousands, except percentages):

Year Ended December 31, 2015

Compared to Year Ended December 31, 2016 Year Ended Year Ended December 31. December 31, Increase Percentage 2015 2016 (Decrease) Change Revenue \$ 2,352,521 \$ 2,188,047 \$ (164,474) (7)% Operating expenses: Direct costs of revenue (excluding depreciation and amortization) 328,501 341,147 12,646 4 Selling, general and administrative 199,412 231,397 31,985 16 Impairment of goodwill and other intangibles 4,165,400 (4,165,400)NM 694,891 Depreciation and amortization 687,729 7,162 1 5,381,042 1,267,435 Total operating expenses (4,113,607)(76)Income (loss) from operations (3,028,521)920,612 3,949,133 NM 890,279 938,501 Interest expense, net 48,222 5 Gain on early extinguishment of debt 7,061 1,030,092 1,023,031 NM Other expense, net (6,201)(2,105)(4,096)(66)Income (loss) before income taxes (3,917,940)1,010,098 4,928,038 NM Provision for income taxes 1,513 15,986 14,473 NM (3,919,453)994,112 4,913,565 Net income (loss) NM Net income attributable to noncontrolling interest (3,934)(3,915)(19)(0)Net income (loss) attributable to Intelsat S.A. \$(3,923,387) 990,197 \$ 4,913,584 NM Cumulative preferred dividends (9,919)(9,919)NM Net income (loss) attributable to common shareholders \$(3,933,306) 990,197 \$ 4,923,503 NM

Revenue

The following table sets forth our comparative revenue by service type, with Off-Network and Other Revenues shown separately from On-Network Revenues for the periods below (in thousands, except percentages):

	Year Ended December 31, 2015	Year Ended December 31, 2016	Increase (Decrease)	Percentage Change
On-Network Revenues				
Transponder services	\$ 1,705,568	\$ 1,561,108	\$(144,460)	(8)%
Managed services	405,330	414,758	9,428	2
Channel	38,872	9,134	(29,738)	(77)
Total on-network revenues	2,149,770	1,985,000	(164,770)	(8)
Off-Network and Other Revenues				
Transponder, MSS and other off-network services	160,063	157,212	(2,851)	(2)
Satellite-related services	42,688	45,835	3,147	7
Total off-network and other revenues	202,751	203,047	296	_
Total	\$ 2,352,521	\$ 2,188,047	\$(164,474)	(7)%

Total revenue for the year ended December 31, 2016 decreased by \$164.5 million, or 7%, as compared to the year ended December 31, 2015. By service type, our revenues increased or decreased due to the following:

On-Network Revenues:

- Transponder services—an aggregate decrease of \$144.5 million, primarily due to a \$141.2 million decrease in revenue from network services customers, together with a net decline from media customers. The network services decline was mainly due to non-renewals and renewal pricing at lower rates for enterprise and wireless infrastructure services. The network services decline also reflects previously discussed reduced volumes from non-renewals of point-to-point connectivity, which is shifting to fiber alternatives. The net media decrease resulted primarily from lower volumes due to certain North American customers migrating to new compression standards and single format distribution, as well as declines in the Asia-Pacific region due to non-renewals, partially offset by growth in DTH television services in the Latin America and Caribbean region.
- Managed services—an aggregate increase of \$9.4 million, largely due to an increase of \$35.6 million in revenue from network services customers for broadband services for air and maritime mobility applications and an increase of \$7.4 million in revenue from government customers, partially offset by declines in revenues of \$21.4 million, primarily from network services customers for point-to-point trunking applications, which are switching to fiber alternatives, and \$5.5 million from media customers for reduced occasional video solutions.
- Channel—an aggregate decrease of \$29.7 million due to the continued migration of international point-to-point satellite traffic to fiber optic cable. This legacy product is no longer actively marketed to our customers.

Off-Network and Other Revenues:

- Transponder, MSS and other off-network services—an aggregate decrease of \$2.9 million, primarily due to decreases in services for government applications largely related to renewal pricing and non-renewals, and lower revenue from MSS, partially offset by an increase from sales of customer premises equipment.
- Satellite-related services—an aggregate increase of \$3.1 million, primarily due to increased revenue from support for third-party satellite services.

Operating Expenses

Direct Costs of Revenue (Excluding Depreciation and Amortization)

Direct costs of revenue increased by \$12.6 million, or 4%, to \$341.1 million for the year ended December 31, 2016 as compared to the year ended December 31, 2015. The increase was primarily due to the following:

- · an increase of \$11.0 million due to higher cost of sales for customer premises equipment mainly in support of our government business;
- an increase of \$4.6 million in staff-related expenses;

- an increase of \$4.6 million in office and operational expenses primarily driven by expenses related to our global network connectivity initiatives; and
- · an increase of \$3.8 million in satellite-related insurance costs due to recent launches; offset by
- a decrease of \$12.2 million in the cost of third-party fixed satellite services, managed services and MSS capacity purchased in support of our government business.

Selling, General and Administrative

Selling, general and administrative expenses increased by \$32.0 million, or 16%, to \$231.4 million for the year ended December 31, 2016 as compared to the year ended December 31, 2015. The increase was primarily due to the following:

- an increase of \$17.2 million in bad debt expense, primarily related to a limited number of customers in the Latin America region;
- an increase of \$9.1 million in staff-related expenses; and
- an increase of \$6.1 million in professional fees primarily due to our liability management initiatives.

Impairment of Goodwill and Other Intangibles

Impairment of goodwill and other intangibles was \$4.2 billion for the year ended December 31, 2015, with no comparable amount in the year ended December 31, 2016. We recorded a non-cash impairment charge of \$4.2 billion for goodwill and other intangibles during the year ended December 31, 2015, reducing goodwill from \$6.8 billion to \$2.6 billion, and reducing non-amortizable intangible assets from \$2.46 billion to \$2.45 billion as a result of our annual goodwill and trade name impairment analysis.

Depreciation and Amortization

Depreciation and amortization expense increased by \$7.1 million, or 1%, to \$694.9 million for the year ended December 31, 2016 as compared to the year ended December 31, 2015. Significant items impacting depreciation and amortization included:

- an increase of \$52.7 million in depreciation expense resulting from the impact of satellites placed in service; partially offset by
- a net decrease of \$34.8 million in depreciation expense due to the timing of certain satellites and ground equipment becoming fully depreciated, and other satellite related expenses; and
- a decrease of \$11.7 million in amortization expense primarily due to changes in the pattern of consumption of amortizable intangible assets, as these assets primarily include acquired backlog, which relates to contracts covering varying periods that expire over time, and acquired customer relationships, for which the value diminishes over time.

Interest Expense, Net

Interest expense, net consists of the gross interest expense we incur together with gains and losses on interest rate swaps (which reflect net interest accrued on the interest rate swaps as well as the change in their fair value), offset by interest income earned and the amount of interest we capitalize related to assets under construction. As of December 31, 2015, we held interest rate swaps with an aggregate notional amount of \$1.6 billion to economically hedge the variability in cash flow on a portion of the floating-rate term loans under our senior secured credit facilities. The swaps had not been designated as hedges for accounting purposes. The swaps matured in January 2016.

Interest expense, net increased by \$48.2 million, or 5.4%, to \$938.5 million for the year ended December 31, 2016, as compared to \$890.3 million for the year ended December 31, 2015. The increase in interest expense, net was principally due to the following:

- a net increase of \$62.2 million in interest expense primarily driven by our new note issuances offset by certain repurchases and exchanges in 2016 (see—Liquidity and Capital Resources—Long-Term Debt); partially offset by
- a decrease of \$12.0 million from higher capitalized interest primarily resulting from increased levels of satellites and related assets under construction; and
- a net decrease of \$3.5 million in interest resulting from the expiration of the interest rate swaps in January 2016.

The non-cash portion of total interest expense, net was \$24.6 million for the year ended December 31, 2016. The non-cash interest expense was due to the amortization of deferred financing fees and the accretion and amortization of discounts and premiums.

Gain on Early Extinguishment of Debt

Gain on early extinguishment of debt was \$1.0 billion for the year ended December 31, 2016 as compared to a gain of \$7.1 million for the year ended December 31, 2015. The gains were related to certain debt transactions that occurred during each of the respective years (see Liquidity and Capital Resources —Long-Term Debt). The gains on early extinguishment of debt consisted of the difference between the carrying value of the debt redeemed or exchanged and the fair value of the debt issued, if applicable, and the total cash amount paid (including related fees), together with write-offs of unamortized debt issuance costs.

Other Expense, Net

Other expense, net was \$2.1 million for the year ended December 31, 2016 as compared to \$6.2 million for the year ended December 31, 2015. The decrease of \$4.1 million was primarily due to decreases in expenses and other costs related to our business conducted in Brazilian *reais*.

Provision for Income Taxes

Our income tax expense increased by \$14.5 million to \$16.0 million for the year ended December 31, 2016, as compared to \$1.5 million for the year ended December 31, 2015. The increase in expense over the prior year was principally due to the recognition of previously unrecognized tax benefits related to our U.S. subsidiaries for the year ended December 31, 2015 as compared to December 31, 2016.

Cash paid for income taxes, net of refunds, totaled \$22.7 million and \$26.3 million for the years ended December 31, 2016 and 2015, respectively.

Net Income (Loss) Attributable to Intelsat S.A.

Net income attributable to Intelsat S.A. for the year ended December 31, 2016 totaled \$990.2 million. Net income increased from a comparable period loss in 2015 by \$4.9 billion, reflecting the various items discussed above.

Cumulative Preferred Dividends

Cumulative preferred dividends declared during the year ended December 31, 2015 were \$9.9 million, with no comparable amount during the year ended December 31, 2016.

Net Income (Loss) Attributable to Common Shareholders

Net income attributable to common shareholders for the year ended December 31, 2016 totaled \$990.2 million. Net income increased from a comparable period loss in 2015 by \$4.9 billion, reflecting the various items discussed above.

EBITDA

EBITDA consists of earnings before net interest, loss (gain) on early extinguishment of debt, taxes and depreciation and amortization. Given our high level of leverage, refinancing activities are a frequent part of our efforts to manage our costs of borrowing. Accordingly, we consider loss (gain) on early extinguishment of debt an element of interest expense. EBITDA is a measure commonly used in the FSS sector, and we present EBITDA to enhance the understanding of our operating performance. We use EBITDA as one criterion for evaluating our performance relative to that of our peers. We believe that EBITDA is an operating performance measure, and not a liquidity measure, that provides investors and analysts with a measure of operating results unaffected by differences in capital structures, capital investment cycles and ages of related assets among otherwise comparable companies. However, EBITDA is not a measure of financial performance under U.S. GAAP, and our EBITDA may not be comparable to similarly titled measures of other companies. EBITDA should not be considered as an alternative to operating income (loss) or net income (loss) determined in accordance with U.S. GAAP, as an indicator of our operating performance, or as an alternative to cash flows from operating activities determined in accordance with U.S. GAAP, as an indicator of cash flows, or as a measure of liquidity.

A reconciliation of net income (loss) to EBITDA for the periods shown is as follows (in thousands):

	Year Ended December 31, 2015	Year Ended December 31, 2016	Year Ended December 31, 2017
Net income (loss)	\$(3,919,453)	\$ 994,112	\$ (174,814)
Add (Subtract):			
Interest expense, net	890,279	938,501	1,020,770
Loss (gain) on early extinguishment of debt	(7,061)	(1,030,092)	4,109
Provision for income taxes	1,513	15,986	71,130
Depreciation and amortization	687,729	694,891	707,824
EBITDA	\$(2,346,993)	\$ 1,613,398	\$ 1,629,019

Adjusted EBITDA

In addition to EBITDA, we calculate a measure called Adjusted EBITDA to assess the operating performance of Intelsat S.A. Adjusted EBITDA consists of EBITDA of Intelsat S.A. as adjusted to exclude or include certain unusual items, certain other operating expense items and certain other adjustments as described in the table and related footnotes below. Our management believes that the presentation of Adjusted EBITDA provides useful information to investors, lenders and financial analysts regarding our financial condition and results of operations because it permits clearer comparability of our operating performance between periods. By excluding the potential volatility related to the timing and extent of non-operating activities, such as impairments of asset value and other non-recurring items, our management believes that Adjusted EBITDA provides a useful means of evaluating the success of our operating activities. We also use Adjusted EBITDA, together with other appropriate metrics, to set goals for and measure the operating performance of our business, and it is one of the principal measures we use to evaluate our management's performance in determining compensation under our incentive compensation plans. Adjusted EBITDA measures have been used historically by investors, lenders and financial analysts to estimate the value of a company, to make informed investment decisions and to evaluate performance. Our management believes that the inclusion of Adjusted EBITDA facilitates comparison of our results with those of companies having different capital structures.

Adjusted EBITDA is not a measure of financial performance under U.S. GAAP and may not be comparable to similarly titled measures of other companies. Adjusted EBITDA should not be considered as an alternative to operating income (loss) or net income (loss) determined in accordance with U.S. GAAP, as an indicator of our operating performance, as an alternative to cash flows from operating activities determined in accordance with U.S. GAAP, as an indicator of cash flows, or as a measure of liquidity.

A reconciliation of net income (loss) to EBITDA and EBITDA to Adjusted EBITDA is as follows (in thousands):

	Year Ended December 31, 2015	Year Ended December 31, 2016	Year Ended December 31, 2017
Net income (loss)	\$(3,919,453)	\$ 994,112	\$ (174,814)
Add (Subtract):			
Interest expense, net	890,279	938,501	1,020,770
Loss (gain) on early extinguishment of debt	(7,061)	(1,030,092)	4,109
Provision for income taxes	1,513	15,986	71,130
Depreciation and amortization	687,729	694,891	707,824
EBITDA	(2,346,993)	1,613,398	1,629,019
Add:			
Compensation and benefits (1)	26,235	23,222	15,995
Non-recurring and other non-cash items (2)	9,877	14,050	19,589
Impairment of goodwill and other intangibles (3)	4,165,400		
Adjusted EBITDA	\$ 1,854,519	\$ 1,650,670	\$ 1,664,603

⁽¹⁾ Reflects non-cash expenses incurred relating to our equity compensation plans and a portion of the expenses related to our defined benefit retirement plan and other postretirement benefits.

⁽²⁾ Reflects certain non-recurring gains and losses and non-cash items, including the following: costs associated with development activities; professional fees primarily related to our liability management initiatives in 2016 and 2017; professional fees associated with the OneWeb/SoftBank Transactions referred to below; non-cash expense related to the recognition of expense on a straight-line basis for certain office space leases in 2015; severance and retention payments; expenses associated with the relocation of our government business subsidiary to our U.S. administrative headquarters facility in 2015; and other various non-recurring expenses. These costs were partially offset by non-cash income related to the recognition of deferred revenue on a straight-line basis for certain prepaid capacity service contracts.

⁽³⁾ Reflects a non-cash goodwill and other intangibles impairment charge due to our annual impairment test which indicated that both our goodwill and our non-amortizable intangible trade name asset exceeded their estimated fair value.

B. Liquidity and Capital Resources

Overview

We are a highly leveraged company and our contractual obligations, commitments and debt service requirements over the next several years are significant. At December 31, 2017, the aggregate principal amount of our debt outstanding not held by affiliates was \$14.2 billion. Our interest expense, net for the year ended December 31, 2017 was \$1.0 billion, which included \$48.7 million of non-cash interest expense. We also expect to make significant capital expenditures in 2018 and future years, as set forth below in—Capital Expenditures.

Our primary source of liquidity is and will continue to be cash generated from operations as well as existing cash. At December 31, 2017, cash and cash equivalents were approximately \$525.2 million. In addition, \$16.2 million of restricted cash was included within current assets on the consolidated balance sheet as compensating balances against certain letters of credit outstanding.

We currently expect to use cash on hand, cash flows from operations and refinancing of our third party debt to fund our most significant cash outlays, including debt service requirements and capital expenditures, in the next twelve months and beyond, and expect such sources to be sufficient to fund our requirements over that time and beyond. In past years, our cash flows from operations and cash on hand have been sufficient to fund interest obligations (\$870.4 million and \$915.6 million in 2016 and 2017, respectively) and significant capital expenditures (\$714.6 million and \$461.6 million in 2016 and 2017, respectively). Our total capital expenditures are expected to range from \$375 million to \$425 million in 2018, \$425 million to \$500 million in 2019, and \$375 million to \$475 million in 2020. However, an inability to generate sufficient cash flow to satisfy our debt service obligations or to refinance our obligations on commercially reasonable terms would have an adverse effect on our business, financial position, results of operations and cash flows, as well as on our and our subsidiaries' ability to satisfy their obligations in respect of their respective debt. See Item 3D—Risk Factors—Risk Factors Relating to Our Business—We have a substantial amount of indebtedness, which may adversely affect our cash flow and our ability to operate our business, remain in compliance with debt covenants, and make payments on our indebtedness. We also continually evaluate ways to simplify our capital structure and opportunistically extend our maturities and reduce our costs of debt. In addition, we may from time to time retain any future earnings and cash to repurchase, repay, redeem or retire any of our outstanding debt securities in privately negotiated or open market transactions, by tender offer or otherwise.

Cash Flow Items

Our cash flows consisted of the following for the periods shown (in thousands):

	Year Ended December 31, 2015	Year Ended December 31, 2016	Year Ended December 31, 2017
Net cash provided by operating activities	\$ 910,031	\$ 683,506	\$ 464,230
Net cash used in investing activities	(749,354)	(730,589)	(468,297)
Net cash provided by (used) in financing activities	(102,986)	541,596	(137,858)
Net change in cash and cash equivalents	48,394	494,483	(140,809)

Net Cash Provided by Operating Activities

Net cash provided by operating activities decreased by \$219.3 million to \$464.2 million for the year ended December 31, 2017 as compared to the year ended December 31, 2016. The decrease was due to a \$78.0 million decrease in net income and changes in non-cash items and a \$141.3 million decrease from changes in operating assets and liabilities. The primary drivers of the decrease in operating assets and liabilities were higher outflows for accounts payable and accrued expenses, lower inflows related to deferred revenue, and lower inflows related to customer receivables.

Net Cash Used in Investing Activities

Net cash used in investing activities decreased by \$262.3 million to \$468.3 million during the year ended December 31, 2017 as compared to the year ended December 31, 2016. The decrease was primarily due to lower capital expenditures and insurance proceeds received related to Intelsat 33e, partially offset by increased purchases of cost method investments and increased capital contributions to a joint venture.

Net Cash Provided by (Used in) Financing Activities

Net cash from financing activities decreased by \$679.5 million to a net outflow of \$137.9 million during the year ended December 31, 2017 as compared to the year ended December 31, 2016. The decrease was primarily due to higher repayments of long-term debt in 2017 associated with the satisfaction and discharge of \$1.5 billion aggregate principal amount of Intelsat Jackson's 7.25% Senior Notes due 2019. This was partially offset by a decrease in payments related to tender offer, debt exchange and consent solicitation transactions completed in 2016, and higher proceeds received from the issuance of long-term debt, driven by the offering of \$1.5 billion aggregate principal amount of 9.75% Senior Notes due 2025 completed by Intelsat Jackson in 2017.

Supplemental Disclosures of Non-cash Financing Activities

As of December 31, 2017, \$16.2 million of cash was legally restricted, being held as a compensating balance for certain outstanding letters of credit.

Long-Term Debt

This section describes the changes to our long-term debt during the years ended December 31, 2016 and 2017. For detail regarding our outstanding long-term indebtedness as of December 31, 2017, see Note 12 to our consolidated financial statements included elsewhere in this Annual Report.

Senior Secured Credit Facilities

Intelsat Jackson Senior Secured Credit Agreement

On January 12, 2011, Intelsat Jackson entered into a secured credit agreement (the "Intelsat Jackson Secured Credit Agreement"), which included a \$3.25 billion term loan facility and a \$500.0 million revolving credit facility, and borrowed the full \$3.25 billion under the term loan facility. The term loan facility required regularly scheduled quarterly payments of principal equal to 0.25% of the original principal amount of the term loan beginning six months after January 12, 2011, with the remaining unpaid amount due and payable at maturity.

On October 3, 2012, Intelsat Jackson entered into an Amendment and Joinder Agreement (the "Jackson Credit Agreement Amendment"), which amended the Intelsat Jackson Secured Credit Agreement. As a result of the Jackson Credit Agreement Amendment, interest rates for borrowings under the term loan facility and the revolving credit facility were reduced. In April 2013, our corporate family rating was upgraded by Moody's, and as a result, the interest rate for the borrowing under the term loan facility and revolving credit facility were further reduced to LIBOR plus 3.00% or the Above Bank Rate ("ABR") plus 2.00%.

On November 27, 2013, Intelsat Jackson entered into a Second Amendment and Joinder Agreement (the "Second Jackson Credit Agreement Amendment"), which further amended the Intelsat Jackson Secured Credit Agreement. The Second Jackson Credit Agreement Amendment reduced interest rates for borrowings under the term loan facility and extended the maturity of the term loan facility. In addition, it reduced the interest rate applicable to \$450 million total revolving credit facility and extended the maturity of such portion. As a result of the Second Jackson Credit Agreement Amendment, interest rates for borrowings under the term loan facility and the new tranche of the revolving credit facility were (i) LIBOR plus 2.75%, or (ii) the ABR plus 1.75%. The LIBOR and the ABR, plus applicable margins, related to the term loan facility and the new tranche of the revolving credit facility were determined as specified in the Intelsat Jackson Secured Credit Agreement, as amended by the Second Jackson Credit Agreement, and the LIBOR was not to be less than 1.00% per annum. The maturity date of the term loan facility was extended from April 2, 2018 to June 30, 2019 and the maturity of the new \$450 million tranche of the revolving credit facility was extended from January 12, 2016 to July 12, 2017. The interest rates and maturity date applicable to the \$50 million tranche of the revolving credit facility that was not amended did not change. The Second Jackson Credit Agreement Amendment further removed the requirement for regularly scheduled quarterly principal payments under the term loan facility.

In June 2017, Intelsat Jackson terminated all remaining commitments under its revolving credit facility.

On November 27, 2017, Intelsat Jackson entered into a Third Amendment and Joinder Agreement (the "Third Jackson Credit Agreement Amendment"), which further amended the Intelsat Jackson Secured Credit Agreement. The Third Jackson Credit Agreement Amendment extended the maturity date of \$2.0 billion of the existing floating rate B-2 Tranche of term loans (the "B-3 Tranche Term Loans"), to November 27, 2023, subject to springing maturity in the event that certain series of Intelsat Jackson's senior notes are not refinanced prior to the dates specified in the Third Jackson Credit Agreement Amendment. The B-3 Tranche Term Loans have an applicable interest rate margin of 3.75% for LIBOR loans and 2.75% for base rate loans (at Intelsat Jackson's election as applicable).

The B-3 Tranche Term Loans are subject to a prepayment premium of 1.00% of the principal amount for any voluntary prepayment of, or amendment or modification in respect of, the B-3 Tranche Term Loans prior to November 27, 2018 in connection with prepayments, amendments or modifications that have the effect of reducing the applicable interest rate margin on the B-3 Tranche Term Loans, subject to certain exceptions. The Third Jackson Credit Agreement Amendment also (i) added a provision requiring that, beginning with the fiscal year ending December 31, 2018, Intelsat Jackson to apply a certain percentage of its Excess Cash Flow (as defined in the Third Jackson Credit Agreement Amendment), if any, after operational needs for each fiscal year towards the repayment of outstanding term loans, subject to certain deductions, (ii) amended the most-favored nation provision with respect to the incurrence of certain indebtedness by Intelsat Jackson and its restricted subsidiaries, and (iii) amended the covenant limiting the ability of Intelsat Jackson to make certain dividends, distributions and other restricted payments to its shareholders based on its leverage level at that time.

On December 12, 2017, Intelsat Jackson further amended the Intelsat Jackson Secured Credit Agreement by entering into a Fourth Amendment and Joinder Agreement (the "Fourth Jackson Credit Agreement Amendment"), which, among other things, (i) permitted Intelsat Jackson to establish one or more series of additional incremental term loan tranches if the proceeds thereof are used to refinance an existing tranche of term loans, and (ii) added a most-favored nation provision applicable to the B-3 Tranche Term Loans for further extensions of the existing floating rate B-2 Tranche Term Loans under certain circumstances.

On January 2, 2018, Intelsat Jackson entered into a Fifth Amendment and Joinder Agreement (the "Fifth Jackson Credit Agreement Amendment"), which further amended the Intelsat Jackson Secured Credit Agreement. The Fifth Jackson Credit Agreement Amendment refinanced the remaining \$1.095 billion B-2 Tranche Term Loans, through the creation of (i) a new incremental floating rate tranche of term loans with a principal amount of \$395.0 million (the "B-4 Tranche Term Loans"), and (ii) a new incremental fixed rate tranche of term loans with a principal amount of \$700.0 million (the "B-5 Tranche Term Loans"). The maturity date of both the B-4 Tranche Term Loans and the B-5 Tranche Term Loans is January 2, 2024, subject to springing maturity in the event that certain series of Intelsat Jackson's senior notes are not refinanced or repaid prior to the dates specified in the Fifth Jackson Credit Agreement Amendment. The B-4 Tranche Term Loans have an applicable interest rate margin of 4.50% per annum for LIBOR loans and 3.50% per annum for base rate loans (at Intelsat Jackson's election as applicable). The B-5 Tranche Term Loans have an interest rate of 6.625% per annum. The Fifth Jackson Credit Agreement Amendment also specified make-whole and prepayment premiums applicable to the B-4 Tranche Term Loans and the B-5 Tranche Term Loans at various dates.

We entered into interest rate caps, effective in February 2018, to mitigate the risk of interest rate increases on the B-3 Tranche Term Loans and the B-4 Tranche Term Loans.

Intelsat Jackson's obligations under the Intelsat Jackson Secured Credit Agreement are guaranteed by ICF and certain of Intelsat Jackson's subsidiaries. Intelsat Jackson's obligations under the Intelsat Jackson Secured Credit Agreement are secured by a first priority security interest in substantially all of the assets of Intelsat Jackson and the guarantors party thereto, to the extent legally permissible and subject to certain agreed exceptions, and by a pledge of the equity interests of the subsidiary guarantors and the direct subsidiaries of each guarantor, subject to certain exceptions, including exceptions for equity interests in certain non-U.S. subsidiaries, existing contractual prohibitions and prohibitions under other legal requirements.

The Intelsat Jackson Secured Credit Agreement includes two financial covenants. Intelsat Jackson must maintain a consolidated secured debt to consolidated EBITDA ratio equal to or less than 3.50 to 1.00 at the end of each fiscal quarter, as well as a consolidated EBITDA to consolidated interest expense ratio equal to or greater than 1.75 to 1.00 at the end of each fiscal quarter, in each case as such financial measures are defined in the Intelsat Jackson Secured Credit Agreement. Intelsat Jackson was in compliance with these financial maintenance covenant ratios with a consolidated secured debt to consolidated EBITDA ratio of 2.74 to 1.00 and a consolidated EBITDA to consolidated interest expense ratio of 2.05 to 1.00 as of December 31, 2017.

2017 Debt Transactions

January 2017 Intelsat Luxembourg Exchange Offer

In January 2017, Intelsat Luxembourg completed a debt exchange (the "Second 2018 Luxembourg Exchange"), whereby it exchanged \$403.3 million aggregate principal amount of its 6.75% Senior Notes due 2018 (the "2018 Luxembourg Notes") for an equal aggregate principal amount of newly issued unsecured 12.50% Senior Notes due 2024 (the "2024 Luxembourg Notes"). The Second 2018 Luxembourg Exchange consisted of \$377.6 million aggregate principal amount of 2018 Luxembourg Notes held by ICF as a result of the First 2018 Luxembourg Exchange (as defined and described below), together with \$25 million aggregate principal amount of 2018 Luxembourg Notes repurchased by us in the fourth quarter of 2015. We consolidate ICF, the holder of the 2018 Luxembourg Notes exchanged in the Second 2018 Luxembourg Exchange.

July 2017 Intelsat Jackson Senior Notes Refinancing

On July 5, 2017, Intelsat Jackson completed an offering of \$1.5 billion aggregate principal amount of 9.75% Senior Notes due 2025 (the "2025 Jackson Notes"). These notes are guaranteed by all of Intelsat Jackson's subsidiaries that guarantee its obligations under the Intelsat Jackson Secured Credit Agreement and senior notes, as well as by certain of Intelsat Jackson's parent entities. Also on July 5, 2017, the net proceeds from the sale of the 2025 Jackson Notes were used, along with other available cash, to satisfy and discharge all \$1.5 billion aggregate principal amount of Intelsat Jackson's 7.25% Senior Notes due 2019. In connection with the satisfaction and discharge, we recognized a loss on early extinguishment of debt of \$4.6 million, consisting of the difference between the carrying value of the debt redeemed and the total cash amount paid (including related fees and expenses), together with a write-off of unamortized debt issuance costs.

November & December 2017 and January 2018 Amendments to Intelsat Jackson Senior Secured Credit Facilities

In November and December 2017, and January 2018, Intelsat Jackson entered into amendments to the Intelsat Jackson Secured Credit Agreement. See —Description of Indebtedness—Intelsat Jackson—Intelsat Jackson Senior Secured Credit Agreement, above.

2016 Debt Transactions

March 2016 Intelsat Jackson Senior Secured Notes Offering

On March 29, 2016, Intelsat Jackson completed an offering of \$1.25 billion aggregate principal amount of 8% Senior Secured Notes due 2024 (the "2024 Secured Jackson Notes"). The 2024 Secured Jackson Notes bear interest at 8% annually and mature in February 2024. These notes are guaranteed by ICF and certain of Intelsat Jackson's subsidiaries. The net proceeds from this offering have been and, are expected to be, used for general corporate purposes, which may include repayment and repurchase of indebtedness, capital expenditures and working capital and to pay fees and expenses related to the offering. A portion of the net proceeds was used to prepay in full all amounts outstanding under an intercompany loan due by Intelsat Jackson.

May 2016 Intelsat Jackson Notes Repurchases

In May 2016, we repurchased \$459.7 million in aggregate principal amount of Intelsat Jackson's outstanding 6 5/8% Senior Notes due 2022 (the "2022 Jackson Notes"). In connection with these repurchases, we recognized a net gain on early extinguishment of debt of \$131.4 million, consisting of the difference between the carrying value of the debt repurchased and the total cash amount paid (including related fees and expenses), together with a write-off of unamortized debt premium and unamortized debt issuance costs.

Subsidiary Guarantee of Intelsat Jackson's 6 5/8% Senior Notes due 2022

In May 2016, Intelsat Jackson and each of the subsidiaries of Intelsat Jackson that guarantees loans under Intelsat Jackson's Secured Credit Agreement executed a supplemental indenture to the indenture governing the 2022 Jackson Notes, following the execution of which such subsidiaries guarantee the 2022 Jackson Notes.

2016 Intelsat Jackson Tender Offers and June 2016 Senior Secured Notes Issuance

In May 2016, Intelsat Jackson commenced tender offers to purchase several tranches of outstanding debt (the "Tender Offers"). In June 2016, Intelsat Jackson completed an issuance of \$490 million aggregate principal amount of 9 ½% Senior Secured Notes due 2022 (the "2022 Jackson Secured Notes"), with an original issue discount of 2.0%. Under the terms of the issuance, in the event that all of the net proceeds of the 2022 Jackson Secured Notes were not applied to fund the Tender Offers, Intelsat Jackson would have been required to use the portion of the net proceeds not so applied to redeem the 2022 Jackson Secured Notes. Since the possible uses of the debt proceeds were restricted to repayment of long-term debt, the net proceeds were classified as restricted cash within long-term assets on the condensed consolidated balance sheet as of June 30, 2016. In July 2016, the net proceeds from the sale of the 2022 Jackson Secured Notes were used to repurchase \$673.5 million aggregate principal amount of the 2022 Jackson Notes pursuant to the terms of the previously commenced Tender Offers, and to pay related fees and expenses. Due to the classification of the net proceeds as restricted cash, both the June 2016 issuance and the July 2016 use of the net proceeds are disclosed supplementally as non-cash financing activities in the accompanying consolidated statement of cash flows. In connection with this repurchase, we recognized a gain on early extinguishment of debt of \$219.6 million during the year ending December 31, 2016, consisting of the difference between the carrying value of the debt repurchased and the total cash amount paid (including related fees and expenses), together with a write-off of unamortized debt premium and unamortized debt issuance costs.

September 2016 Intelsat Jackson Debt Exchange and Consent Solicitation

In September 2016, Intelsat Jackson completed a debt exchange receiving \$141.4 million aggregate principal amount of 2022 Jackson Notes in exchange for \$99.7 million aggregate principal amount of newly issued 2024 Secured Jackson Notes issued and \$17.0 million in cash. In connection with this exchange, Intelsat Jackson also received a consent from holders of \$141.5 million principal amount of 2022 Jackson Notes in exchange for \$9.2 million in cash to amend the indenture governing the 2022 Jackson Notes, among other things to: (i) eliminate substantially all of the restrictive covenants and certain events of default pertaining to the 2022 Jackson Notes, and (ii) waive any defaults or events of default potentially existing under the indenture governing the 2022 Jackson Notes as of September 12, 2016. We determined the transaction was accounted for as a modification and not as an extinguishment of debt under ASU 470, *Debt* ("ASU 470"). As a result, the fees paid to bondholders, including the consent payment, were amortized over the remaining term of the debt instrument.

December 2016 Intelsat Connect Finance Exchange Offers

First 2018 Luxembourg Exchange—In December 2016, ICF completed an exchange, receiving \$377.6 million aggregate principal amount of 2018 Luxembourg Notes in exchange for \$132.1 million aggregate principal amount of its newly issued unsecured 12 ½% Senior Notes due 2022 (the "2022 ICF Notes") and \$226.5 million in cash (the "First 2018 Luxembourg Exchange"). The 2022 ICF Notes are guaranteed by Intelsat Luxembourg. We accounted for the First 2018 Luxembourg Exchange as a modification of debt under ASU 470. As a result, remaining unamortized debt issuance costs on the exchanged 2018 Luxembourg Notes will be amortized over the remaining term of the newly issued 2022 ICF Notes. We expensed approximately \$3.3 million of fees related to the First 2018 Luxembourg Exchange.

2021 Luxembourg Exchange—In December 2016, ICF completed an exchange, receiving \$979.2 million aggregate principal amount of Intelsat Luxembourg's 7 3/4% Senior Notes due 2021 (the "2021 Luxembourg Notes") in exchange for \$538.4 million aggregate principal amount of its newly issued 2022 ICF Notes and \$29.4 million in cash (the "2021 Luxembourg Exchange"). We accounted for the 2021 Luxembourg Exchange as an extinguishment of debt under ASU 470. In connection with the 2021 Luxembourg Exchange, we recognized a net gain on early extinguishment of debt of \$609.8 million, consisting of the difference between the carrying value of the 2021 Luxembourg Notes exchanged and the fair value of the 2022 ICF Notes issued and the total cash paid (including related fees and expenses), together with a write-off of unamortized debt issuance costs.

2023 Luxembourg Exchange—In December 2016, ICF completed an exchange, receiving \$111.7 million aggregate principal amount of Intelsat Luxembourg's 8 ½% Senior Notes due 2023 (the "2023 Luxembourg Notes") in exchange for \$61.4 million aggregate principal amount of newly issued 2022 ICF Notes and \$3.3 million in cash (the "2023 Luxembourg Exchange"). We accounted for the 2023 Luxembourg Exchange as an extinguishment of debt under ASU 470. In connection with the 2023 Luxembourg Exchange, we recognized a net gain on early extinguishment of debt of \$69.4 million, consisting of the difference between the carrying value of the 2023 Luxembourg Notes exchanged and the fair value of the 2022 ICF Notes issued and the total cash paid (including related fees and expenses), together with a write-off of unamortized debt issuance costs.

Satellite Performance Incentives

Our cost of satellite construction includes an element of deferred consideration to satellite manufacturers referred to as satellite performance incentives. We are contractually obligated to make these payments over the lives of the satellites, provided the satellites continue to operate in accordance with contractual specifications. We capitalize the present value of these payments as part of the cost of the satellites and record a corresponding liability to the satellite manufacturers. This asset is amortized over the useful lives of the satellites and the liability is accreted as interest expense is recorded based on the passage of time and reduced as the payments are made. Our total satellite performance incentive payment liability as of December 31, 2016 and 2017 was \$234.2 million and \$241.1 million, respectively.

Capital Expenditures

Our capital expenditures depend on our business strategies and reflect our commercial responses to opportunities and trends in our industry. Our actual capital expenditures may differ from our expected capital expenditures if, among other things, we enter into any currently unplanned strategic transactions. Levels of capital spending from one year to the next are also influenced by the nature of the satellite life cycle and by the capital-intensive nature of the satellite industry. For example, we incur significant capital expenditures during the years in which satellites are under construction. We typically procure a new satellite within a timeframe that would allow the satellite to be deployed at least one year prior to the end of the service life of the satellite to be replaced. As a result, we frequently experience significant variances in our capital expenditures from year to year. The following table compares our satellite-related capital expenditures to total capital expenditures from 2013 through 2017 (in thousands).

Year 2013	Satellite-Related Capital Expenditures	Total Capital Expenditures
2013	\$ 542,942	\$ 600,792
2014	566,716	645,424
2015	657,656	724,362
2016	629,346	714,570
2017	355,675	461,627
Total	\$ 2,752,335	\$3,146,775

Capital expenditure guidance for 2018 through 2020 (the "Guidance Period") assumes investment in seven satellites, three of which are in the design and manufacturing phase or recently launched. The remaining four satellites are replacement satellites, for which manufacturing contracts have not yet been signed. By early 2019, we plan to have completed the investment program in the current series of Intelsat EpicNG high-throughput satellites and payloads, thereby significantly increasing our total transmission capacity from levels at 2017 year end.

Payments for satellites and other property and equipment for the year ended December 31, 2017 were \$497.0 million, which included \$461.6 million and \$35.4 million in cash flows from investing activities and from financing activities, respectively, in our consolidated statements of cash flows. We intend to fund our capital expenditure requirements through cash on hand and cash provided from operating activities.

Currency and Exchange Rates

Substantially all of our customer contracts, capital expenditure contracts and operating expense obligations are denominated in U.S. dollars. Consequently, we are not exposed to material foreign currency exchange risk. However, the service contracts with our Brazilian customers provide for payment in Brazilian *reais*. Accordingly, we are subject to the risk of a reduction in the value of the Brazilian *real* as compared to the U.S. dollar in connection with payments made by Brazilian customers, and our exposure to fluctuations in the exchange rate for Brazilian *reais* is ongoing. However, the rates payable under our service contracts with Brazilian customers are adjusted annually to account for inflation in Brazil, thereby mitigating the risk. For the years ended December 31, 2015, 2016 and 2017, our Brazilian customers represented approximately 4.2%, 3.7% and 4.0% of our revenue, respectively. Transactions in other currencies are converted into U.S. dollars using exchange rates in effect on the dates of the transactions.

We recorded foreign currency exchange losses of \$11.4 million and gains of \$3.3 million and \$0.9 million for the years ended December 31, 2015, 2016 and 2017, respectively. The losses and gains for each year were primarily attributable to the conversion of our Brazilian *reais* receivables and cash balances held in Brazil, and were net of other working capital account balances translated into U.S. dollars at the exchange rates in effect on the last day of the applicable year or, with respect to exchange transactions effected during the year, at the time the exchange transactions occurred.

C. Research and Development, Patents and Licenses

During the year ended December 31, 2017, we incurred expenses of \$0.6 million for development activities. In addition, a few isolated patent initiatives have been conducted in furtherance of innovation efforts of the Company, resulting in \$1.0 million of expenses for the year ended December 31, 2017. Further, Intelsat personnel regularly engage in activities that are intended to result in new or improved functions, performance, or quality related to our network, teleports and satellites.

D. Trend Information

Other than as disclosed elsewhere in this Annual Report, we are not aware of any trends, uncertainties, demands, commitments or events that are reasonably likely to have a material adverse effect on our revenues, income, profitability, liquidity or capital resources, or that would cause the disclosed financial information to be not necessarily indicative of future operating results or financial conditions. See Item 5—Operating and Financial Review and Prospects for further discussion.

E. Off-Balance Sheet Arrangements

We have a revenue sharing agreement with JSAT International, Inc. ("JSAT") related to services sold on the Horizons Holdings satellites. We are responsible for billing and collection for such services and we remit 50% of the revenue, less applicable fees and commissions, to JSAT.

At December 31, 2017, we also had an off-balance sheet commitment of \$4.4 million, which we expect to pay through 2018 for development activities.

F. Tabular Disclosure of Contractual Obligations

The following table sets forth our contractual obligations and capital and certain other commitments as of December 31, 2017, and the expected year of payments (in thousands):

	Payments due by year							
Contractual Obligations (1) Long-Term debt obligations	2018	2019	2020	2021	2022	2023 and thereafter	Other	Total
Intelsat S.A. and subsidiary notes and credit facilities— principal payments	\$ 96,650	\$1,095,000	\$2,200,000	\$2,170,832	\$1,221,892	\$7,738,770	\$ —	\$14,523,144
Intelsat S.A. and subsidiary notes and credit facilities— interest payments (2)	1,062,398	1,039,061	1,010,097	767,613	620,382	857,387	_	5,356,938
Operating lease obligations	14,338	13,889	13,500	13,376	13,424	93,501	_	162,028
Sublease rental income	(665)	(617)	(526)	(312)	(143)	(161)	_	(2,424)
Horizons-3 Satellite LLC Capital Contributions (3)	41,500	4,600	11,900	13,500	15,900	59,700	_	147,100
Purchase obligations (4)	422,050	285,861	156,593	20,874	18,014	51,602	_	954,994
Other long-term liabilities (including interest) (5)	42,987	42,244	43,023	42,226	31,898	158,189	_	360,567
Income tax contingencies (6)							31,380	31,380
Total contractual obligations	\$1,679,258	\$2,480,038	\$3,434,587	\$3,028,109	\$1,921,367	\$8,958,988	\$31,380	\$21,533,727

- (1) Obligations related to our pension and postretirement medical benefit obligations are excluded from the table. We maintain a noncontributory defined benefit retirement plan covering substantially all of our employees hired prior to July 19, 2001. We expect that our future contributions to the defined benefit retirement plan will be based on the minimum funding requirements of the Internal Revenue Code and on the plan's funded status. The impact on the funded status is determined based upon market conditions in effect when we completed our annual valuation. In the first quarter of 2015, we amended the defined benefit retirement plan to cease the accrual of additional benefits for the remaining active participants effective March 31, 2015. We anticipate that our contributions to the defined benefit retirement plan in 2018 will be approximately \$5.1 million. We fund the postretirement medical benefits throughout the year based on benefits paid. We anticipate that our contributions to fund postretirement medical benefits in 2018 will be approximately \$4.1 million. See Note 7—Retirement Plans and Other Retiree Benefits to our consolidated financial statements included elsewhere in this Annual Report.
- (2) Represents estimated interest payments to be made on our fixed and variable rate debt. Interest payments for variable rate debt and incentive obligations have been estimated based on the current interest rates.
- (3) See Note 10(b)—Investments—Horizons-3 Satellite LLC.
- (4) Includes satellite construction and launch contracts, estimated payments to be made on performance incentive obligations related to certain satellites that are currently under construction, vendor contracts and customer commitments.
- (5) Represents satellite performance incentive obligations related to satellites that are in service (and interest thereon).
- (6) The timing of future cash flows from income tax contingencies cannot be reasonably estimated and therefore is reflected in the other column. See Note 14—Income Taxes to our consolidated financial statements included elsewhere in this Annual Report for further discussion of income tax contingencies.

Satellite Construction and Launch Obligations

As of December 31, 2017, we had approximately \$828.6 million of expenditures remaining under our existing satellite construction contracts and satellite launch contracts. Satellite launch and in-orbit insurance contracts related to future satellites to be launched are cancelable up to thirty days prior to the satellite's launch. As of December 31, 2017, we did not have any non-cancelable commitments related to existing launch insurance or in-orbit insurance contracts for satellites to be launched.

See Item 4B—Business Overview—Our Network—Satellite Systems—Planned Satellites for details relating to certain of our satellite construction and launch contracts.

Operating Leases

We have commitments for operating leases primarily relating to equipment and office facilities. These leases contain escalation provisions for increases. As of December 31, 2017, minimum annual rentals of all leases (net of sublease income on leased facilities), totaled approximately \$159.6 million, exclusive of potential increases in real estate taxes, operating assessments and future sublease income.

Customer and Vendor Contracts

We have contracts with certain of our customers which require us to provide equipment, services and other support during the term of the related contracts. We also have long-term contractual obligations with service providers primarily related to the operation of certain of our satellites. As of December 31, 2017, we had commitments under these customer and vendor contracts which totaled approximately \$126.4 million related to the provision of equipment, services and other support.

G. Safe Harbor

See the section entitled "Forward-Looking Statements" at the beginning of this Annual Report.

Item 6. Directors, Senior Management and Employees

A. Directors and Senior Management

Our current executive officers and directors are as follows:

Name	Age	Position
	57	Director and Executive Chairman, Intelsat S.A.
Stephen Spengler	58	Director and Chief Executive Officer, Intelsat S.A.
Michelle Bryan	61	Executive Vice President, General Counsel, Chief Administrative Officer and Secretary, Intelsat S.A.
Michael DeMarco	47	Executive Vice President, Operations, Intelsat Corporation
Samer Halawi	48	Executive Vice President & Chief Commercial Officer, Intelsat Corporation
Jacques Kerrest	71	Executive Vice President & Chief Financial Officer, Intelsat S.A.
Justin Bateman	44	Director, Intelsat S.A.
Robert Callahan	66	Director, Intelsat S.A.
John Diercksen	68	Director, Intelsat S.A.
Edward A. Kangas	73	Director, Intelsat S.A.
Raymond Svider	55	Director, Intelsat S.A.

The following is a brief biography of each of our executive officers and directors:

Mr. McGlade became the Executive Chairman of the board of directors of Intelsat S.A. in April 2015 and served as Chief Executive Officer and Deputy Chairman of the board of directors of Intelsat S.A. from July 2011 to April 2015. Effective on April 1, 2018, Mr. McGlade is expected to transition from Executive Chairman to a non-executive Chairman of the board of directors of Intelsat S.A. Mr. McGlade served as the Chief Executive Officer of Intelsat Investments S.A. from April 2005 to April 2015, and was Deputy Chairman of the board of directors of Intelsat Investments S.A. from August 2008 to May 2013. Prior to that, Mr. McGlade was the Chief Executive Officer of O2 UK, the largest subsidiary of O2 plc and a leading U.K. cellular telephone company, a position he took in October 2000. He was also an Executive Director of O2 plc. During his tenure at O2 UK and O2 plc, Mr. McGlade was a director of the GSM Association, a trade association for GSM mobile operators, and served as Chairman of its Finance Committee from February 2004 to February 2005. He was also a director of Tesco Mobile from September 2003 to March 2005 and a director of The Link, a distributor of mobile phones and other high performance analog semiconductors, as well as Omnispace LLC, a mobile satellite services provider. Mr. McGlade holds a Bachelor of Arts degree from Rutgers University. Mr. McGlade's business address is 4, rue Albert Borschette, L-1246 Luxembourg.

Mr. Spengler became the Chief Executive Officer of Intelsat S.A. on April 1, 2015, and became a director of Intelsat S.A. in October 2015. Prior to April 2015, Mr. Spengler served as Deputy Chief Executive Officer of Intelsat S.A. from December 2014, and prior to that he served as President and Chief Commercial Officer of Intelsat Corporation from March 2013 to December 2014. Mr. Spengler also served as Executive Vice President, Sales, Marketing and Strategy of Intelsat Corporation from February 2008 to March 2013. Before joining Intelsat in 2003, Mr. Spengler held various positions in the telecommunications industry, including Senior Vice President of Global Sales, Broadband Access Networks at Cirronet, Inc., Vice President of Sales and Marketing at ViaSat Satellite Networks, Regional Sales Director for Satellite Networks in Europe, the Middle East and Africa for Scientific-Atlanta Europe based in London, and sales and marketing positions at GTE Spacenet and GTE Corporation. Mr. Spengler received his Bachelor of Arts degree from Dickinson College in Carlisle, Pennsylvania, and his Masters of Business Administration from Boston University in Massachusetts. Mr. Spengler's business address is 4, rue Albert Borschette, L-1246 Luxembourg.

Ms. Bryan became the Executive Vice President, General Counsel and Chief Administrative Officer and Secretary of Intelsat S.A. in March 2013. Prior to that, Ms. Bryan served as Senior Vice President, Human Resources and Corporate Services of Intelsat Corporation since January 2007. Prior to joining Intelsat, Ms. Bryan served as interim General Counsel and Corporate Secretary for Laidlaw International, and prior to that held a number of executive positions with US Airways Group, Inc. including Executive Vice President, Corporate Affairs and General Counsel and Corporate Secretary, as well as Senior Vice President of Human Resources. Ms. Bryan earned a Bachelor of Arts degree from the University of Rochester and a Juris Doctor from Georgetown University. Ms. Bryan's business address is 4, rue Albert Borschette, L-1246 Luxembourg.

Mr. DeMarco became the Executive Vice President, Operations of Intelsat Corporation in August 2017. Prior to that, Mr. DeMarco served as Senior Vice President, Operations since April 2015, and prior to that as Senior Vice President, Marketing and Solutions Development, with responsibility for product management, marketing, customer solutions engineering and asset management functions. From 2006 to 2009 he served as Intelsat Corporation's Vice President of Media Services and has held roles of increasing responsibility within the Company, serving as Vice President of Core Video Services, Senior Director of Business Operations, and Director of Product Finance at PanAmSat prior to its 2006 merger with Intelsat. Since November 2017, he has also served as director of Dejero Labs, Inc., a provider of connectivity required for cloud computing, online collaborations, and the secure exchange of video and data. Mr. DeMarco earned a Bachelor of Science Degree in Finance and a Masters of Business Administration from Fairfield University in Connecticut. Mr. DeMarco's business address is 7900 Tysons One Place, McLean, VA 22102, United States.

Mr. Halawi became the Executive Vice President and Chief Commercial Officer of Intelsat S.A. on January 9, 2018. Prior to joining Intelsat, Mr. Halawi served as Chief Commercial Officer for WorldVu Satellites Limited ("OneWeb") from April 2017 to January 2018, where he established and oversaw the distribution, product management, communications, business development, strategy, and sales and marketing functions. From 2011 to 2017, he served as Chief Executive Officer for Thuraya Telecommunications Company, a leader in mobile satellite services, with responsibility for performance, positioning and growth of the company. Mr. Halawi previously spent eight years at Inmarsat PLC in global strategy, running operations for the Middle East, Africa and Asia-Pacific. He also held prior roles in the telecommunications industry at Flag Telecom and ICO Global Communications ("ICO"), including a three year period in investment banking in the Middle East while at ICO. Mr. Halawi began his career in the automotive industry, occupying several positions with Chrysler Corporation and Ford Motor Company. He holds a Bachelor of Science degree in Electrical Engineering from Lawrence Technological University in Michigan, and a Masters of Business Administration from the University of Michigan. Mr. Halawi's business address is 7900 Tysons One Place, McLean, VA 22102, United States.

Mr. Kerrest became the Executive Vice President and Chief Financial Officer of Intelsat S.A. on February 1, 2016. Prior to this, Mr. Kerrest served as President of DPC Data Inc., a data products and specialized data services company, from July 2014 to February 2016, and has been serving as a director of that company since 2011. From 2008 to 2011, Mr. Kerrest served as Chief Financial Officer and Chief Operating Officer of ActivIdentity Corporation, an identity assurance provider. He also served as the Chief Financial Officer of Virgin Media plc, the second largest communications company in the United Kingdom, from 2004 to 2008. Prior to 2004, Mr. Kerrest held the role of Chief Financial Officer at companies including Equant Inc., Harte-Hanks, Inc., Chancellor Broadcasting Company and Positive Communications. Since June 2017, he also serves as a director of comScore, Inc., a cross-platform measurement company that measures audiences, brands and consumer behavior. Mr. Kerrest received his Masters of Science degree from Faculte Des Sciences Economiques in Paris, France, and a Masters of Business Administration from Institut D'Etudes Politiques De Paris in Paris, France as well as the Thunderbird School of Global Management in Glendale, Arizona. Mr. Kerrest's business address is 4, rue Albert Borschette, L-1246 Luxembourg.

Mr. Bateman became a director of Intelsat S.A. in July 2011. Mr. Bateman was a director of Intelsat Investments S.A. from August 2008 to May 2013. Mr. Bateman is a Managing Partner of BC Partners based in its New York office, the investment arm of which he co-established in early 2008. He initially joined BC Partners' London office in 2000 from PricewaterhouseCoopers, where he spent three years in Transaction Services working on due diligence projects for both financial investors and corporate clients. In 2002/2003 he left BC Partners to complete his MBA at INSEAD before rejoining its London office. Mr. Bateman serves on the board of Cyxtera Technologies, Inc., an information security technology company, and Teneo Global LLC, and has previously served on the boards of Office Depot, Inc., MultiPlan, Inc. and Suddenlink Communications. He has a degree in economics from the University of Cambridge in the UK. Mr. Bateman's business address is 4, rue Albert Borschette, L-1246 Luxembourg.

Mr. Callahan became a director of Intelsat S.A. in April 2014. Mr. Callahan is the Chairman of Longueview Advisory, a media, internet and technology advisory firm. Prior to joining Longueview, he served as a special advisor with General Atlantic, Inc., a leading global growth equity firm, where he worked on internet, technology and resource investments, such as the Alibaba Group and Network Solutions, Inc., where he served as Chairman. He previously held the position of Chairman and Chief Executive Officer of Ziff Davis Media, Inc. Mr. Callahan also spent 20 years at the Walt Disney Company/ABC/Capital Cities, where he held numerous positions, including President of ABC Inc. He currently serves as a director of AppNexus Inc., a provider of advertising products and services utilizing a cloud-based real-time online platform. Mr. Callahan holds a Bachelor of Science degree in Journalism from the University of Kansas. Mr. Callahan's business address is 4, rue Albert Borschette, L-1246 Luxembourg.

Mr. Diercksen became a director of Intelsat S.A. in September 2013. Mr. Diercksen serves as a Senior Advisor at LionTree Investment Advisors, addressing financial, operational and management services with client business development. From December 2015 to June 2017, Mr. Diercksen served as the Chief Executive Officer of Beachfront Wireless Previously, Mr. Diercksen retired from Verizon Communications as the executive vice president for strategy, development and planning in September 2013, with responsibility for key strategic initiatives related to the review and assessment of potential mergers, acquisitions and divestitures. Earlier in his career, Mr. Diercksen held a number of senior financial and leadership positions at Verizon, Bell Atlantic, and NYNEX, among other companies. Mr. Diercksen also serves on the boards of Cyxtera Technologies, Inc. and Banco Popular, Inc. and previously served on the board of Harman International Industries. Mr. Diercksen holds an MBA from Pace University and a Bachelor of Business Administration in finance from Iona College. Mr. Diercksen also qualifies as an audit committee financial expert. Mr. Diercksen's business address is 4, rue Albert Borschette, L-1246 Luxembourg.

Mr. Kangas became a director of Intelsat S.A. in July 2012. He also serves as Chairman of the board of directors of Deutsche Bank USA Corp., the U.S. holding company of Deutsche Bank AG. Mr. Kangas serves as Lead Director of Tenet Healthcare Corporation, where he previously served as Non-Executive Chairman (and member of the Compensation Committee) from 2003 to 2015. Mr. Kangas also serves as Lead Director of United Technologies Corporation, and serves as a member of the board of directors of Hovnanian Enterprises, Inc. (and as Chair of its Audit Committee). He also formerly served as a director of Intuit, Inc. and Electronic Data Systems Corp. Mr. Kangas previously served as Global Chairman and Chief Executive Officer of Deloitte, Touche, Tohmatsu from 1989 to 2000. He also served as the managing partner of Deloitte & Touche (USA) from 1989 to 1994. Mr. Kangas holds a bachelor's degree in business and an MBA from the University of Kansas and is a Certified Public Accountant. Mr. Kangas also qualifies as an audit committee financial expert.

Mr. Kangas' business address is 4, rue Albert Borschette, L-1246 Luxembourg.

Mr. Svider became a director of Intelsat S.A. in July 2011. Prior to April 2013, Mr. Svider also served as Chairman of the board of directors. Mr. Svider was a director of Intelsat Investments S.A. from February 2008 to May 2013 and became the Chairman of the board of directors of Intelsat S.A. in May 2008. Mr. Svider has been Co-Chairman of BC Partners since December 2008 and has been a Managing Partner of BC Partners since 2003. He joined BC Partners in 1992 in Paris before moving to London in 2000 to lead its investments in the technology and telecommunications industries. Over the years, Mr. Svider has participated in or led a variety of investments, including Tubesca, Nutreco, UTL, Neopost, Polyconcept, Neuf Telecom, Unity Media/Tele Columbus, Office Depot Inc., ATI Enterprises, MultiPlan, Inc., Suddenlink Communications, Accudyne Industries, Teneo Global LLC and PetSmart. He is currently on the board of Altice USA, Accudyne Industries, Teneo Global LLC and PetSmart. Prior to joining BC Partners, Mr. Svider worked in investment banking at Wasserstein Perella in New York and Paris, and at the Boston Consulting Group in Chicago. Mr. Svider holds a Master of Business Administration from the University of Chicago and a Master of Science in Engineering from both École Polytechnique and École Nationale Superieure des Telecommunications in France. Mr. Svider's business address is 4, rue Albert Borschette, L-1246 Luxembourg.

B. Compensation of Officers and Directors

This section sets forth (i) the compensation and benefits provided to our executive officers and directors for 2017, (ii) a brief description of the bonus program in which our executive officers participated in 2017, (iii) the total amounts set aside or accrued in 2017 for pension, retirement and similar benefits for our executive officers, and (iv) the number, exercise price and expiration date of share option grants made during 2017.

2017 Compensation

For 2017, our executive officers received total compensation, including base salary, bonus, non-equity incentive compensation, contributions to the executive officer's account under our 401(k) plans and other retirement plans and certain perquisites, equal to \$12 million in the aggregate.

Annual Cash Bonuses

In April 2013, our board of directors adopted, and our shareholders approved, a Bonus Plan (the "Bonus Plan") which provides that certain of our and our subsidiaries' employees, including the executive officers, may be awarded cash bonuses based on the attainment of specific performance goals and business criteria established by our board of directors for participants in the Bonus Plan. The goals and criteria for the 2017 fiscal year included certain financial metrics, including revenue and adjusted EBITDA targets, as well as certain management objectives, all as defined by the compensation committee. The bonus target percentages for our executives are set forth in their respective employment agreements. Awards for the subject year are determined based upon completion of the audited consolidated financial statements for that year. The Bonus Plan is a discretionary plan and the compensation committee retains the right to award compensation absent the attainment of performance criteria.

The Bonus Plan enables the compensation committee to grant bonuses that are intended to qualify as performance-based compensation for purposes of Section 162(m) of the United States Internal Revenue Service Tax Code (the "Code") by conditioning the payout of the bonus on the satisfaction of certain performance goals (which are selected from the same list of performance goals applicable under our 2013 Equity Plan (see "—2013 Equity Incentive Plan" below)). In addition, the Bonus Plan also provides that, except to the extent otherwise provided in an award agreement, or any applicable employment, change in control, severance or other agreement between a participant and the Company, in the event of a change in control (as defined in our 2013 Equity Plan), the compensation committee may provide that all or a portion of any such bonus award will become fully vested based on (i) actual performance through the date of the change in control, as determined by the compensation committee or (ii) if the compensation committee determines that measurements of actual performance cannot be reasonably assessed, the assumed achievement of target performance as determined by the compensation committee. All awards previously deferred will be settled in full upon, or as soon as practicable following, the change in control.

Pension, Retirement and Similar Benefits

Our executive officers participate in a tax-qualified 401(k) plan on the same terms as our other employees. Our executive officers also participate in the Intelsat Excess Benefit Plan, a nonqualified retirement plan under which our executive officers and certain key employees receive additional contributions to address limitations placed on contributions under the tax-qualified 401(k) plan. Under the terms of his employment agreement, Mr. McGlade is provided with certain retiree medical benefits that are not otherwise provided to participants under the terms of our medical plan. The aggregate amount of the employer contributions to the 401(k) plans and the Intelsat Excess Benefit Plan for our executive officers during 2017 was \$168,709. Total present value of Mr. McGlade's post-retirement medical benefits was \$273,228.

Employment Agreements and Severance Protection

We have entered into employment agreements with each of our executive officers, including Mr. Halawi, who became an executive officer on January 9, 2018. Among other things, the employment agreements provide for minimum base salary, bonus eligibility and severance protection in the event of involuntary terminations of employment. Specifically, under the employment agreements, if the executive officer's employment is terminated by us without cause or if the officer resigns for good reason (in either case, as defined in the executive officer's respective employment agreement), then, subject to the executive officer's execution of a release of claims and compliance with certain restrictive covenants, the executive officer will be paid a severance amount on the sixtieth day after such termination of employment equal to the product of (x) the sum of the executive officer's annual base salary and target annual bonus as in effect on the date of such termination of employment, multiplied by (y) a severance multiplier equal to 2.0 in the case of Mr. Spengler, and 1.5 in the case of Messrs. DeMarco, Halawi, and Kerrest and Ms. Bryan. In the case of Mr. McGlade, his employment agreement was amended in 2015 for a fixed three year term ending on March 31, 2018. In the event of a severance during the term of his agreement, Mr. McGlade's severance amount is fixed at a severance multiplier equal to 2.0 times the sum of his annual base salary and target bonus as in effect on April 1, 2015. In addition, in certain cases of termination of employment, Mr. McGlade's agreement provides that he will be paid a prorated target bonus for the year of his termination based on actual results and the portion of the fiscal year he was employed. The employment agreement for Mr. McGlade further provides that, in the event a "golden parachute" excise tax under Section 4999 of the Code is imposed on any compensation or benefits received in connection with a change of control, and our shares are readily tradable on an established securities market or otherwise at such time, he will be entitled to an additional payment such that he will be placed in the same after-tax position that he would have been in had no excise tax been imposed. Mr. McGlade's employment agreement terminates on March 31, 2018 and thereafter there are no severance protections or payment obligations for Mr. McGlade.

Director Compensation

We provide non-executive independent members of the board with compensation (including equity based compensation) for their service on the board and any committees of the board. Our board has adopted a director compensation policy applicable to each director (an "outside director") who is neither our employee nor nominated by any entity that (i) receives a management or monitoring fee from the Company or any subsidiary or (ii) beneficially owns or is part of a group that beneficially owns at least fifty percent (50%) of voting shares of the Company. The director compensation policy provides that each outside director receives an annual board cash retainer of \$75,000 (the "basic cash retainer"). Effective April 1, 2018 Mr. McGlade will become an outside director eligible for compensation under the director compensation policy. In addition to the basic cash retainer, Mr. McGlade will receive an additional annual cash retainer of \$50,000 for serving as the chairman of the board. The chairman of the Audit Committee receives an annual cash retainer of \$12,500 and each other member of the Compensation Committee receives an annual cash retainer of \$17,500 and each other member of the Compensation Committee receives an annual cash retainer of \$10,000. At such time as our board of directors has a Nominating and Corporate Governance Committee, the chairman of the Nominating and Corporate Governance Committee shall receive an annual cash retainer of \$10,000 and each other member of the Nominating and Corporate Governance Committee shall receive an annual cash retainer of \$10,000 and each other member of the Nominating and Corporate Governance Committee shall receive an annual cash retainer of \$10,000 and each other member of the Nominating and Corporate Governance Committee shall receive an annual cash retainer of \$10,000 and each other member of the Nominating and Corporate Governance Committee shall receive an annual cash retainer of \$10,000 and each other member of the Nominating and Corporate Governance Committee shal

Each outside director may elect to receive any of the foregoing cash retainers in the form of fully vested restricted share unit ("RSU") awards with a grant date value equal to the amount of such cash retainer, subject to such terms and conditions as established by the board of directors from time to time. An outside director may elect to assign his or her interest in (or enter into a mutually acceptable arrangement with the Company with respect to the delivery of) the foregoing items to any entity shareholder that nominates such outside director for election to the board of directors and, in such case, the Company shall pay cash in lieu of equity awards in an amount equal to the grant date value of such awards.

Other than the severance protection provided under the employment agreements of Messrs. McGlade and Spengler described above, no directors are party to service contracts with the Company providing for benefits upon termination of employment or service.

Non-executive members of the board are entitled to reimbursements for travel and other out-of-pocket expenses related to their board service.

Pursuant to a governance agreement (the "Governance Agreement") we entered into with the shareholder affiliated with BC Partners (the "BC Shareholder"), the shareholder affiliated with Silver Lake (the "Silver Lake Shareholder") and David McGlade (collectively, with the BC Shareholder and the Silver Lake Shareholder, the "Governance Shareholders"), under the terms of which we have agreed to reimburse directors nominated by the Governance Shareholders for travel and other expenses related to their board service.

Equity Grants issued during 2017

In 2017, we granted a total of 903,000 RSUs to our executive officers as a group and 116,700 RSUs to our outside directors pursuant to the 2013 Equity Plan (—see Equity Compensation Plans below). These units included both time-vesting restricted stock units as well as performance-based restricted stock units which vest on the basis of achievement of certain financial metrics.

Equity Compensation Plans

2008 Share Incentive Plan

On May 6, 2009, the board of directors of Intelsat Global S.A. adopted the amended and restated Intelsat Global, Ltd. 2008 Share Incentive Plan (the "2008 Equity Plan"). Intelsat S.A. adopted the 2008 Equity Plan by an amendment effective as of March 30, 2012. The 2008 Equity Plan provides for a variety of equity-based awards with respect to our common shares, including non-qualified share options, incentive share options (within the meaning of Section 422 of the Code), restricted share awards, restricted share unit awards, share appreciation rights, phantom share awards and performance-based awards. While certain awards remain outstanding under the 2008 Equity Plan, no new awards may be granted under the 2008 Equity Plan.

In addition, in connection with the IPO, each of our executive officers agreed to cancel a portion of their unvested performance options in exchange for grants of new stock options and restricted share units granted in the aggregate to our executive officers under the 2013 Equity Incentive Plan.

Except for certain grants of restricted shares and stock options made immediately following the IPO, following the consummation of the IPO no new awards may be granted under the 2008 Equity Plan.

2013 Equity Incentive Plan

In connection with the IPO, we established the Intelsat S.A. 2013 Equity Incentive Plan (the "2013 Equity Plan"). Any of the employees, directors, officers, consultants or advisors (or prospective employees, directors, officers, consultants or advisors) of the Company or any of our subsidiaries or their respective affiliates, are eligible for awards under the 2013 Equity Plan. The compensation committee has the authority to determine who is granted an award under the 2013 Equity Plan, and it has delegated authority to the Chief Executive Officer of the Company to make awards to individuals below the executive officer level, subject to reporting such awards to the compensation committee at the next following committee meeting.

No more than 20,000,000 of our common shares in the aggregate may be issued with respect to incentive stock options under the 2013 Equity Plan. No participant may be granted awards in any one calendar year with respect to more than 1,500,000 of our common shares in the aggregate (or the equivalent amount in cash, other securities or property).

Our common shares subject to awards are generally unavailable for future grant. If any shares are surrendered or tendered to pay the exercise price of an award or to satisfy withholding taxes owed, such shares will not be available for grant under the 2013 Equity Plan. If any award granted under the 2013 Equity Plan expires, terminates, is canceled or forfeited without being settled or exercised, our common shares subject to such award will again be made available for future grant.

The compensation committee may grant awards of non-qualified stock options, incentive (qualified) stock options, stock appreciation rights, restricted stock awards, restricted stock units, other stock-based awards, performance compensation awards (including cash bonus awards), or any combination of the foregoing. Awards may be granted under the 2013 Equity Plan and in assumption of, or in substitution for, outstanding awards previously granted.

C. Board Practices

Board Leadership Structure

Our board of directors consists of seven directors. Our articles of incorporation provide that our board of directors shall consist of not less than three directors and not more than twenty directors. Under Luxembourg law, directors are appointed by the general meeting of shareholders for a period not exceeding six years or until a successor has been elected. Our board is divided into three classes as described below. Pursuant to our articles of incorporation, our directors are appointed by the general meeting of shareholders for a period of up to three years (or, if longer, up to the annual meeting held following the third anniversary of the appointment), with each director serving until the third annual general meeting of shareholders following their election. Upon the expiration of the term of a class of directors, directors in that class will be elected for three-year terms at the annual general meeting of shareholders in the year in which their term expires. Messrs. Svider and Bateman are serving as Class I directors for a term expiring in 2020. Messrs. Spengler, McGlade and Callahan are serving as Class II directors for a term expiring in 2018. Messrs. Kangas and Diercksen are serving as Class III directors for a term expiring in 2019. Mr. McGlade serves as the Chairman of our board of directors.

Audit Committee

Intelsat S.A. has an audit committee consisting of Messrs. Kangas, Diercksen and Callahan. All members of the audit committee are independent directors. Pursuant to its charter and the authority delegated to it by the board of directors, the audit committee has sole authority for the engagement, compensation and oversight of our independent registered public accounting firm. In addition, the audit committee reviews the results and scope of the audit and other services provided by our independent registered public accounting firm, and also reviews our accounting and control procedures and policies. The audit committee meets as often as it determines necessary but not less frequently than once every fiscal quarter. Our board of directors has determined that each of Messrs. Kangas and Diercksen is an audit committee financial expert.

Compensation Committee

Intelsat S.A. has a compensation committee consisting of Messrs. Svider, Diercksen and Kangas. Messrs. Diercksen and Kangas are independent, and Mr. Svider is not independent, since he is associated with the Sponsors. Pursuant to its charter and the authority delegated to it by the board of directors, the compensation committee has responsibility for the approval and evaluation of all of our compensation plans, policies and programs as they affect Intelsat S.A.'s chief executive officer and other executive officers. The compensation committee meets as often as it determines necessary.

D. Employees

As of December 31, 2017, we had 1,170 full-time regular employees. These employees consisted of:

- 694 employees in engineering, operations and related information systems;
- 204 employees in finance, legal and other administrative functions;
- 179 employees in sales, marketing and strategy; and
- 93 employees in support of government sales and marketing.

We believe that our relations with our employees are good. None of our employees is represented by a union or covered by a collective bargaining agreement.

E. Share Ownership

The following table and accompanying footnotes show information regarding the beneficial ownership of our common shares by:

- each person known by us to beneficially own 5% or more of our outstanding common shares;
- · each of our directors;
- · each executive officer, subject to permitted exceptions; and
- all directors and executive officers as a group.

The percentage of beneficial ownership set forth below is based on approximately 119,560,679 common shares issued and outstanding as of February 8, 2018. All common shares listed in the table below are entitled to one vote per share, unless otherwise indicated in the notes thereto. Unless otherwise indicated, the address of each person named in the table below is c/o Intelsat S.A., 4, rue Albert Borschette, L-1246 Luxembourg.

	Common Shares Beneficially Owned(1)	
Name of Beneficial Owner:	Number	Percentage
Serafina S.A.(2)(12)	62,962,644	52.7%
Silver Lake Group, L.L.C.(3)(12)	14,170,685	11.9%
SLP III Investment Holdings S.à r.l.(3)(12)	13,892,905	11.6%
Entities Associated with Discovery(4)	7,423,034	6.2%
Arbiter Partners Capital Management (5)	5,983,054	5.0%
David McGlade(6)(12)	3,928,414	3.3%
Stephen Spengler(7)	905,016	*
Michelle Bryan(8)	334,101	*
Michael DeMarco(9)	109,034	*
Samer Halawi		*
Jacques Kerrest(10)	356,645	*
Justin Bateman	_	*
Robert Callahan	54,490	*
John Diercksen	59,477	*
Edward Kangas	59,485	*
Raymond Svider	_	*
Directors and executive officers as a group ⁽¹¹⁾ (11 persons)	5,806,662	4.8%

- * Represents beneficial ownership of less than one percent of shares outstanding.
- (1) The amounts and percentages of our common shares beneficially owned are reported on the basis of regulations of the U.S. Securities and Exchange Commission (the "SEC") governing the determination of beneficial ownership of securities. Under the rules of the SEC, a person is deemed to be a "beneficial owner" of a security if that person has or shares "voting power," which includes the power to vote or to direct the voting of such security, or "investment power," which includes the power to dispose of or to direct the disposition of such security. A person is also deemed to be a beneficial owner of any securities of which that person has a right to acquire beneficial ownership within 60 days. Under these rules, more than one person may be deemed to be a beneficial owner of such securities as to which such person has an economic interest.
- The common shares beneficially owned by Serafina S.A. are also beneficially owned by the limited partnerships comprising the fund commonly known as BC European Capital VIII, BC European Capital—Intelsat Co-Investment and BC European Capital—Intelsat Co-Investment 1. CIE Management II Limited is the general partner of, and has investment control over the shares beneficially owned by, each of the limited partnerships comprising the BC European Capital VIII fund that are domiciled in the United Kingdom, BC European Capital—Intelsat Co-Investment, and BC European Capital—Intelsat Co-Investment 1 (collectively, the "CIE Funds"). CIE Management II Limited may, therefore, be deemed to have shared voting and investment power over the common shares beneficially owned by each of the CIE Funds. LMBO Europe SAS is the Gefant of, and has investment control over the shares beneficially owned by, each of limited partnerships comprising the BC European Capital VIII fund that are domiciled in France (collectively, the "LMBO Funds"). LMBO Europe SAS may, therefore, be deemed to have shared voting and investment power over the common shares beneficially owned by each of the LMBO Funds. Because each of CIE Management II Limited and LMBO Europe SAS is managed by a board of directors, no individuals have ultimate voting or investment control for purposes of Section 13(d)(3) of the Securities Exchange Act of 1934, as amended (the "Act"), over the shares that may be deemed beneficially owned by CIE Management II Limited or LMBO Europe SAS. The address of Serafina S.A. is 29, avenue de la Porte Neuve, L-2227 Luxembourg. The address of CIE Management II Limited and the CIE Funds is Heritage Hall, Le Marchant Street, St. Peter Port, Guernsey, GY1 4HY, Channel Islands and the address of LMBO Europe SAS and the LMBO Funds is 58-60 Avenue Kleber, Paris, France 75116.

- (3) The common shares held of record by SLP III Investment Holding S.à r.l. are beneficially owned by its shareholders Silver Lake Partners III, L.P. ("SLP") and Silver Lake Technology Investors III, L.P. ("SLTI"). Silver Lake Technology Associates III, L.P. ("SLTA") serves as the general partner of each of SLP and SLTI and may be deemed to beneficially own the shares directly owned by SLP and SLTI. SLTA III (GP), L.L.C. ("SLTA GP") serves as the general partner of SLTA and may be deemed to beneficially own the shares directly owned by SLP and SLTI. Silver Lake Group, L.L.C. ("SLG") serves as the managing member of SLTA GP and may be deemed to beneficially own the shares directly owned by SLP and SLTI. The address for each of SLP, SLTI, SLTA, SLTA GP and SLG is 2775 Sand Hill Road, Suite 100, Menlo Park, CA 94025.
- (4) Based on the most recently available Schedule 13G filed with the SEC on February 14, 2018 by Discovery Capital Management, LLC ("Discovery"), Discovery reports that it is an investment adviser in accordance with Rule 13d-1(b)(1)(ii)(E) under the U.S. Securities Exchange Act of 1934 (the "Exchange Act"), and a parent holding company pursuant to Rule 13d-1(b)(1)(ii)(G) of the Exchange Act. Discovery reports that all securities reported in the Schedule 13G referenced herein are owned by advisory clients of Discovery, and none of the advisory clients individually own more than 5% of the outstanding shares of Intelsat S.A. Discovery further reports that it is the relevant entity for which Robert K. Citrone may be considered a control person. The address of Discovery is 20 Marshall Street, Suite 310, South Norwalk, Connecticut 06854.
- Based on the most recently available Schedule 13G filed with the SEC on January 23, 2018 by Arbiter Partners Capital Management LLC, Arbiter Partners Capital Management LLC reports that it is a registered investment adviser (an "Adviser") in accordance with Rule 13d-1(b)(1)(ii)(E) under the U.S. Securities Exchange Act of 1934, and acts as an investment adviser for Arbiter Partners QP, LP, as well as certain managed accounts (the "Managed Accounts") that collectively hold less than 1% of the outstanding shares of Intelsat S.A. Mr. Paul J. Issac controls the Adviser, as well as the Managed Accounts advised by the Adviser. The address of Arbiter Partners Capital Management LLC is 530 Fifth Avenue, 20th Floor, New York, New York 10036
- (6) Includes common shares held by McGlade Investments II, LLC, the Article 4 Family Trust U/T David McGlade 2009 GRAT and the David P. McGlade Declaration of Trust. Mr. McGlade exercises voting power over a total of 1,887,802 common shares. Mr. McGlade also holds restricted share units and options entitling him to receive or purchase 2,040,612 common shares within sixty days of February 8, 2018. A portion of these shares, restricted share units and options is subject to vesting and other restrictions.
- (7) Mr. Spengler exercises voting power over 470,231 common shares and holds restricted share units and options entitling him to receive or purchase 434,785 common shares within sixty days of February 8, 2018. A portion of these shares, restricted share units and options is subject to vesting and other restrictions.
- (8) Ms. Bryan exercises voting power over 173,523 common shares and holds restricted share units and options entitling her to receive or purchase 160,578 common shares within sixty days of February 8, 2018. A portion of these restricted share units and options is subject to vesting and other restrictions.
- (9) Mr. DeMarco exercises voting power over 51,125 shares and holds restricted share units and options entitles him to purchase 57,909 common shares within sixty days of February 8, 2018. A portion of these shares, restricted share units and options is subject to vesting and other restrictions.
- (10) Mr. Kerrest exercises voting power over 127,145 shares and holds restricted share units and options entitling him to receive or purchase 229,500 common shares within sixty days of February 8, 2018. A portion of these restricted share units and options is subject to vesting and other restrictions.
- (11) Directors and executive officers as a group exercise voting power over 2,883,278 common shares and hold restricted share units and options entitling them to receive or purchase 2,923,384 common shares within sixty days of February 8, 2018 under applicable vesting schedules.
- Investment Holdings S.à r.l. currently has the right to nominate four directors for election to our board of directors and SLP III Investment Holdings S.à r.l. currently has the right to nominate one director for election to our board of directors. The Governance Agreement also provides that a majority of the directors then in office (or, if the board has delegated such authority, the nomination or similar committee of the board) shall nominate the remaining directors for election to the board, one of whom shall be our executive chairman, who is currently Mr. McGlade. Under the terms of the Governance Agreement, each of Serafina S.A., SLP III Investment Holdings S.à r.l. and David McGlade has agreed to vote all common shares held by such person or entity in favor of the directors nominated under the terms of the Governance Agreement and in furtherance of the removal of any directors by Serafina S.A. or SLP III Investment Holdings S.à r.l. under the terms of the Governance Agreement. As a result, Serafina S.A. and certain related parties named in footnote (2) above, SLP III Investment Holdings S.à r.l. and certain related parties named in footnote (3) above and David McGlade may be deemed to constitute a "group" that beneficially owns approximately 67.6% of our common shares for purposes of Section 13(d)(3) of the Act. Each of Serafina S.A., SLP III Investment Holdings S.à r.l., their respective related parties and David McGlade disclaim beneficial ownership of any common shares held by the other parties to the Governance Agreement.

Item 7. Major Shareholders and Related Party Transactions

A. Major Shareholders

See Item 6E—Share Ownership.

B. Related Party Transactions

None.

C. Interests of experts and counsel

Not applicable.

Item 8. Financial Information

A. Consolidated Statements and Other Financial Information

Our consolidated financial statements are filed under this item, beginning on page F-1 of this Annual Report on Form 20-F. The financial statement schedules required under Regulation S-X are filed pursuant to Item 18 and Item 19 on Form 20-F.

Legal Proceedings

We are subject to litigation in the ordinary course of business, but management does not believe that the resolution of any pending proceedings would have a material adverse effect on our financial position or results of operations.

Dividend Policy

We do not expect to pay dividends or other distributions on our common shares in the foreseeable future. We currently intend to retain any future earnings for working capital and general corporate purposes, which could include the financing of operations or the repayment, redemption, retirement or repurchase in the open market of our indebtedness. Under Luxembourg law, the amount and payment of dividends or other distributions is determined by a simple majority vote at a general shareholders' meeting based on the recommendation of our board of directors, except in certain limited circumstances. Pursuant to our articles of incorporation, the board of directors has the power to pay interim dividends or make other distributions in accordance with applicable Luxembourg law. Distributions may be lawfully declared and paid if our net profits and/or distributable reserves are sufficient under Luxembourg law. All of our common shares rank *pari passu* with respect to the payment of dividends or other distributions unless the right to dividends or other distributions has been suspended in accordance with our articles of incorporation or applicable law.

Under Luxembourg law, up to 5% of our net profits per year must be allocated to the creation of a legal reserve until such reserve has reached an amount equal to 10% of our issued share capital. The allocation to the legal reserve becomes compulsory again when the legal reserve no longer represents 10% of our issued share capital. The legal reserve is not available for distribution.

We are a holding company and have no material assets other than our indirect ownership of shares in our operating subsidiaries. If we were to pay a dividend or other distribution on our common shares at some point in the future, we would cause the operating subsidiaries to make distributions to us in an amount sufficient to cover any such dividends. Our subsidiaries' ability to make distributions to us is restricted under certain of their debt and other agreements.

B. Significant Changes

No significant change has occurred since the date of the annual financial statements included in this Annual Report on Form 20-F.

Item 9. The Offer and Listing

A. Offering and Listing Details

Since our IPO on April 23, 2013, our common shares have traded on the NYSE under the symbol "I".

The following table sets forth the high and low trading prices on the NYSE for our common shares for the periods indicated.

	Trading Price (US\$) Price per Common Share	
E. H. Einangial Wassering Listing	High	Low
Full Financial Year since listing	22.77	15 21
Year ended December 31, 2014	22.77	15.31
Year ended December 31, 2015	18.00	3.66
Year ended December 31, 2016	4.50	1.44
Year ended December 31, 2017	7.47	2.63
Full Financial Quarters for 2016 and 2017		
First Quarter Ended March 31, 2016	4.27	1.44
Second Quarter Ended June 30, 2016	4.14	2.12
Third Quarter Ended September 30, 2016	3.23	2.12
Fourth Quarter Ended December 31, 2016	4.50	2.38
First Quarter Ended March 31, 2017	5.87	2.71
Second Quarter Ended June 30, 2017	4.52	2.63
Third Quarter Ended September 30, 2017	5.05	2.97
Fourth Quarter Ended December 31, 2017	7.47	3.01
Last six months		
August 2017	4.13	3.20
September 2017	5.05	3.69
October 2017	7.47	4.22
November 2017	4.45	3.50
December 2017	3.85	3.01
January 2018	3.73	2.73

B. Plan of Distribution

Not applicable.

C. Markets

See item 9A—Offering and Listing Details.

D. Selling Shareholders

Not applicable.

E. Dilution

Not applicable.

F. Expenses of the Issue

Not applicable.

Item 10. Additional Information

A. Share Capital

Not applicable.

B. Memorandum and Articles of Association

A copy of our amended and restated consolidated articles of incorporation is being filed as an exhibit to this Annual Report, and is incorporated herein by reference. The information called for by this Item 10B—"Additional Information—Memorandum and Articles of Association" has been reported previously in our Registration Statement on Form F-1, as amended (File No. 333-181527), initially filed with the SEC on May 18, 2012, under the heading "Description of Share Capital," and in our Annual Report on Form 20-F as amended (File No. 001-35878), initially filed with the SEC on February 28, 2017, under the heading "Additional Information – memorandum and Articles of Association," and is incorporated by reference into this Annual Report. There are no limitations on the rights to own securities, including the rights of non-resident or foreign shareholders to hold or exercise voting rights on the securities imposed by the laws of Luxembourg or by our articles of incorporation.

C. Material Contracts

The following is a summary of each material contract, other than material contracts entered into in the ordinary course of business, to which we are a party, for the two years immediately preceding the date of this Annual Report:

Employment Agreements and Other Arrangements

See summary of Employment Agreements provided under Item 6B above. From time to time, we also enter into other compensation agreements and retention mechanisms with our executive officers.

Equity Compensation Agreements

Equity Grant Agreements under 2008 Equity Plan

Certain of our executive officers hold options granted under the 2008 Equity Plan that are subject to forfeiture and other restrictions as set forth in the executive officers' respective award agreements.

Option and Restricted Share Unit Agreements under 2013 Equity Plan

Certain of our executive officers hold restricted share units ("RSUs") and option agreements under our 2013 Equity Plan that vest as follows:

- RSUs which vest based on continued service or achievement of one or more long-term performance and financial metrics over two to three years;
 and
- options to purchase common shares at exercise prices of \$3.29 per share, \$3.77 per share and \$27.00 per share, which are fully vested or vest based on continued service over 2 to 3 years and expire on the 10th anniversary of the date of grant.

Shareholders and Other Agreements Providing for Registration Rights

Intelsat is a party to three shareholders agreements: a management shareholders agreement (as amended, the "Management Shareholders Agreement") with the Sponsors and certain members of management (the "Management Shareholders"), including Mr. McGlade; a shareholders agreement (as amended, the "Sponsors Shareholders Agreement") with the Sponsors; and a shareholders agreement (as amended, the "Other Equity Investors Shareholders Agreement") with the Sponsors and two additional shareholders (the "Other Equity Investors").

Registration Rights

Under the Sponsors Shareholders Agreement, the Other Equity Investors Shareholders Agreement and letter agreements with certain executives and former executives, we have granted the Sponsors, the Other Equity Investors and Mr. McGlade and certain former executives certain registration rights. Subject to certain exceptions, including the Company's right to defer a demand registration under certain circumstances, the Sponsors are entitled to unlimited demand registrations. Under the respective agreement, each Sponsor, each Other Equity Investor and Mr. McGlade and certain former executives are entitled to piggyback registration rights with respect to any registrations by the Company for its own account or for the account of other shareholders (or in the case of Mr. McGlade and former executives, solely the Sponsors), subject to certain exceptions. The registration rights are subject to customary limitations and exceptions, including the Company's right to withdraw or defer the registration or a sale pursuant thereto in certain circumstances and certain cutbacks by the underwriters if marketing factors require a limitation on the number of shares to be underwritten in a proposed offering.

In connection with the registrations described above, the Company has agreed to indemnify the shareholders against certain liabilities. In addition, except for the Sponsors Shareholders Agreement, which provides that certain fees, costs and expenses will be paid *pro rata* by the Company and selling shareholders based on the number of securities to be sold in the offering, the Company will bear all fees, costs and expenses (excluding underwriting discounts and commissions and similar brokers' fees, transfer taxes and certain costs of more than one counsel for the selling shareholders).

Governance Agreement

Prior to the consummation of the IPO, we entered into the Governance Agreement with the BC Shareholder, the Silver Lake Shareholder and Mr. McGlade (as amended from time to time, the "Governance Agreement").

Board of Directors

The Governance Agreement provided for the composition of our board of directors at the completion of our IPO, and thereafter, including:

- Our Executive Chairman and former Chief Executive Officer, Mr. McGlade;
- Four directors nominated by the BC Shareholder (our current Chief Executive Officer, Mr. Spengler, is currently serving in this capacity);
- · One director nominated by the Silver Lake Shareholder; and
- Three independent directors (Messrs. Kangas, Diercksen and Callahan are currently serving in these roles).

The Governance Agreement also provides that we will appoint additional independent directors to our board as necessary to comply with SEC rules or NYSE rules, in which case each of the BC Shareholder and the Silver Lake Shareholder will be entitled to a proportionate increase in the number of directors it is entitled to nominate.

In addition, the Governance Agreement provides that the BC Shareholder has the right to nominate four directors for election to the board as long as the BC Shareholder owns at least 35% of our outstanding common shares on a fully diluted basis, after giving effect to convertible and exchange securities held by the BC Shareholder. However, the BC Shareholder's nomination rights will decrease if the BC Shareholder's ownership is less than 35% as follows:

	Number of Directors
	to be Nominated
	by the BC
Percentage Ownership of BC Shareholder	Shareholder
25% or greater but less than 35%	3
15% or greater but less than 25%	2
5% or greater but less than 15%	1

The Silver Lake Shareholder has the right to nominate one director for election to the board as long as the Silver Lake Shareholder owns at least the lesser of (x) 50% of the common shares held by it on the date of the Governance Agreement, April 23, 2013, and (y) shares representing at least 5% of our outstanding common shares. If either the BC Shareholder or the Silver Lake Shareholder is not entitled to nominate a director for election to the board but remains a shareholder, it will be entitled to certain information rights.

In the event that the BC Shareholder's or Silver Lake Shareholder's nomination rights are decreased as described above, each shareholder will agree to cause their respective director or directors to resign from the board as appropriate to reflect the decrease, and, subject to the rights described above, the majority of the remaining directors on the board may fill such vacancy with any person other than a person affiliated with the BC Shareholder or the Silver Lake Shareholder.

We have agreed to include the director nominees proposed by the BC Shareholder and Silver Lake Shareholder on each slate of nominees for election to the board, to recommend the election of those nominees to our shareholders and to use commercially reasonable efforts to have them elected to the board.

Voting Agreements

Under the Governance Agreement, each of the BC Shareholder, the Silver Lake Shareholder and Mr. McGlade has agreed to vote all shares held by it or him in favor of the directors nominated as described above and in furtherance of the removal of any directors by the BC Shareholder or the Silver Lake Shareholder under the terms of the Governance Agreement.

Other Provisions

Under the Governance Agreement, the Silver Lake Shareholder has certain tag-along rights on transfers by the BC Shareholder, and the BC Shareholder has drag-along rights with respect to the Silver Lake Shareholder under certain circumstances. The Governance Agreement also contains customary confidentiality provisions.

Termination

The Governance Agreement will terminate upon the earlier of (i) the tenth anniversary of the date of the agreement and (ii) the day on which the BC Shareholder and the Silver Lake Shareholder no longer are entitled to nominate directors under the Governance Agreement.

Indemnification Agreements

We have entered into agreements with our executive officers and directors to provide contractual indemnification in addition to the indemnification provided for in our articles of incorporation.

Debt Agreements

For a summary of the terms of our material debt agreements, see Note 12 to our consolidated financial statements included elsewhere in this Annual Report. In addition, with regard to all the notes issued by Intelsat Luxembourg, ICF and Intelsat Jackson, the following covenants and events of default apply:

Covenants that limit the issuers, and in some cases some of the issuers' subsidiaries', ability to:

- incur additional debt or issue disqualified or preferred stock;
- · pay dividends or repurchase shares of Intelsat Jackson or any of its parent companies;
- · make certain investments;
- · enter into transactions with affiliates;
- merge, consolidate and sell assets; and
- · incur liens on any of their assets securing other indebtedness, unless the applicable notes are equally and ratably secured.

Events of Default

- default in payments of interest after a 30-day grace period or a default in the payment of principal when due;
- default in the performance of any covenant in the indenture that continues for more than 60 days after notice of default has been provided to the issuer:
- failure to make any payment when due, including applicable grace periods, under any indebtedness for money borrowed by Intelsat Luxembourg, ICF, Intelsat Jackson or a significant subsidiary thereof having a principal amount in excess of \$75 million;
- the acceleration of the maturity of any indebtedness for money borrowed by Intelsat Luxembourg, ICF, Intelsat Jackson or a significant subsidiary thereof having a principal amount in excess of \$75 million;
- · insolvency or bankruptcy of Intelsat Luxembourg, ICF, Intelsat Jackson or a significant subsidiary thereof; and
- failure by Intelsat Luxembourg, ICF, Intelsat Jackson or a significant subsidiary thereof to pay final judgments aggregating in excess of \$75 million, which are not discharged, waived or stayed for 60 days after the entry thereof.

If any event of default occurs and is continuing with respect to the notes, the trustee or the holders of at least 25% in principal amount of the notes may declare the entire principal amount of the notes to be immediately due and payable. If any event of default with respect to the notes occurs because of events of bankruptcy, insolvency or reorganization, the entire principal amount of the notes will be automatically accelerated, without any action by the trustee or any holder.

Terminated Combination Agreement with OneWeb and Share Purchase Agreement with SoftBank

In February 2017, Intelsat entered into a combination agreement (as amended, the "Combination Agreement") with WorldVu Satellites Limited ("OneWeb"), which provided for a combination of the businesses of Intelsat and OneWeb pursuant to a merger (the "OneWeb Combination"), and Intelsat entered into a share purchase agreement (as amended, the "Share Purchase Agreement") with SoftBank Group Corp. ("SoftBank"), which provided for a cash investment by SoftBank in exchange for shares of Intelsat (the "SoftBank Investment" and, together with the OneWeb Combination, the "OneWeb/SoftBank Transactions"). The consummation of the OneWeb/SoftBank Transactions was conditioned on the successful completion of debt exchange offers for certain outstanding notes of Intelsat Jackson, Intelsat Luxembourg and ICF. In June 2017, Intelsat announced that the debt exchange offers had expired without sufficient tenders having been received, and Intelsat subsequently received termination notices from OneWeb and SoftBank terminating the Combination Agreement and Share Purchase Agreement, respectively.

D. Exchange Controls

We are not aware of any governmental laws, decrees, regulations or other legislation in Luxembourg that restrict the export or import of capital, including the availability of cash and cash equivalents for use by our affiliated companies, or that affect the remittance of dividends, interest or other payments to non-resident holders of our securities.

E. Taxation

The following sets forth material Luxembourg income tax consequences of an investment in our common shares. It is based upon laws and relevant interpretations thereof in effect as of the date of this Annual Report, all of which are subject to change. This discussion does not deal with all possible tax consequences relating to an investment in our common shares, such as the tax consequences under U.S. federal, state, local and other tax laws.

Material Luxembourg Tax Considerations for Holders of Shares

The following is a summary discussion of certain Luxembourg tax considerations of the acquisition, ownership and disposition of your common shares that may be applicable to you if you acquire our common shares. This does not purport to be a comprehensive description of all of the tax considerations that may be relevant to any of our common shares or the Holders thereof, and does not purport to include tax considerations that arise from rules of general application or that are generally assumed to be known to Holders. This discussion is not a complete analysis or listing of all of the possible tax consequences of such transactions and does not address all tax considerations that might be relevant to particular Holders in light of their personal circumstances or to persons that are subject to special tax rules.

It is not intended to be, nor should it be construed to be, legal or tax advice. This discussion is based on Luxembourg laws and regulations as they stand on the date of this Annual Report and is subject to any change in law or regulations or changes in interpretation or application thereof (and which may possibly have a retroactive effect). Prospective investors should therefore consult their own professional advisers as to the effects of state, local or foreign laws and regulations, including Luxembourg tax law and regulations, to which they may be subject.

As used herein, a "Luxembourg individual" means an individual resident in Luxembourg who is subject to personal income tax (*impôt sur le revenu*) on his or her worldwide income from Luxembourg or foreign sources, and a "Luxembourg corporate Holder" means a company (that is, a fully taxable entity within the meaning of Article 159 of the Luxembourg Income Tax Law) resident in Luxembourg subject to corporate income tax (*impôt sur le revenu des collectivités*) and municipal business tax (*impôt commercial communal*) on its worldwide income from Luxembourg or foreign sources. For purposes of this summary, Luxembourg individuals and Luxembourg corporate Holders are collectively referred to as "Luxembourg Holders." A "non-Luxembourg Holder" means any investor in our common shares other than a Luxembourg Holder.

Tax Regime Applicable to Realized Capital Gains

Luxembourg Holders

Luxembourg resident individual Holders

Capital gains realized by Luxembourg resident individuals who do not hold their shares as part of a commercial or industrial or independent business and who hold no more than 10% of the share capital of the Company will only be taxable if they are realized on a sale of common shares that takes place before their acquisition or within the first six months following their acquisition. If such is the case, capital gains will be taxed at ordinary rates according to the progressive income tax schedule plus surcharges.

For Luxembourg resident individuals holding (alone or together with his/her spouse or civil partner and underage children), directly or indirectly, more than 10% of the capital of the Company at any time during the five years prior to the sale (or if the Luxembourg resident individuals have received the shares for no consideration within the last five years and that the former holder held at least 10% in the capital of the Company at any moment during said five years), capital gains will be taxable, regardless of the holding period. In case of a sale after six months from acquisition, the capital gain is subject to tax as extraordinary income subject to the half-global rate method. Within the six month period, capital gains will be taxed at ordinary rates according to the progressive income tax schedule plus surcharges.

If such shares are held as part of a commercial or industrial business, capital gains would be taxable in the same manner as income from such business.

Luxembourg resident corporate Holders

Capital gains realized upon the disposal of common shares by a fully taxable Luxembourg resident corporate Holder will in principle be subject to corporate income tax and municipal business tax. The combined applicable rate (including an unemployment fund contribution) is 27.08% for the fiscal year ending 2017 for a Luxembourg resident corporate Holder established in Luxembourg-City. An exemption from such taxes may be available to the Luxembourg resident corporate Holder pursuant to Article 166 of the Luxembourg Income Tax law subject to the fulfillment of the conditions set forth therein. The scope of the capital gains exemption can be limited in the cases provided by the Grand Ducal Decree of December 21, 2001, as amended.

Non-Luxembourg Holders

An individual who is a non-Luxembourg Holder of shares (and who does not have a permanent establishment, a permanent representative or a fixed place of business in Luxembourg) will only be subject to Luxembourg taxation on capital gains arising upon disposal of such shares if such non-Luxembourg Holder has (alone or together with his or her spouse or civil partner and underage children), directly or indirectly held, more than 10% of the capital of the Company at any time during the past five years, and either (i) such non-Luxembourg Holder has been a resident of Luxembourg for tax purposes for at least 15 years and has become a non-resident within the last five years preceding the realization of the gain, subject to any applicable tax treaty, or (ii) the disposal of shares occurs within six months from their acquisition (or prior to their actual acquisition), subject to any applicable tax treaty.

A corporate non-Luxembourg Holder which has a permanent establishment, a permanent representative or a fixed place of business in Luxembourg to which shares are attributable, will bear corporate income tax and municipal business tax on a gain realized on a disposal of such shares as set forth above for a Luxembourg corporate Holder. However, gains realized on the sale of the shares may benefit from the full exemption provided for by Article 166 of the Luxembourg Income Tax Law and by the Grand Ducal Decree of December 21, 2001, as amended, subject in each case to fulfillment of the conditions set out therein.

A corporate non-Luxembourg Holder, which has no permanent establishment in Luxembourg to which the shares are attributable, will bear corporate income tax and municipal business tax on a gain realized on a disposal of such shares under the same conditions applicable to an individual non-Luxembourg Holder, as set out above under (ii).

Tax Regime Applicable to Distributions

Withholding tax

Distributions imputed for tax purposes on current or accumulated profits are subject to a withholding tax of 15%. Distributions sourced from a reduction of capital as defined in Article 97 (3) of the Luxembourg Income Tax Law, including, among others, share premium, should not be subject to withholding tax, provided no newly accumulated fiscal profits are recognized. For the foreseeable future, we do not expect to recognize newly accumulated fiscal profits in the relevant annual standalone accounts of the Company prepared under Luxembourg GAAP, and so, on that basis, distributions should not be subject to Luxembourg withholding tax.

To the extent, however, that the Company would recognize, against our expectation, newly accumulated fiscal profits in its annual standalone accounts prepared under Luxembourg GAAP, there will be a 15% withholding tax, unless one of the below exemptions or reductions is available for the dividend recipient.

The rate of the withholding tax may be reduced pursuant to any applicable double taxation treaty existing between Luxembourg and the country of residence of the relevant Holder, subject to the fulfillment of the conditions set forth therein.

No withholding tax applies if the distribution is made to (i) a Luxembourg resident corporate Holder (that is, a fully taxable entity within the meaning of Article 159 of the Luxembourg Income Tax Law), (ii) an undertaking of collective character which is resident of a Member State of the European Union and is referred to by article 2 of the Council Directive 2011/96/EU of 30 November 2011, as amended, and concerning the common fiscal regime applicable to parent and subsidiary companies of different member states (subject to the general anti-abuse rule provided for by Council Directive 2015/121/EU as implemented into Luxembourg laws), (iii) a corporation or a cooperative company resident in Norway, Iceland or Liechtenstein and subject to a tax comparable to corporate income tax as provided by the Luxembourg Income Tax Law, (iv) an undertaking with a collective character subject to a tax comparable to corporate income tax as provided by the Luxembourg Income Tax Law which is resident in a country that has concluded a tax treaty with Luxembourg, (v) a corporation company resident in Switzerland which is subject to corporate income tax in Switzerland without benefiting from an exemption and (vi) a Luxembourg permanent establishment of one of the aforementioned categories under (i) to (iv), provided that at the date of payment, the Holder holds or commits to hold directly or through a tax transparent vehicle, during an uninterrupted period of at least twelve months, shares representing at least 10% of the share capital of the Company or acquired for an acquisition price of at least EUR 1.2 million.

Income Tax

Luxembourg individual Holders

Luxembourg individual Holders must include the distributions paid on the shares in their taxable income. However, 50% of the amount of such dividends may be exempted from tax under the Luxembourg Income Tax Law. The applicable withholding tax can, under certain conditions, entitle the relevant Luxembourg Holder to a tax credit.

Luxembourg resident corporate Holders

Luxembourg resident corporate Holders can benefit from an exemption of 100% of the amount of a dividend received provided that, at the date when the income is made available, they hold or commit to hold a participation of minimum 10% of the share capital of the Company or which has an acquisition price equivalent to minimum EUR 1.2 million for an uninterrupted period of at least 12 months.

Net Wealth Tax

Luxembourg Holders

Luxembourg net wealth tax will not be levied on a Luxembourg Holder with respect to the shares held unless (i) the Luxembourg Holder is a legal entity subject to net wealth tax in Luxembourg; or (ii) the shares are attributable to an enterprise (other than of an individual Holder) or part thereof which is carried on through a permanent establishment, a fixed place of business or a permanent representative in Luxembourg.

Net wealth tax is levied annually at a digressive rate depending on the amount of the net wealth of the above, as determined for net wealth tax purposes (i.e., 0.5% on amounts up to EUR 500 million and 0.05% on the amount of taxable net wealth exceeding EUR 500 million).

The shares of the Company may be exempt from net wealth tax subject to the conditions set forth by Paragraph 60 of the Law of October 16, 1934 on the valuation of assets (*Bewertungsgesetz*), as amended.

Non-Luxembourg Holders

Luxembourg net wealth tax will not be levied on a non-Luxembourg Holder with respect to the shares held unless the shares are attributable to an enterprise of a non-Luxembourg corporate Holder or part thereof which is carried on through a permanent establishment or a permanent representative in Luxembourg.

Stamp and Registration Taxes

No registration tax or stamp duty will be payable by a Holder of shares in Luxembourg solely upon the disposal of shares by sale or exchange.

Estate and Gift Taxes

No estate or inheritance tax is levied on the transfer of shares upon the death of a Holder of shares in cases where the deceased was not a resident of Luxembourg for inheritance tax purposes, and no gift tax is levied upon a gift of shares if the gift is not passed before a Luxembourg notary or recorded in a deed registered in Luxembourg. Where a Holder of shares is a resident of Luxembourg for tax purposes at the time of his or her death, the shares are included in his or her taxable estate for inheritance tax or estate tax purposes.

F. Dividends and Paying Agents

Not applicable.

G. Statements by Experts

Not applicable.

H. Documents on Display

Documents concerning us that are referred to herein may be inspected at our principal executive offices at 4, rue Albert Borschette, L-1246 Luxembourg. Those documents, which include our registration statements, periodic reports and other documents which were filed with or furnished to the SEC, may be obtained electronically from the Investors section of our website at www.intelsat.com, from the SEC's website at www.sec.gov or from the SEC public reference room at 100 F Street, N.E., Room 1580, Washington, D.C. 20549. Further information on the operation of the public reference rooms may be obtained by calling the SEC at 1-202-551-8909. Copies of documents can also be requested from the SEC public reference rooms for a copying fee at prescribed rates.

I. Subsidiary Information

Not applicable.

Item 11. Quantitative and Qualitative Disclosures About Market Risk

Interest Rate Risk

The satellite communications industry is a capital intensive, technology driven business. We are subject to interest rate risk primarily associated with our borrowings. Interest rate risk is the risk that changes in interest rates could adversely affect earnings and cash flows. Specific interest rate risks include: the risk of increasing interest rates on short-term debt; the risk of increasing interest rates for planned new fixed-rate long-term financings; and the risk of increasing interest rates for planned refinancings using long-term fixed-rate debt.

Excluding the impact of our outstanding interest rate swaps, approximately, 79% of our debt, or \$11.4 billion principal amount of our debt as at December 31, 2016 and December 31, 2017 was fixed-rate debt. We perform interest rate sensitivity analyses on our variable-rate debt. Based on the level of fixed-rate debt outstanding at December 31, 2017, a 100 basis point decrease in market rates would result in an increase in fair value of this fixed-rate debt of approximately \$381.0 million. These analyses indicate that a 100 basis point increase in interest rates would have an annual impact of approximately \$31.0 million on our consolidated statements of operations and cash flows as of December 31, 2017. While our variable-rate debt may impact earnings and cash flows as interest rates change, it is not subject to changes in fair values.

As of December 31, 2017, we held interest rate caps with an aggregate notional amount of \$2.4 billion, which mature in February 2021. These caps were entered into to mitigate the risk of interest rate increase on the floating rate term loans under our senior secured credit facilities. Under the terms of the interest rate caps, if LIBOR exceeds 2% prior to the 3 year expiration date, the Company will receive the resulting increase in interest payment required to the term loan holders from the counterparties to the arrangement.

These interest rate caps have not been designated for hedge accounting treatment in accordance with the Derivatives and Hedging topic of the Codification, as amended and interpreted, and the changes in fair value of these instruments are recognized in earnings during the period of change.

Foreign Currency Risk

We do not currently use material foreign currency derivatives to hedge our foreign currency exposures. Substantially all of our customer contracts, capital expenditure contracts and operating expense obligations are denominated in U.S. dollars. Consequently, we are not exposed to material foreign currency exchange risk. However, the service contracts with our Brazilian customers provide for payment in Brazilian *reais*. Accordingly, we are subject to the risk of a reduction in the value of Brazilian *reais* as compared to U.S. dollars in connection with payments made by Brazilian customers, and our exposure to fluctuations in the exchange rate for Brazilian *reais* is ongoing. However, the rates payable under our service contracts with Brazilian customers are adjusted annually to account for inflation in Brazil, thereby partially mitigating the risk. For the years ended December 31, 2015, 2016 and 2017 our Brazilian customers represented approximately 4.2%, 3.7% and 4.0% of our revenue, respectively. Transactions in other currencies are converted into U.S. dollars using exchange rates in effect on the dates of the transactions.

Item 12. Description of Securities Other than Equity Securities

Not applicable.

PART II

Item 13. Defaults, Dividend Arrearages and Delinquencies

Not applicable.

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

Not applicable.

Item 15. Controls and Procedures

(a) Disclosure Controls and Procedures

Disclosure controls and procedures are controls and procedures that are designed to ensure that information required to be disclosed by us in reports that we file or furnish under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. We periodically review the design and effectiveness of our disclosure controls and procedures worldwide, including compliance with various laws and regulations that apply to our operations. We make modifications to improve the design and effectiveness of our disclosure controls and procedures, and may take other corrective action, if our reviews identify a need for such modifications or actions. In designing and evaluating the disclosure controls and procedures, we recognize that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving the desired control objectives.

We have carried out an evaluation, under the supervision and with the participation of our management, including our principal executive officer and our principal financial officer, of the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rule 13a-15(e) and 15d-15(e) under the Exchange Act), as of the year ended December 31, 2017. Based upon that evaluation, our principal executive officer and our principal financial officer concluded that our disclosure controls and procedures were effective as of December 31, 2017.

(b) Management's Annual Report on Internal Control over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework set forth in *Internal Control—Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework). Based on our evaluation, management has concluded that our internal control over financial reporting was effective as of December 31, 2017.

(c) Attestation Report of the Registered Public Accounting Firm

See the report of KPMG LLP, an independent registered public accounting firm, included under "Item 18. Financial Statements" on pages F-2 and F-3 of this Annual Report.

(d) Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting during the year ended December 31, 2017 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Item 16. [Reserved]

Item 16A. Audit Committee Financial Expert

The board of directors has determined that each of Messrs. Kangas and Diercksen qualifies as an audit committee financial expert, as defined in Item 16A of Form 20-F, and that Messrs. Kangas and Diercksen are also "independent," as defined in Rule 10A-3 under the Exchange Act and applicable NYSE standards. For more information about Messrs. Kangas and Diercksen, see Item 6A—Directors, Senior Management and Employees—Directors and Senior Management.

Item 16B. Code of Ethics

We have adopted a Code of Ethics for Senior Financial Officers, including our chief executive officer, chief financial officer, principal accounting officer, controller and any other person performing similar functions. The Code of Ethics is posted on our website at www.intelsat.com. We intend to disclose on our website any amendments to or waivers of this Code of Ethics.

Item 16C. Principal Accountant Fees and Services

Audit Fees

Our audit fees were \$2.4 million and \$2.9 million for the years ended 2016 and 2017, respectively.

Audit-Related Fees

Our audit-related fees were \$0.2 million and \$0.6 million for the years ended 2016 and 2017, respectively.

Tax Fees

Our tax fees paid to our principal accountants were \$20,000 and none for the years ended 2016 and 2017, respectively. The 2016 fees were primarily associated with U.S. state taxation.

All Other Fees

All other fees paid to our principal accountants were \$150,000 for each of the two years 2016 and 2017. Our other fees for 2016 and 2017 included fees associated with attestation of IT security controls.

Audit Committee Pre-Approval Policies and Procedures

Consistent with SEC requirements regarding auditor independence, the audit committee has adopted a policy to pre-approve services to be provided by our independent registered public accounting firm prior to commencement of the specified service. The requests for pre-approval are submitted to the audit committee, or a designated member of the audit committee, by our Chief Financial Officer or Controller, and the audit committee chairman executes engagement letters with our independent registered public accounting firm following approval by audit committee members, or the designated member of the audit committee. All services performed by KPMG LLP during 2017 were pre-approved by the audit committee.

Item 16D. Exemptions from the Listing Standards for Audit Committees

Not applicable.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

Not applicable.

Item 16F. Change in Registrants' Certifying Accountant

Not applicable.

Item 16G. Corporate Governance

Our common shares are listed on the NYSE. For purposes of NYSE rules, so long as we are a foreign private issuer, we are eligible to take advantage of certain exemptions from NYSE corporate governance requirements provided in the NYSE rules. We are required to disclose the significant ways in which our corporate governance practices differ from those that apply to U.S. companies under NYSE listing standards. Set forth below is a summary of these differences:

Director Independence—The NYSE rules require domestic companies to have a majority of independent directors, but as a foreign private issuer we are exempt from this requirement. Our board of directors consists of seven members and we believe that three of our board members satisfy the "independence" requirements of the NYSE rules.

Board Committees—The NYSE rules require domestic companies to have a compensation committee and a nominating and corporate governance committee composed entirely of independent directors, but as a foreign private issuer we are exempt from these requirements. We have a compensation committee comprised of three members, and we believe that two of the committee members satisfy the "independence" requirements of the NYSE rules. We do not have a nominating and corporate governance committee.

Item 16H. Mine Safety Disclosure

Not applicable.

PART III

Item 17. Financial Statements

Not applicable.

Item 18. Financial Statements

(a)(1) The following financial statements are included in this Annual Report on Form 20-F:

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Report of Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets as of December 31, 2016 and 2017	F-4
Consolidated Statements of Operations for the Years Ended December 31, 2015, 2016 and 2017	F-5
Consolidated Statements of Comprehensive Income (Loss) for the Years Ended December 31, 2015, 2016 and 2017	F-6
Consolidated Statements of Changes in Shareholders' Deficit for the Years Ended December 31, 2015, 2016 and 2017	F-7
Consolidated Statements of Cash Flows for the Years Ended December 31, 2015, 2016 and 2017	F-8
Notes to Consolidated Financial Statements	F-10
(a)(2) The following Financial Statement schedule is included in this Annual Report on Form 20-F:	
Schedule II—Valuation and Qualifying Accounts for the Years Ended December 31, 2015, 2016 and 2017	F-59

Item 19. Exhibits

The following exhibits are filed as part of this Annual Report:

EXHIBIT INDEX

Exhibit No.	Document Description
1.1	Consolidated Articles of Incorporation of Intelsat S.A., as amended on June 15, 2017.*
2.1	Indenture for Intelsat Jackson Holdings S.A.'s 7_1/4% Senior Notes due 2020, dated as of September 30, 2010, by and among Intelsat Jackson Holdings S.A., as Issuer, Intelsat S.A. and Intelsat (Luxembourg) S.A., as Parent Guarantors, the subsidiary guarantors named therein and Wells Fargo Bank, National Association, as Trustee (including the forms of the 2020 Jackson Notes) (incorporated by reference to Exhibit 4.1 of Intelsat Investments S.A.'s Current Report on Form 8-K, File No. 000-50262, filed on October 4, 2010).
2.2	First Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 7_1/4% Senior Notes due 2020, dated as of January 12, 2011, by and among Intelsat Jackson Holdings S.A., certain subsidiaries of Intelsat Jackson Holdings S.A. named therein and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.6 of Intelsat Investments S.A.'s Current Report on Form 8-K, File No. 000-50262, filed on January 19, 2011).
2.3	Second Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 7.1/4% Senior Notes due 2020, dated as of April 12, 2011, by and among Intelsat (Poland) Sp. z.o.o., Intelsat Jackson Holdings S.A., as Issuer, and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.3 of Intelsat Investments S.A.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2011, File No. 000-50262, filed on November 8, 2011).
2.4	Third Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 7.1/4% Senior Notes due 2020, dated as of December 16, 2011, by and among Intelsat Jackson Holdings S.A., as Issuer, and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.1 of Intelsat Investments S.A.'s Current Report on Form 8-K, File No. 000-50262, filed on December 16, 2011).
2.5	Fourth Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 7_1/4% Senior Notes due 2020, dated as of April 25, 2012, by and among Intelsat Jackson Holdings S.A., as Issuer, Intelsat Subsidiary (Gibraltar) Limited, Intelsat New Dawn (Gibraltar) Limited and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.1 of Intelsat Investments S.A.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, File No. 000-50262, filed on May 8, 2012).
2.6	Fifth Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 7_1/4% Senior Notes due 2020, dated as of July 31, 2012, by and among Intelsat Jackson Holdings S.A., as Issuer, Intelsat Luxembourg Investment S.à r.l. and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.4 of Intelsat Investments S.A.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, File No. 000-50262, filed on August 1, 2012).
2.7	Sixth Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 7.1/4% Senior Notes due 2020, dated as of January 31, 2013, by and among Intelsat Jackson Holdings S.A., as Issuer, Intelsat Align S.à r.l., Intelsat Finance Nevada LLC and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.18 of Intelsat Investments S.A.'s Annual Report on Form 10-K, File No. 000-50262, filed on February 28, 2013).
2.8	Seventh Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 7_1/4% Senior Notes due 2020, dated as of May 20, 2013, by and among Intelsat S.A., Intelsat Investment Holdings S.à r.l., Intelsat Holdings S.A., each as a Guarantor, Intelsat Jackson Holdings S.A., as Issuer, and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 2.8 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on February 20, 2014).
2.9	Eighth Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 7.1/4% Senior Notes due 2020, dated as of June 28, 2013, by and among Intelsat Finance Bermuda Ltd., as guarantor, Intelsat Jackson Holdings S.A., as Issuer, and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 2.19 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on February 20, 2014).
2.10	Ninth Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 7_1/4% Senior Notes due 2020, dated as of November 25, 2015, by and among Intelsat Ireland Operations Limited, as guarantor, Intelsat Jackson Holdings S.A., as Issuer, and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 2.10 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on March 8, 2016).
2.11	Tenth Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 7_1/4% Senior Notes due 2020, dated as of December 22, 2016, by and among Intelsat Connect Finance S.A., as New Guarantor, Intelsat Jackson Holdings S.A., as Issuer, and U.S. Bank National Association, as Trustee (incorporated by reference to Exhibit 2.11 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 000-35878, filed on February 28, 2017, as amended).

Exhibit No.	Document Description
2.12	Indenture for Intelsat Jackson Holdings S.A.'s 7_1/2 % Senior Notes due 2021, dated as of April 5, 2011, by and among Intelsat Jackson Holdings S.A., as Issuer, Intelsat S.A. and Intelsat (Luxembourg) S.A., as Parent Guarantors, the subsidiary guarantors named therein and Wells Fargo Bank, National Association, as Trustee (including the forms of the New Jackson Notes) (incorporated by reference to Exhibit 4.1 of Intelsat Investments S.A.'s Current Report on Form 8-K, File No. 000-50262, filed on April 5, 2011).
2.13	First Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 7,1/2% Senior Notes due 2021, dated as of April 12, 2011, by and among Intelsat (Poland) Sp. z.o.o., Intelsat Jackson Holdings S.A., as Issuer, and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.4 of Intelsat Investments S.A.'s Quarterly Report on Form 10-Q for the quarter ended September 30, 2011, File No. 000-50262, filed on November 8, 2011).
2.14	Second Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 7.1/2% Senior Notes due 2021, dated as of July 31, 2012, by and among Intelsat Jackson Holdings S.A., as Issuer, Intelsat Luxembourg Investment S.à r.l. and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.3 of Intelsat Investments S.A.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, File No. 000-50262, filed on August 1, 2012).
2.15	Third Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 7.1/2% Senior Notes due 2021, dated as of January 31, 2013, by and among Intelsat Jackson Holdings S.A., as Issuer, Intelsat Align S.à r.l., Intelsat Finance Nevada LLC and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.22 of Intelsat Investments S.A.'s Annual Report on Form 10-K, File No. 000-50262, filed on February 28, 2013).
2.16	Fourth Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 7_1/2% Senior Notes due 2021, dated as of May 20, 2013, by and among Intelsat S.A., Intelsat Investment Holdings S.à r.l., Intelsat Holdings S.A., each as a Guarantor, Intelsat Jackson Holdings S.A., as Issuer, and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 2.24 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on February 20, 2014).
2.17	Fifth Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 7_1/2% Senior Notes due 2021, dated as of June 28, 2013, by and among Intelsat Finance Bermuda Ltd., as guarantor, Intelsat Jackson Holdings S.A., as Issuer, and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 2.25 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on February 20, 2014).
2.18	Sixth Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 7.1/2% Senior Notes due 2021, dated as of November 25, 2015, by and among Intelsat Ireland Operations Limited, as guarantor, Intelsat Jackson Holdings S.A., as Issuer, and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 2.17 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on March 8, 2016).
2.19	Seventh Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 7-1/2% Senior Notes due 2021, dated as of December 22, 2016, by and among Intelsat Connect Finance S.A., as New Guarantor, Intelsat Jackson Holdings S.A., as Issuer, and U.S. Bank National Association, as Trustee (incorporated by reference to Exhibit 2.19 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 000-35878, filed on February 28, 2017, as amended).
2.20	Indenture for Intelsat (Luxembourg) S.A.'s 6.3/4% Senior Notes due 2018, 7_3/4% Senior Notes due 2021 and 8_1/8% Senior Notes due 2023, dated as of April 5, 2013, by and among Intelsat (Luxembourg) S.A., as Issuer, Intelsat S.A., as Parent Guarantor, and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.1 of Intelsat Investments S.A.'s Current Report on Form 8-K, File No. 000-50262, filed on April 5, 2013).
2.21	First Supplemental Indenture for Intelsat (Luxembourg) S.A.'s 6.3/4% Senior Notes due 2018, 7_3/4% Senior Notes due 2021 and 8_1/8% Senior Notes due 2023, dated as of May 20, 2013, by and among Intelsat S.A., Intelsat Investment Holdings S.à r.l., Intelsat Holdings S.A., each as a Guarantor, Intelsat Jackson Holdings S.A., as Issuer, and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 2.32 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on February 20, 2014).
2.22	Indenture for Intelsat Jackson Holdings S.A.'s 5_1/2% Senior Notes due 2023, dated as of June 5, 2013, by and among Intelsat Jackson Holdings S.A., as Issuer, Intelsat S.A., Intelsat Investment Holdings S.à r.l., Intelsat Holdings, S.A., Intelsat Investments S.A., Intelsat (Luxembourg) S.A., each as a Parent Guarantor, the subsidiary guarantors named therein and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 99.1 of Intelsat S.A.'s Current Report on Form 6-K, File No. 001-35878, filed on June 5, 2013).
2.23	First Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 5.1/2% Senior Notes due 2023, dated as of June 28, 2013, by and among Intelsat Finance Bermuda Ltd., as guarantor, Intelsat Jackson Holdings S.A., as Issuer, and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 2.35 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on February 20, 2014).

Exhibit No.	Document Description
2.24	Second Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 5,1/2% Senior Notes due 2023, dated as of November 25, 2015, by and among Intelsat Ireland Operations Limited, as guarantor, Intelsat Jackson Holdings S.A., as Issuer, and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 2.25 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on March 8, 2016).
2.25	Third Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 5_1/2% Senior Notes due 2023, dated as of December 22, 2016, by and among Intelsat Connect Finance S.A., as New Guarantor, Intelsat Jackson Holdings S.A., as Issuer, and U.S. Bank National Association, as Trustee (incorporated by reference to Exhibit 2.25 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 000-35878, filed on February 28, 2017, as amended).
2.26	Indenture for Intelsat Jackson Holdings S.A.'s 8% Senior Secured Notes due 2024, dated as of March 29, 2016, by and among Intelsat Jackson Holdings S.A., as Issuer, Intelsat (Luxembourg) S.A. as Parent Guarantor, the subsidiary guarantors named therein and Wilmington Trust, National Association, as Trustee (including the form of the 8% Notes) (incorporated by reference to Exhibit 99.1 of Intelsat S.A.'s Current Report on Form 6-K, File No. 001-35878, filed on March 29, 2016).
2.27	First Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 8% Senior Secured Notes due 2024, dated as of December 22, 2016, by and among Intelsat (Luxembourg) S.A., as Released Guarantor, Intelsat Connect Finance S.A., as New Guarantor, Intelsat Jackson Holdings S.A., as Issuer, and Wilmington Trust, National Association, as Trustee (incorporated by reference to Exhibit 2.27 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 000-35878, filed on February 28, 2017, as amended).
2.28	Indenture for Intelsat Jackson Holdings S.A.'s 9½% Senior Secured Notes due 2022, dated as of June 30, 2016, by and among Intelsat Jackson Holdings S.A., as Issuer, Intelsat (Luxembourg) S.A. as Parent Guarantor, the subsidiary guarantors named therein and Wilmington Trust, National Association, as Trustee (including the form of the 9½% Notes) (incorporated by reference to Exhibit 99.1 of Intelsat S.A.'s Current Report on Form 6-K, File No. 001-35878, filed on July 1, 2016).
2.29	First Supplemental Indenture for Intelsat Jackson Holdings S.A.'s 9 1/2% Senior Secured Notes due 2022, dated as of December 22, 2016, by and among Intelsat (Luxembourg) S.A., as Released Guarantor, Intelsat Connect Finance S.A., as New Guarantor, Intelsat Jackson Holdings S.A., as Issuer, and Wilmington Trust, National Association, as Trustee (incorporated by reference to Exhibit 2.29 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 000-35878, filed on February 28, 2017, as amended).
2.30	Indenture for Intelsat Jackson Holdings S.A.'s 9 3/4% Senior Notes due 2025, dated as of July 5, 2017, by and among Intelsat Jackson Holdings S.A., as Issuer, Intelsat S.A., Intelsat Investment Holdings S.A. r.I., Intelsat Holdings S.A., Intelsat Investments S.A., Intelsat (Luxembourg) S.A. and Intelsat Connect Finance S.A., each as a Parent Guarantor, the subsidiary guarantors named therein and U.S. Bank, National Association, as Trustee (incorporated by reference to Exhibit 99.1 of Intelsat S.A.'s Current Report on Form 6-K, File No. 001-35878, filed on July 5, 2017).
2.31	Indenture for Intelsat Connect Finance S.A.'s 12_1/2% Senior Notes due 2022, dated as of December 22, 2016, by and among Intelsat Connect Finance S.A., as Issuer, Intelsat (Luxembourg) S.A., as Parent Guarantor and U.S. Bank, National Association, as Trustee (including the form of the 12_1/2% Notes) (incorporated by reference to Exhibit 99.1 of Intelsat S.A.'s Current Report on Form 6-K, File No. 001-35878, filed on December 23, 2016).
2.32	Indenture for Intelsat (Luxembourg) S.A.'s 12,1/2% Senior Notes due 2024, dated as of January 6, 2017, by and between Intelsat (Luxembourg) S.A., as Issuer and U.S. Bank, National Association, as Trustee (including the form of the 12,1/2% Notes) (incorporated by reference to Exhibit 99.1 of Intelsat S.A.'s Current Report on Form 6-K, File No. 001-35878, filed on January 6, 2017).
3.1	Governance Agreement, dated as of April 23, 2013, by and among Intelsat S.A. and the shareholders of Intelsat S.A. party thereto (incorporated by reference to Exhibit 3.1 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on February 20, 2014).
3.2	Amendment No. 1, dated as of February 20, 2015, to the Governance Agreement, dated as of April 23, 2013, by and among Intelsat S.A. and the shareholders of Intelsat S.A. party thereto (incorporated by reference to Exhibit 3.2 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on March 8, 2016).
4.1	Credit Agreement, dated as of January 12, 2011, by and among Intelsat Jackson, as the Borrower, Intelsat (Luxembourg) S.A., the several lenders from time to time parties thereto, Bank of America, N.A., as Administrative Agent, Credit Suisse Securities (USA) LLC ("Credit Suisse") and J.P. Morgan Securities LLC ("J.P. Morgan"), as Co-Syndication Agents, Barclays Bank Plc and Morgan Stanley Senior Funding, Inc., as Co-Documentation Agents, Merrill Lynch, Pierce, Fenner & Smith Incorporated ("Merrill Lynch"), Credit Suisse and J.P. Morgan, as Joint Lead Arrangers, Merrill Lynch, Credit Suisse, J.P. Morgan, Barclays Capital, Deutsche Bank Securities Inc., Morgan Stanley & Co. Incorporated and UBS Securities LLC, as Joint Bookrunners, and HSBC Bank USA, N.A., Goldman Sachs Partners LLC and RBC Capital Markets, as Co-Managers (incorporated by reference to Exhibit 10.1 of Intelsat Investments S.A.'s Current Report on Form 8-K, File No. 000-50262, filed on January 19, 2011).

4.11

Exhibit No.	Document Description
4.2	Guarantee, dated as of January 12, 2011, made among each of the subsidiaries of Intelsat Jackson Holdings S.A. listed on Annex A thereto and Bank of America, N.A., as Administrative Agent (incorporated by reference to Exhibit 10.2 of Intelsat Investments S.A.'s Current Report on Form 8-K, File No. 000-50262, filed on January 19, 2011).
4.3	Luxembourg Shares and Beneficiary Certificates Pledge Agreement, dated as of January 12, 2011, by and among Intelsat (Luxembourg) S.A., Intelsat Jackson Holdings S.A., Intelsat Intermediate Holding Company S.A., Intelsat Phoenix Holdings S.A., Intelsat Subsidiary Holding Company S.A., Intelsat (Gibraltar) Limited, as Pledgors, and Wilmington Trust FSB, as Pledgee (incorporated by reference to Exhibit 10.3 of Intelsat Investments S.A.'s Current Report on Form 8-K, File No. 000-50262, filed on January 19, 2011).
4.4	Security and Pledge Agreement, dated as of January 12, 2011, by and among Intelsat Jackson Holdings S.A., each of the subsidiaries of Intelsat Jackson Holdings S.A. listed on Annex A thereto, Bank of America, N.A., as Administrative Agent, and Wilmington Trust FSB, as Collateral Trustee (incorporated by reference to Exhibit 10.4 of Intelsat Investments S.A.'s Current Report on Form 8-K, File No. 000-50262, filed on January 19, 2011).
4.5	Collateral Agency and Intercreditor Agreement, dated as of January 12, 2011 by and among Intelsat (Luxembourg) S.A., Intelsat Jackson Holdings S.A., the other grantors from time to time party thereto, Bank of America, N.A., as Administrative Agent under the Existing Credit Agreement, each additional First Lien Representative from time to time a party thereto, each Second Lien Representative from time to time a party thereto and Wilmington Trust FSB, as Collateral Trustee (incorporated by reference to Exhibit 10.5 of Intelsat Investments S.A.'s Current Report on Form 8-K, File No. 000-50262, filed on January 19, 2011).
4.6	Amendment and Joinder Agreement, dated as of October 3, 2012, by and among Intelsat (Luxembourg) S.A., Intelsat Jackson Holdings S.A., the Subsidiary Guarantors party thereto, Bank of America, N.A., as Administrative Agent for the Lenders and collateral agent for the Secured Parties, the Lenders party thereto and the Tranche B-1 Term Loan Lenders party thereto, to the Credit Agreement, dated as of January 12, 2011 (incorporated by reference to Exhibit 10.1 of Intelsat Investments S.A.'s Current Report on Form 8-K, File No. 000-50262, filed on October 3, 2012).
4.7	Amendment No. 2 and Joinder Agreement, dated as of November 27, 2013, by and among Intelsat (Luxembourg) S.A., Intelsat Jackson Holdings S.A., the Subsidiary Guarantors party hereto, Bank of America, N.A., as Administrative Agent for the lenders and collateral agent for the secured parties thereto, the lenders party thereto and the Tranche B-2 Term Loan Lenders (as defined therein) party thereto, to the Credit Agreement, dated as of January 12, 2011 (as amended by the Amendment and Joinder Agreement, dated as of October 3, 2012) (incorporated by reference to Exhibit 4.7 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on February 20, 2014).
4.8	Amendment No. 3 and Joinder Agreement, dated as of November 27, 2017, by and among Intelsat Connect Finance S.A., Intelsat Jackson Holdings S.A., the Subsidiary Guarantors party hereto, Bank of America, N.A., as Administrative Agent for the lenders and collateral agent for the secured parties thereto, the lenders party thereto and the Tranche B-3 Term Loan Lenders (as defined therein) party thereto, to the Credit Agreement, dated as of January 12, 2011 (as amended by the Amendment and Joinder Agreement, dated as of October 3, 2012, and the Amendment No. 2 and Joinder Agreement, dated as of November 27, 2013) (incorporated by reference to Exhibit 99.1 of Intelsat S.A.'s Current Report on Form 6-K, File No. 001-35878, filed on November 27, 2017).
4.9	Amendment No. 4 and Joinder Agreement, dated as of December 12, 2017, by and among Intelsat Connect Finance S.A., Intelsat Jackson Holdings S.A., the Subsidiary Guarantors party hereto, Bank of America, N.A., as Administrative Agent for the lenders and collateral agent for the secured parties thereto, the lenders party thereto and the Tranche B-3 Term Loan Lenders (as defined therein) party thereto, to the Credit Agreement, dated as of January 12, 2011 (as amended by the Amendment and Joinder Agreement, dated as of October 3, 2012, the Amendment No. 2 and Joinder Agreement, dated as of November 27, 2013, and the Amendment No. 3 and Joinder Agreement, dated as of November 27, 2017) (incorporated by reference to Exhibit 99.1 of Intelsat S.A.'s Current Report on Form 6-K, File No. 001-35878, filed on December 12, 2017).
4.10	Amendment No. 5 and Joinder Agreement, dated as of January 2, 2018, by and among Intelsat Connect Finance S.A., Intelsat Jackson Holding S.A., the Subsidiary Guarantors party hereto, Bank of America, N.A., as Administrative Agent for the lenders and collateral agent for the secured parties thereto, the lenders party thereto and the Tranche B-4 Term Loan Lenders and the Tranche B-5 Term Loan Lenders (as defined therein) party thereto, to the Credit Agreement, dated as of January 12, 2011 (as amended by the Amendment and Joinder Agreement, dated as of October 3, 2012, the Amendment No. 2 and Joinder Agreement, dated as of November 27, 2013, the Amendment No. 3 and Joinder Agreement, dated as of November 27, 2017, and the Amendment No. 4 and Joinder Agreement, dated as of December 12, 2017) (incorporated by reference to Exhibit 99.1 of Intelsat S.A.'s Current Report on Form 6-K, File No. 001-35878, filed on January 2, 2018).

Employment Agreement, dated as of December 29, 2008 and effective as of February 4, 2008, by and among Intelsat Global, Ltd., Intelsat, Ltd. and David McGlade (incorporated by reference to Exhibit 10.1 of Intelsat, Ltd.'s Current Report on Form 8-K, File No. 000-50262, filed on January 5, 2009).

Exhibit No.	Document Description
4.12	Amendment and Acknowledgement, dated as of May 6, 2009, by and among Intelsat, Ltd., Intelsat Global, Ltd. and David McGlade (incorporated by reference to Exhibit 10.24 of Intelsat, Ltd.'s Current Report on Form 8-K, File No. 000-50262, filed on May 12, 2009).
4.13	Assignment and Modification Agreement, effective as of December 21, 2009, to Employment Agreement dated as of December 29, 2008, by and among David McGlade, Intelsat Global, Ltd., Intelsat, Ltd., and Intelsat Management LLC (incorporated by reference to Exhibit 10.65 of Intelsat Investments S.A.'s Annual Report on Form 10-K for the year ended December 31, 2009, File No. 000-50262, filed on March 10, 2010).
4.14	Severance Agreement, dated as of May 8, 2009, by and between Intelsat Global, Ltd. and Stephen Spengler (incorporated by reference to Exhibit 10.27 of Intelsat, Ltd.'s Current Report on Form 8-K, File No. 000-50262, filed on May 12, 2009).
4.15	Intelsat S.A.'s Amended and Restated 2008 Share Incentive Plan (incorporated by reference to Exhibit 4.15 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on February 20, 2014).
4.16	Management Shareholders Agreement of Intelsat Global, Ltd. (incorporated by reference to Exhibit 10.11 of Intelsat, Ltd.'s Current Report on Form 8-K, File No. 000-50262, filed on May 12, 2009).
4.17	Letter Agreement, dated as of May 6, 2009, by and between Intelsat Global, Ltd. and David McGlade regarding the Management Shareholders Agreement (incorporated by reference to Exhibit 10.12 of Intelsat, Ltd.'s Current Report on Form 8-K, File No. 000-50262, filed on May 12, 2009).
4.18	Amendment to Management Shareholders Agreement of Intelsat Global, Ltd., dated as of December 7, 2009 and effective as of December 15, 2009 (incorporated by reference to Exhibit 10.76 of Intelsat Investments S.A.'s Annual Report on Form 10-K for the year ended December 31, 2009, File No. 000-50262, filed on March 10, 2010).
4.19	Acknowledgment Agreement, dated as of December 7, 2009, by and among certain shareholders of Intelsat Global, Ltd., regarding the Amendment to Management Shareholders Agreement of Intelsat Global, Ltd. (incorporated by reference to Exhibit 10.77 of Intelsat Investments S.A.'s Annual Report on Form 10-K for the year ended December 31, 2009, File No. 000-50262, filed on March 10, 2010).
4.20	Letter Amendment, dated as of December 7, 2009, by and between Intelsat Global, Ltd. and David McGlade regarding the Management Shareholder's Agreement (incorporated by reference to Exhibit 10.73 of Intelsat Investments S.A.'s Annual Report on Form 10-K for the year ended December 31, 2009, File No. 000-50262, filed on March 10, 2010).
4.21	Second Amendment to Employment Agreement, dated as of February 28, 2012, by and among David McGlade, Intelsat Global S.A., Intelsat S.A. and Intelsat Management LLC (incorporated by reference to Exhibit 10.1 of Intelsat Investments S.A.'s Quarterly Report on Form 10-Q for the quarter ended March 31, 2012, File No. 000-50262, filed on May 8, 2012).
4.22	Amendment No. 2 to the Management Shareholders Agreement, dated as of March 30, 2012, by and among Intelsat Global S.A., Intelsat Global Holdings S.A. and the other parties thereto (incorporated by reference to Exhibit 10.1 of Intelsat Investments S.A.'s Current Report on Form 8-K, File No. 000-50262, filed on April 5, 2012).
4.23	Letter Agreement, dated as of March 30, 2012, by and among Intelsat Global S.A., Intelsat Global Holdings S.A., David McGlade and the other parties thereto regarding the Management Shareholders Agreement (incorporated by reference to Exhibit 10.2 of Intelsat Investments S.A.'s Current Report on Form 8-K, File No. 000-50262, filed on April 5, 2012).
4.24	Modification Agreement, dated as of March 30, 2012, to the Employment Agreement, dated as of December 29, 2008, by and among David McGlade, Intelsat Global S.A. and Intelsat S.A. (together with the Assignment and Modification Agreement, dated as of December 21, 2009, by and among Intelsat Management LLC, Intelsat Global S.A. and Intelsat S.A.) (incorporated by reference to Exhibit 10.7 of Intelsat Investments S.A.'s Current Report on Form 8-K, File No. 000-50262, filed on April 5, 2012).
4.25	Amendment, dated as of March 30, 2012, to the employment letter agreement, dated as of May 8, 2009, by and between Intelsat Global and Stephen Spengler (incorporated by reference to Exhibit 10.10 of Intelsat Investments S.A.'s Current Report on Form 8-K, File No. 000-50262, filed on April 5, 2012).
4.26	Amendment, dated as of March 30, 2012, to the employment letter agreement, dated as of May 8, 2009, by and between Intelsat Global S.A. and Thierry Guillemin (incorporated by reference to Exhibit 10.11 of Intelsat Investments S.A.'s Current Report on Form 8-K, File No. 000-50262, filed on April 5, 2012).
4.27	Shareholders Agreement, dated as of February 4, 2008, by and among Serafina Holdings Limited and the shareholders party thereto (incorporated by reference as Exhibit 10.78 to Amendment No. 1 to Intelsat Global Holdings S.A.'s Registration Statement on Form F-1, File No. 333-181527, filed on June 26, 2012).
4.28	Amendment No. 1 to Shareholders Agreement, dated as of December 7, 2009, by and among Intelsat Global, Ltd. and the shareholders party thereto (incorporated by reference as Exhibit 10.79 to Amendment No. 1 to Intelsat Global Holdings S.A.'s Registration Statement on Form F-1, File No. 333-181527, filed on June 26, 2012).

Exhibit No.	Document Description
4.29	Amendment No. 2 to Shareholders Agreement, dated as of March 30, 2012, by and among Intelsat Global S.A., Intelsat Global Holdings S.A. and the shareholders party thereto (incorporated by reference as Exhibit 10.80 to Amendment No. 1 to Intelsat Global Holdings S.A.'s Registration Statement on Form F-1, File No. 333-181527, filed on June 26, 2012).
4.30	Intelsat S.A.'s 2013 Equity Incentive Plan (incorporated by reference to Exhibit 4.39 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on February 20, 2014).
4.31	Intelsat S.A.'s Bonus Plan (incorporated by reference to Exhibit 4.40 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on February 20, 2014).
4.32	Supplement No. 2 to Guarantee, dated as of July 31, 2012, by and between Intelsat Luxembourg Investment S.à r.l. and Bank of America, N.A. (incorporated by reference to Exhibit 10.2 of Intelsat Investments S.A.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, File No. 000-50262, filed on August 1, 2012).
4.33	Agreement for the Adherence by Intelsat Luxembourg Investment S.à r.l. and Intelsat Corporation to the Luxembourg Shares and Beneficiary Certificates Pledge Agreement, dated as of January 12, 2011, and for the Amendment of the Pledge Agreement, dated as of July 31, 2012, by and among the Pledgors listed therein and Wilmington Trust, National Association (as successor by merger to Wilmington Trust FSB), as Collateral Trustee (incorporated by reference to Exhibit 10.3 of Intelsat Investments S.A.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, File No. 000-50262, filed on August 1, 2012).
4.34	Supplement No. 2 to Security and Pledge Agreement, dated as of July 31, 2012, by and among Intelsat Luxembourg Investment S.à r.l., as New Guarantor, Bank of America, N.A., as Administrative Agent and Wilmington Trust, National Association (as successor by merger to Wilmington Trust FSB), as Collateral Trustee (incorporated by reference to Exhibit 10.4 of Intelsat Investments S.A.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, File No. 000-50262, filed on August 1, 2012).
4.35	Collateral Agency and Intercreditor Joinder, dated as of July 31, 2012, by and between Intelsat Luxembourg Investment S.à r.l. and Wilmington Trust, National Association (as successor by merger to Wilmington Trust FSB), as Collateral Trustee (incorporated by reference to Exhibit 10.5 of Intelsat Investments S.A.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, File No. 000-50262, filed on August 1, 2012).
4.36	Form of Indemnification Agreement between Intelsat S.A. and its directors and officers (previously filed as Exhibit 10.64 to Amendment No. 2 to Intelsat Global Holdings S.A.'s Registration Statement on Form F-1, File No. 333-181527, filed on August 8, 2012).
4.37	Amendment No. 3 to the Management Shareholders Agreement, dated as of April 23, 2013, by and among Intelsat S.A., Serafina S.A., SLP III Investment Holding S.à r.l. and the Management Shareholders party thereto (incorporated by reference to Exhibit 4.49 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on February 20, 2014).
4.38	Supplement No. 3 to Guarantee, dated as of January 31, 2013, to the Guarantee dated as of January 12, 2011, by and among Intelsat Align S.à r.l. and Intelsat Finance Nevada LLC, as New Guarantors, and Bank of America, N.A., as Administrative Agent (incorporated by reference to Exhibit 10.84 of Intelsat Investments S.A.'s Annual Report on Form 10-K, File No. 000-50262, filed on February 28, 2013).
4.39	Agreement for the Adherence by Intelsat Align S.à r.l. to the Luxembourg Shares and Beneficiary Certificates Pledge Agreement, dated as of January 12, 2011, and for the Amendment of the Pledge Agreement, dated as of January 31, 2013, by and among the Pledgors listed therein and Wilmington Trust, National Association (as successor by merger to Wilmington Trust FSB), as Collateral Trustee (incorporated by reference to Exhibit 10.85 of Intelsat Investments S.A.'s Annual Report on Form 10-K, File No. 000-50262, filed on February 28, 2013).
4.40	Supplement No. 3 to Security and Pledge Agreement, dated as of January 31, 2013, to the Security and Pledge Agreement dated as of January 12, 2011, by and among Intelsat Align S.àr.l. and Intelsat Nevada LLC, as New Guarantors, Bank of America, N.A., as Administrative Agent and Wilmington Trust, National Association (as successor by merger to Wilmington Trust FSB), as Collateral Trustee (incorporated by reference to Exhibit 10.86 of Intelsat Investments S.A.'s Annual Report on Form 10-K, File No. 000-50262, filed on February 28, 2013).
4.41	Collateral Agency and Intercreditor Joinder, dated as of January 31, 2013, by and among Intelsat Align S.à r.l. and Intelsat Nevada LLC, as new Grantors, and Wilmington Trust, National Association (as successor by merger to Wilmington Trust FSB), as Collateral Trustee (incorporated by reference to Exhibit 10.87 of Intelsat Investments S.A.'s Annual Report on Form 10-K, File No. 000-50262, filed on February 28, 2013).
4.42	Collateral Agency and Intercreditor Joinder, dated as of November 25, 2015, by and among Intelsat Ireland Operations Limited, as new Granter, and Wilmington Trust. National Association (as successor by merger to Wilmington Trust FSR), as Collateral Trustee (incompared by

reference to Exhibit 4.46 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on March 8, 2016).

Exhibit No.	Document Description
4.43	Guarantee, dated as of January 31, 2013, made among Intelsat Align S.à r.l. and Intelsat Finance Nevada LLC, as New Guarantors, and Credit Suisse AG, Cayman Islands Branch (f/k/a Credit Suisse, Cayman Island Branch), as Administrative Agent (incorporated by reference to Exhibit 10.88 of Intelsat Investments S.A.'s Annual Report on Form 10-K, File No. 000-50262, filed on February 28, 2013).
4.44	Guarantee, dated as of January 31, 2013, made among Intelsat Align S.à r.l. and Intelsat Finance Nevada LLC, as New Guarantors, and Bank of America, N.A., as Administrative Agent (incorporated by reference to Exhibit 10.89 of Intelsat Investments S.A.'s Annual Report on Form 10-K, File No. 000-50262, filed on February 28, 2013).
4.45	Supplement No. 5 to Guarantee, dated as of November 25, 2015, to the Guarantee dated as of January 12, 2011, by and between Intelsat Ireland Operations Limited, as New Guarantor, and Bank of America, N.A., as Administrative Agent (incorporated by reference to Exhibit 4.49 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on March 8, 2016).
4.46	Third Amendment, dated as of March 18, 2013, to Employment Agreement, dated as of December 29, 2008, by and among David McGlade, Intelsat Global Holdings S.A., Intelsat S.A. and Intelsat Management LLC (incorporated by reference as Exhibit 10.73 to Amendment No. 7 to Intelsat Global Holdings S.A.'s Registration Statement on Form F-1, File No. 333-181527, filed on March 20, 2013).
4.47	Employment Agreement, dated as of March 18, 2013, by and between Intelsat Corporation and Stephen Spengler (incorporated by reference to Exhibit 10.77 to Amendment No. 7 to Intelsat Global Holdings S.A.'s Registration Statement on Form F-1, File No. 333-181527, filed on March 20, 2013).
4.48	Employment Agreement, dated as of March 18, 2013, by and among Intelsat Global Holdings S.A., Intelsat S.A. and Michelle Bryan (incorporated by reference to Exhibit 10.78 to Amendment No. 7 to Intelsat Global Holdings S.A.'s Registration Statement on Form F-1, File No. 333-181527, filed on March 20, 2013).
4.49	Governance Agreement, dated as of April 23, 2013, by and among Intelsat S.A. and the shareholders of Intelsat S.A. party thereto (see Exhibit 3.1).
4.50	Fifth Amendment, dated as of December 11, 2014, to Employment Agreement, dated as of December 29, 2008, by and among David McGlade, Intelsat S.A., Intelsat Investments S.A. and Intelsat Management LLC (incorporated by reference to Exhibit 4.62 to Intelsat S.A.'s Annual Report of Form 20-F. File No. 001-35878, filed on February 18, 2015)

Exhibit No.	Document Description
4.51	Second Amendment, dated as of December 11, 2014, to Employment Agreement, dated as of March 18, 2013, by and between Stephen Spengler and Intelsat Corporation (incorporated by reference to Exhibit 4.63 to Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on February 18, 2015).
4.52	Amendment to Intelsat S.A.'s 2013 Equity Incentive Plan, effective as of October 23, 2014 (incorporated by reference to Exhibit 4.64 to Intelsat S.A.'s Annual Report on Form 20-F, File No. 001-35878, filed on February 8, 2015).
4.53	Second Amendment to Intelsat S.A.'s 2013 Equity Incentive Plan, effective as of June 16, 2016 (incorporated by reference to Exhibit 10.3 of Intelsat S.A.'s Registration Statement on Form S-8, File No. 333-212417, filed on July 6, 2016).
4.54	Collateral Agency and Intercreditor Joinder, dated as of July 31, 2012, between Intelsat Luxembourg Investment S.a.r.l. and Wilmington Trust. National Association (as successor by merger to Wilmington Trust FSB), as Collateral Trustee (incorporated by reference to Exhibit 10.5 of Intelsat Investments S.A.'s Quarterly Report on Form 10-Q for the quarter ended June 30, 2012, File No. 000-50262, filed on August 1, 2012).
4.55	Collateral Agency and Intercreditor Joinder, dated as of March 29, 2016, by and among Intelsat (Luxembourg) S.A., Intelsat Jackson Holdings S.A., the other grantors from time to time party thereto, Bank of America, N.A., as Administrative Agent under the Existing Credit Agreement, each additional First Lien Representative from time to time a party thereto, each Second Lien Representative from time to time a party thereto and Wilmington Trust, National Association (as successor by merger to Wilmington Trust FSB), as Collateral Trustee (incorporated by reference to Exhibit 4.52 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 000-35878, filed on February 28, 2017, as amended).
4.56	Collateral Agency and Intercreditor Joinder, dated as of June 30, 2016, by and among Intelsat (Luxembourg) S.A., Intelsat Jackson Holdings S.A., the other grantors from time to time party thereto, Bank of America, N.A., as Administrative Agent under the Existing Credit Agreement, each additional First Lien Representative from time to time a party thereto, each Second Lien Representative from time to time a party thereto and Wilmington Trust, National Association (as successor by merger to Wilmington Trust FSB), as Collateral Trustee (incorporated by reference to Exhibit 4.53 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 000-35878, filed on February 28, 2017, as amended).
4.57	Amendment Agreement to the Luxembourg Shares and Beneficiary Certificates Pledge Agreement, dated as of March 23, 2016, by and among Intelsat (Luxembourg) S.A., Intelsat Jackson Holdings S.A., Intelsat Operations S.A., and Intelsat Corporation, as Pledgors, and Wilmington Trust, National Association (as successor by merger to Wilmington Trust FSB), as Collateral Trustee or Pledgee (incorporated by reference to Exhibit 4.54 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 000-35878, filed on February 28, 2017, as amended).
4.58	Confirmation and Amendment Agreement to the Luxembourg Claims Pledge Agreement, dated as of October 24, 2016, by and among Intelsat Jackson Holdings S.A., Intelsat Operations S.A. and Intelsat Align S.à r.l., as Pledgors, and Wilmington Trust, National Association (as successor by merger to Wilmington Trust FSB), as Collateral Trustee or Pledgee (incorporated by reference to Exhibit 4.55 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 000-35878, filed on February 28, 2017, as amended).
4.59	Confirmation and Amendment Agreement to the Luxembourg Shares and Beneficiary Certificates Pledge Agreement, dated as of October 24, 2016, by and among Intelsat (Luxembourg) S.A., Intelsat Jackson Holdings S.A., Intelsat Operations S.A., and Intelsat Corporation, as Pledgors, and Wilmington Trust, National Association (as successor by merger to Wilmington Trust FSB), as Collateral Trustee or Pledgee (incorporated by reference to Exhibit 4.56 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 000-35878, filed on February 28, 2017, as amended).
4.60	Collateral Agency and Intercreditor Joinder, dated as of December 22, 2016, by and among Intelsat Connect Finance S.A., Intelsat (Luxembourg) S.A., Intelsat Jackson Holdings S.A., the other grantors from time to time party thereto, Bank of America, N.A., as Administrative Agent under the Existing Credit Agreement, each additional First Lien Representative from time to time a party thereto, each Second Lien Representative from time to time a party thereto and Wilmington Trust, National Association (as successor by merger to Wilmington Trust FSB), as Collateral Trustee (incorporated by reference to Exhibit 4.57 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 000-35878, filed on February 28, 2017, as amended).
4.61	Joinder No. 1 to Credit Agreement, dated as of December 22, 2016, by and between Intelsat Connect Finance S.A. and Bank of America, N.A., as Administrative Agent (incorporated by reference to Exhibit 4.58 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 000-35878, filed on February 28, 2017, as amended).
4.62	Release of Intelsat (Luxembourg) S.A. from Credit Agreement, dated as of December 22, 2016, by Bank of America, N.A., as Administrative Agent (incorporated by reference to Exhibit 4.59 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 000-35878, filed on February 28, 2017, as amended).

Exhibit No.	Document Description
4.63	Confirmation and Amendment Agreement to the Luxembourg Claims Pledge Agreement, dated as of December 22, 2016, by and among Intelsat Jackson Holdings S.A., Intelsat Operations S.A., Intelsat Align S.à r.l. and Intelsat Connect Finance S.A. as Pledgors, and Wilmington Trust, National Association (as successor by merger to Wilmington Trust FSB), as Collateral Trustee or Pledgee (incorporated by reference to Exhibit 4.60 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 000-35878, filed on February 28, 2017, as amended).
4.64	Amendment Agreement to the Luxembourg Shares and Beneficiary Certificates Pledge Agreement, dated as of December 22, 2016, by and among Intelsat (Luxembourg) S.A., Intelsat Jackson Holdings S.A., Intelsat Operations S.A., Intelsat Connect Finance S.A. and Intelsat Corporation, as Pledgors, and Wilmington Trust, National Association (as successor by merger to Wilmington Trust FSB), as Collateral Trustee or Pledgee (incorporated by reference to Exhibit 4.61 of Intelsat S.A.'s Annual Report on Form 20-F, File No. 000-35878, filed on February 28, 2017, as amended).
4.65	Combination Agreement, dated as of February 28, 2017, by and between Intelsat S.A. and WorldVu Satellites Limited (incorporated by reference to Exhibit 99.1 of Intelsat S.A.'s Current Report on Form 6-K, File No. 001-35878, filed on February 28, 2017).
4.66	First Amendment to and Waiver Relating to the Combination Agreement, dated as of May 17, 2017, by and between Intelsat S.A. and WorldVu Satellites Limited (incorporated by reference to Exhibit 99.1 of Intelsat S.A.'s Current Report on Form 6-K, File No. 001-35878, filed on May 17, 2017).
4.67	Share Purchase Agreement, dated as of February 28, 2017, by and between Intelsat S.A., SoftBank Group Corp. and, solely for the limited purposes set forth therein, WorldVu Satellites Limited (incorporated by reference to Exhibit 99.2 of Intelsat S.A.'s Current Report on Form 6-K, File No. 001-35878, filed on February 28, 2017).
4.68	First Amendment to and Waiver Relating to the Share Repurchase Agreement, dates as of May 17, 2017, by and between Intelsat S.A., Softbank Group Corp. and, solely for the limited purposes set forth therein, WorldVu Satellites Limited (incorporated by reference to Exhibit 99.2 of Intelsat S.A.'s Current Report on Form 6-K, File No. 001-35878, filed on May 17, 2017).
8.1	<u>List of significant subsidiaries of Intelsat S.A.*</u>
12.1	Rule 13a-14(a)/15d-14(a) Certification of Principal Executive Officer.*

Exhibit No.	Document Description
12.2	Rule 13a-14(a)/15d-14(a) Certification of Principal Financial Officer.*
13.1	Certification of Chief Executive Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.*
13.2	Certification of Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.*
15.1	Consent of KPMG LLP*
101.	Interactive Data Files
101.INS	XBRL Instance Document. **
101.SCH	XBRL Taxonomy Extension Schema Document. **
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document. **
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document. **
101.LAB	XBRL Taxonomy Extension Label Linkbase Document. **
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document. **

 ^{*} Filed herewith.

^{**} Attached as Exhibit 101 to this Annual Report on Form 20-F are the following formatted in Extensible Business Reporting Language ("XBRL"): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Comprehensive Loss, (iv) Consolidated Statements of Changes in Shareholders' Deficit, (v) Consolidated Statements of Cash Flows and (vi) Notes to Consolidated Financial Statements.

SIGNATURE

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this Annual Report on its behalf.

	INTELSAT S.A.	
Date: February 26, 2018	By/s/ Stephen Spengler	
	Stephen Spengler	
	Chief Executive Officer	
Date: February 26, 2018	By/s/ Jacques Kerrest	
	Jacques Kerrest	
	Executive Vice President and Chief Financial Officer	

Intelsat S.A. Index to Consolidated Financial Statements

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

Report of Independent Registered Public Accounting Firm

The Shareholders and Board of Directors Intelsat S.A.:

Opinions on the Consolidated Financial Statements and Internal Control Over Financial Reporting

We have audited the accompanying consolidated balance sheets of Intelsat S.A. and subsidiaries (the Company) as of December 31, 2016 and 2017, the related consolidated statements of operations, comprehensive income (loss), changes in shareholders' deficit, and cash flows for each of the years in the three-year period ended December 31, 2017, and the related notes and financial statement Schedule II – Valuation and Qualifying Accounts (collectively, the consolidated financial statements). We also have audited the Company's internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2016 and 2017, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2017, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2017, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission.

Basis for Opinions

The Company's management is responsible for these consolidated financial statements, for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Part II, Item 15b Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's consolidated financial statements and an opinion on the Company's internal control over financial reporting based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) ("PCAOB") and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud, and whether effective internal control over financial reporting was maintained in all material respects.

Our audits of the consolidated financial statements included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ KPMG LLP

We have served as the Company's auditor since 2002.

McLean, Virginia February 26, 2018

INTELSAT S.A.

CONSOLIDATED BALANCE SHEETS

(in thousands, except per share amounts)

	As of December 31, 2016	As of December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 666,024	\$ 525,215
Restricted cash	_	16,176
Receivables, net of allowances of \$54,744 in 2016 and \$29,669 in 2017	203,036	221,223
Prepaid expenses and other current assets	55,908	56,862
Total current assets	924,968	819,476
Satellites and other property and equipment, net	6,185,842	5,923,619
Goodwill	2,620,627	2,620,627
Non-amortizable intangible assets	2,452,900	2,452,900
Amortizable intangible assets, net	391,838	349,584
Other assets	365,834	443,830
Total assets	\$12,942,009	\$12,610,036
LIABILITIES AND SHAREHOLDERS' DEFICIT		
Current liabilities:		
Accounts payable and accrued liabilities	\$ 215,987	\$ 116,396
Taxes payable	16,733	12,007
Employee related liabilities	50,178	29,328
Accrued interest payable	204,840	263,207
Current portion of long-term debt	_	96,572
Deferred satellite performance incentives	23,455	25,780
Deferred revenue	157,684	149,749
Other current liabilities	64,786	47,287
Total current liabilities	733,663	740,326
Long-term debt, net of current portion	14,198,084	14,112,086
Deferred satellite performance incentives, net of current portion	210,706	215,352
Deferred revenue, net of current portion	906,744	794,707
Deferred income taxes	168,445	48,434
Accrued retirement benefits	186,284	191,079
Other long-term liabilities	148,081	296,616
Shareholders' deficit:		
Common shares; nominal value \$0.01 per share	1,180	1,196
Paid-in capital	2,156,911	2,173,367
Accumulated deficit	(5,715,931)	(5,894,659)
Accumulated other comprehensive loss	(76,305)	(87,774)
Total Intelsat S.A. shareholders' deficit	(3,634,145)	(3,807,870)
Noncontrolling interest	24,147	19,306
Total liabilities and shareholders' deficit	\$12,942,009	\$12,610,036

INTELSAT S.A.

CONSOLIDATED STATEMENTS OF OPERATIONS (in thousands, except per share amounts)

	Year Ended December 31, 2015	Year Ended December 31, 2016	Year Ended December 31, 2017
Revenue	\$ 2,352,521	\$ 2,188,047	\$ 2,148,612
Operating expenses:			
Direct costs of revenue (excluding depreciation and amortization)	328,501	341,147	322,216
Selling, general and administrative	199,412	231,397	204,015
Impairment of goodwill and other intangibles	4,165,400	_	_
Depreciation and amortization	687,729	694,891	707,824
Total operating expenses	5,381,042	1,267,435	1,234,055
Income (loss) from operations	(3,028,521)	920,612	914,557
Interest expense, net	890,279	938,501	1,020,770
Gain (loss) on early extinguishment of debt	7,061	1,030,092	(4,109)
Other income (expense), net	(6,201)	(2,105)	6,638
Income (loss) before income taxes	(3,917,940)	1,010,098	(103,684)
Provision for income taxes	1,513	15,986	71,130
Net income (loss)	(3,919,453)	994,112	(174,814)
Net income attributable to noncontrolling interest	(3,934)	(3,915)	(3,914)
Net income (loss) attributable to Intelsat S.A.	\$(3,923,387)	\$ 990,197	\$ (178,728)
Cumulative preferred dividends	(9,919)		
Net income (loss) attributable to common shareholders	\$(3,933,306)	\$ 990,197	\$ (178,728)
Net income (loss) per common share attributable to Intelsat S.A.:			
Basic	\$ (36.68)	\$ 8.65	\$ (1.50)
Diluted	\$ (36.68)	\$ 8.36	\$ (1.50)

INTELSAT S.A.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) (in thousands)

	Year Ended December 31, 2015	Year Ended December 31, 2016	Year Ended December 31, 2017
Net income (loss)	\$(3,919,453)	\$ 994,112	\$ (174,814)
Other comprehensive income (loss), net of tax:			
Defined benefit retirement plans:			
Reclassification adjustment for amortization of unrecognized prior service credits included in net			
periodic pension costs and other, net of tax	(248)	(5)	21
Reclassification adjustment for amortization of unrecognized actuarial loss included in net			
periodic pension costs, net of tax	5,244	2,223	2,074
Actuarial gain (loss) arising during the year, net of tax	22,943	(177)	(13,896)
Curtailment gain, net of tax of \$3.8 million	6,510	_	
Marketable securities:			
Unrealized gains (losses) on investments, net of tax	(21)	285	567
Reclassification adjustment for realized gain on investments, net of tax	(340)	(192)	(235)
Other comprehensive income (loss)	34,088	2,134	(11,469)
Comprehensive income (loss)	(3,885,365)	996,246	(186,283)
Comprehensive income attributable to noncontrolling interest	(3,934)	(3,915)	(3,914)
Comprehensive income (loss) attributable to Intelsat S.A.	<u>\$(3,889,299</u>)	\$ 992,331	\$ (190,197)

INTELSAT S.A.

CONSOLIDATED STATEMENTS OF CHANGES IN SHAREHOLDERS' DEFICIT (in thousands)

	Preferr Shares (in millions)	ed Amount	Comm Shares (in millions)	Amount	Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Intelsat S.A. Shareholders' Deficit	Noncontrolling Interest
Balance at December 31, 2014	3.5	\$ 35	106.7	\$1,067	\$2,117,898	\$(2,782,741)	\$ (112,527)	\$ (776,268)	\$ 33,701
Net income (loss)						(3,923,387)		(3,923,387)	3,934
Dividends paid to noncontrolling interests	_	_	_	_	_	_	_	_	(8,423)
Share-based compensation	_	_	0.9	9	25,912	_	_	25,921	_
Declaration of preferred stock dividend	_	_	_	_	(9,919)	_	_	(9,919)	_
Postretirement/pension liability adjustment, net of tax of									
\$16.5 million	_	_	_	_	_	_	27,939	27,939	_
Curtailment gain, net of tax of \$3.8 million	_	_	_	_	_	_	6,510	6,510	_
Other comprehensive loss, net of tax of (\$0.2) million							(361)	(361)	
Balance at December 31, 2015	3.5	\$ 35	107.6	\$1,076	\$2,133,891	\$(6,706,128)	\$ (78,439)	\$(4,649,565)	\$ 29,212
Net income	_		_		_	990,197		990,197	3,915
Dividends paid to noncontrolling interests	_	_	_	_	_	_	_	_	(8,980)
Share-based compensation	_	_	0.8	8	23,081	_	_	23,089	_
Preferred shares conversion	(3.5)	(35)	9.6	96	(61)	_	_	_	_
Postretirement/pension liability adjustment, net of tax of \$1.0 million	_	_	_	_	_	_	2,041	2,041	_
Other comprehensive income, net of tax of \$0.2 million	_	_	_	_	_	_	93	93	_
Balance at December 31, 2016		\$ —	118.0	\$1,180	\$2,156,911	\$(5,715,931)	\$ (76,305)	\$(3,634,145)	\$ 24,147
Net income (loss)	_	_	_	_	_	(178,728)	_	(178,728)	3,914
Dividends paid to noncontrolling interests	_	_	_	_	_		_		(8,755)
Share-based compensation	_	_	1.6	16	16,456	_	_	16,472	<u> </u>
Postretirement/pension liability adjustment, net of tax of									
(\$3.1) million	_	_	_	_	_	_	(11,801)	(11,801)	_
Other comprehensive income, net of tax of \$0.2 million							332	332	
Balance at December 31, 2017		\$ —	119.6	\$1,196	\$2,173,367	\$(5,894,659)	\$ (87,774)	\$(3,807,870)	\$ 19,306

INTELSAT S.A.

CONSOLIDATED STATEMENTS OF CASH FLOWS (in thousands)

Adjustments to reconcile net income (loss) to net eash provided by operating activities Impariment of goodwill and other intagibles \$4,165,400 707,82 707,8		Year Ended December 31, 2015	Year Ended December 31, 2016	Year Ended December 31, 2017
Adjustments to reconcile act income (loss) to net cash provided by operating activities 1,15,400	Cash flows from operating activities:			
Impairment of goodwill and other intangibles	Net income (loss)	\$ (3,919,453)	\$ 994,112	\$ (174,814)
Depreciation ad amortization	Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Provision for doubtful accounts 7,432 24,91 (4,00 Foreign currency transcation (gain) los 11,374 6,300 8.7 Loss on disposal of assets 16 20 4.8 Shar-based compensation 25,768 23,222 15,99 Deferred income taxes (9,348) 9,737 43,93 Amortization of discount, premium, issuance costs and related costs 20,119 24,622 48,68 (Gain) loss on early extinguishment of debt (7,061) (1,030,092) 4.10 Unrealized (gains) loss on derivative financial instruments (24,024) (76,64) 3.28 Other non-cash items 7,899 3,361 3.28 Other non-cash items 7,899 3,361 3.28 Changes in operating assets and liabilities 2,340 (51,321) (24,77 Accounts payable and accrued liabilities 1,542 35,850 46,33 Perpaid expenses and other assets 1,542 35,850 46,23 Accrued retriement benefits 2,010 47,065 8,33 Deferred revenue 1	Impairment of goodwill and other intangibles	4,165,400	_	_
Foreign currency transaction (gain) loss	Depreciation and amortization	687,729	694,891	707,824
Loss on disposal of assets	Provision for doubtful accounts	7,432	24,591	(4,094)
Share-based compensation 25,768 23,222 15,99 Deferred income taxes (9,348) (9,737) 43,93 Amortization of discount, prenium, issuance costs and related costs (20,119) 24,622 48,69 (Gain) loss on early extinguishment of debt (7,061) (1,03,092) 4,10 Unrealized (gains) losses on derivative financial instruments (24,024) (764) 22.7 Amortization of actuarial loss and prior service credits for retirement benefits 7,89 3,361 3,28 Other non-cash items 75 1,186 2.8 Changes in operating assets and liabilities: 34,642 6,478 (1,33) Receivables (35,4642) 6,478 (1,33) Perpaid expenses and other assets (25,789) (51,321) (24,77 Accounts payable and accrued inibilities 1,542 3,850 42,33 Accured interest payable 2,180 (32,74) (34,642) (34,765 83,36 Deferred evenue 2,180 (32,240) (34,762) (34,762) (34,762) (34,762) (34,762)	Foreign currency transaction (gain) loss	11,374	(3,300)	(876)
Deferred income taxes	Loss on disposal of assets	16	20	45
Amortization of discount, premium, issuance costs and related costs	Share-based compensation	25,768	23,222	15,995
(Gain) loss on early extinguishment of debt (7,061) (1,030,002) 4,10 Unrealized (gains) losses on derivative financial instruments 7,899 3,361 3,28 Amortization of actuarial loss and prior service credits for retirement benefits 75 1,186 (28 Changes in operating assets and liabilities: 75 1,186 (28 Receivables (34,642) 6,478 (4,33) Prepaid expenses and other assets (25,780) (51,321) (24,77) Accounts payable and accrued liabilities 1,542 35,850 (42,33) Accrued interest payable (2) 47,065 38,56 Deferred revenue 51,805 (88,786) (134,57 Accrued retirement benefits (20,070) (9,385) (134,27 Other long-term liabilities (28,111) (8,497) (8,78 Net cash provided by operating activities (28,111) (8,497) (8,78 Net cash provided by operating activities (25,000) (4,000) (25,78 Payments for in insurance settlements (25,000) (40,000) (25,78	Deferred income taxes	(9,348)	(9,737)	43,931
Unrealized (gains) losses on derivative financial instruments	Amortization of discount, premium, issuance costs and related costs	20,119	24,622	48,696
Amortization of actuarial loss and prior service credits for retirement benefits 7,899 3,361 3,28 Changes in operating assets and liabilities: 75 1,186 C28 Changes in operating assets and liabilities: (25,780) (31,421) (24,77 Accounts payable and accrued liabilities (25,780) (31,321) (24,77 Accounts payable and accrued liabilities (20,707) (3,358) (42,33 Accrued interest payable (20,707) (9,385) (13,42 Accounts payable and accrued liabilities (20,707) (9,385) (13,42 Accounts payable and accrued liabilities (20,707) (9,385) (13,42 Account pretirement benefits (20,707) (9,385) (13,42 Account pretirement benefits (20,707) (9,385) (13,42 Account pretirement benefits (20,707) (9,385) (34,42 Account pretirement benefits (20,707) (9,385) (34,42 Account pretirement benefits (20,707) (30,385) (34,42 Account pretirement benefits (20,700) (30,700)	(Gain) loss on early extinguishment of debt	(7,061)	(1,030,092)	4,109
Other non-eash items 75 1,186 (28 Changes in operating assets and liabilities: Receivables (34,642) 6,478 (14,33) Prepaid expenses and other assets (25,780) (51,321) (24,77) Accounts payable and accrued liabilities 1,542 35,850 (42,33) Accrued interest payable (20,070) (9,385) (13,42) Deferred revenue 51,805 (58,796) (13,42) Other long-term liabilities (20,077) (9,385) (13,42) Other long-term liabilities (20,070) (9,385) (13,42) Other long-term liabilities (20,007) (9,385) (13,42) Other long-term liabilities (28,111) (8,497) (8,78 Net cash provided by operating activities (28,111) (8,497) (8,78 Payments for satellities and other property and equipment (including capitalized interest) (724,362) (714,570) (46,162 Payments for satellities and other property and equipment (including capitalized interest) (724,362) (714,570) (46,162 Cash (lows from insurance settlemen				275
Changes in operating assets and liabilities: Receivables	Amortization of actuarial loss and prior service credits for retirement benefits	7,899	3,361	3,287
Changes in operating assets and liabilities: Receivables		75	1,186	(287)
Receivables (34,642) 6.478 (14,33) Prepaid expenses and other assets (25,780) (51,321) (24,77) Accounts payable and accrued liabilities 1,542 35,850 (42,33) Accrued interest payable (2) 47,065 58,36 Deferred revene 51,805 (58,796) (134,57) Accrued retirement benefits (20,707) (9,385) (134,57) Other long-term liabilities (20,707) (9,385) (18,478) Net cash provided by operating activities 910,031 683,506 464,23 Cash flows from investing activities 910,031 683,506 464,23 Payments for satellities and other property and equipment (including capitalized interest) (724,362) (714,570) (461,62 Purchase of cost method investments (25,000) (40,00) (25,74 Capital contribution to unconsolidated affiliate - (12,019) (30,71 Proceeds from insurance settlements - - 49,78 Net as used in investing activities (749,352) (730,589) 468,229 <td>Changes in operating assets and liabilities:</td> <td></td> <td>,</td> <td>,</td>	Changes in operating assets and liabilities:		,	,
Prepaid expenses and other assets (25,780) (31,321) (24,77) Accounts payable and accrued liabilities 1,542 35,850 (42,33) Accrued interest payable 20 47,065 58,36 Deferred revenue 51,805 (87,996) (134,57) Accrued retirement benefits (20,707) (9,385) (13,427) Other long-term liabilities (28,111) (8,497) (8,78 Net cash provided by operating activities 910,031 683,506 464,23 Payments for satellites and other property and equipment (including capitalized interest) (724,362) (714,570) (461,62 Purchase of cost method investments (25,000) (4,000) (25,740) Capital contribution to unconsolidated affiliate — (20,000) (4,000) (25,740) Purchase of cost method investing activities — — 49,78 — Other investing activities — — 49,78 — Other investing activities — — — 49,78 — — — —		(34.642)	6.478	(14,333)
Accounts payable and accrued liabilities 1,542 35,850 (42,33 Accrued interest payable (2) 47,065 58,33 Deferred revenue 51,805 (58,796) (134,57) Accrued retirement benefits (20,077) (9,385) (13,42) Other long-term liabilities (28,111) (8,497) (8,78) Net cash provided by operating activities 910,031 683,506 464,23 Cash flows from investing activities 724,362 (714,570) (461,62) Purchase of cost method investments (25,000) (4,000) (25,74) Capital contribution to unconsolidated affiliate — (12,019) (30,71) Proceeds from insurance settlements 8 — — 49,78 Oher investing activities 749,354 (730,589) 468,29 Net cash used in investing activities 749,354 (730,589) 468,29 Net cash used in investing activities 430,000 1,250,000 1,500,00 Repayments for financing activities 440,000 1,250,000 1,500,00	Prepaid expenses and other assets			(24,776)
Accrued interest payable (2) 47,065 58,36 Deferred revenue 51,805 (58,796) (134,57) Accrued retirement benefits (20,707) (9,385) (13,42) Other long-term liabilities (28,111) (8,497) (8,78 Net cash provided by operating activities 910,031 683,506 464,23 Cash flows from investing activities 7(24,362) (714,570) (40,00) (25,74 Payments for satellites and other property and equipment (including capitalized interest) (25,000) (4,000) (25,74 Capital contribution to unconsolidated affiliate — (12,019) (30,71 Proceeds from insurance settlements — — 49,78 Other investing activities 8 — — Net cash used in investing activities (749,354) (730,589) 468,29 Cash flows from financing activities (749,354) (730,589) 468,29 Cash flows from financing activities (749,354) (730,589) 468,29 Cash flows from financing activities 430,000 1,250,000				(42,337)
Deferred revenue 51,805 (58,796) (13,437) Accrued retirement benefits (20,707) (9,385) (13,42) Other long-term liabilities (28,111) (8,497) (8,788) Net cash provided by operating activities 910,031 683,506 464,23 Cash flows from investing activities "724,362 (714,570) (461,62 Purchase of cost method investments (25,000) (4,000) (25,74 Capital contribution to unconsolidated affiliate "1,201 (30,71 Proceeds from insurance settlements "2" "49,78 Other investing activities 8 "2" "49,78 Other investing activities 8 "2" "2" Proceeds from insuance settlements 430,000 1,250,000 1,500,00 Repayments of long-term debt 430,000 1,250,000 1,500,00 Repayments of long-term debt "49,82 "49,82 "49,82 Payment of prenium on early extinguishment of debt "2" (32,33) (41,23 Payments of long-term debt "9,919 <				58,367
Accrued retirement benefits			,	(134,577)
Other long-term liabilities (28,111) (8,497) (8,788) Net cash provided by operating activities 910,031 683,506 464,23 Cash flows from investing activities 7(724,362) (714,570) (461,62) Purchase of cost method investments (724,362) (714,570) (461,62) Capital contribution to unconsolidated affiliate — (12,019) (30,71) Proceeds from insurance settlements — 49,78 Other investing activities 8 — 49,78 Net cash used in investing activities 8 — 49,78 Net cash used in investing activities 8 — 49,78 Proceeds from financing activities 430,000 1,250,000 1,500,00 Repayments of long-term debt 430,000 1,250,000 1,500,00 Repayments of long-term debt 430,000 1,250,000 1,000,00 Repayments of premium on early extinguishment of debt — (38,33) (41,23 Payment of premium on early extinguishment of debt — (39,23,76) (1 Dividends paid	Accrued retirement benefits			(13,422)
Net cash provided by operating activities 910,031 683,506 464,23 Cash flows from investing activities 724,362 (714,570) (461,62) Payments for satellites and other property and equipment (including capitalized interest) (25,000) (4,000) 25,74 Purchase of cost method investments (25,000) (4,000) 25,74 Capital contribution to unconsolidated affiliate — (12,019) (30,71 Proceeds from insurance settlements — 497,88 Other investing activities 8 — - Net cash used in investing activities 8 — - Proceeds from issuance of long-term debt 430,000 1,500,00 Repayments of long-term debt (496,829) (328,944) (1,500,00 Repayments of premium on early extinguishment of debt — (32,200) (1,200,00 Payments on tender, debt exchange and consent — (293,276) (1 Dividends paid to preferred shareholders (9,919) (4,959) — Principal payments on deferred satellites performance incentives (19,568) (17,429)				(8,783)
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Cash and cash equivalents, beginning of period 123,147 171,541 666,02	Effect of exchange rate changes on cash and cash equivalents	(9,297)	(30)	1,116
	Net change in cash and cash equivalents	48,394	494,483	(140,809)
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Cash and cash equivalents, end of period \$ 1/1,541 \$ 666,024 \$ 525,21	Cash and cash equivalents, end of period	\$ 171,541	\$ 666,024	\$ 525,215

Supplemental cash flow information:			
Interest paid, net of amounts capitalized	\$894,465	\$ 870,370	\$915,627
Income taxes paid, net of refunds	26,324	22,687	33,731
Supplemental disclosure of non-cash investing activities:			
Accrued capital expenditures and payments for satellites	\$ 82,208	\$ 127,008	\$ 38,450
Capitalization of deferred satellite performance incentives	16,800	69,909	44,445
Supplemental disclosure of non-cash financing activities:			
Debt financing and restricted cash received	\$ —	\$ 480,200	\$ —
Restricted cash used	_	(480,200)	_
Repayments of long-term debt	_	1,468,401	_
Issuance of long-term debt	_	(731,884)	_
Discount on long-term debt	_	212,660	_
Write-off of debt issuance costs	_	(9,253)	_
Restricted cash—letters of credit collateral	_	_	16,160

INTELSAT S.A.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

Note 1 Background of Company

Intelsat S.A. (the "Company", "we"," us" or "our") provides satellite communications services worldwide through a global communications network of approximately 50 satellites and ground facilities related to the satellite operations and control, and teleport services.

Note 2 Significant Accounting Policies

(a) Principles of Consolidation

The accompanying consolidated financial statements include the accounts of Intelsat S.A., its wholly-owned subsidiaries, and variable interest entities ("VIE") of which we are the primary beneficiary. We are the primary beneficiary of one VIE, as more fully described in Note 10—Investments, and accordingly, we include in our consolidated financial statements the assets and liabilities and results of operations of the entity, even though we may not own a majority voting interest. We use the equity method to account for our investments in entities where we exercise significant influence over operating and financial policies but do not retain control under either the voting interest model (generally 20% to 50% ownership interest) or the variable interest model. In 2015, we entered into a joint venture agreement as further described in Note 10—Investments, and the investment is accounted for using the equity method. We have eliminated all significant intercompany accounts and transactions.

(b) Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles ("U.S. GAAP") requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities as of the date of the financial statements, the reported amounts of revenues and expenses during the reporting periods, and the disclosures of contingent liabilities. Accordingly, ultimate results could differ from those estimates.

(c) Revenue Recognition

We earn revenue from providing satellite services and managed services to customers. We enter into contracts with customers to provide satellite transponders and transponder capacity and, in certain cases, earth stations and teleport facilities, for periods typically ranging from one year to the life of the satellite. Our revenue recognition policies are as follows:

Satellite Utilization Charges. We generally recognize revenues on a straight-line basis over the term of the related customer contract unless collectability is not reasonably assured. Revenues from occasional use services are recognized as the services are performed. We have certain obligations, including providing spare or substitute capacity if available, in the event of satellite service failure under certain long-term agreements. We generally are not obligated to refund satellite utilization payments previously made.

Satellite Related Consulting and Technical Services. We recognize revenue from the provision of consulting services as those services are performed. We recognize revenue for consulting services with specific deliverables, such as Transfer Orbit Support Services or training programs, upon the completion of those services.

Tracking, Telemetry and Commanding ("TT&C"). We earn TT&C services revenue from providing operational services to other satellite owners and from certain customers on our satellites. TT&C agreements entered into in connection with our satellite utilization contracts are typically for the period of the related service agreement. We recognize this revenue ratably over the term of the service agreement.

In-Orbit Backup Services. We provide back-up transponder capacity that is held on reserve for certain customers on agreed-upon terms. We recognize revenues for in-orbit protection services ratably over the term of the related agreement.

Revenue Share Arrangements. We recognize revenues under revenue share agreements for satellite-related services either on a gross or net basis in accordance with the principal versus agent considerations topic of the Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC"), which provides guidance and specifies when an entity should report revenue gross as a principal versus net as an agent, depending on the nature of the specific contractual relationship.

We may sell these products or services individually or in some combination to our customers. When these products and services are sold together, we account for the multiple elements under FASB ASC Topic 605-25, Revenue Recognition-Multiple Element Arrangements ("FASB ASC 605-25"). FASB ASC 605-25 provides guidance on accounting for arrangements that involve the delivery or performance of multiple products, services and/or rights to use assets. We allocate revenue for transactions or collaborations that include multiple elements to each unit of accounting based on each element's relative selling price, and recognize revenue for each unit of accounting when the applicable revenue recognition criteria have been met.

(d) Fair Value Measurements

We estimate the fair value of our financial instruments using available market information and valuation methodologies. The carrying amounts of cash and cash equivalents, receivables, accounts payable and accrued liabilities approximate their fair values because of the short maturity of these financial instruments.

FASB ASC Topic 820, Fair Value Measurements and Disclosure ("FASB ASC 820") defines fair value as the price that would be received in the sale of an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. FASB ASC 820 requires disclosure of the extent to which fair value is used to measure financial assets and liabilities, the inputs utilized in calculating valuation measurements, and the effect of the measurement of significant unobservable inputs on earnings, or changes in net assets, as of the measurement date. FASB ASC 820 establishes a three-level valuation hierarchy based upon the transparency of inputs utilized in the measurement and valuation of financial assets or liabilities as of the measurement date. We apply fair value accounting for all financial assets and liabilities and non-financial assets and liabilities that are recognized or disclosed at fair value in the financial statements on a recurring basis.

The fair value hierarchy prioritizes the inputs used in valuation techniques into three levels as follows:

- Level 1—unadjusted quoted prices for identical assets or liabilities in active markets;
- Level 2—quoted prices for similar assets and liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that
 are not active, and inputs other than quoted market prices that are observable or that can be corroborated by observable market data by
 correlation; and
- Level 3—unobservable inputs based upon the reporting entity's internally developed assumptions which market participants would use in pricing the asset or liability.

(e) Cash and Cash Equivalents

Cash and cash equivalents consist of cash on hand and highly liquid investments with original maturities of three months or less, which are generally time deposits with banks and money market funds. The carrying amount of these investments approximates market value.

(f) Receivables and Allowances for Doubtful Accounts

We provide satellite services and extend credit to numerous customers in the satellite communication, telecommunications and video markets. We monitor our exposure to credit losses and maintain allowances for doubtful accounts and anticipated losses. We believe we have adequate customer collateral and reserves to cover our exposure. If we determine that the collection of payments is not reasonably assured at the time the respective service is provided, we defer recognition of the revenue until we believe collection is reasonably assured or the payment is received.

(g) Satellites and Other Property and Equipment

Satellites and other property and equipment are stated at historical cost, or in the case of certain satellites acquired, the fair value at the date of acquisition. Capitalized costs consist primarily of the costs of satellite construction and launch, including launch insurance and insurance during the period of in-orbit testing, the net present value of performance incentives expected to be payable to the satellite manufacturers (dependent on the continued satisfactory performance of the satellites), costs directly associated with the monitoring and support of satellite construction, and interest costs incurred during the period of satellite construction.

We depreciate satellites and other property and equipment on a straight-line basis over the following estimated useful lives:

	Years
Buildings and improvements	10 - 40
Satellites and related costs	10 - 17
Ground segment equipment and software	4 - 15
Furniture and fixtures and computer hardware	4 - 12
Leasehold improvements(1)	2 - 12

(1) Leasehold improvements are depreciated over the shorter of the useful life of the improvement or the remaining lease term.

(h) Other Assets

Other assets consist of investments in certain equity securities, long-term deposits, long-term receivables and other miscellaneous deferred charges and long-term assets.

(i) Goodwill and Other Intangible Assets

We account for goodwill and other intangible assets in accordance with FASB ASC Topic 350, Intangibles—Goodwill and Other ("FASB ASC 350"). Goodwill represents the excess of the consideration transferred plus the fair value of any noncontrolling interest in the acquiree at the acquisition date over the fair values of identifiable net assets of businesses acquired. Goodwill and certain other intangible assets deemed to have indefinite lives are not amortized but are tested on an annual basis for impairment during the fourth quarter, or whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable. See Note 11—Goodwill and Other Intangible Assets.

Intangible assets arising from business combinations are initially recorded at fair value. We record other intangible assets at cost. We amortize intangible assets with determinable lives (consisting of backlog and customer relationships) based on the expected pattern of consumption. We review these intangible assets for impairment whenever facts and circumstances indicate that the carrying amounts may not be recoverable. See Note 11—Goodwill and Other Intangible Assets.

(j) Impairment of Long-Lived Assets

We review long-lived assets, including property and equipment and acquired intangible assets with estimable useful lives, for impairment whenever events or changes in circumstances indicate that the carrying amount of such an asset may not be recoverable. These indicators of impairment can include, but are not limited to, the following:

- satellite anomalies, such as a partial or full loss of power;
- · under-performance of an asset compared to expectations; and
- · shortened useful lives due to changes in the way an asset is used or expected to be used.

The recoverability of an asset to be held and used is determined by comparing the carrying amount to the estimated undiscounted future cash flows expected to be generated by the asset. If the carrying amount of the asset exceeds its estimated undiscounted future cash flows, we record an impairment charge in the amount by which the carrying amount of the asset exceeds its fair value, which we determine by either a quoted market price, if any, or a value determined by utilizing discounted cash flow techniques.

(k) Income Taxes

We account for income taxes in accordance with FASB ASC Topic 740—*Income Taxes*. We are subject to income taxes in the United States as well as a number of other foreign jurisdictions. Significant judgment is required in the calculation of our tax provision and the resulting tax liabilities and in the recoverability of our deferred tax assets that arise from temporary differences between the tax and financial statement recognition of revenue and expense and net operating loss and credit carry forwards.

We regularly assess the likelihood that our deferred tax assets can be recovered. A valuation allowance is required when it is more likely than not that all or a portion of the deferred tax asset will not be realized. We evaluate the recoverability of our deferred tax assets based in part on the existence of deferred tax liabilities that can be used to realize the deferred tax assets.

During the ordinary course of business, there are transactions and calculations for which the ultimate tax determination is uncertain. We evaluate our tax positions to determine if it is more likely than not that a tax position is sustainable, based solely on its technical merits and presuming the taxing authorities have full knowledge of the position and access to all relevant facts and information. When a tax position does not meet the more likely than not standard, we record a liability or contra asset for the entire amount of the unrecognized tax benefit. Additionally, for those tax positions that are determined more likely than not to be sustainable, we measure the tax position at the largest amount of benefit more likely than not (determined by cumulative probability) to be realized upon settlement with the taxing authority.

(1) Foreign Currency Translation

Our functional currency is the U.S. dollar, since substantially all customer contracts, capital expenditure contracts and operating expense obligations are denominated in U.S. dollars. Transactions not denominated in U.S. dollars have been translated using the spot rates of exchange at the dates of the transactions. We recognize differences on exchange arising on the settlement of the transactions denominated in currencies other than the U.S. dollar in the consolidated statement of operations.

(m) Comprehensive Income

Comprehensive income consists of net income or loss and other gains and losses affecting shareholders' equity that, under U.S. GAAP, are excluded from net income or loss. Such items consist primarily of the change in the market value of available-for-sale securities and pension liability adjustments.

(n) Share-Based Compensation

Compensation cost is recognized based on the requirements of FASB ASC Topic 718, Compensation—Stock Compensation ("FASB ASC 718"), for all share-based awards granted.

Awards are measured at the grant date based on the fair value as calculated using the Black-Scholes option pricing model for share options, a Monte Carlo simulation model for awards with market conditions, or the closing market price at the grant date for awards of shares or restricted shares units. The expense is recognized over the requisite service period, based on attainment of certain vesting requirements.

The determination of the value of certain awards requires considerable judgment, including estimating expected volatility, expected term and risk-free rate. The Company's expected volatility is based on the average volatility rates of similar actively-traded companies over the range of each award's estimated expected term, which is based on the midpoint between the expected vesting time and the remaining contractual life. The risk-free rate is derived from the applicable Constant Maturity Treasury rate.

(o) Deferred Satellite Performance Incentives

The cost of satellite construction may include an element of deferred consideration that we are obligated to pay to satellite manufacturers over the lives of the satellites, provided the satellites continue to operate in accordance with contractual specifications. Historically, the satellite manufacturers have earned substantially all of these payments. Therefore, we account for these payments as deferred financing. We capitalize the present value of these payments as part of the cost of the satellites and record a corresponding liability to the satellite manufacturers. Interest expense is recognized on the deferred financing and the liability is reduced as the payments are made.

(p) Derivative Instruments

We enter into derivative transactions primarily to manage our exposure to fluctuations in foreign exchange rates and interest rates. We employ risk management strategies, which may include the use of foreign currency swaps, interest rate swaps and interest rate caps. We measure all derivatives at fair value and recognize them as either assets or liabilities on our consolidated balance sheets. Changes in the fair value of derivative instruments not qualifying as hedges are recognized in earnings in the current period.

(q) New Accounting Pronouncements

In May 2014, the FASB issued Accounting Standard Update ("ASU") 2014-09, Revenue from Contracts with Customers (Topic 606), which will supersede the revenue recognition requirements in FASB ASC Topic 605 – Revenue Recognition. The guidance in ASU 2014-09 clarifies the principles for recognizing revenue and improves financial reporting by creating a common revenue standard for U.S. GAAP and International Financial Reporting Standards. The FASB issued several amendments to the standard, including clarification of accounting for licenses of intellectual property and identifying performance obligations.

The Company formed an implementation team to evaluate and direct the implementation of the new revenue recognition standard and related amendments. This evaluation also included the impact of the new standard on relevant controls, systems and business processes. The team assessed contracts entered into with key customers and other forms of agreements with customers globally and evaluated the provisions under the five-step model specified by the new guidance. Based on our assessment, the adoption of the new standard will impact the determination of transaction price for prepayment contracts, accounting of incremental costs for obtaining a contract, allocation of the transaction price to performance obligations in multiple element arrangements and will require additional disclosures.

We have identified all contracts with prepayment provisions and determined that certain long-term contracts with prepayments contain a significant financing component primarily due to the length of time between when payment is received and when the transfer of services to the customer occurs. Further, we currently expense sales incentives under our sales incentive program as incurred. Under the new standard, we will be required to defer and amortize a portion of these incentive costs over the life of the contract.

Lastly, prior to the adoption of the new standard, equipment revenue was required to be limited to the amount that was not contingent upon the delivery of additional items meeting other specified performance conditions. Under ASC 606, we are required to allocate the total contract revenue to various performance obligations such as equipment and service. As a result, we expect to recognize more equipment revenue upon customer acceptance, and recognize less revenue over the contract term than under previous accounting rules. More importantly, total revenue over the full contract term will be unchanged and there will be no change to customer billing, the timing of cash flows, or the presentation of cash flows.

We will adopt the new revenue standard effective January 1, 2018, using the modified retrospective transition method applied to those contracts for which not substantially all revenue was recognized under legacy GAAP. Upon adoption, we will recognize the cumulative effect as an adjustment to our opening accumulated deficit, with a corresponding increase to contract liabilities for our existing contracts with prepayment provisions. On an ongoing basis, the adjustment related to contracts with a significant financing component will result in an increase in revenue as well as an increase in interest expense. Additionally, contract acquisition costs associated with our sales incentive program in future periods will be capitalized and amortized over the respective contract life and equipment revenue will be recognized at a point in time upon customer acceptance.

Based on currently available information, we estimate the following opening balance sheet impact (all amounts are approximate, and they do not include any income tax effect):

Effect on Accumulated Deficit as of January 1, 2018:

	Dollars in millions
	_
Opening Balance Sheet Impact	increase/ (decrease)
Prepayments contracts	\$345 - \$355
Multiple elements arrangements	(\$5 - \$15)
Contract acquisition costs	(\$5 - \$10)

In January 2016, the FASB issued ASU 2016-01, *Financial Instruments – Overall (Topic 825)*, to require equity investments (except those accounted for under the equity method of accounting or those that result in consolidation of the investee) to be measured at fair value with changes in fair value recognized in net income. An entity may choose to measure equity investments that do not have readily determinable fair values at cost minus impairment, if any, plus or minus changes resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. ASU 2016-10 is effective for interim and annual periods beginning after December 15, 2017. The amendments related to equity investments without readily determinable fair values (including disclosure requirements) should be applied prospectively to equity investments that exist as of the date of adoptions. Our cost method investments recorded in other assets in our consolidated balance sheets had a total carrying value of \$29.0 million and \$54.7 million as of December 31, 2016 and 2017, respectively. We are in the process of evaluating the impact that ASU 2016-01 will have on our consolidated financial statements and disclosures.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*, to increase transparency and comparability by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. ASU 2016-02 is effective for interim and annual periods beginning after December 15, 2018, on a modified retrospective basis with early adoption allowed. We are in the process of evaluating the impact that ASU 2016-02 will have on our consolidated financial statements and associated disclosures.

In June 2016, the FASB issued ASU 2016-13, Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, which changes how companies measure and recognize credit impairment for any financial assets. The standard will require companies to immediately recognize an estimate of credit losses expected to occur over the remaining life of the financial assets that are within the scope of the standard. ASU 2016-13 is effective for interim and annual periods beginning after December 15, 2019 for public business entities that are SEC filers, on a modified retrospective basis. Early adoption is permitted for interim and annual periods beginning after December 15, 2018. We are in the process of evaluating the impact that ASU 2016-13 will have on our consolidated financial statements and associated disclosures.

In August 2016, the FASB issued ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments, which addresses specific issues relating to diversity in practice in how certain cash receipts and cash payments are presented and classified in the statement of cash flows. Additionally, in November 2016, the FASB issued ASU 2016-18, Statement of Cash Flows (Topic 230): Restricted Cash (a consensus of the FASB Emerging Issues Task Force), which requires that amounts described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. ASU 2016-15 and ASU 2016-18 are effective for interim and annual periods beginning after December 15, 2017 for public business entities, on a retrospective basis. Early adoption is permitted for both standards in any interim or annual period, and for ASU 2016-15 with a condition that the entire ASU is adopted in the same period. We do not expect the adoption of ASU 2016-15 to have a material impact on our consolidated financial statements and associated disclosures. The amendments in ASU 2016-18 will change the presentation of cash flows from restricted cash from supplemental disclosure of non-cash financing activities to cash flows from financing activities in our consolidated statement of cash flows. During the year ended December 31, 2016, the amendments in ASU 2016-18 would have resulted in reclassification of \$480.2 million, currently presented as debt financing and restricted cash received under supplemental disclosure of non-cash financing activities, to proceeds from issuance of long-term debt under cash flows from financing activities. During the year ended December 31, 2017, the amendments in ASU 2016-18 would have resulted in elimination of \$16.2 million, currently presented as restricted cash - letters of credit collateral under supplemental disclosure of non-cash financing activi

In October 2016, the FASB issued ASU 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory*, which is intended to improve the accounting for the income tax consequences of intra-entity transfers of assets other than inventory. The amendments in ASU 2016-16 eliminate the current requirement to defer the recognition of current and deferred income taxes for an intra-entity asset transfer until the asset has been sold to an outside party. ASU 2016-16 is effective for interim and annual periods beginning after December 15, 2017 for public business entities, on a modified retrospective basis. Early adoption is permitted as of the beginning of an annual reporting period for which interim or annual financial statements have not been issued. We plan to adopt the amendments in the first quarter of 2018 and expect the effect of ASU 2016-16 to be a cumulative benefit to accumulated deficit on January 1, 2018. Based on our existing intercompany structure, we expect the benefit to accumulated deficit to be approximately \$170 million. The benefit relates to certain deferred intercompany gains/losses, mostly in connection with a series of intercompany transactions in 2011 and 2017 and related steps that reorganized the ownership of our assets among our subsidiaries.

In January 2017, the FASB issued ASU 2017-04, Intangibles-Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment, which is intended to simplify the subsequent measurement of goodwill. The amendments in ASU 2017-04 modify the concept of impairment from the condition that exists when the carrying amount of goodwill exceeds its fair value to the condition that exists when the carrying amount of a reporting unit exceeds its fair value. An entity will no longer determine goodwill impairment by calculating the implied fair value of goodwill by assigning the fair value of a reporting unit to all of its assets and liabilities, as if that reporting unit had been acquired in a business combination. ASU 2017-04 will be effective for interim and annual goodwill impairment tests in fiscal years beginning after December 15, 2019 for public business entities, on a prospective basis. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. When adopted, we will measure impairment using the difference between the carrying amount and the fair value of the reporting unit, if required.

In March 2017, the FASB issued ASU 2017-07, Compensation-Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost, which is intended to improve the presentation of net periodic pension cost and net periodic postretirement benefit cost in the financial statements. ASU 2017-07 requires that an employer disaggregate the service cost component from the other components of net benefit cost and report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. ASU 2017-07 is effective for interim and annual periods beginning after December 15, 2017 for public business entities. Early adoption is permitted as of the beginning of an annual period for which interim or annual financial statements have not been issued. We are in the process of evaluating the impact that ASU 2017-07 will have on our consolidated financial statements and associated disclosures.

In May 2017, the FASB issued ASU 2017-09, Compensation-Stock Compensation (Topic 718): Scope of Modification Accounting, which is intended to clarify when to account for a change to the terms or conditions of a share-based payment award as a modification. Under ASU 2017-09 modification accounting is required only if the fair value (or calculated intrinsic value, if those amounts are being used to measure the award under ASC 718), the vesting conditions, or the classification of the award changes as a result of the change in terms or conditions. ASU 2017-09 is effective for all entities for annual periods, and interim periods within those annual periods, beginning after December 15, 2017. Early adoption is permitted, including adoption in any interim period for which financial statements have not yet been issued or made available for issuance. The amendment should be applied prospectively to an award modified on or after the adoption date. We do not anticipate this ASU will have a material impact on our consolidated financial statements and associated disclosures and will continue to evaluate the impact of ASU 2017-09 as any modifications occur.

In February 2018, the FASB issued ASU 2018-02, *Income Statement – Reporting Comprehensive Income (Topic 220)*, which allows for an optional reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act. Consequently, the amendments eliminate the stranded tax effects resulting from the Tax Cuts and Jobs Act for those entities that elect the optional reclassification. The amendments in this update will also require certain disclosures about stranded tax effects. ASU 2018-02 is effective for all entities for interim and annual periods beginning after December 15, 2018. We are in the process of evaluating the impact that ASU 2018-02 will have on our consolidated financial statements and associated disclosures.

Note 3 Share Capital

Under our Articles of Incorporation, we have an authorized share capital of \$10.0 million, represented by 1.0 billion shares of any class with a nominal value of \$0.01 per share. At December 31, 2017, there were 119.6 million common shares issued and outstanding.

On May 1, 2016, each of our 5.75% Series A mandatorily convertible junior non-voting preferred shares (the "Series A Preferred Shares") automatically converted into 2.7778 common shares, based on the average of the closing prices per common share over the 40 trading day period ending on the third trading day prior to the mandatory conversion date. The automatic conversion for a total of 9.6 million new common shares was recorded on May 2, 2016.

Note 4 Net Income (Loss) per Share

Basic earnings per share ("EPS") is computed by dividing net income (loss) attributable to Intelsat S.A.'s common shareholders by the weighted average number of common shares outstanding during the periods.

The following table sets forth the computation of basic and diluted net income (loss) per share attributable to Intelsat S.A.:

		(in thousands, except per share data or where otherwise noted)						
			Year Ended	_	ear Ended	_	ear Ended	
	NT.	Dec	ember 31, 2015	Decei	December 31, 2016		mber 31, 2017	
	Numerator:		(2.010.150)				(1=1011)	
	Net income (loss)	\$	(3,919,453)	\$	994,112	\$	(174,814)	
	Net income attributable to noncontrolling interest		(3,934)		(3,915)		(3,914)	
	Net income (loss) attributable to Intelsat S.A.		(3,923,387)		990,197		(178,728)	
	Less: Preferred Shares dividends declared		(9,919)		_			
	Net income (loss) attributable to common							
	shareholders	\$	(3,933,306)	\$	990,197	\$	(178,728)	
	Numerator for Basic EPS—income/ (loss) available							
	to common shareholders	\$	(3,933,306)	\$	990,197	\$	(178,728)	
	Numerator for Diluted EPS	\$	(3,933,306)	\$	990,197	\$	(178,728)	
	Denominator:							
	Basic weighted average shares outstanding (in							
	millions)		107.2		114.5		118.9	
	Weighted average dilutive shares outstanding (in							
	millions):							
	Preferred shares (in millions)		_		3.2		_	
	Employee compensation related shares							
	including options and restricted stock units							
	(in millions)		_		0.8		_	
	Diluted weighted average shares outstanding (in	_						
	millions)		107.2		118.5		118.9	
Rasi	c net income (loss) per common share attributable to		107.2		110.5		110.5	
	telsat S.A.	\$	(36.68)	\$	8.65	\$	(1.50)	
		Ψ	(30.00)	Ψ	0.03	Ψ	(1.50)	
	ted net income (loss) per common share attributable		(2.5.50)		0.46		(4 = 0)	
to	Intelsat S.A.	\$	(36.68)	\$	8.36	\$	(1.50)	

Due to a net loss in the year ended December 31, 2015 and 2017, there were no dilutive securities, and therefore, basic and diluted EPS were the same. The weighted average number of shares that could potentially dilute basic EPS in the future was 5.1 million, 6.2 million and 3.5 million (consisting of restricted share units and options to purchase common shares) for the years ended December 31, 2015, 2016 and 2017, respectively. Further, there were 9.6 million weighted average common shares resulting from the potential conversion of Series A Preferred Shares for the year ended December 31, 2015, that could have diluted basic EPS in future periods.

Note 5 Share-Based and Other Compensation Plans

In April 2013, our board of directors adopted the amended and restated Intelsat Global, Ltd. 2008 Share Incentive Plan (as amended, the "2008 Equity Plan"). Also in April 2013, our board of directors adopted the Intelsat S.A. 2013 Equity Incentive Plan (the "2013 Equity Plan"). No new awards may be granted under the 2008 Equity Plan.

The 2013 Equity Plan provides for a variety of equity based awards, including incentive stock options (within the meaning of Section 422 of the United States Internal Revenue Service Tax Code), restricted shares, restricted share units ("RSUs"), other share-based awards and performance compensation awards. Effective June 16, 2016, we increased the aggregate number of common shares authorized for issuance under the 2013 Equity Plan to 20.0 million common shares. The total aggregate number of shares available for future issuance under the 2013 Equity Plan was 9.1 million as of December 31, 2017.

In March 2016, the FASB issued ASU 2016-09, Compensation-Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, which is intended to improve accounting for share-based payment transactions as part of the FASB's simplification initiative. We adopted this ASU in the first quarter of 2017 and are recognizing forfeitures as they occur. The adoption did not have a material impact on our consolidated financial statements and associated disclosures.

For all share-based awards, we recognize the compensation costs over the vesting period during which the employee provides service in exchange for the award. During the years ended December 31, 2015, 2016 and 2017, we recorded compensation expense of \$25.8 million, \$23.2 million, and \$16.0 million, respectively.

Stock Options

Stock options generally expire 10 years from the date of grant. In some cases, options have been granted which expire 15 years from the date of grant. The options vest monthly over service periods ranging from two to five years.

Stock Option activity during 2017 was as follows:

	Number of Stock Options (in thousands)	 ed Average cise price	Weighted Average remaining contractual term (in years)	Aggregate intrinsic value (in millions)
Outstanding at January 1, 2017	2,291	\$ 3.82		
Exercised	(126)	3.77		
Forfeited	(35)	3.77		
Expired	(46)	 3.80		
Outstanding at December 31, 2017	2,084	\$ 3.84	6.7	\$ <u> </u>
Exercisable at December 31, 2017	1,944	\$ 3.88	6.6	\$ <u> </u>

The total intrinsic value of stock options exercised during the years ended December 31, 2015 and 2017 was \$0.3 million and \$0.2 million, respectively. No stock options were exercised during the year ended December 31, 2016. As of December 31, 2017, there was \$0.1 million of total unrecognized compensation cost related to unvested options, which is expected to be recognized over a weighted average period of 1.1 years.

During the years ended December 31, 2015, 2016 and 2017, we recorded compensation expense of \$0.8 million, \$2.6 million and \$1.4 million, respectively, including compensation expense from option modifications in 2014 and 2016, further described below. During years ended December 31, 2015 and 2017, we received cash of \$0.2 million and \$0.5 million, respectively, from the exercise of stock options. No stock options were exercised during the year ended December 31, 2016.

Anti-Dilution Options

In connection with our initial public offering of common shares in April 2013 (the "IPO") and upon consummation of the IPO, options were granted to certain individuals in accordance with the existing terms of their side letters to a management shareholders agreement to which we are a party, which, when taken together with the common shares received in connection with the reclassification of our outstanding former Class B Shares at the time of our IPO, preserved their ownership interests represented by their outstanding former Class B Shares immediately prior to the reclassification.

These options generally expire 10 years from the date of the grant.

	Number of Stock Options (in thousands)	Weighted Average Exercise price		Weighted Average remaining contractual term (in years)	intrir	gregate nsic value nillions)
Outstanding at January 1, 2017	1,610	\$	11.98			
Outstanding at December 31, 2017	1,610	\$	11.98	5.1	\$	
Exercisable at December 31, 2017	1,610	\$	11.98	5.1	\$	

We measure the fair value of anti-dilution option grants at the date of grant using a Black-Scholes option pricing model. There were no anti-dilution options granted during the years ended December 31, 2015, 2016 and 2017.

During the year ended December 31, 2016, we recorded compensation expense associated with anti-dilution option awards of \$1.0 million related to 2016 option modifications further described below. No compensation expense was recorded for these awards during the years ended December 31, 2015 and 2017.

There were no anti-dilution options exercised during the years ended 2015, 2016 or 2017.

2016 Option modifications

During the year ended December 31, 2016, we amended 1.2 million stock options under the 2008 Equity Plan (including 0.7 million of anti-dilution options), and 0.4 million stock options under the 2013 Equity Plan in order to modify the exercise prices to \$4.16 for the anti-dilution options and to \$3.77 for the remainder. As a result of the change, we estimated the difference between fair value of the amended options and the fair value of the original awards before settlement. The fair value was measured using the Black-Scholes option pricing model and the following assumptions were used for the amended options and the original awards before amendment: risk-free interest rates of 0.8% to 1.5%; dividend yields of 0.0%; expected volatility of 50-60%; and expected life of one to four years.

All such options were fully vested and we recognized additional compensation expense associated with the modifications of \$2.0 million for the year ended December 31, 2016, which has been included in the respective sections above.

Time-based RSUs

Time-based RSUs vest over periods ranging from one to three years from the date of grant.

Time-based RSUs activity during 2017 was as follows:

	Number of RSUs (in thousands)	 ed Average ite fair value	Weighted Average remaining contractual term (in years)	Aggreg intrinsic (in milli	value
Outstanding at January 1, 2017	3,594	\$ 9.52			
Granted	1,412	4.36			
Vested(1)	(1,400)	9.76			
Forfeited	(189)	 4.62			
Outstanding at December 31, 2017	3,417	\$ 7.56	1.4	\$	11.6

⁽¹⁾ The total vested RSUs does not include 1,025 RSUs that have vested but for which shares have not been issued.

The fair value of time-based RSUs is deemed to be the market price of common shares on the date of grant. The weighted average grant date fair value of time-based RSUs granted during the years ended December 31, 2015, 2016, and 2017 was \$11.64, \$1.67, and \$4.36, respectively. The total intrinsic value of time-based RSUs vested during the years ended December 31, 2015, 2016 and 2017 was \$8.0 million, \$1.7 million, and \$6.0 million, respectively. As of December 31, 2017, there was \$5.6 million of total unrecognized compensation cost related to unvested time-based RSUs, which is expected to be recognized over a weighted average period of 1.4 years.

During the years ended December 31, 2015, 2016, and 2017, we recorded compensation expense associated with these time-based RSUs of \$22.8 million, \$17.9 million, and \$13.7 million, respectively.

Performance-based RSUs

Performance-based RSUs vest after three years from the date of grant upon achievement of certain performance conditions. These grants are subject to vesting upon achievement of an adjusted EBITDA target and achievement of a relative shareholder return ("RSR"), which is based on the Company's relative shareholder return percentile ranking versus the S&P 900 Index target as defined in the grant agreement.

Performance-based RSUs activity during 2017 was as follows:

	Number of RSUs (in thousands)	Weighted Average grant date fair value	Weighted Average remaining contractual term (in years)	Aggregate intrinsic value (in millions)
Outstanding at January 1, 2017	1,829	\$ 6.22		
Granted	790	2.79		
Cancelled	(324)	21.48		
Forfeited	(139)	3.01		
Outstanding at December 31, 2017	2,156	\$ 2.89	1.4	\$ 7.3

We measure the fair value of performance-based RSUs at the date of grant using the market price of our common shares (to measure the award based on an adjusted EBITDA target) and a Monte Carlo simulation model (to measure the award based on an RSR target).

The weighted average grant date fair value of performance-based RSUs granted during the years ended December 31, 2015, 2016, and 2017 was \$8.97, \$0.94, and \$2.79, respectively. As of December 31, 2017, there was \$1.2 million of total unrecognized compensation cost related to unvested performance-based RSUs, which is expected to be recognized over a weighted average period of 1.4 years.

Achievement of the adjusted EBITDA target for awards granted in 2015, 2016, and 2017 is not currently considered probable. No compensation cost associated with these awards (based on the adjusted EBITDA condition) was recognized during the years ended December 31, 2015, and 2017. We recorded compensation expense associated with the awards granted in 2016 (based on the adjusted EBITDA condition) of \$0.1 million during the year ended December 31, 2016, which was reversed during the year ended December 31, 2017. We recorded compensation expense associated with the RSR portion of performance-based RSUs of \$2.2 million, \$1.6 million, and \$1.0 million during the years ended December 31, 2015, 2016 and 2017, respectively.

Note 6 Fair Value Measurements

We have identified investments in marketable securities, interest rate financial derivative instruments, warrant and put option embedded derivative instruments as those items that meet the criteria of the disclosure requirements and fair value framework of FASB ASC 820.

The following tables present assets and liabilities measured and recorded at fair value in our consolidated balance sheets on a recurring basis and their corresponding level within the fair value hierarchy (in thousands), excluding long-term debt (see Note 12—Long-Term Debt) and pension plan assets (see Note 7—Retirement Plans and Other Retiree Benefits). No transfers between Level 1 and Level 2 fair value measurements occurred during the year ended December 31, 2017.

		Fair Value Measurements at December 31, 2016						
			Quo	ted Prices			Sig	nificant
			in Acti	ive Markets	Signific	ant Other	Unol	bservable
Description		As of	for Ide	ntical Assets	Observ	able Inputs	I	nputs
Assets	Decem	ber 31, 2016	(L	evel 1)	(Le	evel 2)	(L	evel 3)
Marketable securities(1)	\$	5,381	\$	5,381	\$	_	\$	
Total assets	\$	5,381	\$	5,381	\$		\$	
Liabilities				<u> </u>				
Put option embedded derivative(4)	\$	1,496	\$		\$		\$	1,496
Total liabilities	\$	1,496	\$		\$		\$	1,496

			Fair value Measurements at December 31, 2017					
			Quote	ed Prices in			Sig	nificant
				Markets for		icant Other	Uno	bservable
Description		As of	Ident	ical Assets	Obser	vable Inputs]	nputs
Assets	Decen	ber 31, 2017	(I	evel 1)	(I	evel 2)	(L	evel 3)
Marketable securities(1)	\$	5,776	\$	5,776	\$	_	\$	_
Undesignated interest rate cap (2)		22,336		_		22,336		_
Warrant(3)		4,100						4,100
Total assets	\$	32,212	\$	5,776	\$	22,336	\$	4,100
Liabilities								
Put option embedded derivative(4)	\$	658	\$	<u> </u>	\$	<u> </u>	\$	658
Total liabilities	\$	658	\$		\$		\$	658

Fair Value Messurements at December 31 2017

- (1) The valuation measurement inputs of these marketable securities represent unadjusted quoted prices in active markets and, accordingly, we have classified such investments within Level 1 of the fair value hierarchy. The cost basis of our available-for-sale marketable securities was \$5.0 million at December 31, 2016 and \$4.7 million at December 31, 2017. We sold marketable securities with a cost basis of \$0.7 million during the year ended December 31, 2017 and recorded a nominal gain on the sale within other income (expense), net in our consolidated statement of operations.
- (2) The valuation of our interest rate derivative instruments reflects the fair value of premiums paid, taking into account observable inputs including current interest rates, the market expectation for future interest rates volatility and current creditworthiness of the counterparties. As a result, we have determined that our derivative valuations in their entirety are classified within Level 2 of the fair value hierarchy.
- (3) We valued the warrant using a valuation technique which reflects the risk free rate, time to maturity and volatility of comparable companies. We identified the inputs used to calculate the fair value as Level 3 inputs and concluded that the valuation in its entirety was classified as Level 3 within the fair value hierarchy.
- (4) We valued the contingent put option embedded within the 2022 ICF Notes (as defined in Note 12—Long-Term Debt), using a valuation technique which reflects the estimated date and probability of a change of control, the fair value of the 2022 ICF Notes, and a credit valuation adjustment reflecting our credit spreads. We identified the inputs used to calculate the fair value as Level 3 inputs and concluded that the valuation in its entirety was classified as Level 3 within the fair value hierarchy.

Note 7 Retirement Plans and Other Retiree Benefits

We maintain a noncontributory defined benefit retirement plan covering substantially all of our employees hired prior to July 19, 2001. The cost of providing benefits to eligible participants under the defined benefit retirement plan is calculated using the plan's benefit formulas, which take into account the participants' remuneration, dates of hire, years of eligible service, and certain actuarial assumptions. In addition, as part of the overall medical plan, we provide postretirement medical benefits to certain current retirees who meet the criteria under the medical plan for postretirement benefit eligibility.

In the first quarter of 2015, we amended the defined benefit retirement plan to cease the accrual of additional benefits for the remaining active participants effective March 31, 2015, resulting in a curtailment of \$10.3 million that decreased both the pension liability and the actuarial loss recorded in accumulated other comprehensive loss. As a result of the curtailment, all of the plan's participants are now considered inactive. Accordingly, all amounts recorded in accumulated other comprehensive loss are being recognized as an increase to net periodic benefit cost over the average remaining life expectancy of plan participants, which is approximately 20 years, beginning in the second quarter of 2015.

Also, as a result of the plan amendment, we recognized in our consolidated statements of operations \$0.6 million of prior service credits that were previously recorded in accumulated other comprehensive loss.

The defined benefit retirement plan is subject to the provisions of the Employee Retirement Income Security Act of 1974, as amended. We expect that our future contributions to the defined benefit retirement plan will be based on the minimum funding requirements of the Internal Revenue Code and on the plan's funded status. Any significant decline in the fair value of our defined benefit retirement plan assets or other adverse changes to the significant assumptions used to determine the plan's funded status would negatively impact its funded status and could result in increased funding in future periods. The impact on the funded status is determined based upon market conditions in effect when we completed our annual valuation. We anticipate that our contributions to the defined benefit retirement plan in 2018 will be approximately \$5.1 million. We fund the postretirement medical benefits throughout the year based on benefits paid. We anticipate that our contributions to fund postretirement medical benefits in 2018 will be approximately \$4.1 million.

Prior service credits and actuarial losses are reclassified from accumulated other comprehensive loss to net periodic pension benefit costs, which are included in both direct costs of revenue and selling, general and administrative on our consolidated statements of operations for the year ended December 31, 2017. The following table presents these reclassifications, net of tax, as well as the reclassification of the realized gain on investments, and the statement of operations line items that are impacted (in thousands):

	Year Ended cember 31, 2015	De	Year Ended cember 31, 2016	De	Year Ended cember 31, 2017
Amortization of prior service credits reclassified from other comprehensive					_
loss to net periodic pension benefit costs included in:					
Direct costs of revenue (excluding depreciation and amortization)	\$ (141)	\$	(3)	\$	12
Selling, general and administrative	(107)		(2)		9
Total	\$ (248)	\$	(5)	\$	21
Amortization of actuarial loss reclassified from other comprehensive loss to net periodic pension benefit costs included in:					
Direct costs of revenue (excluding depreciation and amortization)	\$ 3,196	\$	1,372	\$	1,269
Selling, general and administrative	2,048		851		805
Total	\$ 5,244	\$	2,223	\$	2,074
Realized gain on investments included in:					
Other expense, net	\$ (340)	\$	(192)	\$	(235)
Total	\$ (340)	\$	(192)	\$	(235)

Reconciliation of Funded Status and Accumulated Benefit Obligation. Expenses for our defined benefit retirement plan and for postretirement medical benefits that are provided under our medical plan are developed from actuarial valuations. The following summarizes the projected benefit obligations, plan assets and funded status of the defined benefit retirement plan, as well as the projected benefit obligations of the postretirement medical benefits provided under our medical plan (in thousands, except percentages):

	Year Ended December 31, 2016		Year December	
	Pension Benefits	Other Post- retirement Benefits	Pension Benefits	Other Post- retirement Benefits
Change in benefit obligation				
Benefit obligation at beginning of period	\$ 435,462	\$ 90,583	\$ 424,929	\$ 82,897
Service cost	_	_		_
Interest cost	16,183	3,363	14,778	2,869
Employee contributions	_	422	_	416
Plan amendments	_	_	_	_
Plan curtailments	(20.454)	(2.210)	(24.200)	(4.125)
Benefits paid	(30,454)	(3,310)	(24,380)	(4,125)
Actuarial (gain) loss	3,738	(8,161)	31,895	530
Benefit obligation at end of period	\$ 424,929	\$ 82,897	\$ 447,222	\$ 82,587
Change in plan assets				
Plan assets at beginning of period	\$ 326,458	\$ —	\$ 317,510	\$ —
Employer contributions	606	2,888	2,888	3,709
Employee contributions	_	422	_	416
Actual return on plan assets	20,900	_	38,564	_
Benefits paid	(30,454)	(3,310)	(24,380)	(4,125)
Plan assets at fair value at end of period	\$ 317,510	\$ —	\$ 334,582	\$ —
Accrued benefit costs and funded status of the plans	\$(107,419)	\$ (82,897)	\$(112,640)	\$ (82,587)
Accumulated benefit obligation	\$ 424,929		\$ 447,222	
Weighted average assumptions used to determine accumulated benefit obligation and accrued benefit costs				
Discount rate	3.82%	4.19%	3.67%	3.64%
Weighted average assumptions used to determine net periodic benefit costs				
Discount rate	4.53%	4.50%	4.23%	4.19%
Expected rate of return on plan assets	7.80%	_	7.60%	_
Rate of compensation increase	_	_	_	_
Amounts in accumulated other comprehensive loss recognized in net periodic				
benefit cost				
Actuarial (gain) loss, net of tax	\$ 2,228	\$ (5)	\$ 2,363	\$ (289)
Prior service credits, net of tax	(8)	3	(8)	29
Total	\$ 2,220	\$ (2)	\$ 2,355	\$ (260)
Amounts in accumulated other comprehensive loss not yet recognized in net periodic benefit cost				
Actuarial (gain) loss, net of tax	\$ 87,981	\$ (9,468)	\$ 99,152	\$ (8,815)
Prior service credits, net of tax	(343)		(366)	
Total	\$ 87,638	\$ (9,468)	\$ 98,786	\$ (8,815)
Amounts in accumulated other comprehensive loss expected to be recognized in net periodic benefit cost in the subsequent year				
Actuarial (gain) loss	\$ (3,751)	\$ —	\$ (5,307)	\$ 403
Prior service credits		8		8
Total	\$ (3,751)	\$ 8	\$ (5,307)	\$ 411
	+ (3,701)	<u> </u>	<u> </u>	

Our benefit obligations are discounted along a yield curve that is derived from the monthly bid-price data of bonds that are rated high grade by either Moody's Investor Service or Standard and Poor's Rating Services. The bond types included are noncallable bonds, private placement bonds that are traded among qualified institutional buyers and are at least two years from date of issuance, bonds with a make-whole provision, and bonds issued by foreign corporations that are denominated in U.S. dollars. Excluded are bonds that are callable, sinkable and puttable as well as those for which the quoted yield-to-maturity is zero. Using the bonds from this universe that have a yield higher than the regression mean yield curve, regression analysis is used to determine the best-fitting curve, which gives a good fit to the data at both long and short maturities. The resulting regressed coupon yield curve is smoothed continuously along its entire length and represents an unbiased average of the observed market data.

In the first quarter of 2016, we changed the method we use to estimate the interest cost component of net periodic benefit cost for our defined benefit pension and other postretirement benefit plans. Historically, we estimated the interest cost component using a single weighted-average discount rate derived from the yield curve used to measure the benefit obligation at the beginning of the period. We have elected to use a full yield curve approach in the estimation of this component of benefit cost by applying the specific spot rates along the yield curve used in the determination of the benefit obligation to the relevant projected cash flows. We have made this change to improve the correlation between projected benefit cash flows and the corresponding yield curve spot rates, and to provide a more precise measurement of interest costs. This change does not affect the measurement of our total benefit obligations, as the change in the interest cost is completely offset in the actuarial (gain) loss reported. We have accounted for this change as a change in estimate and, accordingly, have accounted for it prospectively starting in the first quarter of 2016. The discount rate that we used to measure interest cost as of December 31, 2016 was approximately 3.8%. The discount rate that we measured at December 31, 2016 and would have used for interest cost under our prior estimation technique was approximately 4.5%. The reduction in interest cost as of December 31, 2017 was approximately 3.6%.

Interest rates used in these valuations are key assumptions, including discount rates used in determining the present value of future benefit payments and expected return on plan assets, which are reviewed and updated on an annual basis. The discount rates reflect market rates for high-quality corporate bonds. We consider current market conditions, including changes in interest rates, in making assumptions. The Society of Actuaries ("SOA") issued new mortality and mortality improvement tables in 2014, and modified those tables in 2015, 2016 and 2017. Our December 31, 2017 valuation used mortality and improvement tables based on the SOA tables, adjusted to reflect (1) an ultimate rate of mortality improvement consistent with both historical experience and U.S. Social Security long-term projections, and (2) a shorter transition period to reach the ultimate rate, which is consistent with historical patterns. In establishing the expected return on assets assumption, we review the asset allocations considering plan maturity and develop return assumptions based on different asset classes. The return assumptions are established after reviewing historical returns of broader market indexes, as well as historical performance of the investments in the plan. Our pension plan assets are managed in accordance with an investment policy adopted by the pension committee, as discussed below.

Plan Assets. The investment policy of the Plan includes target allocation percentages of approximately 49% for investments in equity securities (29% U.S. equities and 20% non-U.S. equities), 36% for investments in fixed income securities and 15% for investments in other securities, which is broken down further into 5% for investments in hedge fund of funds and 10% for investments in real estate fund of funds. Plan assets include investments in both U.S. and non-U.S. equity funds. Fixed income investments include a U.S. government securities fund, two short duration bond funds, a high yield bond fund and an emerging markets debt fund. The funds in which the plan's assets are invested are institutionally managed and have diversified exposures into multiple asset classes implemented with over 63 investment managers. The guidelines and objectives of the funds are congruent with the Intelsat investment policy statement.

The target and actual asset allocation of our pension plan assets were as follows:

	As of Decem	ber 31, 2016	As of December 31, 2017		
	Target Allocation	Actual Allocation	Target Allocation	Actual Allocation	
Asset Category	Anotation	Anocation	Anocation	Anotation	
Equity securities	49%	47%	49%	50%	
Debt securities	36%	34%	36%	35%	
Other securities	<u>15</u> %	19%	<u>15</u> %	<u>15</u> %	
Total	100%	100%	100%	100%	

The fair values of our pension plan assets by asset category are as follows (in thousands):

	Measurements at other 31, 2017	Level 1	Level 2	Level 3
Asset Category	 	<u> </u>		
Equity Securities				
U.S. Large-Cap (1)	\$ 78,076	\$ 78,076	\$ —	\$ —
U.S. Small/Mid-Cap (2)	19,952	19,952	_	_
World Equity Ex-US (3)	67,835	67,835	_	—
Fixed Income Securities				
Short Duration Bonds (4)	98,421	98,421	_	_
High Yield Bonds (5)	9,419	9,419	_	_
Emerging Market Fixed income (Non-US) (6)	9,127	9,127	_	_
Other Securities		\$282,830	<u>s — </u>	<u>s </u>
Hedge Funds (7)	17,121			
Core Property Fund (8)	34,486			
Income earned but not yet received	145			
Total	\$ 334,582			
	Measurements at aber 31, 2016	Level 1	Level 2	Level 3
Asset Category				
Equity Constitue				
Equity Securities				
U.S. Large-Cap (1)	\$ 80,698	\$ 80,698	\$ —	\$ —
Ú.S. Large-Cap (1) U.S. Small/Mid-Cap (2)	\$ 22,184	22,184	\$ <u> </u>	\$ <u> </u>
U.S. Large-Cap (1) U.S. Small/Mid-Cap (2) World Equity Ex-US (3)	\$ /	. ,	\$ — — —	\$ — — —
U.S. Large-Cap (1) U.S. Small/Mid-Cap (2) World Equity Ex-US (3) Fixed Income Securities	\$ 22,184 46,999	22,184 46,999	\$ — — —	\$ — — —
U.S. Large-Cap (1) U.S. Small/Mid-Cap (2) World Equity Ex-US (3) Fixed Income Securities Short Duration Bonds (4)	\$ 22,184 46,999 90,099	22,184 46,999 90,099	\$ — — —	\$ — — —
U.S. Large-Cap (1) U.S. Small/Mid-Cap (2) World Equity Ex-US (3) Fixed Income Securities Short Duration Bonds (4) High Yield Bonds (5)	\$ 22,184 46,999 90,099 14,125	22,184 46,999 90,099 14,125	\$ — — — —	\$ — — — —
U.S. Large-Cap (1) U.S. Small/Mid-Cap (2) World Equity Ex-US (3) Fixed Income Securities Short Duration Bonds (4)	\$ 22,184 46,999 90,099	22,184 46,999 90,099	\$ — — — — —	\$ — — — —
U.S. Large-Cap (1) U.S. Small/Mid-Cap (2) World Equity Ex-US (3) Fixed Income Securities Short Duration Bonds (4) High Yield Bonds (5)	\$ 22,184 46,999 90,099 14,125	22,184 46,999 90,099 14,125	\$ — — — — — — — — — — — —	\$ — — — — — — — — — —
U.S. Large-Cap (1) U.S. Small/Mid-Cap (2) World Equity Ex-US (3) Fixed Income Securities Short Duration Bonds (4) High Yield Bonds (5) Emerging Market Fixed income (Non-US) (6)	\$ 22,184 46,999 90,099 14,125	22,184 46,999 90,099 14,125 4,100	- - - - -	
U.S. Large-Cap (1) U.S. Small/Mid-Cap (2) World Equity Ex-US (3) Fixed Income Securities Short Duration Bonds (4) High Yield Bonds (5) Emerging Market Fixed income (Non-US) (6) Other Securities	\$ 22,184 46,999 90,099 14,125 4,100	22,184 46,999 90,099 14,125 4,100	- - - - -	
U.S. Large-Cap (1) U.S. Small/Mid-Cap (2) World Equity Ex-US (3) Fixed Income Securities Short Duration Bonds (4) High Yield Bonds (5) Emerging Market Fixed income (Non-US) (6) Other Securities Hedge Funds (7)	\$ 22,184 46,999 90,099 14,125 4,100	22,184 46,999 90,099 14,125 4,100	- - - - -	

⁽¹⁾ US large cap equity fund invests primarily in a portfolio of common stocks included in the S&P 500 Index, as well as other equity securities and derivative instruments whose value is derived from the performance of the S&P 500.

⁽²⁾ US small/mid cap equity fund invests primarily in a portfolio of common stocks included in the Russell 2500 Index.

⁽³⁾ World equity ex-US fund invests primarily in common stocks and other equity securities whose issuers comprise a broad range of capitalizations and are located outside of the U.S. The fund invests primarily in developed countries but may also invest in emerging markets.

⁽⁴⁾ Short duration bond fund includes the Opportunistic Income fund and the Limited Duration Bond Fund. The Opportunistic Income fund invests primarily in a diversified portfolio of investment grade and non-investment grade fixed-income securities. There are no restrictions on the maturity of any individual securities or on the fund's average portfolio maturity, although the average portfolio duration will typically vary between zero and two years. Under normal circumstances, the Limited Duration Bond Fund will invest at least 80% of its net assets in investment-grade, U.S. dollar-denominated debt instruments. The Fund is expected to maintain a portfolio duration of three years or less.

- (5) High yield bond fund seeks to maximize return by investing primarily in a diversified portfolio of higher yielding, lower rated fixed income securities. The fund will invest primarily in securities rated below investment grade, including corporate bonds, convertible and preferred securities and zero coupon obligations.
- (6) Emerging markets debt fund seeks to maximize return investing in fixed income securities of emerging markets issuers. The fund will invest primarily in U.S. dollar denominated debt securities of government, government-related and corporate issuers in emerging market countries, as well as entities organized to restructure the outstanding debt of such issuers.
- (7) Hedge fund seeks to provide returns that are different from (less correlated with) investments in more traditional asset classes. The fund will pursue its investment objective by investing substantially all of its assets in various hedge funds. The fund has semi-annual redemptions in June and December with a 95 day pre-notification period, and a two year lock-up on all purchases which have expired.
- (8) Core property fund is a fund of funds that invests in direct commercial property funds primarily in the U.S. The fund is meant to provide current income-oriented returns, diversification, and modest inflation protection to an overall investment portfolio. Total returns are expected to be somewhere between stocks and bonds, with moderate volatility and low correlation to public markets. The fund has quarterly redemptions with a 95 day pre-notification period, and no lock-up period.

Our plan assets are measured at fair value. FASB ASC 820 prioritizes the inputs used in valuation techniques including Level 1, Level 2 and Level 3 (see Note 2 (d)—Significant Accounting Policies—Fair Value Measurements).

The majority of our plan assets are valued using measurement inputs which include unadjusted prices in active markets and we have therefore classified these assets within Level 1 of the fair value hierarchy. Our other securities include Hedge Funds and Core Property Funds, which are measured at fair value using the net asset value per share practical expedient, and are not classified in the fair value hierarchy.

Net periodic pension benefit costs included the following components (in thousands):

	ear Ended aber 31, 2015	ear Ended aber 31, 2016	ar Ended ber 31, 2017
Service cost	\$ 780	\$ 	\$
Interest cost	18,734	16,183	14,778
Expected return on plan assets	(25,926)	(25,535)	(24,410)
Amortization of unrecognized prior service credits	(43)	_	_
Amortization of unrecognized net loss	7,911	3,370	3,751
Curtailment gain	(564)	_	
Special termination benefit recognized	 <u> </u>	 <u> </u>	 <u> </u>
Total benefit	\$ 892	\$ (5,982)	\$ (5,881)

We had accrued benefit costs at December 31, 2016 and 2017 of \$107.5 million and \$112.6 million, respectively, related to the pension benefits, of which \$0.6 million for each year were recorded within other current liabilities, and \$106.9 million and \$112.0 million were recorded in other long-term liabilities, respectively.

Net periodic other postretirement benefit costs included the following components (in thousands):

	r Ended per 31, 2015	r Ended oer 31, 2016	 r Ended er 31, 2017
Service cost	\$ 70	\$ 	\$ _
Interest cost	4,592	3,363	2,869
Amortization of prior service cost	_	_	(8)
Amortization of unrecognized net (gain) loss	 596	(8)	(455)
Total costs	\$ 5,258	\$ 3,355	\$ 2,406

We had accrued benefit costs at December 31, 2016 and 2017 related to the other postretirement benefits of \$82.9 million and \$82.6 million, respectively, of which \$4.1 million for each year were recorded in other current liabilities, and \$78.8 million and \$78.5 million were recorded in other long-term liabilities, respectively.

Depending on our actual future health care claims, our actual costs may vary significantly from those projected above. As of December 31, 2016 and December 31, 2017, the assumed health care cost trend rates were 7.2% (6.9% prior to medicare) and 6.8% (6.6% prior to medicare), respectively. These rates are expected to decrease annually to an ultimate rate of 4.5% by December 31, 2037. Increasing the assumed health care cost trend rate by 1% each year would increase the other postretirement benefits obligation as of December 31, 2017 by \$9.2 million. Decreasing this trend rate by 1% each year would reduce the other postretirement benefits obligation as of December 31, 2017 by \$7.4 million. A 1% increase in the assumed health care cost trend rate would have increased the net periodic other postretirement benefits cost by \$0.3 million and a 1% decrease would have decreased the cost by \$0.2 million for 2017.

The benefits expected to be paid in each of the next five years and in the aggregate for the five years thereafter are as follows (in thousands):

	Pension Benefits	Other Post- retirement Benefits
2018	\$ 37,063	\$ 4,091
2019	28,918	4,358
2020	27,864	4,582
2021	27,615	4,788
2022	27,447	4,972
2023 to 2027	131,974	26,121
Total	\$280,881	\$ 48,912

(b) Other Retirement Plans

We maintain a defined contribution retirement plan, qualified under the provisions of Section 401(k) of the Internal Revenue Code, for our employees in the United States. We recognized compensation expense for this plan of \$6.8 million, \$10.3 million and \$7.8 million for the years ended December 31, 2015, 2016 and 2017, respectively. We also maintain other defined contribution retirement plans in several non-U.S. jurisdictions, but such plans are not material to our financial position or results of operations.

Note 8 Receivables

Receivables were comprised of the following (in thousands):

	Dece	As of December 31, 2016		As of iber 31, 2017
Service charges:				
Billed	\$	246,833	\$	234,724
Unbilled		8,872		11,025
Other		2,075		5,143
Allowance for doubtful accounts		(54,744)		(29,669)
Total	\$	203,036	\$	221,223

Unbilled service charges represent amounts earned and accrued as receivables from customers for services rendered prior to the end of the reporting period. Unbilled service charges are expected to be billed and collected within twelve months of the respective balance sheet date.

Note 9 Satellites and Other Property and Equipment

(a) Satellites and Other Property and Equipment, net

Satellites and other property and equipment, net were comprised of the following (in thousands):

	As of December 31, 2016	As of December 31, 2017
Satellites and launch vehicles	\$ 10,363,771	\$ 10,653,213
Information systems and ground segment	727,929	808,203
Buildings and other	250,369	264,417
Total cost	11,342,069	11,725,833
Less: accumulated depreciation	(5,156,227)	(5,802,214)
Total	\$ 6,185,842	\$ 5,923,619

Satellites and other property and equipment, net as of December 31, 2016 and 2017 included construction-in-progress of \$1.1 billion and \$0.7 billion, respectively. These amounts relate primarily to satellites under construction and related launch services. Interest costs of \$98.3 million and \$60.0 million were capitalized during the years ended December 31, 2016 and 2017, respectively. Additionally, we recorded depreciation expense of \$627.5 million, \$646.4 million and \$665.6 million during the years ended December 31, 2015, 2016 and 2017, respectively.

We have entered into launch contracts for the launch of both specified and unspecified future satellites. Each of these launch contracts provides that such contract may be terminated at our option, subject to payment of a termination fee that increases as the applicable launch date approaches. In addition, in the event of a failure of any launch, we may exercise our right to obtain a replacement launch within a specified period following our request for re-launch.

(b) Recent Satellite Launches

Intelsat 37e, the fifth satellite in the Intelsat Epic^{NG} fleet, was successfully launched on September 29, 2017. The all-digital Intelsat 37e is the first high-throughput ("HTS") satellite to offer full, high-resolution interconnectivity between C-, Ku- and Ka- bands, delivering additional services and improved throughput to support enterprise, broadband, government and mobility applications in the Americas, Africa and Europe. Intelsat 37e is expected to enter into service in the first quarter of 2018.

On July 5, 2017, we successfully launched our Intelsat 35e satellite into orbit. The fourth of our Intelsat Epic^{NG} next-generation HTS satellites, Intelsat 35e will deliver high-performance services in the C- and Ku-bands. The Intelsat 35e Ku-band services include a customized high power wide beam for direct-to-home ("DTH") service delivery in the Caribbean, as well as services for mobility and government applications in the Caribbean, trans-Europe to Africa and the African continent. Intelsat 35e entered into service in August 2017.

Intelsat 32e, a customized payload positioned on a third-party satellite, was successfully launched on February 14, 2017. Intelsat 32e is the third of six in our planned Intelsat EpicNG fleet, featuring high-performance spot beams. Intelsat 32e increases our service capabilities over the in-demand North Atlantic and Caribbean regions, supplying services for applications such as in-flight connectivity for commercial flights and passenger and commercial broadband for cruise lines and shipping vessels. Intelsat 32e entered into service in March 2017.

On August 24, 2016, we successfully launched our Intelsat 36 and Intelsat 33e satellites into orbit. Intelsat 36 is co-located with our Intelsat 20 satellite at the 68.5°E orbital location and entered into service in late September 2016. Intelsat 36 provides capacity for DTH television services via its Ku-band payload, as well as media distribution services via its C-band payload to customers in the Africa and Indian Ocean regions.

Intelsat 33e is the second of six HTS satellite within our Intelsat EpicNG platform, featuring high-performance spot beams and an advanced digital payload. Due to a malfunction in the primary thruster for orbit raising, Intelsat 33e arrived at its 60°E orbital location in December 2016 and entered into service in late January 2017. In addition, in February 2017, measurements indicated higher than expected fuel use while performing stationkeeping maneuvers. There is no evidence of any impact to the communications payload. A Failure Review Board has been established to determine the cause of the primary thruster failure and a separate team to investigate the fuel use anomaly. As of December 31, 2017, these investigations were ongoing and final conclusions have not been reached. We continue to participate in the investigations. We filed a loss claim in March 2017 with our insurers relating to the loss of life for

approximately \$78 million. The claim is still in process. We have received approximately \$49.8 million in cash as of December 31, 2017, and have filed for arbitration with respect to our claims against certain insurers. Intelsat 33e is fully operational, delivering commercial-grade services for enterprise, fixed and mobile network operators, aeronautical and maritime mobility service providers, and for government customers in the Africa, Europe, Middle East and Asia regions.

On June 9, 2016, we successfully launched our Intelsat 31 satellite to the 95°W orbital location, co-located with our Intelsat 30 satellite. This satellite will provide in-orbit resilience for DTH television services in Latin America via its Ku-band payload. Intelsat 31 also includes a C-band payload that enhances our Latin American network infrastructure. This satellite has completed in-orbit testing and entered into service in late July 2016.

On January 27, 2016, we successfully launched our Intelsat 29e satellite into orbit. Intelsat 29e is the first HTS within our Intelsat EpicNG platform, featuring high performance spot beams and an advanced digital payload. The satellite, which is located at the 310°E orbital location, supports broadband services for enterprise, fixed and mobile network operators, aeronautical and maritime mobility service providers, and for government customers operating throughout the Americas and the North Atlantic region via C- and Ku- band payloads. Intelsat 29e entered into service in March 2016.

On August 20, 2015, we successfully launched our Intelsat 34 satellite into orbit. Intelsat 34 is a C- and Ku-band satellite that establishes long-term capacity at the 304.5°E orbital location, and entered into service in October 2015. Intelsat 34 includes a C-band payload which delivers media distribution services to Latin American customers. The satellite also hosts a DTH platform in Ku-band as well as a specialized Ku-band payload serving the North Atlantic region, designed to support broadband services for the aeronautical and maritime mobility sectors.

(c) Satellite Health

Our satellite fleet is diversified by manufacturer and satellite type, and as a result, our fleet is generally healthy. We have experienced some technical problems with our current fleet but have been able to minimize the impact of these problems on our customers, our operations and our business in recent years. Many of these problems have been component failures and anomalies that have had little long-term impact to date on the overall transponder availability in our satellite fleet. All of our satellites have been designed to accommodate an anticipated rate of equipment failures with adequate redundancy to meet or exceed their orbital design lives, and to date, this redundancy design scheme has proven effective. After each anomaly we have generally restored services for our customers on the affected satellite, provided alternative capacity on other satellites in our fleet, or provided capacity that we purchased from other satellite operators.

Significant Anomalies

During orbit raising of Intelsat 33e in September 2016, the satellite experienced a malfunction of the main satellite thruster. Orbit raising was subsequently completed using a different set of satellite thrusters. The anomaly resulted in a delay of approximately three months in reaching the geostationary orbit, as well as a reduction in the projected lifetime of the satellite. Intelsat 33e entered service in January 2017. In addition, in February 2017, measurements indicated higher than expected fuel use while performing stationkeeping maneuvers. There is no evidence of any impact to the communications payload. A Failure Review Board has been established to determine the cause of the primary thruster failure and a separate team to investigate the fuel use anomaly. Intelsat has filed a loss claim with insurers relating to the reduction of life.

Note 10 Investments

We have ownership interests in two entities that meet the criteria of a VIE: Horizons Satellite Holdings, LLC ("Horizons Holdings") and Horizons-3 Satellite LLC ("Horizons 3"), which are discussed in further detail below, including our analyses of the primary beneficiary determination as required under FASB ASC Topic 810, *Consolidation* ("FASB ASC 810"). We also own noncontrolling investments recognized under the cost method, discussed further below.

(a) Horizons Holdings

Our first joint venture with JSAT International, Inc. ("JSAT") is named Horizons Satellite Holdings, LLC, and consists of two investments: Horizons-1 Satellite LLC ("Horizons-1") and Horizons-2 Satellite LLC ("Horizons-2"). Horizons Holdings borrowed from JSAT a portion of the funds necessary to finance the construction of the Horizons 2 satellite pursuant to a loan agreement. The borrowing was subsequently repaid. We provide certain services to the joint venture and in return utilize capacity from the joint venture.

We have determined that this joint venture meets the criteria of a VIE under FASB ASC 810, and we have concluded that we are the primary beneficiary because decisions relating to any future relocation of the Horizons 2 satellite, the most significant asset of the joint venture, are effectively controlled by us. In accordance with FASB ASC 810, as the primary beneficiary, we consolidate Horizons Holdings within our consolidated financial statements. Total assets of Horizons Holdings were \$48.3 million and \$38.7 million as of December 31, 2016 and 2017, respectively. Total liabilities at both dates were nominal.

We have a revenue sharing agreement with JSAT related to services sold on the Horizons 1 and Horizons 2 satellites. We are responsible for billing and collection for such services, and we remit 50% of the revenue, less applicable fees and commissions, to JSAT. Amounts payable to JSAT related to the revenue sharing agreement, net of applicable fees and commissions, from the Horizons 1 and Horizons 2 satellites were \$6.2 million and \$5.4 million as of December 31, 2016 and 2017, respectively.

(b) Horizons-3 Satellite LLC

On November 4, 2015, we entered into a new joint venture agreement with JSAT. The joint venture, named Horizons 3, was formed for the purpose of developing, launching, managing, operating and owning a high performance satellite to be located at the 169°E orbital location.

Horizons 3, which is 50% owned by each of Intelsat and JSAT, was set up with a joint share of management authority and equal rights to profits and revenues from the joint venture. Similar to Horizons Holdings, we have a revenue sharing agreement with JSAT related to services sold on the Horizons 3 satellite. In addition, we are responsible for billing and collection for such services, and we remit 50% of the revenue, less applicable fees and commissions, to JSAT.

We have determined that this joint venture meets the criteria of a VIE under FASB ASC 810, however we have concluded that we are not the primary beneficiary and therefore do not consolidate Horizons 3. The assessment considered both quantitative and qualitative factors, including an analysis of voting power and other means of control of the joint venture as well as each owner's exposure to risk of loss or gain. Because we and JSAT equally share control over the operations of the joint venture and also equally share exposure to risk of losses or gains, we concluded that we are not the primary beneficiary of Horizons 3. Our investment, included within other assets in our consolidated balance sheets, is accounted for using the equity method of accounting. The investment balance was \$31.1 million and \$61.8 million as of December 31, 2016 and 2017, respectively.

In connection with our investment in Horizons 3, we entered into a capital contribution and subscription agreement which requires us to fund our 50% share of the amounts due in order to maintain our respective 50% interest in the joint venture. Pursuant to this agreement, we made contributions of \$10.3 million and \$27.4 million during the years ended December 31, 2016 and 2017, respectively. In addition, our indirect subsidiary that holds our investment in Horizons 3 has entered into a security and pledge agreement with Horizons 3, pursuant to which it has granted a security interest in its membership interests in Horizons 3. Further, our indirect subsidiary has granted a security interest to Horizons 3 in its customer capacity contracts and its ownership interest in its wholly-owned subsidiary that will hold the U.S. Federal Communications Commission license required for the joint venture's operations.

(c) Cost Method Investments

Our cost method investments recorded in other assets in our consolidated balance sheets had a total carrying value of \$29.0 million and \$54.7 million as of December 31, 2016 and 2017, respectively. The balance as of December 31, 2017 consists of five separate noncontrolling investments.

(d) Equity Attributable to Intelsat S.A. and Non-controlling Interests

The following tables present changes in equity attributable to the Company and equity attributable to our noncontrolling interests, which is included in the equity section of our consolidated balance sheet (in thousands):

	Intelsat S.A. Shareholders' Deficit		Noncontrolling Interest		Tota	Total Shareholders' Deficit	
Balance at January 1, 2016	\$	(4,649,565)	\$	29,212	\$	(4,620,353)	
Net income		990,197		3,915		994,112	
Dividends paid to noncontrolling interests		_		(8,980)		(8,980)	
Share-based compensation		23,089				23,089	
Postretirement/pension liability adjustment		2,041		_		2,041	
Other comprehensive income		93		_		93	
Balance at December 31, 2016	\$	(3,634,145)	\$	24,147	\$	(3,609,998)	
		Intelsat S.A. reholders' Deficit		controlling Interest	Tota	l Shareholders' Deficit	
Balance at January 1, 2017	\$	(3,634,145)	\$	24,147	\$	(3,609,998)	
Net income (loss)		(178,728)		3,914		(174,814)	
Dividends paid to noncontrolling interests		<u> </u>		(8,755)		(8,755)	
Share-based compensation		16,472				16,472	
Postretirement/pension liability adjustment		(11,801)		_		(11,801)	
Other comprehensive income		332				332	
Balance at December 31, 2017	\$	(3,807,870)	\$	19,306	\$	(3,788,564)	

Note 11 Goodwill and Other Intangible Assets

The carrying amounts of goodwill and acquired intangible assets not subject to amortization consist of the following (in thousands):

	As of	As of		
	December 31, 2016	December 31, 2017		
Goodwill (1)	\$ 2,620,627	\$ 2,620,627		
Orbital locations	2,387,700	2,387,700		
Trade name	65,200	65,200		

⁽¹⁾ Net of accumulated impairment losses of \$4,160,200.

We account for goodwill and other non-amortizable intangible assets in accordance with FASB ASC 350, and have deemed these assets to have indefinite lives. Therefore, these assets are not amortized but are instead tested on an annual basis for impairment during the fourth quarter, or whenever events or changes in circumstances indicate that the carrying amount may not be fully recoverable.

(a) Goodwill

We perform our annual goodwill impairment assessment using a qualitative approach to identify and consider the significance of relevant key factors, events, and circumstances that affect the fair value of our reporting unit. We are required to identify reporting units at a level below the Company's identified operating segments for impairment analysis. We have identified only one reporting unit for the goodwill impairment test.

Assumptions and Approach Used. We make our qualitative evaluation considering, among other things, general macroeconomic conditions, industry and market considerations, cost factors, overall financial performance and other relevant entity-specific events.

Based on our examination of the qualitative factors at December 31, 2016, we concluded that there was not a likelihood of more than 50% that the fair value of our reporting unit was less than its carrying value; therefore, no further testing of goodwill was required.

At December 31, 2017, we reassessed the different qualitative factors and updated our assessment. Based on our review, since the fixed and mobile satellite services industry is under pressure (pricing, over-supply, value-chain inefficiencies) and since comparable companies have demonstrated negative to minimal revenue growth with equities underperforming, we determined that a quantitative assessment of goodwill was appropriate.

We determined the estimated fair value of our reporting unit using discounted cash flow analysis, along with independent source data related to the comparative market multiples and, when available, recent transactions, each of which is considered a Level 3 input within the fair value hierarchy under FASB ASC 820. The discounted cash flows were derived from a five-year projection of cash flows plus a residual value, with the resulting projected cash flows discounted at an appropriate weighted average cost of capital.

In estimating the undiscounted cash flows, we primarily used our internally prepared budgets and forecast information. The key assumptions included in our model were projected growth rates, cost of capital, effective tax rates, and industry and economic trends. A change in the estimated future cash flows or other assumptions could change our estimated fair values and result in future impairments. Based on our quantitative analysis as described above, we concluded that there was no impairment for goodwill at December 31, 2017.

(b) Orbital Locations, Trade Name and other Intangible Assets

Orbital Locations. Intelsat is authorized by governments to operate satellites at certain orbital locations—i.e., longitudinal coordinates along the Clarke Belt. The Clarke Belt is the part of space approximately 35,800 kilometers above the plane of the equator where geostationary orbit may be achieved. Various governments acquire rights to these orbital locations through filings made with the ITU, a sub-organization of the United Nations. We will continue to have rights to operate satellites at our orbital locations so long as we maintain our authorizations to do so.

Our rights to operate at orbital locations can be used and sold individually; however, since satellites and customers can be and are moved from one orbital location to another, our rights are used in conjunction with each other as a network that can be adapted to meet the changing needs of our customers and market demands. Due to the interchangeable nature of orbital locations, the aggregate value of all of the orbital locations is used to measure the extent of impairment, if any.

We determined the estimated fair value of our rights to operate at orbital locations using the build-up method to determine the cash flows for the income approach, with the resulting projected cash flows discounted at an appropriate weighted average cost of capital. In instances where the build-up method did not generate positive value for the rights to operate at an orbital location, but the rights were expected to generate revenue, we assigned a value based upon independent source data for recent transactions relating to similar orbital locations, which are all considered Level 3 inputs within the fair value hierarchy under FASB ASC 820.

At December 31, 2016 and December 31, 2017, we determined, based on an examination of qualitative factors, that there was no impairment.

Trade Name. We have implemented the relief from royalty method to determine the estimated fair value of the Intelsat trade name. The relief from royalty analysis is comprised of two major steps: i) a determination of the hypothetical royalty rate, and ii) the subsequent application of the royalty rate to projected revenue. In determining the hypothetical royalty rate utilized in the relief from royalty approach, we considered comparable license agreements, operating earnings benchmark rule of thumb, an excess earnings analysis to determine aggregate intangible asset earnings, and other qualitative factors, each of which is considered Level 3 input within the fair value hierarchy under FASB ASC 820.

At December 31, 2016 and December 31, 2017, we determined, based on an examination of qualitative factors, that there was no impairment.

The carrying amount and accumulated amortization of acquired intangible assets subject to amortization consisted of the following (in thousands):

	As o	As of December 31, 2016			As of December 31, 2017		
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	
Backlog and other	\$ 743,760	\$ (669,045)	\$ 74,715	\$ 743,760	\$ (686,425)	\$ 57,335	
Customer relationships	534,030	(216,907)	317,123	534,030	(241,781)	292,249	
Total	\$1,277,790	\$ (885,952)	\$391,838	\$1,277,790	\$ (928,206)	\$349,584	

Intangible assets are amortized based on the expected pattern of consumption. We recorded amortization expense of \$60.2 million, \$48.5 million and \$42.3 million for the years ended December 31, 2015, 2016 and 2017, respectively.

Scheduled amortization charges for the intangible assets over the next five years are as follows (in thousands):

Year	Amount
<u>Year</u> 2018	\$38,481
2019	34,351
2020	31,103
2021	28,635
2022	25,479

Our policy is to expense all costs incurred to renew or extend the terms of our intangible assets. The renewal expenses for the years ended December 31, 2015, 2016 and 2017 were immaterial to our consolidated results of operations.

Note 12 Long-Term Debt

The carrying values and fair values of our notes payable and long-term debt were as follows (in thousands):

		As of December 31, 2016		As of Decemb		per 31, 2017		
	Carr	ying Value		ir Value	Cai	rrying Value		air Value
Intelsat Luxembourg:	Ф.	500.000	Ć.	410.000	Φ.	06.550		04.515
6.75% Senior Notes due June 2018	\$	500,000	\$	410,000	\$	96,650	\$	94,717
Unamortized prepaid debt issuance costs and discount on 6.75% Senior Notes		(5,746)		_		(78)		_
7.75% Senior Notes due June 2021	1	2,000,000		640,000		2,000,000		1,070,000
Unamortized prepaid debt issuance costs on 7.75% Senior Notes	-	(16,588)		_		(13,325)		_
8.125% Senior Notes due June 2023		1,000,000		295,000		1,000,000		515,000
Unamortized prepaid debt issuance costs on 8.125% Senior Notes		(9,764)		_		(8,562)		_
12.5% Senior Notes due November 2024		`— ´		_		403,350		265,052
Unamortized prepaid debt issuance costs and discount on 12.5% Senior Notes		_		_		(209,165)		_
Total Intelsat Luxembourg obligations		3,467,902	1	,345,000		3,268,870		1,944,769
Intelsat Connect Finance:								
12.5% Senior Notes due April 2022	\$	731,884	\$	475,725	\$	731,892	\$	640,406
Unamortized prepaid debt issuance costs and discount on 12.5%								
Senior Notes		(297,257)				(267,108)		
Total Intelsat Connect Finance obligations		434,627		475,725		464,784		640,406
Intelsat Jackson:								
9.5% Senior Secured Notes due September 2022	\$	490,000	\$	543,900	\$	490,000	\$	565,950
Unamortized prepaid debt issuance costs and discount on 9.5%								
Senior Secured Notes		(20,243)				(17,556)		
8.00% Senior Secured Notes due February 2024		1,349,678	1	,383,420		1,349,678		1,423,910
Unamortized prepaid debt issuance costs and premium on 8.0% Senior Secured Notes		(6,005)				(5 279)		
7.25% Senior Notes due October 2020	,	(6,005) 2,200,000	1	,716,000		(5,378) 2,200,000	,	2,068,000
Unamortized prepaid debt issuance costs and premium on 7.25%	- 4	2,200,000	1	,710,000		2,200,000	-	2,000,000
Senior Notes		(6,756)		_		(5,151)		_
7.25% Senior Notes due April 2019		1,500,000	1	,260,000		_		_
Unamortized prepaid debt issuance costs on 7.25% Senior Notes		(5,886)				_		_
7.5% Senior Notes due April 2021		1,150,000		879,750		1,150,000		1,040,750
Unamortized prepaid debt issuance costs on 7.5% Senior Notes		(6,828)		_		(5,415)		_
5.5% Senior Notes due August 2023	- 2	2,000,000	1	,340,000		2,000,000		1,630,000
Unamortized prepaid debt issuance costs on 5.5% Senior Notes		(14,900)		_		(12,977)		
9.75% Senior Notes due July 2025		_		_		1,500,000		1,455,000
Unamortized prepaid debt issuance costs on 9.75% Senior Notes Senior Secured Credit Facilities due June 2019	,	3,095,000	2	,013,756		(20,315) 1,095,000		1,093,631
Unamortized prepaid debt issuance costs and discount on Senior		3,093,000	3	,013,730		1,093,000		1,093,031
Secured Credit Facilities		(21,682)		_		(4,636)		
Senior Secured Credit Facilities due November 2023		(21,002)		_		2,000,000		1,947,500
Unamortized prepaid debt issuance costs and discount on Senior						2,000,000		1,5 . 7,0 0 0
Secured Credit Facilities		_		_		(28,600)		_
Total Intelsat Jackson obligations	1	1,702,378	10	,136,826		11,684,650	1	1,224,741
Eliminations:	_			, ,		7 7	_	, ,.
6.75% Senior Notes due June 2018 owned by Intelsat Connect								
Finance	\$	(402,570)	\$	(330,107)	\$	_	\$	_
Unamortized prepaid debt issuance costs and discount on 6.75%								
Senior Notes		5,490		_		_		_
7.75% Senior Notes due June 2021 owned by Intelsat Connect								
Finance		(979,168)		(313,334)		(979,168)		(523,855)
Unamortized prepaid debt issuance costs on 7.75% Senior Notes		8,121		_		6,524		_
8.125% Senior Notes due June 2023 owned by Intelsat Connect								
Finance		(111,663)		(32,941)		(111,663)		(57,506)
Unamortized prepaid debt issuance costs on 8.125% Senior Notes		1,090		_		956		_
Unamortized prepaid debt issuance costs and discount on 12.5% Senior Notes		71,877		_		67,525		_
12.5% Senior Notes due November 2024 owned by Intelsat Connect Finance				_		(402,595)		(264,556)
Unamortized prepaid debt issuance costs and discount on 12.5% Senior Notes		_				208,775		
Total eliminations:	- (1,406,823)		(676,382)	_	(1,209,646)	_	(845,917)
							Ø 17	
Total Intelsat S.A. long-term debt	3 14	4,198,084	211	,281,169	3	14,208,658	\$1.	2,963,999
Less:								

Current portion of long-term debt		96,572	
Total long-term debt, excluding current portion	\$ 14.198.084	\$ 14.112.086	

The fair value for publicly traded instruments is determined using quoted market prices, and for non-publicly traded instruments, fair value is based upon composite pricing from a variety of sources, including market leading data providers, market makers and leading brokerage firms. Substantially all of the inputs used to determine the fair value of our debt are classified as Level 1 inputs within the fair value hierarchy from FASB ASC 820, except our senior secured credit facilities, the inputs for which are classified as Level 2.

Required principal repayments of long-term debt over the next five years and thereafter as of December 31, 2017 are as follows (in thousands):

Year	Amount
2018	\$ 96,650
2019	1,095,000
2020	2,200,000
2021	2,170,832
2022	1,221,892
2023 and thereafter	7,738,770
Total principal repayments	14,523,144
Unamortized discounts, premium and prepaid issuance costs	(314,486)
Total Intelsat S.A. long-term debt	\$14,208,658

January 2018 Intelsat Jackson Senior Secured Credit Agreement Amendment

In January 2018, Intelsat Jackson entered into an amendment of the Intelsat Jackson Secured Credit Agreement. See—Description of Indebtedness—Intelsat Jackson—Intelsat Jackson Senior Secured Credit Agreement, below.

2017 Debt Transactions

January 2017 Intelsat Luxembourg Exchange Offer

In January 2017, Intelsat Luxembourg completed a debt exchange (the "Second 2018 Luxembourg Exchange"), whereby it exchanged \$403.3 million aggregate principal amount of its 6.75% Senior Notes due 2018 (the "2018 Luxembourg Notes") for an equal aggregate principal amount of newly issued unsecured 12.50% Senior Notes due 2024 (the "2024 Luxembourg Notes"). The Second 2018 Luxembourg Exchange consisted of \$377.6 million aggregate principal amount of 2018 Luxembourg Notes held by ICF as a result of the First 2018 Luxembourg Exchange (as defined and described below), together with \$25 million aggregate principal amount of 2018 Luxembourg Notes repurchased by us in the fourth quarter of 2015. We consolidate ICF, the holder of the 2018 Luxembourg Notes exchanged in the Second 2018 Luxembourg Exchange.

Terminated Combination Agreement with OneWeb and Share Purchase Agreement with SoftBank

In February 2017, Intelsat entered into a combination agreement (as amended, the "Combination Agreement") with WorldVu Satellites Limited ("OneWeb"), which provided for a combination of the businesses of Intelsat and OneWeb pursuant to a merger (the "OneWeb Combination"), and Intelsat entered into a share purchase agreement (as amended, the "Share Purchase Agreement") with SoftBank Group Corp. ("SoftBank"), which provided for a cash investment by SoftBank in exchange for shares of Intelsat (the "SoftBank Investment" and, together with the OneWeb Combination, the "OneWeb/SoftBank Transactions"). The consummation of the OneWeb/SoftBank Transactions was conditioned on the successful completion of debt exchange offers for certain outstanding notes of Intelsat Jackson, Intelsat Luxembourg and ICF. In June 2017, Intelsat announced that the debt exchange offers had expired without sufficient tenders having been received, and Intelsat subsequently received termination notices from OneWeb and SoftBank terminating the Combination Agreement and Share Purchase Agreement, respectively.

July 2017 Intelsat Jackson Senior Notes Refinancing

On July 5, 2017, Intelsat Jackson completed an offering of \$1.5 billion aggregate principal amount of 9.75% Senior Notes due 2025 (the "2025 Jackson Notes"). These notes are guaranteed by all of Intelsat Jackson's subsidiaries that guarantee its obligations under the Intelsat Jackson Secured Credit Agreement and senior notes, as well as by certain of Intelsat Jackson's parent entities. Also on July 5, 2017, the net proceeds from the sale of the 2025 Jackson Notes were used, along with other available cash, to satisfy and discharge all \$1.5 billion aggregate principal amount of Intelsat Jackson's 7.25% Senior Notes due 2019. In connection with the satisfaction and discharge, we recognized a loss on early extinguishment of debt of \$4.6 million, consisting of the difference between the carrying value of the debt redeemed and the total cash amount paid (including related fees and expenses), together with a write-off of unamortized debt issuance costs.

November & December 2017 Amendments to Intelsat Jackson Senior Secured Credit Facility

In November and December 2017, Intelsat Jackson entered into amendments of the Intelsat Jackson Secured Credit Agreement. See—Description of Indebtedness—Intelsat Jackson—Intelsat Jackson Senior Secured Credit Agreement, below.

2016 Debt Transactions

March 2016 Intelsat Jackson Senior Secured Notes Offering

On March 29, 2016, Intelsat Jackson completed an offering of \$1.25 billion aggregate principal amount of 8% Senior Secured Notes due 2024 (the "2024 Secured Jackson Notes"). The 2024 Secured Jackson Notes bear interest at 8% annually and mature in February 2024. These notes are guaranteed by ICF and certain of Intelsat Jackson's subsidiaries. The net proceeds from this offering have been and, are expected to be, used for general corporate purposes, which may include repayment and repurchase of indebtedness, capital expenditures and working capital and to pay fees and expenses related to the offering. A portion of the net proceeds was used to prepay in full all amounts outstanding under an intercompany loan due by Intelsat Jackson.

May 2016 Intelsat Jackson Notes Repurchases

In May 2016, we repurchased \$459.7 million in aggregate principal amount of Intelsat Jackson's outstanding 6 5/8% Senior Notes due 2022 (the "2022 Jackson Notes"). In connection with these repurchases, we recognized a net gain on early extinguishment of debt of \$131.4 million, consisting of the difference between the carrying value of the debt repurchased and the total cash amount paid (including related fees and expenses), together with a write-off of unamortized debt premium and unamortized debt issuance costs.

Subsidiary Guarantee of Intelsat Jackson's 6 5/8% Senior Notes due 2022

In May 2016, Intelsat Jackson and each of the subsidiaries of Intelsat Jackson that guarantees loans under Intelsat Jackson's Secured Credit Agreement executed a supplemental indenture to the indenture governing the 2022 Jackson Notes, following the execution of which such subsidiaries guarantee the 2022 Jackson Notes.

2016 Intelsat Jackson Tender Offers and June 2016 Senior Secured Notes Issuance

In May 2016, Intelsat Jackson commenced tender offers to purchase several tranches of outstanding debt (the "Tender Offers"). In June 2016, Intelsat Jackson completed an issuance of \$490 million aggregate principal amount of 9 1/2% Senior Secured Notes due 2022 (the "2022 Jackson Secured Notes"), with an original issue discount of 2.0%. Under the terms of the issuance, in the event that all of the net proceeds of the 2022 Jackson Secured Notes were not applied to fund the Tender Offers, Intelsat Jackson would have been required to use the portion of the net proceeds not so applied to redeem the 2022 Jackson Secured Notes. Since the possible uses of the debt proceeds were restricted to repayment of long-term debt, the net proceeds were classified as restricted cash within long-term assets on the condensed consolidated balance sheet as of June 30, 2016. In July 2016, the net proceeds from the sale of the 2022 Jackson Secured Notes were used to repurchase \$673.5 million aggregate principal amount of the 2022 Jackson Notes pursuant to the terms of the previously commenced Tender Offers, and to pay related fees and expenses. Due to the classification of the net proceeds as restricted cash, both the June 2016 issuance and the July 2016 use of the net proceeds are disclosed supplementally as non-cash financing activities in the accompanying consolidated statement of cash flows. In connection with this repurchase, we recognized a gain on early extinguishment of debt of \$219.6 million during the year ending December 31, 2016, consisting of the difference between the carrying value of the debt repurchased and the total cash amount paid (including related fees and expenses), together with a write-off of unamortized debt premium and unamortized debt issuance costs.

September~2016~Intelsat~Jackson~Debt~Exchange~and~Consent~Solicitation

In September 2016, Intelsat Jackson completed a debt exchange receiving \$141.4 million aggregate principal amount of 2022 Jackson Notes in exchange for \$99.7 million aggregate principal amount of newly issued 2024 Secured Jackson Notes issued and \$17.0 million in cash. In connection with this exchange, Intelsat Jackson also received a consent from holders of \$141.5 million principal amount of 2022 Jackson Notes in exchange for \$9.2 million in cash to amend the indenture governing the 2022 Jackson Notes, among other things to: (i) eliminate substantially all of the restrictive covenants and certain events of default pertaining to the 2022 Jackson Notes, and (ii) waive any defaults or events of default potentially existing under the indenture governing the 2022 Jackson Notes as of September 12, 2016. We determined the transaction was accounted for as a modification and not as an extinguishment of debt under ASU 470, *Debt* ("ASU 470"). As a result, the fees paid to bondholders, including the consent payment, were amortized over the remaining term of the debt instrument.

December 2016 Intelsat Connect Finance Exchange Offers

First 2018 Luxembourg Exchange—In December 2016, ICF completed an exchange, receiving \$377.6 million aggregate principal amount of 2018 Luxembourg Notes in exchange for \$132.1 million aggregate principal amount of its newly issued unsecured 12 ½% Senior Notes due 2022 (the "2022 ICF Notes") and \$226.5 million in cash (the "First 2018 Luxembourg Exchange"). The 2022 ICF Notes are guaranteed by Intelsat Luxembourg. We accounted for the First 2018 Luxembourg Exchange as a modification of debt under ASU 470. As a result, remaining unamortized debt issuance costs on the exchanged 2018 Luxembourg Notes will be amortized over the remaining term of the newly issued 2022 ICF Notes. We expensed approximately \$3.3 million of fees related to the First 2018 Luxembourg Exchange.

2021 Luxembourg Exchange—In December 2016, ICF completed an exchange, receiving \$979.2 million aggregate principal amount of Intelsat Luxembourg's 7 3/4% Senior Notes due 2021 (the "2021 Luxembourg Notes") in exchange for \$538.4 million aggregate principal amount of its newly issued 2022 ICF Notes and \$29.4 million in cash (the "2021 Luxembourg Exchange"). We accounted for the 2021 Luxembourg Exchange as an extinguishment of debt under ASU 470. In connection with the 2021 Luxembourg Exchange, we recognized a net gain on early extinguishment of debt of \$609.8 million, consisting of the difference between the carrying value of the 2021 Luxembourg Notes exchanged and the fair value of the 2022 ICF Notes issued and the total cash paid (including related fees and expenses), together with a write-off of unamortized debt issuance costs.

2023 Luxembourg Exchange—In December 2016, ICF completed an exchange, receiving \$111.7 million aggregate principal amount of Intelsat Luxembourg's 8 ½% Senior Notes due 2023 (the "2023 Luxembourg Notes") in exchange for \$61.4 million aggregate principal amount of newly issued 2022 ICF Notes and \$3.3 million in cash (the "2023 Luxembourg Exchange"). We accounted for the 2023 Luxembourg Exchange as an extinguishment of debt under ASU 470. In connection with the 2023 Luxembourg Exchange, we recognized a net gain on early extinguishment of debt of \$69.4 million, consisting of the difference between the carrying value of the 2023 Luxembourg Notes exchanged and the fair value of the 2022 ICF Notes issued and the total cash paid (including related fees and expenses), together with a write-off of unamortized debt issuance costs.

Description of Indebtedness

(a) Intelsat Luxembourg

6 3/4% Senior Notes due 2018

Intelsat Luxembourg had \$96.7 million in aggregate principal amount outstanding of the 2018 Luxembourg Notes. The 2018 Luxembourg Notes bear interest at 6 ³/4% annually and mature in June 2018. The 2018 Luxembourg Notes are guaranteed by Intelsat S.A., Intelsat Investment Holdings S.à r.l., Intelsat Holdings S.A. and Intelsat Investments S.A. (the "Parent Guarantors").

Interest is payable on the 2018 Luxembourg Notes semi-annually on June 1 and December 1. Intelsat Luxembourg may redeem some or all of the notes at the applicable redemption prices set forth in the notes.

The 2018 Luxembourg Notes are senior unsecured obligations of Intelsat Luxembourg and rank equally with Intelsat Luxembourg's other senior unsecured indebtedness

7 3/4% Senior Notes due 2021

Intelsat Luxembourg had \$2.0 billion in aggregate principal amount of the 2021 Luxembourg Notes outstanding at December 31, 2017. \$979.2 million principal amount were held by ICF. The 2021 Luxembourg Notes bear interest at 7 3/4% annually and mature in June 2021. The 2021 Luxembourg Notes are guaranteed by the Parent Guarantors.

Interest is payable on the 2021 Luxembourg Notes semi-annually on June 1 and December 1. Intelsat Luxembourg may redeem some or all of the notes at the applicable redemption prices set forth in the notes.

The 2021 Luxembourg Notes are senior unsecured obligations of Intelsat Luxembourg and rank equally with Intelsat Luxembourg's other senior unsecured indebtedness.

8 1/8% Senior Notes due 2023

Intelsat Luxembourg had \$1.0 billion in aggregate principal amount of the 2023 Luxembourg Notes outstanding at December 31, 2017. \$111.7 million principal amount were held by ICF. The 2023 Luxembourg Notes bear interest at 8 1/8% annually and mature in June 2023. The 2023 Luxembourg Notes are guaranteed by the Parent Guarantors.

Interest is payable on the 2023 Luxembourg Notes semi-annually on June 1 and December 1. Intelsat Luxembourg may redeem the 2023 Luxembourg Notes, in whole or in part, prior to June 1, 2018 at a price equal to 100% of the principal amount plus the applicable premium described in the notes. Thereafter, Intelsat Luxembourg may redeem some or all of the notes at the applicable redemption prices set forth in the notes.

The 2023 Luxembourg Notes are senior unsecured obligations of Intelsat Luxembourg and rank equally with Intelsat Luxembourg's other senior unsecured indebtedness.

12 1/2% Senior Notes due 2024

Intelsat Luxembourg had \$403.4 million in aggregate principal amount of the 2024 Luxembourg Notes outstanding at December 31, 2017. \$402.6 million principal amount were held by ICF. The 2024 Luxembourg Notes bear interest at 12 ½ annually and mature in November 2024.

Interest is payable on the 2024 Luxembourg Notes semi-annually on May 15 and November 15.

The 2024 Luxembourg Notes are senior unsecured obligations of Intelsat Luxembourg and rank equally with Intelsat Luxembourg's other senior unsecured indebtedness.

(b) Intelsat Connect Finance

12 1/2% Senior Secured Notes due 2022

ICF had \$731.9 million in aggregate principal amount of 2022 ICF Notes outstanding at December 31, 2017. The 2022 ICF Notes bear interest at 12 ½% annually and mature in April 2022. These notes are guaranteed by Intelsat Luxembourg.

Interest is payable on the 2022 ICF Notes semi-annually on June 15 and December 15. ICF may redeem some or all of the notes at the applicable redemption prices set forth in the notes.

(c) Intelsat Jackson

9 1/2% Senior Secured Notes due 2022

Intelsat Jackson had \$490 million in aggregate principal amount of 2022 Jackson Secured Notes outstanding at December 31, 2017. The 2022 Jackson Secured Notes bear interest at 9 1/2% annually and mature in September 2022. These notes are guaranteed by ICF and certain of Intelsat Jackson's subsidiaries.

Interest is payable on the 2022 Jackson Secured Notes semi-annually on March 30 and September 30. Intelsat Jackson may redeem some or all of the notes at the applicable redemption prices set forth in the notes.

The 2022 Jackson Secured Notes are senior secured obligations of Intelsat Jackson.

8 % Senior Secured Notes due 2024

Intelsat Jackson had \$1.3 billion in aggregate principal amount of 2024 Jackson Secured Notes outstanding at December 31, 2017. The 2024 Jackson Secured Notes bear interest at 8% annually and mature in February 2024. These notes are guaranteed by ICF and certain of Intelsat Jackson's subsidiaries.

Interest is payable on the 2024 Jackson Secured Notes semi-annually on February 15 and August 15. Intelsat Jackson may redeem some or all of the notes at the applicable redemption prices set forth in the notes.

The 2024 Jackson Secured Notes are senior secured obligations of Intelsat Jackson.

7 1/4% Senior Notes due 2020

Intelsat Jackson had \$2.2 billion in aggregate principal amount of 2020 Jackson Notes outstanding at December 31, 2017. The 2020 Jackson Notes bear interest at 7 1/4% annually and mature in October 2020. These notes are guaranteed by the Parent Guarantors, Intelsat Luxembourg, ICF and certain of Intelsat Jackson's subsidiaries.

Interest is payable on the 2020 Jackson Notes semi-annually on April 15 and October 15. Intelsat Jackson may redeem some or all of the notes at the applicable redemption prices set forth in the notes.

The 2020 Jackson Notes are senior unsecured obligations of Intelsat Jackson and rank equally with Intelsat Jackson's other senior unsecured indebtedness.

7 1/2% Senior Notes due 2021

Intelsat Jackson had \$1.15 billion in aggregate principal amount of 2021 Jackson Notes outstanding at December 31, 2017. The 2021 Jackson Notes bear interest at 7 ½ % annually and mature in April 2021. These notes are guaranteed by the Parent Guarantors, Intelsat Luxembourg, ICF and certain of Intelsat Jackson's subsidiaries.

Interest is payable on the New Jackson Notes semi-annually on April 1 and October 1.

The 2021 Jackson Notes are senior unsecured obligations of Intelsat Jackson and rank equally with Intelsat Jackson's other senior unsecured indebtedness.

5 1/2% Senior Notes due 2023

Intelsat Jackson had \$2.0 billion in aggregate principal amount of the 2023 Jackson Notes outstanding at December 31, 2017. The 2023 Jackson Notes bear interest at $5^{-1}/2\%$ annually and mature in August 2023. These notes are guaranteed by the Parent Guarantors, Intelsat Luxembourg, ICF and certain of Intelsat Jackson's subsidiaries.

Interest is payable on the 2023 Jackson Notes semi-annually on February 1 and August 1. Intelsat Jackson may redeem some or all of the 2023 Jackson Notes at any time prior to August 1, 2018 at a price equal to 100% of the principal amount thereof plus the applicable premium described in the notes. Thereafter, Intelsat Jackson may redeem some or all of the 2023 Intelsat Jackson Notes at the applicable redemption prices set forth in the notes.

The 2023 Jackson Notes are senior unsecured obligations of Intelsat Jackson and rank equally with Intelsat Jackson's other senior unsecured indebtedness.

9 3/4% Senior Notes due 2025

Intelsat Jackson had \$1.5 billion in aggregate principal amount of the 2025 Jackson Notes outstanding at December 31, 2017. The 2025 Jackson Notes bear interest at 93/4% annually and mature in July 2025. These notes are guaranteed by the Parent Guarantors, Intelsat Luxembourg, ICF and certain of Intelsat Jackson's subsidiaries.

Interest is payable on the 2025 Jackson Notes semi-annually on January 15 and July 15. Intelsat Jackson may redeem some or all of the 2025 Jackson Notes at any time prior to July 15, 2021 at a price equal to 100% of the principal amount thereof plus the applicable premium described in the notes. Thereafter, Intelsat Jackson may redeem some or all of the notes at the applicable redemption prices set forth in the notes.

The 2025 Jackson Notes are senior unsecured obligations of Intelsat Jackson and rank equally with Intelsat Jackson's other senior unsecured indebtedness.

Intelsat Jackson Senior Secured Credit Agreement

On January 12, 2011, Intelsat Jackson entered into a secured credit agreement (the "Intelsat Jackson Secured Credit Agreement"), which included a \$3.25 billion term loan facility and a \$500.0 million revolving credit facility, and borrowed the full \$3.25 billion under the term loan facility. The term loan facility required regularly scheduled quarterly payments of principal equal to 0.25% of the original principal amount of the term loan beginning six months after January 12, 2011, with the remaining unpaid amount due and payable at maturity.

On October 3, 2012, Intelsat Jackson entered into an Amendment and Joinder Agreement (the "Jackson Credit Agreement Amendment"), which amended the Intelsat Jackson Secured Credit Agreement. As a result of the Jackson Credit Agreement Amendment, interest rates for borrowings under the term loan facility and the revolving credit facility were reduced. In April 2013, our corporate family rating was upgraded by Moody's, and as a result, the interest rate for the borrowing under the term loan facility and revolving credit facility were further reduced to LIBOR plus 3.00% or the Above Bank Rate ("ABR") plus 2.00%.

On November 27, 2013, Intelsat Jackson entered into a Second Amendment and Joinder Agreement (the "Second Jackson Credit Agreement Amendment"), which further amended the Intelsat Jackson Secured Credit Agreement. The Second Jackson Credit Agreement Amendment reduced interest rates for borrowings under the term loan facility and extended the maturity of the term loan facility. In addition, it reduced the interest rate applicable to \$450 million of the \$500 million total revolving credit facility and extended the maturity of such portion. As a result of the Second Jackson Credit Agreement Amendment, interest rates for borrowings under the term loan facility and the new tranche of the revolving credit facility were (i) LIBOR plus 2.75%, or (ii) the ABR plus 1.75%. The LIBOR and the ABR, plus applicable margins, related to the term loan facility and the new tranche of the revolving credit facility were determined as specified in the Intelsat Jackson Secured Credit Agreement, as amended by the Second Jackson Credit Agreement Amendment, and the LIBOR was not to be less than 1.00% per annum. The maturity date of the term loan facility was extended from April 2, 2018 to June 30, 2019 and the maturity of the new \$450 million tranche of the revolving credit facility was extended from January 12, 2016 to July 12, 2017. The interest rates and maturity date applicable to the \$50 million tranche of the revolving credit facility that was not amended did not change. The Second Jackson Credit Agreement Amendment further removed the requirement for regularly scheduled quarterly principal payments under the term loan facility.

In June 2017, Intelsat Jackson terminated all remaining commitments under its revolving credit facility.

On November 27, 2017, Intelsat Jackson entered into a Third Amendment and Joinder Agreement (the "Third Jackson Credit Agreement Amendment"), which further amended the Intelsat Jackson Secured Credit Agreement. The Third Jackson Credit Agreement Amendment extended the maturity date of \$2.0 billion of the existing floating rate B-2 Tranche of term loans (the "B-3 Tranche Term Loans"), to November 27, 2023, subject to springing maturity in the event that certain series of Intelsat Jackson's senior notes are not refinanced prior to the dates specified in the Third Jackson Credit Agreement Amendment. The B-3 Tranche Term Loans have an applicable interest rate margin of 3.75% for LIBOR loans and 2.75% for base rate loans (at Intelsat Jackson's election as applicable). The B-3 Tranche Term Loans are subject to a prepayment premium of 1.00% of the principal amount for any voluntary prepayment of, or amendment or modification in respect of, the B-3 Tranche Term Loans prior to November 27, 2018 in connection with prepayments, amendments or modifications that have the effect of reducing the applicable interest rate margin on the B-3 Tranche Term Loans, subject to certain exceptions. The Third Jackson Credit Agreement Amendment also (i) added a provision requiring that, beginning with the fiscal year ending December 31, 2018, Intelsat Jackson will apply a certain percentage of its Excess Cash Flow (as defined in the Third Jackson Credit Agreement Amendment), if any, after operational needs for each fiscal year towards the repayment of outstanding term loans, subject to certain deductions, (ii) amended the most-favored nation provision with respect to the incurrence of certain indebtedness by Intelsat Jackson and its restricted subsidiaries, and (iii) amended the covenant limiting the ability of Intelsat Jackson to make certain dividends, distributions and other restricted payments to its shareholders based on its leverage level at that time.

On December 12, 2017, Intelsat Jackson further amended the Intelsat Jackson Secured Credit Agreement by entering into a Fourth Amendment and Joinder Agreement (the "Fourth Jackson Credit Agreement Amendment"), which, among other things, (i) permitted Intelsat Jackson to establish one or more series of additional incremental term loan tranches if the proceeds thereof are used to refinance an existing tranche of term loans, and (ii) added a most-favored nation provision applicable to the B-3 Tranche Term Loans for further extensions of the existing floating rate B-2 Tranche Term Loans under certain circumstances.

On January 2, 2018, Intelsat Jackson entered into a Fifth Amendment and Joinder Agreement (the "Fifth Jackson Credit Agreement Amendment"), which further amended the Intelsat Jackson Secured Credit Agreement. The Fifth Jackson Credit Agreement Amendment refinanced the remaining \$1.095 billion B-2 Tranche Term Loans, through the creation of (i) a new incremental floating rate tranche of term loans with a principal amount of \$395.0 million (the "B-4 Tranche Term Loans"), and (ii) a new incremental fixed rate tranche of term loans with a principal amount of \$700.0 million (the "B-5 Tranche Term Loans"). The maturity date of both the B-4 Tranche Term Loans and the B-5 Tranche Term Loans is January 2, 2024, subject to springing maturity in the event that certain series of Intelsat Jackson's senior notes are not refinanced or repaid prior to the dates specified in the Fifth Jackson Credit Agreement Amendment. The B-4 Tranche Term Loans have an applicable interest rate margin of 4.50% per annum for LIBOR loans and 3.50% per annum for base rate loans (at Intelsat Jackson's election as applicable). The B-5 Tranche Term Loans have an interest rate of 6.625% per annum. The Fifth Jackson Credit Agreement Amendment also specified make-whole and prepayment premiums applicable to the B-4 Tranche Term Loans and the B-5 Tranche Term Loans at various dates

We entered into interest rate caps, effective in February 2018, to mitigate the risk of interest rate increases on the B-3 Tranche Term Loans and the B-4 Tranche Term Loans.

Intelsat Jackson's obligations under the Intelsat Jackson Secured Credit Agreement are guaranteed by ICF and certain of Intelsat Jackson's subsidiaries. Intelsat Jackson's obligations under the Intelsat Jackson Secured Credit Agreement are secured by a first priority security interest in substantially all of the assets of Intelsat Jackson and the guarantors party thereto, to the extent legally permissible and subject to certain agreed exceptions, and by a pledge of the equity interests of the subsidiary guarantors and the direct subsidiaries of each guarantor, subject to certain exceptions, including exceptions for equity interests in certain non-U.S. subsidiaries, existing contractual prohibitions and prohibitions under other legal requirements.

The Intelsat Jackson Secured Credit Agreement includes two financial covenants. Intelsat Jackson must maintain a consolidated secured debt to consolidated EBITDA ratio equal to or less than 3.50 to 1.00 at the end of each fiscal quarter, as well as a consolidated EBITDA to consolidated interest expense ratio equal to or greater than 1.75 to 1.00 at the end of each fiscal quarter, in each case as such financial measures are defined in the Intelsat Jackson Secured Credit Agreement. Intelsat Jackson was in compliance with these financial maintenance covenant ratios with a consolidated secured debt to consolidated EBITDA ratio of 2.74 to 1.00 and a consolidated EBITDA to consolidated interest expense ratio of 2.05 to 1.00 as of December 31, 2017.

Note 13 Derivative Instruments and Hedging Activities

Undesignated Interest Rate Cap

During 2017, we entered into interest rate caps to mitigate the risk of interest rate increases on our floating rate Senior Secured Credit Facilities with a notional value of \$2.4 billion. The fair value, included in "Other assets" on the consolidated balance sheet of the derivative as of December 31, 2016 and 2017 was zero and \$22.3 million, respectively.

Put Option Embedded Derivative Instrument

The 2022 ICF Notes contain a contingent put option clause within the host contract, which affords the holders of the notes the option to require us to repurchase such notes at 101% of their principal amount in the event of a change of control, as defined in the indenture governing the notes. We concluded that the contingent put option required bifurcation in accordance with FASB ASC 815, and have recorded the embedded derivative at fair value on the consolidated balance sheet in "Other long-term liabilities." We estimated the fair value of the put option derivative using a valuation technique which reflects the estimated date and probability of a change of control, the fair value of the 2022 ICF Notes, and a credit valuation adjustment reflecting our credit spreads. The fair value of the embedded derivative was \$1.5 million as of December 31, 2016 and \$0.7 million as of December 31, 2017.

Preferred Stock Warrant

During 2017, we were issued a warrant to purchase Series E preferred shares of a cost method investment we entered into. We concluded that the warrant is a free standing derivative in accordance with FASB ASC 815. The fair value of the derivative, included in "Other assets" on the consolidated balance sheet as of December 31, 2016 and 2017 was zero and \$4.1 million, respectively.

The following table sets forth the fair value of our derivatives by category (in thousands):

Derivatives not designated as hedging instruments	Balance Sheets Location	,	
Undesignated interest rate cap	Other assets	\$ —	\$ 22,336
Preferred stock warrant	Other assets	_	4,100
Put option embedded derivative	Other		
	long-term liabilities	1,496	658
Total derivatives		\$ 1,496	\$ 27,094

The following table sets forth the effect of the derivative instruments, included in interest expense, net in our consolidated statements of operations (in thousands):

Derivatives not designated as hedging instruments	Presentation in Statements of Operations	Decer	Ended nber 31, 015	Decei	Ended nber 31, 016	Dece	er Ended ember 31, 2017
Undesignated interest rate cap	Included in interest expense, net	\$		\$		\$	1,006
Undesignated interest rate swaps	Included in interest expense, net		3,483		_		_
Put option embedded derivative	Included in other expense, net		_		_		732
Preferred stock warrant	Included in other expense, net						
Total loss on derivative financial instruments		\$	3,483	\$		\$	1,738

Note 14 Income Taxes

On December 22, 2017, the President of the United States signed into law the Tax Cuts and Jobs Act ("The Act"). The Act includes a number of provisions, including the lowering of the U.S. corporate tax rate from 35 percent to 21 percent, effective January 1, 2018. The Act limits our U.S. interest expense deductions to approximately 30 percent of EBITDA through December 31, 2021 and to approximately 30 percent of earnings before net interest and taxes ("EBIT") thereafter. The Act also introduced a new minimum tax ("BEAT"). We are treating the BEAT as a period cost that does not impact the 2017 tax provision. We are currently evaluating the impact of The Act on our future cash taxes.

The company recognized the income tax effects of The Act in its 2017 financial statements in accordance with Staff Accounting Bulletin No. 118, which provides SEC staff guidance for the application of ASC Topic 740, Income Taxes, in the reporting period in which The Act was signed into law. As such, the company's financial results reflect the income tax effects of The Act for which the accounting under ASC Topic 740 is complete and provisional amounts for those specific income tax effects of The Act for which the accounting under ASC Topic 740 is incomplete but a reasonable estimate could be determined. The company did not identify items for which the income tax effects of The Act have not been completed and a reasonable estimate could not be determined as of December 31, 2017.

The company measures deferred tax assets and liabilities using enacted tax rates that will apply in the years in which the temporary differences are expected to be recovered or paid. Accordingly, the company's U.S. deferred tax assets and liabilities were remeasured to reflect the reduction in the U.S. corporate income tax rate from 35 percent to 21 percent, resulting in a \$28 million income tax benefit for the year ended December 31, 2017 and a corresponding \$28 million decrease in net deferred tax liabilities as of December 31, 2017.

The following table summarizes our total income (loss) before income taxes (in thousands):

	Year Ended December 31, 2015	Year Ended December 31, 2016	Year Ended December 31, 2017
Domestic income (loss) before income taxes	\$(3,966,322)	\$ 938,156	\$ (18,149)
Foreign income before income taxes	48,382	71,942	(85,535)
Total income (loss) before income taxes	\$(3,917,940)	\$ 1,010,098	\$ (103,684)

The primary reason for the variance in domestic income before income tax was that our Luxembourg entities recorded a net gain on the extinguishment of debt in 2016. In 2015, they recorded impairments of goodwill and other intangible assets. No comparable amounts were recorded in 2017.

The provision for (benefit from) income taxes consisted of the following (in thousands):

	Year Ended December 31, 2015	December 31, December 31,	
Current income tax provision			
Domestic	\$ —	\$ (35)	\$ (125)
Foreign	10,817	25,721	27,309
Total	10,817	25,686	27,184
Deferred income tax benefit:			
Domestic	\$ —	\$ (80)	\$ 72
Foreign	(9,304)	(9,620)	43,874
Total	(9,304)	(9,700)	43,946
Total income tax provision (benefit):	\$ 1,513	\$ 15,986	\$ 71,130

The income tax provision (benefit) was different from the amount computed using the Luxembourg statutory income tax rate of 27.08% for the reasons set forth in the following table (in thousands):

	Year Ended December 31, 2015	Year Ended December 31, 2016	Year Ended December 31, 2017
Expected tax provision (benefit) at Luxembourg statutory income tax rate	\$(1,144,822)	\$ 295,150	\$ (28,078)
Foreign income tax differential	42,339	51,787	66,242
Nontaxable interest income	(67,651)	_	_
Lux Financing Activities	40,169	(8,279)	30,232
Tax deductible impairment charges in Luxembourg subsidiaries	(854,393)	(1,280,759)	_
Change in tax rate		416,156	(28,250)
Goodwill impairment	599,974	_	
Changes in unrecognized tax benefits	(15,465)	(1,629)	(79)
Changes in valuation allowance	1,463,774	554,479	40,853
Tax effect of 2011 Intercompany Sale	(6,112)	(6,701)	(6,073)
Foreign tax credits	(2,171)	(5,480)	(3,107)
Research and development tax credits	(2,103)	(3,275)	(2,786)
Other	(52,026)	4,537	2,176
Total income tax provision (benefit)	\$ 1,513	\$ 15,986	\$ 71,130

The majority of our operations are located in taxable jurisdictions, including Luxembourg, the United States and the United Kingdom. Our Luxembourg companies that file tax returns as a consolidated group generated a taxable income for the year ended December 31, 2017. Due to our cumulative losses in recent years, and the inherent uncertainty associated with the realization of taxable income in the foreseeable future, we recorded a full valuation allowance against the net operating losses generated in Luxembourg. The difference between tax expense (benefit) reported in the consolidated statements of operations and tax computed at statutory rates is attributable to the valuation allowance on losses generated in Luxembourg, the provision for foreign taxes, which were principally in the United States and the United Kingdom, as well as withholding taxes on revenue earned in many of the foreign markets in which we operate.

Our Luxembourg net operating loss includes the effect of Luxembourg tax to U.S. GAAP differences, primarily related to fair value adjustments attributable to the migration of certain holding companies and subsidiaries' jurisdiction of organization from Bermuda to Luxembourg on December 15, 2009 and the result of a series of internal transactions and related steps completed on January 12, 2011, that reorganized the ownership of our assets among our subsidiaries and effectively combined the legacy business of Intelsat Subsidiary Holding Company S.A. and Intelsat Corporation. Another reason for our Luxembourg net operating loss is the impairment charges against Luxembourg tax values of certain intangible assets and investments in subsidiaries.

The following table details the composition of the net deferred tax balances as of December 31, 2016 and 2017 (in thousands):

	As of December 31, 2016	De	As of cember 31, 2017
Long-term deferred taxes, net	\$ (168,445)	\$	(48,434)
Other assets	15,181		14,583
Net deferred taxes	\$ (153,264)	\$	(33,851)

The components of the net deferred tax liability were as follows (in thousands):

	As of December 31, 2016	As of December 31, 2017
Deferred tax assets:		
Accruals and advances	\$ 31,015	\$ 17,169
Amortizable intangible assets	17,549	13,421
Non-Amortizable intangible assets	76,774	147,332
Performance incentives	14,599	7,289
Customer deposits	20,664	16,064
Bad debt reserve	8,659	2,033
Accrued retirement benefits	67,998	43,592
Disallowed interest expense carryforward	109,575	75,546
Net operating loss carryforward	3,937,736	3,840,759
Tax credits	17,562	11,335
Other	16,491	8,418
Total deferred tax assets	4,318,622	4,182,958
Deferred tax liabilities:		
Satellites and other property and equipment	(186,390)	(266,330)
Amortizable intangible assets	(379,653)	(366,777)
Non-amortizable intangible assets	(186,618)	(103,730)
Tax basis differences in investments and affiliates	(231,210)	(6,753)
Other	(72,524)	(16,875)
Total deferred tax liabilities	(1,056,395)	(760,465)
Valuation allowance	(3,415,491)	(3,456,344)
Total net deferred tax liabilities	<u>\$ (153,264)</u>	\$ (33,851)

In November 2015, the FASB issued ASU 2015-17, Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes to simplify the presentation of deferred income taxes. The amendments in this update require that deferred tax liabilities and assets be classified as noncurrent in a classified statement of financial position. ASU 2015-17 is effective for interim and annual periods beginning after December 15, 2016 on a prospective or retrospective basis with early adoption allowed. We adopted the amendments in the fourth quarter of 2015 on a prospective basis.

As of December 31, 2016 and 2017, our consolidated balance sheets included a deferred tax asset in the amount of \$3.9 billion and \$3.8 billion, respectively, attributable to the future benefit from the utilization of certain net operating loss carryforwards. In addition, our balance sheets as of December 31, 2016 and December 31, 2017 included \$28.7 million and \$15.4 million of deferred tax assets, respectively, attributable to the future benefit from the utilization of tax credit carryforwards. Our alternative minimum tax credit as of December 31, 2017 of \$2.3 million has been reclassified to a long term tax receivable as it is a refundable tax under The Act. As of December 31, 2017, we had tax-effected U.S. federal, state and other foreign tax net operating loss carryforwards of \$40.6 million expiring, for the most part, between 2022 and 2037, and tax effected Luxembourg net operating loss carryforwards of \$3.8 billion without expiration. These Luxembourg net operating loss carryforwards were caused primarily by our interest expense, satellite depreciation and amortization and impairment charges related to investments in subsidiaries, goodwill and other intangible assets. Our research and development credit of \$4.2 million may be carried forward to 2037. Our foreign tax credit of \$11.2 million may be carried forward to 2026.

Our valuation allowance as of December 31, 2016 and 2017 was \$3.4 billion and \$3.5 billion, respectively. Almost all of the valuation allowance relates to Luxembourg net operating loss carryforwards and deferred tax assets created by differences between U.S. GAAP and Luxembourg tax basis. Certain operations of our subsidiaries are controlled by various intercompany agreements which provide these subsidiaries with predictable operating profits. Other subsidiaries, principally Luxembourg subsidiaries, are subject to the risks of our overall business conditions which make their earnings less predictable. Our valuation allowance as of December 31, 2017 also relates to certain deferred tax assets in our U.S. subsidiary, including foreign tax credit carryforward and disallowed interest expense carryforward.

The following table summarizes the activity related to our unrecognized tax benefits (in thousands):

	2016	2017
Balance at January 1	\$40,248	\$36,167
Increases related to current year tax positions	2,301	2,193
Increases related to prior year tax positions	1,530	304
Decreases related to prior year tax positions	(878)	(3)
Expiration of statute of limitations for the assessment of taxes	(7,034)	(7,281)
Balance at December 31	\$36,167	\$31,380

As of December 31, 2016 and December 31, 2017 our gross unrecognized tax benefits were \$36.2 million and \$31.4 million, respectively (including interest and penalties), of which \$27.9 million and \$27.8 million, respectively, if recognized, would affect our effective tax rate. As of December 31, 2016 and 2017, we had recorded reserves for interest and penalties in the amount of \$3.1 million and \$0.6 million, respectively. We continue to recognize interest and, to the extent applicable, penalties with respect to the unrecognized tax benefits as income tax expense. Since December 31, 2017, the change in the balance of unrecognized tax benefits consisted of an increase of \$2.2 million related to current tax positions, an increase of \$0.3 million related to prior tax positions, and a decrease of \$7.3 million due to the expiration of statute of limitations for the assessment of taxes.

We operate in various taxable jurisdictions throughout the world and our tax returns are subject to audit and review from time to time. We consider Luxembourg, the United States, the United Kingdom and Brazil to be our significant tax jurisdictions. Our Luxembourg, U.S., United Kingdom and Brazilian subsidiaries are subject to income tax examination for periods after December 31, 2011. Within the next twelve months, we believe that there are no jurisdictions in which the outcome of unresolved tax issues or claims is likely to be material to our results of operations, financial position or cash flows.

On March 3, 2014, Intelsat Corp, Intelsat Global Service LLC, Intelsat General, Intelsat USA License LLC and Intelsat USA Sales LLC were notified by the District of Columbia Office of the Tax Revenue of its intent to initiate an audit for the tax years ending 2010 and 2011. In June 2017, this audit was closed without any adjustments that were material to our results of operations, financial position or cash flows.

Note 15 Contractual Commitments

In the further development and operation of our commercial global communications satellite system, significant additional expenditures are anticipated. In connection with these and other expenditures, we have a significant amount of long-term debt, as described in "Note 12—Long-Term Debt." In addition to these debt and related interest obligations, we have expenditures represented by other contractual commitments. The additional expenditures as of December 31, 2017 and the expected year of payment are as follows (in thousands):

	Satellite Construction and Launch Obligations	Satellite Performance Incentive Obligations	Horizons-3 Satellite LLC Contribution Obligations	Operating Leases	Sublease Rental Income	Customer and Vendor Contracts	Total
2018	\$ 324,403	\$ 42,987	\$ 41,500	\$ 14,338	\$ (665)	\$ 97,647	\$ 520,210
2019	268,098	42,244	4,600	13,889	(617)	17,763	345,977
2020	149,047	43,023	11,900	13,500	(526)	7,546	224,490
2021	18,738	42,226	13,500	13,376	(312)	2,136	89,664
2022	17,121	31,898	15,900	13,424	(143)	894	79,094
2023 and thereafter	51,197	158,189	59,700	93,501	(161)	406	362,832
Total contractual commitments	\$ 828,604	\$ 360,567	\$ 147,100	\$162,028	\$ (2,424)	\$ 126,392	\$1,622,267

⁽¹⁾ See Note 10(b)—Investments—Horizons-3 Satellite LLC.

(a) Satellite Construction and Launch Obligations

As of December 31, 2017, we had approximately \$828.6 million of expenditures remaining under our existing satellite construction and launch contracts. Satellite launch and in-orbit insurance contracts related to future satellites to be launched are cancelable up to thirty days prior to the satellite's launch. As of December 31, 2017, we did not have any non-cancelable commitments related to existing launch insurance or in-orbit insurance contracts for satellites to be launched.

The satellite construction contracts typically require that we make progress payments during the period of the satellites' construction. The satellite construction contracts contain provisions that allow us to terminate the contracts with or without cause. If terminated without cause, we would forfeit the progress payments and be subject to termination payments that escalate with the passage of time. If terminated for cause, we would be entitled to recover any payments we made under the contracts and certain liquidated damages as specified in the contracts.

(b) Satellite Performance Incentive Obligations

Satellite construction contracts also typically require that we make orbital incentive payments (plus interest as defined in each agreement with the satellite manufacturer) over the orbital life of the satellite. The incentive obligations may be subject to reduction or refund if the satellite fails to meet specific technical operating standards. As of December 31, 2017, we had \$360.6 million of satellite performance incentive obligations, including future interest payments.

(c) Operating Leases

We have commitments for operating leases primarily relating to equipment and office facilities, including our U.S. Administrative Headquarters in McLean, Virginia. As of December 31, 2017, the total obligation related to operating leases, net of sublease income on leased facilities and rental income, was \$159.6 million. Rental income and sublease income are included in other expense, net in the accompanying consolidated statements of operations.

Total rent expense for the years ended December 31, 2015, 2016 and 2017, was \$14.9 million, \$14.0 million and \$14.8 million, respectively.

(d) Customer and Vendor Contracts

We have contracts with certain customers that require us to provide equipment, services and other support during the term of the related contracts. We also have long-term contractual obligations with service providers primarily for the operation of certain of our satellites. As of December 31, 2017, we had commitments under these customer and vendor contracts which totaled approximately \$126.4 million related to the provision of equipment, services and other support.

Note 16 Contingencies

We are subject to litigation in the ordinary course of business. Management does not believe that the resolution of any pending proceedings would have a material adverse effect on our financial position or results of operations.

Note 17 Business and Geographic Segment Information

We operate in a single industry segment in which we provide satellite services to our communications customers around the world. Revenue by region is based on the locations of customers to which services are billed. Our satellites are in geosynchronous orbit, and consequently are not attributable to any geographic location. Of our remaining assets, substantially all are located in the United States.

The geographic distribution of our revenue based upon billing region of the customer was as follows:

	Year Ended December 31, 2015	Year Ended December 31, 2016	Year Ended December 31, 2017
North America	47%	49%	50%
Europe	15%	14%	13%
Latin America and Caribbean	15%	15%	14%
Africa and Middle East	14%	13%	14%
Asia-Pacific	9%	9%	9%

Approximately 7%, 8% and 9% of our revenue was derived from our largest customer during each of the years ended December 31, 2015, 2016 and 2017, respectively. The ten largest customers accounted for approximately 29%, 31% and 34% of our revenue for the years ended December 31, 2015, 2016 and 2017, respectively.

We earn revenue primarily by providing services to our customers using our satellite transponder capacity. Our customers generally obtain satellite capacity from us by placing an order pursuant to one of several master customer service agreements. On-network services are comprised primarily of services delivered on our owned network infrastructure, as well as commitments for third-party capacity, generally long-term in nature, that we integrate and market as part of our owned infrastructure. In the case of third-party services in support of government applications, the commitments for third-party capacity are shorter and matched to the government contracting period, and thus remain classified as off-network services. Off-network services can include transponder services and other satellite-based transmission services, such as mobile satellite services ("MSS"), which are sourced from other operators, often in frequencies not available on our network. Under the category Off-Network and Other Revenues, we also include revenues from consulting and other services.

Our revenues were derived from the following services, with Off-Network and Other Revenues shown separately from On-Network Revenues (in thousands, except percentages):

	Year Ended December 31, 2015		Year Ended December 31, 2016		Year Ende December 31,	
On-Network Revenues						
Transponder services	\$1,705,568	73%	\$1,561,108	71%	\$1,543,384	72%
Managed services	405,330	17%	414,758	19%	412,147	19%
Channel	38,872	2%	9,134	0%	5,405	0%
Total on-network revenues	2,149,770	91%	1,985,000	91%	1,960,936	91%
Off-Network and Other Revenues						
Transponder, MSS and other off-network services	160,063	7%	157,212	7%	141,845	7%
Satellite-related services	42,688	2%	45,835	2%	45,831	2%
Total off-network and other revenues	202,751	9%	203,047	9%	187,676	9%
Total	\$2,352,521	100%	\$2,188,047	100%	\$2,148,612	100%

Note 18 Related Party Transactions

(a) Shareholders' Agreements

Certain shareholders of Intelsat Global S.A. entered into shareholders' agreements on February 4, 2008. The shareholders' agreements were assigned to Intelsat S.A. by amendments effective as of March 30, 2012. The shareholders' agreements and the articles of incorporation of Intelsat S.A. provided, among other things, for the governance of Intelsat S.A. and its subsidiaries and provided specific rights to and limitations upon the holders of Intelsat S.A.'s share capital with respect to shares held by such holders. In connection with our initial public offering (the "IPO") in April 2013, these articles of incorporation and shareholders' agreements were amended.

(b) Governance Agreement

Prior to the consummation of the IPO, we entered into a governance agreement (as amended, the "Governance Agreement") with our shareholder affiliated with BC Partners (the "BC Shareholder"), our shareholder affiliated with Silver Lake (the "Silver Lake Shareholder") and David McGlade, our Executive Chairman (collectively with the BC Shareholder and the Silver Lake Shareholder, the "Governance Shareholders"). The Governance Agreement contains provisions relating to the composition of our board of directors and certain other matters.

(c) Indemnification Agreements

We have entered into agreements with our executive officers and directors to provide contractual indemnification in addition to the indemnification provided for in our articles of incorporation.

(d) Horizons Holdings

We have a 50% ownership interest in Horizons Holdings as a result of a joint venture with JSAT (see Note 10(a)—Investments—Horizons Holdings).

(e) Horizons 3 Satellite LLC

We have a 50% ownership interest in Horizons 3 as a result of a joint venture with JSAT (see Note 10(b)—Investments—Horizons-3 Satellite LLC).

Note 19 Quarterly Results of Operations (in thousands, unaudited)

	Quarter Ended					
2016	March 31	March 31 June 30 September 30				
Revenue (1)	\$552,643	\$ 541,983	\$ 542,727	\$ 550,694		
Income from operations (1)	239,173	227,324	220,410	233,705		
Net income	16,292	117,412 (3)	196,605 (3)	663,803 (3)		
Net income attributable to Intelsat S.A.	15,326	116,429 (3)	195,622 (3)	662,820 (3)		
Net income attributable to common shareholders	15,326	116,429 (3)	195,622 (3)	662,820 (3)		
Net income per share attributable to Intelsat S.A.:						
Basic (2)	\$ 0.14	\$ 1.02	\$ 1.66	\$ 5.62		
Diluted (2)	0.13	0.98	1.65	5.56		
	-	Quarte	er Ended			
2017	March 31	June 30	September 30	December 31		
Revenue (1)	\$538,484	\$ 533,229	\$ 538,759	\$ 538,140		
Income from operations (1)	217,596	229,113	234,033	233,815		
Net loss	(33,642)(4)	(22,800)	(29,416)(4)	(88,956)		
Net loss attributable to Intelsat S.A.	(34,570)(4)	(23,795)	(30,412)(4)	(89,951)		
Net loss attributable to common shareholders	(34,570)(4)	(23,795)	(30,412)(4)	(89,951)		
Net loss per share attributable to Intelsat S.A.:						
Basic (2)	\$ (0.29)	\$ (0.20)	\$ (0.26)	\$ (0.75)		
Diluted (2)	(0.29)	(0.20)	(0.26)	(0.75)		

- (1) Our quarterly revenue and operating income (loss) are generally not impacted by seasonality, as customer contracts for satellite utilization are generally long-term. Revenue declines shown above were primarily due to declines from our network services customers, mainly due to reduced volumes resulting from non-renewals and point-to-point connectivity and certain cellular backhaul services which are eroding to fiber alternatives, together with non-renewals and renewal pricing at lower rates for enterprise network services. Additional declines in Channel services related to the continued migration of international point-to-point satellite traffic to fiber optic cable, a trend which we expect will continue.
- (2) Basic and diluted earnings per share are computed independently for each of the quarters presented. Therefore, the sum of quarterly basic and diluted per share information may not equal annual basic and diluted earnings per share.
- (3) The quarter ended June 30, 2016 includes a \$131.4 million gain on early extinguishment of debt related to the May 2016 Intelsat Jackson Notes Repurchase. The quarter ended September 30, 2016 includes a \$219.6 million gain on early extinguishment of debt related to the September 2016 Intelsat Jackson Debt Exchange and Consent Solicitation. The quarter ended December 31, 2016 includes a \$679.1 million gain on early extinguishment of debt related to the December 2016 ICF Exchange Offers.
- (4) The quarter ended March 31, 2017 includes a \$0.5 million gain on early extinguishment of debt related to the Second 2018 Luxembourg Exchange described above. The quarter ended September 30, 2017 includes a \$4.6 million loss on early extinguishment of debt related to the July 2017 Intelsat Jackson Senior Notes Refinancing described above.

Note 20 Supplemental Consolidating Financial Information

On April 5, 2011, Intelsat Jackson completed an offering of \$2.65 billion aggregate principal amount of senior notes, consisting of \$1.5 billion aggregate principal amount of its 7.25% Senior Notes due 2019 and \$1.15 billion aggregate principal amount of its 7.5% Senior Notes due 2021 (collectively, the "New Jackson Notes"). The New Jackson Notes are fully and unconditionally guaranteed, jointly and severally, by Intelsat S.A., Intelsat Holdings, Intelsat Investment Holdings S.à r.l. and Intelsat Investments (collectively, the "Parent Guarantors"); Intelsat Luxembourg and certain whollyowned subsidiaries of Intelsat Jackson (the "Subsidiary Guarantors"). On July 5, 2017, the net proceeds from the sale of the 2025 Jackson Notes were used, along with other available cash, to satisfy and discharge all \$1.5 billion aggregate principal amount of Intelsat Jackson's 7.25% Senior Notes due 2019 pursuant to the indenture governing such notes.

On April 26, 2012, Intelsat Jackson completed an offering of \$1.2 billion aggregate principal amount of its 7.25% Senior Notes due 2020, which are fully and unconditionally guaranteed, jointly and severally, by the Parent Guarantors, Intelsat Luxembourg, ICF and the Subsidiary Guarantors.

Separate financial statements of the Parent Guarantors, Intelsat Luxembourg, ICF, Intelsat Jackson and the Subsidiary Guarantors are not presented because management believes that such financial statements would not be material to investors. Investments in Intelsat Jackson's subsidiaries in the following condensed consolidating financial information are accounted for under the equity method of accounting. Consolidating adjustments include the following:

- · elimination of investment in subsidiaries;
- · elimination of intercompany accounts;
- elimination of intercompany sales between guarantor and non-guarantor subsidiaries; and
- elimination of equity in earnings (losses) of subsidiaries.

We had other comprehensive income of \$34.1 million and \$2.1 million for the years ended December 31, 2015 and 2016 and other comprehensive loss of \$11.5 million for the year ended December 31, 2017. Other comprehensive income (loss) is fully attributable to the Subsidiary Guarantors, which are also consolidated within Intelsat Jackson.

INTELSAT S.A. AND SUBSIDIARIES CONDENSED CONSOLIDATING BALANCE SHEET AS OF DECEMBER 31, 2017 (in thousands)

	Intelsat S.A. and Other Parent Guarantors	Intelsat Luxembourg	Intelsat Connect Finance	Intelsat Jackson	Jackson Subsidiary Guarantors	Non -Guarantor Subsidiaries	Consolidation and Eliminations	Consolidated
ASSETS								
Current assets:								
Cash and cash equivalents	\$ 1,010	\$ 48,174	\$ 67,822	\$ 334,036	\$ 256,619	\$ 74,173	\$ (256,619)	\$ 525,215
Restricted cash	_	_	_	15,754	1,908	422	(1,908)	16,176
Receivables, net of allowance	4	59	_	162,474	162,072	58,686	(162,072)	221,223
Prepaid expenses and other current assets	1,102	_	_	47,956	47,891	10,404	(50,491)	56,862
Intercompany receivables		132,612	13,571	461,284			(607,467)	
Total current assets	2,116	180,845	81,393	1,021,504	468,490	143,685	(1,078,557)	819,476
Satellites and other property and equipment, net	_	_	_	5,837,190	5,837,190	86,429	(5,837,190)	5,923,619
Goodwill	_	_	_	2,620,627	2,620,627	<u> </u>	(2,620,627)	2,620,627
Non-amortizable intangible assets	_	_	_	2,452,900	2,452,900	_	(2,452,900)	2,452,900
Amortizable intangible assets, net	_	_	_	349,584	349,584	_	(349,584)	349,584
Investment in affiliates	(3,252,586)	(501,466)	(970,929)	194,264	194,264	_	4,336,453	_
Other assets	90	348	859,513	342,205	319,869	101,188	(1,179,383)	443,830
Total assets	\$(3,250,380)	\$ (320,273)	\$ (30,023)	\$12,818,274	\$12,242,924	\$ 331,302	\$ (9,181,788)	\$ 12,610,036
LIABILITIES AND SHAREHOLDERS' EQUITY Current liabilities:								
Accounts payable and accrued liabilities	\$ 25,276	\$ 413	\$ 1.878	\$ 111,121	\$ 110,446	\$ 21,644	\$ (113,047)	\$ 157,731
Accrued interest payable		13,163	4,066	245,978	5,956		(5,956)	263,207
Current portion of long-term debt	_	96,572				_	_	96,572
Deferred satellite performance incentives	_	_	_	25,780	25.780	_	(25,780)	25,780
Other current liabilities	_	_	_	193,221	193,221	3,815	(193,221)	197,036
Intercompany payables	512,908	_	_	<u> </u>	1,290,806	94,559	(1,898,273)	
Total current liabilities	538,184	110,148	5,944	576,100	1,626,209	120,018	(2,236,277)	740,326
Long-term debt, net of current portion		3,172,298	464,784	11,684,650			(1,209,646)	14,112,086
Deferred satellite performance incentives, net of		5,172,270	.0.,, .	11,001,000			(1,20),010)	11,112,000
current portion	_	_	_	215,352	215,352	_	(215,352)	215,352
Deferred revenue, net of current portion	_	_	_	794,542	794,542	165	(794,542)	794,707
Deferred income taxes	_	_	_	37,890	37,890	10,544	(37,890)	48,434
Accrued retirement benefits	_	_	_	190,857	190,857	222	(190,857)	191,079
Other long-term liabilities	_	784	716	289,812	289,812	6,088	(290,596)	296,616
Shareholders' equity (deficit):								_
Common shares	1,196	7,202		200	7,346,327	24	(7,353,753)	1,196
Other shareholders' equity (deficit)	(3,789,760)	(3,610,705)	(501,467)	(971,129)	1,741,935	194,241	3,147,125	(3,789,760)
Total liabilities and shareholders'	(-) , . , . , . , . ,	(-) (-)			, , , , , , , , , , , , , , , , , , ,			(-,,)
equity	\$(3,250,380)	\$ (320,273)	\$ (30,023)	\$12,818,274	\$12,242,924	\$ 331,302	\$ (9,181,788)	\$ 12,610,036

INTELSAT S.A. AND SUBSIDIARIES CONDENSED CONSOLIDATING BALANCE SHEET AS OF DECEMBER 31, 2016 (in thousands)

	O	elsat S.A. and ther Parent Guarantors		Intelsat xembourg	Int	elsat Connect Finance	Int	elsat Jackson		Jackson Subsidiary Suarantors		n-Guarantor ubsidiaries		nsolidation and Eliminations	Co	nsolidated
ASSETS		_				_		_						_		
Current assets:																
Cash and cash																
equivalents	\$	552	\$	59,752	\$	29,985	\$	495,225	\$	414.339	\$	80,510	\$	(414,339)	\$	666,024
Receivables, net of				,		, , , , , ,		,		,		, .		())		, .
allowance		2		_		_		151,345		151,322		51,689		(151,322)		203,036
Prepaid expenses and								,		,		,		(,)		
other current assets		882		3		_		48.320		48,263		6,703		(48,263)		55,908
Intercompany		002		J				10,520		.0,200		0,705		(10,200)		55,500
receivables		_		_		8,867		557,959		_		302.118		(868,944)		_
	_	1.426	_	50.755	_		_		_	(12.024	_	, -			-	024.060
Total current assets		1,436		59,755		38,852		1,252,849		613,924		441,020		(1,482,868)		924,968
Satellites and other property								(00(450		6.006.450		00.202		(6,006,450)		C 105 042
and equipment, net		_						6,096,459		6,096,459		89,383		(6,096,459)		6,185,842
Goodwill		_		_		_		2,620,627		2,620,627		_		(2,620,627)		2,620,627
Non-amortizable intangible																
assets		_						2,452,900		2,452,900		_		(2,452,900)		2,452,900
Amortizable intangible																
assets, net		_		_		_		391,838		391,838		_		(391,838)		391,838
Investment in affiliates		(3,086,095)		(23,113)		(651,909)		184,804		184,804		_		3,391,509		_
Other assets		169				681,910		303,623		303,623		62,123		(985,614)		365,834
Total assets	\$	(3,084,490)	\$	36,642	\$	68,853	\$	13,303,100	\$	12,664,175	\$	592,526	\$	(10,638,797)	\$ 1	2,942,009
LIABILITIES AND SHAREHOLDERS' EQUITY (DEFICIT) Current liabilities:																
Accounts payable and																
accrued liabilities	\$	23,153	\$	_	S	10,830	\$	221,564	\$	218,897	\$	27,351	\$	(218,897)	\$	282,898
Accrued interest	Ψ	25,155	Ψ		Ψ	10,050	Ψ	221,00	Ψ	210,057	Ψ	27,501	Ψ	(210,0)//	Ψ	202,000
payable		_		13,158		2,287		189,395		3,146		_		(3,146)		204,840
Deferred satellite				15,150		2,207		107,575		3,110				(3,110)		201,010
performance																
incentives		_				_		23,455		23,455		_		(23,455)		23,455
Other current liabilities								219,389		219,389		3,081		(219,389)		222,470
Intercompany payables		502,355		366,589				219,569		2,183,616		3,001		(3,052,560)		
1	_	302,333	_	300,369	_		_		-	2,103,010	_			(3,032,300)	_	
Total current																
liabilities		525,508		379,747		13,117		653,803		2,648,503		30,432		(3,517,447)		733,663
Long-term debt, net of																
current portion		_		3,467,902		434,627		11,702,378		_		_		(1,406,823)	1	4,198,084
Deferred satellite																
performance incentives,																
net of current portion		_		_		_		210,706		210,706		_		(210,706)		210,706
Deferred revenue, net of																
current portion		_		_		_		906,521		906,521		223		(906,521)		906,744
Deferred income taxes		_		_		_		156,081		156,081		12,444		(156,161)		168,445
Accrued retirement benefits		_		_		_		186,086		186,086		198		(186,086)		186,284
Other long-term liabilities		_		_		1,554		139,434		139,434		7,093		(139,434)		148,081
Shareholders' equity																
(deficit):																
Common shares		1,180		7,202		_		200		5,558,066		24		(5,565,492)		1,180
Other shareholders'																
equity (deficit)		(3,611,178)	(3,818,209)		(380,445)		(652,109)		2,858,778		542,112		1,449,873	(3,611,178)
Total liabilities and										<u></u>				<u></u>		
shareholders' equity	\$	(3,084,490)	\$	36,642	\$	68,853	\$	13,303,100	\$	12,664,175	\$	592,526	\$	(10,638,797)	\$ 1	2,942,009
									_							

INTELSAT S.A. AND SUBSIDIARIES CONDENSED CONSOLIDATING STATEMENT OF OPERATIONS FOR THE YEAR ENDING DECEMBER 31, 2017 (in thousands)

	Intelsat S.A. and Other Parent Guarantors	Intelsat Luxembourg	Intelsat Connect Finance	Intelsat Jackson	Jackson Subsidiary Guarantors	Non- Guarantor Subsidiaries	Consolidation and Eliminations	Consolidated
Revenue	\$ 22,505	\$ —	\$ —	\$2,003,186	\$2,003,201	\$ 511,940	\$(2,392,220)	\$2,148,612
Operating expenses:							·	·
Direct costs of revenue								
(excluding depreciation and amortization)	_	_	_	276,673	276,673	434,491	(665,621)	322,216
Selling, general and								
administrative	19,465	592	1,717	122,630	115,619	57,673	(113,681)	204,015
Depreciation and amortization				689,244	689,244	18,580	(689,244)	707,824
Total operating expenses	19,465	592	1,717	1,088,547	1,081,536	510,744	(1,468,546)	1,234,055
Income (loss) from operations	3,040	(592)	(1,717)	914,639	921,665	1,196	(923,674)	914,557
Interest expense (income), net	15,977	359,211	(14,116)	727,540	176,767	(53,617)	(190,992)	1,020,770
Gain on early extinguishment of debt	_	209,771	6	(4,612)	_	_	(209,274)	(4,109)
Subsidiary income	(165,800)	181,291	114,318	(2,704)	(2,704)	_	(124,401)	
Other income (expense), net	(44)	(786)	728	7,088	7,035	(1,133)	(6,250)	6,638
Income before income taxes	(178,781)	30,473	127,451	186,871	749,229	53,680	(1,072,607)	(103,684)
Provision for (benefit from) income								
taxes	(53)			72,553	72,553	(1,370)	(72,553)	71,130
Net income	(178,728)	30,473	127,451	114,318	676,676	55,050	(1,000,054)	(174,814)
Net income attributable to noncontrolling interest						(3,914)		(3,914)
Net income attributable to Intelsat S.A.	\$ (178,728)	\$ 30,473	\$127,451	\$ 114,318	\$ 676,676	\$ 51,136	<u>\$(1,000,054</u>)	\$ (178,728)

INTELSAT S.A. AND SUBSIDIARIES CONDENSED CONSOLIDATING STATEMENT OF OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2016 (in thousands)

	Intelsat S.A. and Other Parent Guarantors	Intelsat Luxembourg	Intelsat Connect Finance	Intelsat Jackson	Jackson Subsidiary Guarantors	Non-Guarantor Subsidiaries	Consolidation and Eliminations	Consolidated
Revenue	\$ 2,952	<u>\$</u>	<u>\$</u>	\$1,999,114	\$1,999,129	\$ 562,372	\$(2,375,520)	\$2,188,047
Operating expenses:								
Direct costs of revenue (excluding depreciation and amortization)	_	_	_	264,587	264,587	452,899	(640,926)	341,147
Selling, general and				201,007	201,007	2,0>>	(0.0,520)	5 . 1 , 1 . ,
administrative	7,884	168	61	140,952	137,488	79,083	(134,239)	231,397
Depreciation and amortization				676,542	676,542	18,349	(676,542)	694,891
Total operating expenses	7,884	168	61	1,082,081	1,078,617	550,331	(1,451,707)	1,267,435
Income (loss) from operations	(4,932)	(168)	(61)	917,033	920,512	12,041	(923,813)	920,612
Interest expense (income), net	13,596	272,791	8	661,671	183,931	(9,505)	(183,991)	938,501
Gain on early extinguishment of debt	_	_	_	350,962	_	_	679,130	1,030,092
Subsidiary income	1,008,614	605,685	597,995	9,869	9,869	_	(2,232,032)	_
Other income (expense), net	(4)			(5,909)	1,812	3,808	(1,812)	(2,105)
Income before income taxes	990,082	332,726	597,926	610,284	748,262	25,354	(2,294,536)	1,010,098
Provision for (benefit from) income								
taxes	(115)			12,290	12,290	3,811	(12,290)	15,986
Net income	990,197	332,726	597,926	597,994	735,972	21,543	(2,282,246)	994,112
Net income attributable to noncontrolling interest						(3,915)		(3,915)
Net income attributable to Intelsat S.A.	\$ 990,197	\$ 332,726	\$597,926	\$ 597,994	\$ 735,972	\$ 17,628	<u>\$(2,282,246)</u>	\$ 990,197

INTELSAT S.A. AND SUBSIDIARIES CONDENSED CONSOLIDATING STATEMENT OF OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2015 (in thousands)

	Intelsat S.A. and Other Parent Guarantors	Intelsat Luxembourg	Intelsat Jackson	Jackson Subsidiary Guarantors	Non-Guarantor Subsidiaries	Consolidation and Eliminations	Consolidated
Revenue	\$ —	\$ —	\$ 2,160,235	\$ 2,160,251	\$ 554,831	\$ (2,522,796)	\$ 2,352,521
Operating expenses:							
Direct costs of revenue (exclusive of							
depreciation and amortization)	_	_	241,603	241,603	449,274	(603,979)	328,501
Selling, general and administrative	7,912	193	126,331	125,494	65,143	(125,661)	199,412
Impairment of goodwill and other intangibles	_	_	4,165,400	4,165,400	_	(4,165,400)	4,165,400
Depreciation and amortization			654,784	654,784	32,945	(654,784)	687,729
Total operating expenses	7,912	193	5,188,118	5,187,281	547,362	(5,549,824)	5,381,042
Income (loss) from operations	(7,912)	(193)	(3,027,883)	(3,027,030)	7,469	3,027,028	(3,028,521)
Interest expense (income), net	10,723	274,451	613,162	36,059	(8,057)	(36,059)	890,279
Gain on early extinguishment of debt	_	7,061	_	_	_	_	7,061
Subsidiary income (loss)	(3,904,747)	(3,614,952)	11,983	11,983	_	7,495,733	_
Other income (expense), net			4,367	(5,136)	(10,568)	5,136	(6,201)
Income (loss) before income taxes	(3,923,382)	(3,882,535)	(3,624,695)	(3,056,242)	4,958	10,563,956	(3,917,940)
Provision for (benefit from) income taxes	3		(1,871)	(1,885)	3,381	1,885	1,513
Net income (loss)	(3,923,385)	(3,882,535)	(3,622,824)	(3,054,357)	1,577	10,562,071	(3,919,453)
Net income attributable to noncontrolling interest					(3,934)		(3,934)
Net income (loss) attributable to Intelsat, S.A.	(3,923,385)	(3,882,535)	(3,622,824)	(3,054,357)	(2,357)	10,562,071	(3,923,387)
Cumulative preferred dividends	(9,919)						(9,919)
Net income (loss) attributable to common shareholders	\$(3,933,304)	\$(3,882,535)	\$(3,622,824)	\$(3,054,357)	\$ (2,357)	\$10,562,071	\$(3,933,306)

INTELSAT S.A. AND SUBSIDIARIES CONDENSED CONSOLIDATING STATEMENT OF CASH FLOWS FOR THE YEAR ENDING DECEMBER 31, 2017 (in thousands)

Cash flows from operating setivities 2 \$ 0.288, 894 \$ 0.30297 \$ 699,755 \$ 778,307 \$ 25,037 \$ (780,309) \$ 464,202 Cash flows from investing activities Cash flows from investing activities \$ 0.000 \$ 0.0		Intelsat S.A. and Other Parent Guarantors	Intelsat Luxembourg	Intelsat Connect Finance	Intelsat Jackson	Jackson Subsidiary Guarantors	Non-Guarantor Subsidiaries	Consolidation and Eliminations	Consolidated
Payments for satellities and other property and equipment (including capitalized interest) - -	Cash flows from operating activities:	\$ 27	\$ (288,884)	\$ 30,297	\$ 699,755	\$ 778,307	\$ 25,037	\$ (780,309)	\$ 464,230
Payments for satellities and other property and equipment (including capitalized interest) - -	Cash flows from investing activities:								
For intercompany loans	Payments for satellites and other property and equipment (including capitalized interest)	_	_	_	(445,842)	(445,842)	(15,785)	445,842	(461,627)
Investment in subsidiaries									
Dividend from affiliates		_	_	_		()	_		
Purchase of cost method investments		_				(, ,	_	,	_
Investments	Dividend from affiliates	_	286,454	286,454	13,755	13,755	_	(600,418)	_
Capital contributions to unconsolidated affiliate — — — — — — — — — — — — — — — — — — —		_	_	_	(25 744)	(25.744)	_	25 744	(25.744)
unconsolidated affiliate — <td></td> <td></td> <td></td> <td></td> <td>(20,711)</td> <td>(20,7.1.)</td> <td></td> <td>20,7</td> <td>(25,7)</td>					(20,711)	(20,7.1.)		20,7	(25,7)
Net cash provided by (used in) investing activities	unconsolidated affiliate	_	_	_	_	_	(30,714)	_	(30,714)
Net cash provided by (used in) investing activities — 279,310 286,454 (446,632) (440,132) (46,499) (100,798) (468,297) Cash flows from financing activities Proceeds from fissance activities Proceeds from fissance activities Proceeds from issuance of long-term debt — — — 1,500,000 — — — — 1,500,000 Repayments of long-term debt — — — — (1,500,000) — — — — (1,500,000) Proceeds from (repayment of) intercompany loans — — — — — — — — — — — — — — — — — — —									
Cash flows from financing activities —					49,788	49,788		(49,788)	49,788
Cash flows from financing activities: Proceeds from issuance of long-term debt		_	279,310	286,454	(446,632)	(440,132)	(46,499)	(100,798)	(468,297)
Proceeds from issuance of long-term debt — — — — — — — — — — — — — — — — — — —	Cash flows from financing activities:								
term debt									
Repayments of long-term debt	2				1.500.000				1.500.000
Proceeds from (repayment of) intercompany loans					, ,				, ,
intercompany loans — — — — — — — — — — — — — — — — — — —					(1,500,000)				(1,500,000)
Debt issuance costs							602	(602)	
Payments on debt exchange — — — — — — — — — — — — — — — — — — —	1 7	_	(2.002)	_	(41 227)	_	003		(41 227)
Dividends paid to preferred shareholders		_	(2,002)		(41,237)	_		2,002	(/ /
Other payments for satellites — — — — — — — — — — — — — — — — — — —				(14)	<u> </u>				(14)
Capital contribution from parent — — — — — — — — — — — — — — — — — — —	shareholders	_	_	_	_	(8,724)	_	8,724	_
Dividends to shareholders — — — (286,454) (286,454) (477,425) (13,755) 1,064,088 — Principal payments on deferred satellite performance incentives — — — — (37,186) (37,186) — 37,186 (37,186) Dividends paid to noncontrolling interest — — — — — — — — — (8,755) — — (8,755) Restricted cash for collateral — — — — — — — — — — — — — — — — — — —	Other payments for satellites	_	_	_	(35,396)	(35,396)	_	35,396	(35,396)
Principal payments on deferred satellite performance incentives — — — — — — — — — — — — — — — — — — —	Capital contribution from parent	_	_	7,144	_	63,023	37,986	(108,153)	_
Sate like performance incentives	Dividends to shareholders	_	_	(286,454)	(286,454)	(477,425)	(13,755)	1,064,088	_
Dividends paid to noncontrolling interest — — — — — — — — — — — — — — — — — — —	1 1 2	_	_	_	(37 186)	(37.186)	_	37 186	(37.186)
interest — — — — — — — — — — — — — — — — — — —					(57,100)	(57,100)		37,100	(37,100)
Restricted cash for collateral — — — — — — — — — — — — — — — — — — —		_	_	_	_	_	(8.755)	_	(8.755)
Other financing activities 476 — 414 — — — — — — 890 Net cash provided by (used in) financing activities 476 (2,002) (278,910) (416,020) (497,609) 15,666 1,040,541 (137,858) Effect of exchange rate changes on cash and cash equivalents (45) (2) (4) 1,708 1,714 (541) (1,714) 1,116 Net change in cash and cash equivalents 458 (11,578) 37,837 (161,189) (157,720) (6,337) 157,720 (140,809) Cash and cash equivalents, beginning of period 552 59,752 29,985 495,225 414,339 80,510 (414,339) 666,024 Cash and cash equivalents, end of		_	_	_	(15.747)	(1.901)		1 901	
Net cash provided by (used in) financing activities 476 (2,002) (278,910) (416,020) (497,609) 15,666 1,040,541 (137,858) Effect of exchange rate changes on cash and cash equivalents (45) (2) (4) 1,708 1,714 (541) (1,714) 1,116 Net change in cash and cash equivalents 458 (11,578) 37,837 (161,189) (157,720) (6,337) 157,720 (140,809) Cash and cash equivalents, beginning of period 552 59,752 29,985 495,225 414,339 80,510 (414,339) 666,024 Cash and cash equivalents, end of			_		. , ,		()	· · ·	(/ /
in) financing activities 476 (2,002) (278,910) (416,020) (497,609) 15,666 1,040,541 (137,858) Effect of exchange rate changes on cash and cash equivalents (45) (2) (4) 1,708 1,714 (541) (1,714) 1,116 Net change in cash and cash equivalents 458 (11,578) 37,837 (161,189) (157,720) (6,337) 157,720 (140,809) Cash and cash equivalents, beginning of period 552 59,752 29,985 495,225 414,339 80,510 (414,339) 666,024 Cash and cash equivalents, end of									
cash and cash equivalents (45) (2) (4) 1,708 1,714 (541) (1,714) 1,116 Net change in cash and cash equivalents 458 (11,578) 37,837 (161,189) (157,720) (6,337) 157,720 (140,809) Cash and cash equivalents, beginning of period 552 59,752 29,985 495,225 414,339 80,510 (414,339) 666,024 Cash and cash equivalents, end of		476	(2,002)	(278,910)	(416,020)	(497,609)	15,666	1,040,541	(137,858)
equivalents 458 (11,578) 37,837 (161,189) (157,720) (6,337) 157,720 (140,809) Cash and cash equivalents, beginning of period 552 59,752 29,985 495,225 414,339 80,510 (414,339) 666,024 Cash and cash equivalents, end of		(45)	(2)	(4)	1,708	1,714	(541)	(1,714)	1,116
Cash and cash equivalents, beginning of period 552 59,752 29,985 495,225 414,339 80,510 (414,339) 666,024 Cash and cash equivalents, end of		458	(11.578)	37.837	(161.189)	(157.720)	(6.337)	157.720	(140.809)
Cash and cash equivalents, end of		.50	(,-/0)	,,	(,)	(-1.,.20)	(=,==/)	22.,.20	(2.2,20)
		552	59,752	29,985	495,225	414,339	80,510	(414,339)	666,024
	*	\$ 1,010	\$ 48,174	\$ 67,822	\$ 334,036	\$ 256,619	\$ 74,173	\$ (256,619)	\$ 525,215

INTELSAT S.A. AND SUBSIDIARIES CONDENSED CONSOLIDATING STATEMENT OF CASH FLOWS FOR THE YEAR ENDED DECEMBER 31, 2016 (in thousands)

	Intelsat S.A. and Other Parent Guarantors	Intelsat Luxembourg	Intelsat Connect Finance	Intelsat Jackson	Jackson Subsidiary Guarantors	Non-Guarantor Subsidiaries	Consolidation and Eliminations	Consolidated
Cash flows from operating activities:	\$ (10,234)	\$ 89,342	\$ 4,764	\$ 917,923	\$ 1,506,746	\$ (314,986)	\$ (1,510,049)	\$ 683,506
Cash flows from investing activities:								
Payments for satellites and other								
property and equipment (including								
capitalized interest)	_	_	_	(699,213)	(699,213)	(15,357)	699,213	(714,570)
Repayment from (disbursements for)								
intercompany loans	4,895	_	_	_	_	359,237	(364,132)	
Investment in subsidiaries	(6,087)	(300,050)	_	(30,655)	(10,955)	_	347,747	_
Dividend from affiliates	_	269,700	_	8,980	8,980	_	(287,660)	
Purchase of cost method investment	_	_	_	(4,000)	(4,000)	_	4,000	(4,000)
Capital contributions to unconsolidated						(10.240)		(10.240)
affiliate		_			_	(10,340)	_	(10,340)
Other investing activities						(1,679)		(1,679)
Net cash provided by (used in)								
investing activities	(1,192)	(30,350)		(724,888)	(705,188)	331,861	399,168	(730,589)
Cash flows from financing activities:								
Proceeds from issuance of long-term								
debt	_	_	_	1,250,000	_	_	_	1,250,000
Repayments of long-term debt	_	_	_	(328,944)	_	_	_	(328,944)
Proceeds from (repayment of)								
intercompany loans				(364,132)	(12,438)	_	376,570	_
Payment of premium on early				(22)				(22)
extinguishment of debt Debt issuance costs	_	_	(15.562)	(32)	_	_	2 202	(32)
			(15,562)	(26,133)		_	3,302	(38,393)
Payments on tender, debt exchange and consent transaction			(259,267)	(34,009)				(293,276)
Dividends paid to preferred	_	_	(239,267)	(34,009)	_	_	_	(293,270)
shareholders	(4,959)	_		_	_	_	_	(4,959)
Other payments for satellites	(1,555)	_	_	(18,333)	(18,333)	_	18,333	(18,333)
Capital contribution from parent	_	_	300,050	(10,555)	96,658	36,742	(433,450)	(10,555)
Dividends to shareholders	_	_	_	(269,700)	(524,327)	(8,980)	803,007	_
Principal payments on deferred satellite				(===,,==)	(== 1,== 1)	(0,, 00)	,	
performance incentives	_	_	_	(17,429)	(17,429)	_	17,429	(17,429)
Dividends paid to noncontrolling					, ,			· · · · ·
interest	_	_	_	_	_	(8,980)	_	(8,980)
Other financing activities	_	_	_	1,942	_	_	_	1,942
Net cash provided by (used in)								
financing activities	(4,959)	_	25,221	193,230	(475,869)	18,782	785,191	541,596
Effect of exchange rate changes on cash and								
cash equivalents	(4)	_	_	(999)	(991)	972	992	(30)
Net change in cash and cash equivalents	(16,389)	58,992	29,985	385,266	324,698	36,629	(324,698)	494,483
Cash and cash equivalents, beginning of	(10,509)	30,792	27,703	303,200	324,070	30,029	(324,090)	7,77,703
period	16,941	760	_	109,959	89,641	43,881	(89,641)	171,541
Cash and cash equivalents, end of period	\$ 552	\$ 59,752	\$ 29,985	\$ 495,225	\$ 414,339	\$ 80.510	\$ (414,339)	\$ 666,024
cash and cash equivalents, end of period	φ 33Z	\$ 39,132	\$ 49,903	φ 493,223	\$ 414,339	00,310	g (414,339)	φ 000,024

INTELSAT S.A. AND SUBSIDIARIES CONDENSED CONSOLIDATING STATEMENT OF CASH FLOWS FOR THE YEAR ENDED DECEMBER 31, 2015 (in thousands)

	Intelsat S.A. and Other Parent Guarantors	Intelsat Luxembourg	Intelsat Jackson	Jackson Subsidiary Guarantors	Non-Guarantor Subsidiaries	Consolidation and Eliminations	Consolidated
Cash flows from operating activities:	\$ 724	\$ (251,879)	\$1,138,747	\$1,629,412	\$ 22,438	\$(1,629,411)	\$ 910,031
Cash flows from investing activities:					· · · · · · · · · · · · · · · · · · ·		
Payments for satellites and other property and equipment (including capitalized interest)	_	_	(720,273)	(720,273)	(4,089)	720,273	(724,362)
Repayment from (disbursements for) intercompany loans	9,538		2,064	2.064	(346,799)	333,133	
Investment in subsidiaries	(7,355)	(610,000)	(198)	(40,444)	(340,799)	657,997	_
Dividend from affiliates	19,000	898,400	28,423	28,423	<u> </u>	(974,246)	_
Purchase of cost method investment	19,000	696, 4 00	(25,000)	(25,000)		25,000	(25,000)
Other investing activities			432	432	(424)	(432)	(23,000)
8				432	(121)	(432)	
Net cash provided by (used in) investing activities	21,183	288,400	(714,552)	(754,798)	(351,312)	761,725	(749,354)
Cash flows from financing activities:							
Repayments of long-term debt	_	(17,829)	(479,000)	_	_	_	(496,829)
Proceeds from drawdown of long-term debt	_	_	430,000	_	_	_	430,000
Proceeds from (repayment of)							
intercompany borrowing	(1,430)	_	337,261	_	(634)	(335,197)	_
Dividends paid to preferred shareholders	(9,919)	_	_	_	_	_	(9,919)
Capital contribution from parent	_	_	250,000	86,316	367,553	(703,869)	_
Dividends to shareholders	_	(19,000)	(898,400)	(916,697)	(28,423)	1,862,520	_
Principal payments on deferred satellite performance incentives	_	_	(18,405)	(18,405)	(1,163)	18,405	(19,568)
Dividends paid to noncontrolling interest	_	_	_	_	(8,423)	_	(8,423)
Other financing activities	154	_	1.600	1,600		(1,601)	1,753
Net cash provided by (used in) financing activities	(11,195)	(36,829)	(376,944)	(847,186)	328,910	840,258	(102,986)
Effect of exchange rate changes on cash and					(0.0-0.)		(0.202)
cash equivalents			(925)	(931)	(8,372)	931	(9,297)
Net change in cash and cash equivalents	10,712	(308)	46,326	26,497	(8,336)	(26,497)	48,394
Cash and cash equivalents, beginning of period	6,229	1,068	63,633	63,144	52,217	(63,144)	123,147
Cash and cash equivalents, end of period	\$ 16,941	\$ 760	\$ 109,959	\$ 89,641	\$ 43,881	\$ (89,641)	\$ 171,541

SCHEDULE II—VALUATION AND QUALIFYING ACCOUNTS

Description	Balance at Beginning of Period	Charged to Costs and Expenses (in tho	Deductions usands)	Balance at End of Period
Year ended December 31, 2015:		`	ĺ	
Allowance for doubtful accounts	\$ 35,174	\$ 7,432	\$ (5,428)	\$ 37,178
Year ended December 31, 2016:				
Allowance for doubtful accounts	\$ 37,178	\$ 24,591	\$ (7,025)	\$ 54,744
Year ended December 31, 2017:				
Allowance for doubtful accounts	\$ 54,744	\$ (4,094)	\$ (20,981)	\$ 29,669

See accompanying notes to consolidated financial statements.

- The Company has been incorporated under the name of "Intelsat Global Holdings S.A." pursuant to a deed of Maître Henri HELLINCKX, notary with residence in Luxembourg, on July 8, 2011.
- The articles of incorporation have been amended for the last time pursuant to a deed of **Maître Cosita DELVAUX**, notary with residence in Luxembourg, on June 15, 2017.
- La société a été constituée sous la dénomination de "Intelsat Global Holdings S.A." suivant acte reçu par Maître Henri HELLINCKX, notaire de résidence à Luxembourg, en date du 8 juillet 2011.
- Les statuts ont été modifiés pour la dernière fois suivant acte reçu par Maître Cosita DELVAUX, notaire de résidence à Luxembourg, en date du 15 juin 2017.

CONSOLIDATED ARTICLES OF INCORPORATION AS AT 15TH JUNE, 2017 STATUTS COORDONNES AU 15 JUIN 2017

- In case of discrepancies between the English and the French text, the English version will be binding.
- En cas de divergence entre le texte anglais et le texte français, le texte anglais fera foi.
- Art. 1. Form, Name. There exists among the shareholder(s) and all those who may become owners of the Shares hereafter a company in the form of a société anonyme, under the name of Intelsat S.A. (the "Company").
- Art. 2. Duration. The Company is established for an undetermined duration. The Company may be dissolved at any time by a resolution of the Shareholders adopted in the manner required for amendment of these Articles of Incorporation.

Art. 3. Registered office.

- 3.1 The Company has its registered office in the City of Luxembourg, Grand Duchy of Luxembourg. It may be transferred to any other place or municipality in the Grand Duchy of Luxembourg by means of a resolution of a General Meeting deliberating in the manner provided for amendments to the Articles.
 - 3.2 The address of the registered office may be transferred within the same municipality by decision of the Board of Directors.
 - 3.3 The Company may have offices and branches, both in Luxembourg and abroad.
- 3.4 In the event that the Board of Directors determines that extraordinary political, economic or social developments have occurred or are imminent that would interfere with the normal activities of the Company at its registered office, or with the ease of communications between such office and Persons abroad, the registered office may be temporarily transferred abroad until the complete cessation of these abnormal circumstances; such temporary measures shall have no effect on the nationality of the Company which, notwithstanding the temporary transfer of its registered office, will remain a Luxembourg company. Such temporary measures will be taken and notified to any interested parties by the Board of Directors.

Art. 4. Purpose, Object.

4.1 The object of the Company is the holding of participations, in any form whatsoever, in Luxembourg and foreign companies, or other entities or enterprises, the acquisition by purchase, subscription, or in any other manner as well as the transfer by sale, exchange or otherwise of stock, bonds, debentures, notes and other securities or rights of any kind including interests in partnerships, and the holding, acquisition, disposal, investment in any manner (in), development, licensing or sub licensing of, any patents or other intellectual property rights of any nature or origin as well as the ownership, administration, development and management of its portfolio. The Company may carry out its business through branches in Luxembourg or abroad.

- 4.2 The Company may further conduct or be involved in any way in, directly or indirectly, any satellite telecommunications or other telecommunications or communications related business in the broadest sense, including without limitation the owning and/or operation of satellites, teleports, any ground assets, and any related or connected activity.
- 4.3 The Company may borrow in any form and proceed to the private or public issue of shares, bonds, convertible bonds and debentures or any other securities or instruments it deems fit.
- 4.4 In a general fashion the Company may grant assistance (by way of loans, advances, guarantees or securities or otherwise) to companies or other enterprises or Persons in which the Company has an interest or which form part of the group of companies to which the Company belongs or any entity or Person as the Company may deem fit (including up-stream or cross-stream), take any controlling, management, administrative and/or supervisory measures and carry out any operation which it may deem useful in the accomplishment and development of its purposes.
- 4.5 Finally, the Company may perform all commercial, technical and financial or other operations, connected directly or indirectly in all areas in order to facilitate the accomplishment of its purpose.

Art. 5. Share capital.

- 5.1 The Company has an issued share capital of one million one hundred eighty eight thousand four hundred and thirty three US Dollars and seventy cents (USD 1,188,433.70) represented by a total of one hundred and eighteen million eight hundred and forty three thousand three hundred and seventy (118,843,370) fully paid Common Shares, each with a nominal value of one US Dollar cent (USD0.01), with such rights and obligations as set forth in the present Articles.
- 5.2 The authorised share capital of the Company (including the issued share capital) is set at ten million US Dollars (USD 10,000,000) to be represented by one billion (1,000,000,000) Shares of any Class, each with a nominal value of one USD cent (USD 0.01).
- 5.2.1 The authorized un-issued share capital (and any authorization granted to the Board of Directors in relation thereto) shall be valid for a period ending on June 15, 2022.
- 5.2.2 The Board of Directors, or any delegate(s) duly appointed by the Board of Directors, may from time to time issue Shares of any Class (or any rights, securities or other entitlement to Shares of any Class) as it determines within the limits of the authorised un-issued Share capital against contributions in cash, contributions in kind or by way of incorporation of available reserves as well as by conversion of Preferred A Shares into Common Shares or as dividends or other distributions whether in lieu of cash dividend or other distribution payments or not at such times and on such terms and conditions, including the issue price, as the Board of Directors or its delegate(s) may in its or their discretion resolve without reserving any preferential or pre-emptive subscription rights to existing Shareholders of any Class (including by way of incorporation of reserves). The General Meeting has waived and suppressed and has authorised the Board of Directors to waive, suppress or limit any preferential or pre-emptive subscription rights of Shareholders to the extent the Board deems such waiver, suppression or limitation advisable for any issue or issues of Shares of any Class (or any rights, securities or other entitlement to Shares of any Class) within the authorised (un-issued) Share capital. Upon an issue of Shares within the authorised Share capital the Board shall have the present Articles amended accordingly. Shares may be issued in either Class without having to respect any ratio amongst classes (provided that the Preferred A Shares may not represent more than 50% of the issued share capital at any time).
- 5.3 The issued and/or authorized unissued capital of the Company may be increased, reduced, amended or extended one or several times by a resolution of the General Meeting of Shareholders adopted in compliance with the quorum and majority rules set by these Articles of Incorporation or, as the case may be, by law for any amendment of these Articles of Incorporation.

- 5.4 The Company may not issue fractional Shares and no fractions of Shares shall exist at any time. The Board of Directors shall however be authorised at its discretion to provide for the payment of cash or the issuance of scrip in lieu of any fraction of a Share.
- 5.5 The Company or its subsidiaries may proceed to the purchase or repurchase of its own Shares and may hold Shares in treasury, each time within the limits laid down by law.
- 5.6 Any Share premium or other capital contribution or other available reserve account shall be freely distributable in accordance with the provisions of these Articles.

Art. 6. Securities in registered form only.

- 6.1 Shares
- 6.1.1 Shares of the Company are in registered form only.
- 6.1.2 A register of Shares will be kept by the Company. Ownership of registered Shares will be established by inscription in the said register or in the event separate registrars have been appointed pursuant to Article 6.1.3, such separate register. Without prejudice to the conditions for transfer by book entry in the case provided for in Article 6.1.7 or as the case may be applicable law, and subject to the provisions of Article 8, a transfer of registered Shares shall be carried out by means of a declaration of transfer entered in the relevant register, dated and signed by the transferor and the transferee or by their duly authorised representatives. The Company may accept and enter in the relevant register a transfer on the basis of correspondence or other documents recording the agreement between the transferor and the transferee.
- 6.1.3 The Company may appoint registrars in different jurisdictions who will each maintain a separate register for the registered Shares entered therein and the holders of Shares may elect to be entered in one of the registers and to be transferred from time to time from one register to another register. The Board of Directors may however impose transfer restrictions for Shares that are registered, listed, quoted, dealt in, or have been placed in certain jurisdictions in compliance with the requirements applicable therein. The transfer to the register kept at the Company's registered office may always be requested.
- 6.1.4 Subject to the provisions of Article 6.1.7 and Article 8, the Company may consider the Person in whose name the registered Shares are registered in the register(s) of Shareholders as the full owner of such registered Shares. The Company shall be completely free from any responsibility in dealing with such registered Shares towards third parties and shall be justified in considering any right, interest or claims of such third parties in or upon such registered shares to be non-existent, subject, however, to any right which such third party might have to demand the registration or change in registration of registered Shares. In the event that a holder of registered Shares does not provide an address to which all notices or announcements from the Company may be sent, the Company may permit a notice to this effect to be entered into the register(s) of Shareholders and such holder's address will be deemed to be at the registered office of the Company or such other address as may be so entered by the Company from time to time, until a different address shall be provided to the Company by such holder. The holder may, at any time, change his address as entered in the register(s) of Shareholders by means of written notification to the Company or the relevant registrar.
- 6.1.5 The Board may decide that no entry shall be made in the register(s) of Shareholders and no notice of a transfer shall be recognised by the Company or a registrar during the period starting on the fifth (5) business day before the date of a General Meeting and ending at the close of that General Meeting, unless the Board sets a shorter time limit or unless otherwise mandatorily required by law.
- 6.1.6 All communications and notices to be given to a registered Shareholder shall be deemed validly made to the latest address communicated by the Shareholder to the Company.
- 6.1.7 Where Shares are recorded in the register(s) of Shareholders on behalf of one or more Persons in the name of a securities settlement system or the operator of such a system or in the name of a professional securities depositary or any other depositary (such systems, professionals or other depositaries being referred to hereinafter as «Depositaries») or of a sub-depositary designated by one

or more Depositaries, the Company—subject to having received from the Depositary with whom those Shares are kept in account a certificate or confirmation in proper form—will permit those Persons to exercise the rights attached to those Shares, including admission to and voting at General Meetings (to the extent the relevant Shares carry voting rights). The Board of Directors may determine the formal requirements with which such certificates must comply. Notwithstanding the foregoing, the Company may make dividend payments and any other payments in cash, Shares or other securities only to the Depositary or sub-depositary recorded in the register(s) or in accordance with its instructions, and such payment will effect full discharge of the Company's obligations.

- 6.1.8 The Shares are indivisible vis-à-vis the Company which will recognise only one holder per Share. In case a Share is held by more than one Person, the Persons claiming ownership of the Share will be required to name a single proxy to represent the Share vis-à-vis the Company. The Company has the right to suspend the exercise of all rights attached to such Share until one Person has been so appointed. The same rule shall apply in the case of a conflict between an usufructuary and a bare owner or between a pledger and a pledgee.
 - 6.2 Other Securities
 - 6.2.1 Securities (other than Shares which are covered by Article 6.1) of the Company are in registered form only.
 - 6.2.2 The provisions of Article 6.1 shall apply mutatis mutandis.

Art. 7. Preferred A Shares.

- 7.1 Status
- 7.1.1 The Preferred A Shares are mandatory convertible junior non-voting preferred Shares (actions préférentielles junior sans droits de vote convertibles obligatoirement en actions ordinaires) of the Company with such terms as set forth in the Articles of Incorporation.
- 7.1.2 Each Preferred A Share is identical in all respects to every other Preferred A Share. The Preferred A Shares, subject as set forth herein, rank (i) senior to all Junior Shares, (ii) on parity with all Parity Shares and (iii) junior to all Senior Shares and the Company's existing and future indebtedness, with respect to their Preferred Dividend or distribution rights or rights upon the liquidation, winding-up or dissolution of the Company (as referred to under Article 7.4)
- 7.1.3 The Preferred A Shares shall not have any rights, preferences, privileges or voting powers or relative, participating, optional or other special rights, or qualifications, limitations or restrictions thereof, other than as set forth in these Articles of Incorporation or as provided by mandatory applicable law
 - 7.1.4 For the avoidance of doubt it is clarified that the Preferred A Shares shall not be subject any redemption sinking fund or similar provisions.
 - 7.2 Non-Voting
- 7.2.1 The Preferred A Shareholders shall not have any voting rights with respect to their Preferred A Shares except as set forth herein or as otherwise from time to time required mandatorily by Company Law.
 - 7.2.2 The Preferred A Shareholders shall be entitled to vote in every General Meeting called upon to deal with the following matters:
 - 7.2.2.1 the issue of new shares carrying preferential rights;
 - 7.2.2.2 the determination of the preferential cumulative dividend attaching to the non-voting shares;
 - 7.2.2.3 the conversion of non-voting preferred Shares into common Shares;
 - 7.2.2.4 the reduction of the capital of the Company;
 - 7.2.2.5 any change to the Company's corporate object;
 - 7.2.2.6 the issue of convertible bonds;
 - 7.2.2.7 the dissolution of the Company before its term;

- 7.2.2.8 the transformation of the Company into a company of another legal form;
- 7.2.3 The Preferred A Shares further entitle the Preferred A Shareholders to vote on such matters and on such terms as set forth in Article 20.2.
- 7.2.4 The Preferred A Shareholders shall further in accordance with Company Law have the same voting rights as the holders of Common Shares at all meetings, in case, despite the existence of net profits available in the Company for that purpose, the (cumulative) Preferred Dividends have not been paid in their entirety for any reason whatsoever for a period of two successive financial years (a «Nonpayment») and until such time as all (cumulative) Preferred Dividends shall have been paid in full.
- 7.2.5 Save where the Preferred A Shares have voting rights, no account shall be taken of the Preferred A Shares in determining the conditions as to quorum and majority at General Meetings and in such case, any reference to Shares and Shareholders shall be, for the avoidance of doubt, only to Common Shares or holders of Common Shares.
 - 7.3 Preferred Dividends
 - 7.3.1 Rate

Subject to the rights of holders of any class or series of Shares ranking senior to the Preferred A Shares with respect to dividends or other distributions, Preferred A Shareholders shall be entitled to receive, when, as and if declared by the General Meeting or, in case of interim dividends, the Board of Directors, out of profits or reserves of the Company legally available therefor, a cumulative dividend at the rate per annum of five point seventy-five per cent (5.75%) on the Liquidation Preference per Preferred A Share (the «Dividend Rate») (equivalent to two point eight seven five US Dollars (USD 2.875) per annum per Preferred A Share) (the «Preferred Dividend»).

Except as otherwise provided herein, the Preferred Dividend on any Preferred A Share converted to Common Shares shall cease to accumulate on the Mandatory Conversion Date, the Cash Acquisition Conversion Date or the Early Conversion Date (each, a "Conversion Date"), as applicable.

Preferred A Shareholders shall not be entitled to any dividends or other distributions (other than the Liquidation Preference on liquidation) on the Preferred A Shares, whether payable in cash, property or Common Shares, in excess of the full Preferred Dividend.

7.3.2 Preferred Dividends on the Preferred A Shares may be declared annually, semi-annually (each time with installments) or quarterly by the General Meeting or as interim dividends by the Board and if and to the extent declared shall be payable quarterly (as the case may be by installments) on each Dividend Payment Date at the Dividend Rate. The entitlement for Preferred Dividends for a Dividend Period is calculated from the day immediately following the last day of the immediately prior Dividend Period or if there has been no prior Dividend Period, the Preferred A Issue Date, whether or not in any Dividend Period or periods there have been profits or other reserves legally available for the declaration and payment of such Preferred Dividends. Declared Preferred Dividends shall be payable (as the case may be by installments) on the relevant Dividend Payment Date to Preferred A Record Holders on the immediately preceding Preferred A Record Date, whether or not such Preferred A Record Holders convert their Preferred A Shares, or such Preferred A Shares are automatically converted, after a Preferred A Record Date and on or prior to the immediately succeeding Dividend Payment Date. If a Dividend Payment Date is not a Business Day, payment shall be made on the next succeeding Business Day, without any interest or other payment in lieu of interest accruing with respect to this delay.

The amount of Preferred Dividends on each Preferred A Share for each full Dividend Period shall be computed by dividing the Dividend Rate by four. Preferred Dividends on the Preferred A Shares for any period other than a full Dividend Period shall be computed based upon the actual number of days elapsed during the period over a 360-day year (consisting of twelve 30-day months). Accumulated Preferred Dividends shall not bear interest if they are paid subsequent to the applicable Dividend Payment Date. No Preferred Dividend shall be declared or paid upon, or any sum of cash or number of Common Shares set apart for the payment of Preferred Dividends upon, any outstanding Preferred A Share with respect to any Dividend Period unless all Preferred Dividends for all preceding Dividend Periods shall have been declared and paid upon, or a sufficient sum of cash or number of Common Shares shall have been set apart for the payment of such Preferred Dividends upon, all outstanding Preferred A Shares.

7.3.3 Priority of Preferred Dividends.

- 7.3.3.1 So long as any Preferred A Share remains outstanding, no dividend or distribution shall be declared or paid on the Common Shares or any other Junior Shares, and no Common Shares or Junior Shares shall be, directly or indirectly, purchased, redeemed or otherwise acquired for consideration by the Company or any of its subsidiaries unless all accumulated Preferred Dividends for all preceding Dividend Periods have been declared and paid upon, or a sufficient sum or number of Common Shares have been set apart for the payment of such Preferred Dividends upon, all outstanding Preferred A Shares.
- 7.3.3.2 The foregoing limitation shall not apply to (i) any dividend or distribution payable on any Junior Shares in shares of any other Junior Shares, or to the acquisition of Junior Shares in exchange for, or through application of the proceeds of the sale of, any other Junior Shares; (ii) redemptions, purchases or other acquisitions of Common Shares or other Junior Shares in connection with the administration of any benefit plan or other incentive plan in the ordinary course of business (including purchases to offset the Share Dilution Amount pursuant to a publicly announced repurchase plan); provided that any purchases to offset the Share Dilution Amount; (iii) any dividends or distributions of rights or Junior Shares in connection with a shareholders' rights plan or any redemption or repurchase of rights pursuant to any shareholders' rights plan; (iv) the acquisition by the Company or any of its subsidiaries of record ownership in Junior Shares for the beneficial ownership of any other Persons (other than the Company or any of its subsidiaries), including as trustees or custodians; (v) the exchange or conversion of Junior Shares for or into other Junior Shares (with the same or lesser aggregate liquidation amount) and (vi) any redemption, repurchase or purchase in any way in application of Article 8 (Limitation of ownership-Communications Laws).
- 7.3.3.3 When Preferred Dividends are not paid (or declared and a sum of cash or number of Common Shares sufficient for payment thereof set aside for the benefit of the Preferred A Shareholders on the applicable Record Date) on any Dividend Payment Date in full on Preferred A Shares, all Preferred Dividends declared on the Preferred A Shares and all dividends on any other Parity Shares shall be declared so that the respective amounts of such dividends declared on the Preferred A Shares and each such other class or series of Parity Shares shall bear the same ratio to each other as all accumulated dividends or distributions per share on Preferred A Shares and such class or series of Parity Shares (subject to their having been declared by the General Meeting or the Board of Directors out of legally available profits or reserves and including, all accumulated dividends or distributions) bear to each other; provided that any undeclared (and unpaid) Preferred Dividend will continue to accumulate.
- 7.3.3.4 Subject to the foregoing, and not otherwise, such dividends or other distributions (payable in cash, securities or other property) as may be determined by the Board of Directors or the General Meeting may be declared and paid on any securities, including Common Shares and other Junior Shares, from time to time out of any profits or reserves legally available therefor, and Preferred A Shareholders shall not be entitled to participate in any such dividends or distributions.
 - 7.3.4 Method of Payment of Preferred Dividends.

The Preferred Dividends may be paid in cash, by delivery of Common Shares or through any combination of cash and Common Shares, as determined by the Company (by decision of the Board) in its sole discretion (subject to the limitations described below).

7.3.4.1 Subject to the limitations described below, any declared Preferred Dividend (or any portion of any declared Preferred Dividend) on the Preferred A Shares, whether or not for a current Dividend Period or any prior Dividend Period (including in connection with the payment of declared and unpaid Preferred Dividends to the extent required to be paid pursuant to Articles 7.5, 7.6 or 7.7), may be paid by the Company, as determined in the Company's sole discretion: (i) in cash; (ii) by delivery of Common Shares; or (iii) through any combination of cash and Common Shares.

- 7.3.4.2 Each payment of a declared Preferred Dividend on the Preferred A Shares shall be made in cash, except to the extent the Company elects to make all or any portion of such payment in Common Shares. The Company may make such election by giving notice to the Preferred A Shareholders of such election and the portions of such payment that shall be made in cash and in Common Shares no later than twelve (12) Trading Days prior to the Dividend Payment Date for such Preferred Dividend.
- 7.3.4.3 Common Shares issued in payment or partial payment of a declared Preferred Dividend shall be valued for such purpose at 97% of the average VWAP per Common Share over the ten (10) consecutive Trading Day period ending on the second (2nd) Trading Day immediately preceding the applicable Dividend Payment Date (the "Average Price").
- 7.3.5 No fractional Common Share shall be delivered to Preferred A Shareholders in payment or partial payment of a Preferred Dividend. A cash adjustment shall be paid to each Preferred A Shareholder that would otherwise be entitled to a fraction of a Common Share based on the average VWAP per Common Share over the ten (10) consecutive Trading Day period ending on the second (2nd) Trading Day immediately preceding the relevant Dividend Payment Date.
- 7.3.6 Notwithstanding the foregoing, in no event shall the number of Common Shares delivered in connection with any declared Preferred Dividend, including any declared Preferred Dividend payable in connection with a conversion, exceed a number equal to the total Preferred Dividend payment divided by six US Dollars and thirty cents (USD 6.30), subject to adjustment in a manner inversely proportional to any antidilution adjustment to each Fixed Conversion Rate as set forth in Article 7.11 (such dollar amount, as adjusted, the "Floor Price"). To the extent that the amount of the declared Preferred Dividend exceeds the product of the number of Common Shares delivered in connection with such declared Preferred Dividend and the Average Price, the Company shall, if it is legally able to do so, pay such excess amount in cash.
- 7.3.7 To the extent that the Company, in its reasonable judgment, determines that a Shelf Registration Statement is required in connection with the issuance of, or for resales of, Common Shares issued as payment of a dividend, including Preferred Dividends paid in connection with a conversion, the Company shall, to the extent such a Shelf Registration Statement is not currently filed and effective, use its reasonable best efforts to file and maintain the effectiveness of such a Shelf Registration Statement until the earlier of such time as all Common Shares have been resold thereunder and such time as all such Common Shares are freely tradeable without registration. To the extent applicable, the Company shall also use its reasonable best efforts to have the Common Shares qualified or registered under applicable state securities laws, if required, and approved for listing on the New York Stock Exchange (or if the Common Shares are not listed on the New York Stock Exchange, on the principal other U.S. national or regional securities exchange on which the Common Shares are then listed).
 - 7.4 Rights of Preferred A Shares on Liquidation, Winding up or Dissolution
- 7.4.1 In the event of any liquidation, winding-up or dissolution of the Company, whether voluntary or involuntary, each Preferred A Shareholder shall be entitled to receive the Liquidation Preference per Preferred A Share held, plus an amount equal to accumulated Preferred Dividends on such Preferred A Shares to (but excluding) the date fixed for (the opening of the) liquidation, winding-up or dissolution to be paid out of the assets of the Company available for distribution to its Shareholders, after satisfaction of liabilities owed to the Company's creditors and holders of any Senior Shares and before any payment or distribution is made on any Junior Shares, including, without limitation, the Common Shares.
- 7.4.2 Neither the sale (for cash, Shares, securities or other consideration) of all or substantially all of the assets or business of the Company (other than in connection with the liquidation, winding-up or dissolution of its business), nor the merger or consolidation of the Company into or with any other Person, shall be deemed to be a liquidation, winding-up or dissolution, voluntary or involuntary, for the purposes hereof.
- 7.4.3 If upon the voluntary or involuntary liquidation, winding-up or dissolution of the Company, the amounts payable with respect to the Liquidation Preference plus an amount equal to accumulated (and undeclared and unpaid) Preferred Dividends on the Preferred A Shares and all Parity Shares are not paid in full, the Preferred A Shareholders and all holders of any Parity Shares shall share equally and ratably in any distribution of the Company's assets in proportion to the liquidation preference and an amount equal to the accumulated (and undeclared and unpaid) dividends to which such holders are entitled.

- 7.4.4 After the payment to the Preferred A Shareholders of full preferential amounts provided for in this Article 7.4, the Preferred A Shareholders as such shall have no right or claim to any of the remaining assets of the Company.
 - 7.5 Mandatory Conversion on the Mandatory Conversion Date
- 7.5.1 Each Preferred A Share shall automatically convert (unless previously converted at the option of the Preferred A Shareholder in accordance with Article 7.6 or pursuant to an exercise of a Cash Acquisition Conversion right pursuant to Article 7.7) on the Mandatory Conversion Date ("Mandatory Conversion"), into a number of Common Shares equal to the Mandatory Conversion Rate.
 - 7.5.2 The "Mandatory Conversion Rate" shall be as follows:
- 7.5.2.1 if the Applicable Market Value is greater than twenty-two US Dollars and five cents (USD22.05) (the "Threshold Appreciation Price"), then the Mandatory Conversion Rate shall be equal to two point two six seven six (2.2676) Common Shares per Preferred A Share (the "Minimum Conversion Rate");
- 7.5.2.2 if the Applicable Market Value is less than or equal to the Threshold Appreciation Price but equal to or greater than eighteen US Dollars (USD18.00) (the "Initial Price"), then the Mandatory Conversion Rate per Preferred A Share shall be equal to the Liquidation Preference divided by the Applicable Market Value; or
- 7.5.2.3 if the Applicable Market Value is less than the Initial Price, then the Mandatory Conversion Rate shall be equal to two point seven seven eight (2.7778) Common Shares per Preferred A Share (the "Maximum Conversion Rate").
- 7.5.3 The Fixed Conversion Rates, the Threshold Appreciation Price, the Initial Price and the Applicable Market Value are each subject to adjustment in accordance with the provisions of Article 7.11.
- 7.5.4 If the Company declares a Preferred Dividend for the Dividend Period ending on the Mandatory Conversion Date, the Company shall pay such Preferred Dividend to the Preferred Record Holders as of the immediately preceding Preferred A Record Date in accordance with the provisions of Article 7.3.

If prior to the Mandatory Conversion Date the Company has not declared all or any portion of the accumulated Preferred Dividends on the Preferred A Shares, the Mandatory Conversion Rate shall be adjusted so that Preferred A Shareholders receive an additional number of Common Shares equal to the amount of accumulated Preferred Dividends that have not been declared ("Mandatory Conversion Additional Conversion Amount") divided by the greater of the Floor Price and the Applicable Market Value. To the extent that the Mandatory Conversion Additional Conversion Amount exceeds the product of such number of additional Common Shares and the Applicable Market Value, the Company shall, if the Company is legally able to do so, declare and pay such excess amount in cash pro rata to the Preferred A Shareholders.

- 7.6 Early Conversion at the Option of the Holder
- 7.6.1 Other than during a Cash Acquisition Conversion Period, the Preferred A Shareholders shall have the right to convert their Preferred A Shares, in whole or in part (but in no event less than one Preferred A Share), at any time prior to the Mandatory Conversion Date ("Early Conversion"), into Common Shares at the Minimum Conversion Rate, subject to adjustment as described in Article 7.11 and to satisfaction of the conversion procedures set forth in Article 7.8.
- 7.6.2 If as of any Early Conversion Date the Company has not declared all or any portion of the accumulated Preferred Dividends for all Dividend Periods ending prior to such Early Conversion Date, the Minimum Conversion Rate shall be adjusted so that the converting Preferred A Shareholder receives an additional number of Common Shares equal to the amount of accumulated Preferred Dividends that have not been declared, divided by the greater of the Floor Price and the average of the Closing Prices of the

Common Shares over the forty (40) consecutive Trading Day period ending on the third (3rd) Trading Day immediately preceding the Early Conversion Date (such average being referred to as the "Applicable Early Conversion Market Value"). Except as described above, upon any Early Conversion of any Preferred A Shares, the Company shall make no payment or allowance for unpaid Preferred Dividends on such Preferred A Shares.

7.7 Cash Acquisition Conversion

- 7.7.1 If a Cash Acquisition occurs on or prior to the Mandatory Conversion Date, the Preferred A Shareholders shall have the right to convert their Preferred A Shares, in whole or in part (but in no event less than one Preferred A Share) (such right of the Preferred A Shareholders to convert their Preferred A Shares pursuant to this Article 7.7.1 being the "Cash Acquisition Conversion") during a period (the "Cash Acquisition Conversion Period") that begins on the effective date of such Cash Acquisition (the "Effective Date") and ends at 5:00 p.m., New York City time, on the date that is twenty (20) calendar days after the Effective Date (or, if earlier, the Mandatory Conversion Date) into Common Shares at the Cash Acquisition Conversion Rate (as adjusted pursuant to Article 7.11).
- 7.7.2 On or before the twentieth (20th) calendar day prior to the anticipated Effective Date of the Cash Acquisition, or, if such prior notice is not practicable, no later than the tenth (10th) calendar day immediately following such Effective Date, the Company shall provide notice (the "Cash Acquisition Notice") to the Preferred A Shareholders. Such notice shall state: (i) the anticipated Effective Date of the Cash Acquisition; (ii) that Preferred A Shareholders shall have the right to effect a Cash Acquisition Conversion in connection with such Cash Acquisition during the Cash Acquisition Conversion Period; (iii) the Cash Acquisition Conversion Period; and (iv) the instructions a Preferred A Shareholder must follow to effect a Cash Acquisition Conversion in connection with such Cash Acquisition.

If the Company notifies Preferred A Shareholders of a Cash Acquisition later than the twentieth (20th) calendar day prior to the Effective Date of the Cash Acquisition, the Cash Acquisition Conversion Period shall be extended by a number of days equal to the number of days from, and including, the twentieth (20th) calendar day prior to the Effective Date of the Cash Acquisition to, but excluding, the date of such notice; provided that the Cash Acquisition Conversion Period shall not be extended beyond the Mandatory Conversion Date.

Such notice may be given by the Company pursuant to Article 7.12.

- 7.7.3 Not later than the second Business Day following the Effective Date or, if later, the date the Company provides Preferred A Shareholders notice of the Effective Date of the Cash Acquisition, the Company shall notify Preferred A Shareholders of: (i) the Cash Acquisition Conversion Rate; (ii) the Cash Acquisition Dividend Make-whole Amount and whether the Company shall pay such amount in cash, Common Shares or a combination thereof (and if so, shall specify the combination, if applicable); and (iii) the amount of accumulated and undeclared Preferred Dividends as of the Effective Date and whether the Company shall pay such amount by an adjustment of the Cash Acquisition Conversion Rate, a cash payment or a combination thereof (and if so, shall specify the combination, if applicable). Such notice may be given by the Company pursuant to Article 7.12.
- 7.7.4 Upon any conversion pursuant to Article 7.7.1, in addition to issuing to the converting Preferred A Shareholders the number of Common Shares at the Cash Acquisition Conversion Rate, the Company shall:
- 7.7.4.1 either (x) pay the converting Preferred A Shareholders in cash, to the extent the Company is legally permitted to do so, the present value, computed using a discount rate of five point seventy-five per cent (5.75%) per annum, of all Preferred Dividend amounts on the Preferred A Shares subject to such Cash Acquisition Conversion for all remaining Dividend Periods (excluding any accumulated Preferred Dividends as of the Effective Date) from such Effective Date to but excluding the Mandatory Conversion Date (the "Cash Acquisition Dividend Make-whole Amount"); or (y) increase the number of Common Shares to be issued on conversion by a number equal to (A) the Cash Acquisition Dividend Make-whole Amount divided by (B) the greater of the Floor Price and the Share Price; and

7.7.4.2 to the extent that, as of the Effective Date, the Company has not declared all or any portion of the accumulated Preferred Dividends on the Preferred A Shares as of such Effective Date, the Cash Acquisition Conversion Rate shall be further adjusted so that converting Preferred A Shareholders receive an additional number of Common Shares equal to the amount of such accumulated Preferred Dividends (the "Cash Acquisition Additional Conversion Amount"), divided by the greater of the Floor Price and the Share Price. To the extent that the Cash Acquisition Additional Conversion Amount exceeds the product of the number of additional Common Shares and the Share Price, the Company shall, if legally able to do so, declare and pay such excess amount in cash.

7.7.4.3 if the Effective Date falls during a Dividend Period for which the Company has declared a Preferred Dividend, the Company shall pay such Preferred Dividend on the relevant Dividend Payment Date to the Preferred A Shareholders on the immediately preceding Preferred A Record Date in accordance with Article 7.3.

7.8 Conversion Procedures

- 7.8.1 Pursuant to Article 7.5, on the Mandatory Conversion Date, any outstanding Preferred A Shares shall automatically convert into Common Shares. The Person or Persons entitled to receive the Common Shares issuable upon mandatory conversion of the Preferred A Shares shall be treated as the record holder(s) of such Common Shares as of 5:00 p.m., New York City time, on the Mandatory Conversion Date. Except as provided under Article 7.11.3.3, prior to 5:00 p.m., New York City time, on the Mandatory Conversion Date, the Common Shares issuable upon conversion of Preferred A Shares shall not be outstanding for any purpose and Preferred A Shareholders shall have no rights with respect to such Common Shares, including voting rights, rights to respond to tender offers and rights to receive any dividends or other distributions on the Common Shares, by virtue of holding the Preferred A Shares.
- 7.8.2 To effect an Early Conversion pursuant to Article 7.6, a Preferred A Shareholder must deliver to DTC the appropriate instruction form for conversion pursuant to DTC's conversion program and, if required, pay all transfer or similar taxes or duties, if any.

The Early Conversion shall be effective on the date on which a Preferred A Shareholder has satisfied the foregoing requirements, to the extent applicable ("Early Conversion Date"). A Preferred A Shareholder shall not be required to pay any transfer or similar taxes or duties relating to the issuance or delivery of Common Shares if such Preferred A Shareholder exercises its conversion rights, but such Preferred A Shareholder shall be required to pay any transfer or similar tax or duty that may be payable relating to any transfer involved in the issuance or delivery of Common Shares in a name other than the name of such Preferred A Shareholder. Common Shares shall be issued and delivered only after all applicable taxes and duties, if any, payable by the Preferred A Shareholder have been paid in full and shall be issued, together with any cash to which the converting Preferred A Shareholder is entitled, on the later of the third (3rd) Business Day immediately succeeding the Early Conversion Date and the Business Day after the Preferred A Shareholder has paid in full all applicable taxes and duties, if any. The Person or Persons entitled to receive the Common Shares issuable upon Early Conversion shall be treated for all purposes as the record holder(s) of such Common Shares as of 5:00 p.m., New York City time, on the applicable Early Conversion Date. No allowance or adjustment, except as set forth in Article 7.11.3.3, shall be made in respect of dividends or distributions payable to holders of Common Shares of record as of any date prior to such applicable Early Conversion Date. Prior to such applicable Early Conversion Date, Common Shares issuable upon conversion of any Preferred A Shares shall not be outstanding for any purpose, and Preferred A Shareholders shall have no rights with respect to the Common Shares (including voting rights, rights to respond to tender offers for the Common Shares and rights to receive any dividends or other distributions on the Common Shares) by virtue of holding Preferred A Shares.

In the event that an Early Conversion is effected with respect to Preferred A Shares representing less than all the Preferred A Shares held by a Preferred A Shareholder, upon such Early Conversion the relevant register shall revise its records accordingly.

7.8.3 To effect a Cash Acquisition Conversion pursuant to Article 7.7, a Preferred A Shareholder must, during the Cash Acquisition Conversion Period, deliver to DTC the appropriate instruction form for conversion pursuant to DTC's conversion program and, if required, pay all transfer or similar taxes or duties, if any.

The Cash Acquisition Conversion shall be effective on the date on which a Preferred A Shareholder has satisfied the foregoing requirements, to the extent applicable (the "Cash Acquisition Conversion Date"). A Preferred A Shareholder shall not be required to pay any transfer or similar taxes or duties relating to the issuance or delivery of Common Shares if such Preferred A Shareholder exercises its conversion rights, but such Preferred A Shareholder shall be required to pay any transfer or similar tax or duty that may be payable relating to any transfer involved in the issuance or delivery of Common Shares in a name other than the name of such Preferred A Shareholder. Common Shares shall be issued and delivered only after all applicable taxes and duties, if any, payable by the Preferred A Shareholder have been paid in full and shall be issued, together with any cash to which the converting Preferred A Shareholder is entitled, on the later of the third (3rd) Business Day immediately succeeding the Cash Acquisition Conversion Date and the Business Day after the Preferred A Shareholder has paid in full all applicable taxes and duties, if any. For the avoidance of doubt, Preferred A Shareholders who do not submit their instruction form for conversion during the Cash Acquisition Conversion Period shall not be entitled to convert their Preferred A Shares at the Cash Acquisition Conversion Rate or to receive the Cash Acquisition Dividend Make-whole Amount.

The Person or Persons entitled to receive the Common Shares issuable upon such Cash Acquisition Conversion shall be treated for all purposes as the record holder(s) of such Common Shares as of 5:00 p.m., New York City time, on the applicable Cash Acquisition Conversion Date. No allowance or adjustment, except as set forth in Article 7.11.3.3, shall be made in respect of dividends or distributions payable to holders of Common Shares of record as of any date prior to such applicable Cash Acquisition Conversion Date. Prior to such applicable Cash Acquisition Conversion Date, Common Shares issuable upon conversion of any Preferred A Shares shall not be deemed outstanding for any purpose, and Preferred A Shareholders shall have no rights with respect to the Common Shares (including voting rights, rights to respond to tender offers for the Common Shares and rights to receive any dividends or other distributions on the Common Shares, by virtue of holding Preferred A Shares.

In the event that a Cash Acquisition Conversion is effected with respect to Preferred A Shares representing less than all the Preferred A Shares held by a Preferred A Shareholder, upon such Cash Acquisition Conversion the relevant register shall revise its records accordingly.

- 7.8.4 In the event that a Preferred A Shareholder shall not by written notice designate the name in which Common Shares to be issued upon conversion of such Preferred A Shares should be registered, the Company shall be entitled to register such Shares, and make such payment, in the name of the Preferred A Shareholder as shown on the records of the Company.
- 7.8.5 Preferred A Shares shall cease to be outstanding on the applicable Conversion Date, subject to the right of relevant Preferred A Shareholder to receive Common Shares issuable upon conversion of such Preferred A Shares and other amounts and Common Shares, if any, to which they are entitled pursuant to Articles 7.5, 7.6 or 7.7, as applicable.
 - 7.9 Reservation of Common Shares
- 7.9.1 The Company shall at all times reserve and keep available out of its authorized and unissued Common Shares or Common Shares held in the treasury of the Company, solely for issuance upon the conversion of Preferred A Shares as herein provided, free from any preemptive or other similar rights, the maximum number of shares of Common Shares as shall from time to time be issuable upon the conversion of all the Preferred A Shares then outstanding. For purposes of this Article 7.9.1, the number of Common Shares that shall be deliverable upon the conversion of all outstanding Preferred A Shares shall be computed as if at the time of computation all such outstanding Preferred A Shares were held by a single Preferred A Shareholder.

- 7.9.2 Notwithstanding the foregoing, the Company shall be entitled to deliver upon conversion of Preferred A Shares, as herein provided, Common Shares reacquired and held in the treasury of the Company (or a subsidiary of the Company) (in lieu of the issuance of authorized and unissued Common Shares), so long as any such treasury Common Shares are free and clear of all liens, charges, security interests or encumbrances (other than liens, charges, security interests and other encumbrances created by the Preferred A Shareholders).
- 7.9.3 All Common Shares delivered upon conversion of the Preferred A Shares shall be duly authorized, validly issued, fully paid and non-assessable, free and clear of all liens, claims, security interests and other encumbrances (other than liens, charges, security interests and other encumbrances created by the Preferred A Shareholders).
- 7.9.4 Prior to the delivery of any securities that the Company shall be obligated to deliver upon conversion of the Preferred A Shares, the Company shall use reasonable best efforts to comply with all U.S. federal and state laws and regulations thereunder requiring the registration of such securities with, or any approval of or consent to the delivery thereof by, any governmental authority.
- 7.9.5 If at any time the Common Shares shall be listed on the New York Stock Exchange or any other (U.S.) national securities exchange or automated quotation system, the Company shall, if permitted by the rules of such exchange or automated quotation system, list and keep listed, so long as the Common Shares shall be so listed on such exchange or automated quotation system, all Common Shares issuable upon conversion of the Preferred A Shares; provided, however, that if the rules of such exchange or automated quotation system permit the Company to defer the listing of such Common Shares until the first conversion of Preferred A Shares into Common Shares in accordance with the provisions hereof, the Company covenants to list such Common Shares issuable upon first conversion of the Preferred A Shares in accordance with the requirements of such exchange or automated quotation system at such time.
 - 7.10 Fractional Shares
 - 7.10.1 No fractional Common Shares shall be issued as a result of any conversion of Preferred A Shares.
- 7.10.2 In lieu of any fractional Common Share otherwise issuable in respect of any mandatory conversion pursuant to Article 7.5 or a conversion at the option of the Preferred A Shareholder pursuant to Article 7.6 or Article 7.7, the Company shall pay an amount in cash (computed to the nearest cent) equal to the product of (i) that same fraction and (ii) the average of the Closing Prices over the five consecutive Trading Day period ending on the second Trading Day immediately preceding the Mandatory Conversion Date, Cash Acquisition Conversion Date or Early Conversion Date, as applicable.
- 7.10.3 If more than one Preferred A Share is surrendered for conversion at one time by or for the same Preferred A Shareholder, the number of full Common Shares issuable upon conversion thereof shall be computed on the basis of the aggregate number of Preferred A Shares so surrendered.
 - 7.11 Anti-Dilution Adjustments to the Fixed Conversion Rates.
 - 7.11.1 Each Fixed Conversion Rate shall be subject to the following adjustments:
 - 7.11.1.1 Shares Dividends and Dividends.

If the Company issues Common Shares to all holders of Common Shares as a dividend or other distribution, each Fixed Conversion Rate in effect at 5:00 p.m., New York City time, on the date fixed for determination of the holders of Common Shares entitled to receive such dividend or other distribution shall be divided by a fraction:

- (A) the numerator of which is the number of Common Shares outstanding at 5:00 p.m., New York City time, on the date fixed for such determination, and
- (B) the denominator of which is the sum of the number of Common Shares outstanding at 5:00 p.m., New York City time, on the date fixed for such determination and the total number of Common Shares constituting such dividend or other distribution.

Any adjustment made pursuant to this Article 7.11.1.1 shall become effective immediately after 5:00 p.m., New York City time, on the date fixed for such determination. If any dividend or distribution described in this Article 7.11.1.1 is declared but not so paid or made, each Fixed Conversion Rate shall be readjusted, effective as of the date the Board of Directors publicly announces its or, as the case may be, the General Meeting's, decision not to make such dividend or distribution, to such Fixed Conversion Rate that would be in effect if such dividend or distribution had not been declared. For the purposes of this Article 7.11.1.1, the number of Common Shares outstanding at 5:00 p.m., New York City time, on the date fixed for such determination shall not include Common Shares held in treasury by the Company but shall include any Common Shares issuable in respect of any scrip certificates issued in lieu of fractions of Common Shares. The Company shall not pay any dividend or make any distribution on Common Shares held in treasury by the Company.

7.11.1.2 Issuance of Share Purchase Rights.

If the Company issues to all holders of Common Shares rights or warrants (other than rights or warrants issued pursuant to a dividend reinvestment plan or share purchase plan or other similar plans), entitling such holders, for a period of up to forty-five (45) calendar days from the date of issuance of such rights or warrants, to subscribe for or purchase Common Shares at a price per Common Share less than the Current Market Price, each Fixed Conversion Rate in effect at 5:00 p.m., New York City time, on the date fixed for determination of the holders of Common Shares entitled to receive such rights or warrants shall be increased by multiplying such Fixed Conversion Rate by a fraction:

- (A) the numerator of which is the sum of the number of shares of Common Shares outstanding at 5:00 p.m., New York City time, on the date fixed for such determination and the number of Common Shares issuable pursuant to such rights or warrants, and
- (B) the denominator of which shall be the sum of the number of Common Shares outstanding at 5:00 p.m., New York City time, on the date fixed for such determination and the number of Common Shares equal to the quotient of the aggregate offering price payable to exercise such rights or warrants divided by the Current Market Price.

Any adjustment made pursuant to this Article 7.11.1.2 shall become effective immediately after 5:00 p.m., New York City time, on the date fixed for such determination. In the event that such rights or warrants described in this Article 7.11.1.2 are not so issued, each Fixed Conversion Rate shall be readjusted, effective as of the date the Board of Directors publicly announces its or, as the case may be, the General Meeting's, decision not to issue such rights or warrants, to such Fixed Conversion Rate that would then be in effect if such issuance had not been declared. To the extent that such rights or warrants are not exercised prior to their expiration or Common Shares are otherwise not delivered pursuant to such rights or warrants upon the exercise of such rights or warrants, each Fixed Conversion Rate shall be readjusted to such Fixed Conversion Rate that would then be in effect had the adjustment made upon the issuance of such rights or warrants been made on the basis of the delivery of only the number of Common Shares actually delivered. In determining the aggregate offering price payable to exercise such rights or warrants, there shall be taken into account any consideration received for such rights or warrants and the value of such consideration (if other than cash, to be determined by the Board of Directors). For the purposes of this Article 7.11.1.2, the number of Common Shares at the time outstanding shall not include Shares held in treasury by the Company but shall include any Common Shares issuable in respect of any scrip certificates issued in lieu of fractions of Common Shares. The Company shall not issue any such rights or warrants in respect of Common Shares held in treasury by the Company.

7.11.1.3 Subdivisions and Combinations of the Common Shares.

If outstanding Common Shares shall be subdivided into a greater number of Common Shares or combined into a lesser number of Common Shares, each Fixed Conversion Rate in effect at 5:00 p.m., New York City time, on the effective date of such subdivision or combination shall be multiplied by a fraction:

- (A) the numerator of which is the number of Common Shares that would be outstanding immediately after, and solely as a result of, such subdivision or combination, and
 - (B) the denominator of which is the number of Common Shares outstanding immediately prior to such subdivision or combination.

Any adjustment made pursuant to this Article 7.11.1.3 shall become effective immediately after 5:00 p.m., New York City time, on the effective date of such subdivision or combination.

7.11.1.4 Debt or Asset Dividend.

- (A) If the Company distributes to all holders of Common Shares evidences of its indebtedness, Shares, securities, rights to acquire the Company's Share capital, cash or other assets (excluding (1) any dividend or distribution covered by Article 7.11.1.1, (2) any rights or warrants covered by Article 7.11.1.2, (3) any dividend or distribution covered by Article 7.11.1.5 and (4) any Spin-Off to which the provisions set forth in Article 7.11.1.4 (B) apply), each Fixed Conversion Rate in effect at 5:00 p.m., New York City time, on the date fixed for the determination of holders of Common Shares entitled to receive such distribution shall be multiplied by a fraction:
 - (1) the numerator of which is the Current Market Price, and
- (2) the denominator of which is the Current Market Price minus the Fair Market Value, on such date fixed for determination, of the portion of the evidences of indebtedness, Shares, securities, rights to acquire the Company's share capital, cash or other assets so distributed applicable to one Common Share
- (B) In the case of a Spin-Off, each Fixed Conversion Rate in effect at 5:00 p.m., New York City time, on the date fixed for the determination of holders of Common Shares entitled to receive such distribution shall be multiplied by a fraction:
- (1) the numerator of which is the sum of (x) the Current Market Price of the Common Shares and (y) the Fair Market Value of the portion of those Shares or similar equity interests so distributed which is applicable to one Common Share as of the fifteenth (15th) Trading Day after the effective date for such distribution (or, if such Shares or equity interests are listed on a U.S. national or regional securities exchange, the Current Market Price of such securities), and
 - (2) the denominator of which is the Current Market Price of the Common Shares.

Any adjustment made pursuant to this Article 7.11.1.4 shall become effective immediately after 5:00 p.m., New York City time, on the date fixed for the determination of the holders of Common Shares entitled to receive such distribution. In the event that such distribution described in this Article 7.11.1.4 is not so made, each Fixed Conversion Rate shall be readjusted, effective as of the date the Board of Directors publicly announces its or, as the case may be, the General Meeting's, decision not to make such distribution, to such Fixed Conversion Rate that would then be in effect if such distribution had not been declared. If an adjustment to each Fixed Conversion Rate is required under this Article 7.11.1.4 during any settlement period in respect of Preferred A Shares that have been tendered for conversion, delivery of the Common Shares issuable upon conversion shall be delayed to the extent necessary in order to complete the calculations provided for in this Article 7.11.1.4.

7.11.1.5 Cash Dividends or Distributions.

If the Company distributes an amount exclusively in cash to all holders of Common Shares (excluding (1) any cash that is distributed in a Reorganization Event to which Article 7.11.5 applies, (2) any dividend or distribution in connection with the liquidation, dissolution or winding up of the Company or (3) any consideration payable in as part of a tender or exchange offer by the Company or any subsidiary of the Company), each Fixed Conversion Rate in effect at 5:00 p.m., New York City time, on the date fixed for determination of the holders of Common Shares entitled to receive such distribution shall be multiplied by a fraction:

- (1) the numerator of which is the Current Market Price, and
- (2) the denominator of which is the Current Market Price minus the amount per Common Share of such distribution.

Any adjustment made pursuant to this Article 7.11.1.5 shall become effective immediately after 5:00 p.m., New York City time, on the date fixed for the determination of the holders of Common Shares entitled to receive such distribution. In the event that any distribution described in this Article 7.11.1.5 is not so made, each Fixed Conversion Rate shall be readjusted, effective as of the date the Board of Directors publicly announces its or, as the case may be, the General Meeting's, decision not to make such distribution, to such Fixed Conversion Rate which would then be in effect if such distribution had not been declared

7.11.1.6 Self Tender Offers and Exchange Offers.

If the Company or any subsidiary of the Company successfully completes a tender or exchange offer pursuant to a Schedule TO or registration statement on Form F-4 (or Form S-4) for Common Shares (excluding any securities convertible or exchangeable for Common Shares), where the cash and the value of any other consideration included in the payment per Common Share exceeds the Current Market Price, each Fixed Conversion Rate in effect at 5:00 p.m., New York City time, on the date of expiration of the tender or exchange offer (the "Expiration Date") shall be multiplied by a fraction:

- (A) the numerator of which shall be equal to the sum of:
- (1) the aggregate cash and Fair Market Value on the Expiration Date of any other consideration paid or payable for Common Shares purchased in such tender or exchange offer; and
- (2) the product of the Current Market Price and the number of Common Shares outstanding immediately after such tender or exchange offer expires (after giving effect to the purchase or exchange of shares pursuant to such tender or exchange offer); and
- (B) the denominator of which shall be equal to the product of (1) the Current Market Price and (2) the number of Common Shares outstanding immediately prior to the time such tender or exchange offer expires.

Any adjustment made pursuant to this Article 7.11.1.6 shall become effective immediately after 5:00 p.m., New York City time, on the seventh (7th) Trading Day immediately following the Expiration Date. In the event that the Company or one of its subsidiaries is obligated to purchase Common Shares pursuant to any such tender offer or exchange offer, but the Company or such subsidiary is permanently prevented by applicable law from effecting any such purchases, or all such purchases are rescinded, then each Fixed Conversation Rate shall be readjusted to such Fixed Conversion Rate that would then be in effect if such tender offer or exchange offer had not been made. Except as set forth in the preceding sentence, if the application of this Article 7.11.1.6 to any tender offer or exchange offer would result in a decrease in each Fixed Conversation Rate, no adjustment shall be made for such tender offer or exchange offer under this Article 7.11.1.6. If an adjustment to each Fixed Conversion Rate is required pursuant to this Article 7.11.1.6 during any settlement period in respect of Preferred A Shares that have been tendered for conversion, delivery of the related conversion consideration shall be delayed to the extent necessary in order to complete the calculations provided for in this Article 7.11.1.6.

7.11.1.7 Except with respect to a Spin-Off, in cases where the Fair Market Value of the evidences of the Company's indebtedness, Shares, securities, rights to acquire the Company's share capital, cash or other assets as to which Article 7.11.1.4 or Article 7.11.1.5 apply, applicable to one Common Share, distributed to holders of Common Shares equals or exceeds the average of the Closing Prices of the Common Shares over the five (5) consecutive Trading Day period ending on the Trading Day before the ExDate for such distribution, rather than being entitled to an adjustment in each Fixed Conversion Rate, Preferred A Shareholders shall be entitled to receive upon conversion, in addition to a number of Common Shares otherwise deliverable on the applicable Conversion Date, the kind and amount of the evidences of the Company's indebtedness, Shares, securities, rights to acquire the Company's share capital, cash or other assets comprising the distribution that such Preferred A Shareholder would have received if such Preferred A Shareholder had owned immediately prior to the record date for determining the holders of Common Shares entitled to receive the distribution, for each Preferred A Share, a number of Common Shares equal to the Maximum Conversion Rate in effect on the date of such distribution.

7.11.1.8 Rights Plans.

To the extent that the Company has a rights plan in effect with respect to the Common Shares on any Conversion Date, upon conversion of any Preferred A Shares, Preferred A Shareholders shall receive, in addition to the Common Shares, the rights under such rights plan, unless, prior to such Conversion Date, the rights have separated from the Common Shares, in which case each Fixed Conversion Rate shall be adjusted at the time of separation of such rights as if the Company made a distribution to all holders of the Common Shares as described in Article 7.11.1.4, subject to readjustment in the event of the expiration, termination or redemption of such rights. Any distribution of rights or warrants pursuant to a rights plan that would allow Preferred A Shareholders to receive upon conversion, in addition to any Common Shares, the rights described therein (unless such rights or warrants have separated from Common Shares) shall not constitute a distribution of rights or warrants that would entitle Preferred A Shareholders to an adjustment to the Fixed Conversion Rates.

7.11.2 Adjustment for Tax Reasons.

The Company may make such increases in each Fixed Conversion Rate, in addition to any other increases required by this Article 7.11, as the Company deems advisable to avoid or diminish any income tax to holders of the Common Shares resulting from any dividend or distribution of Common Shares (or issuance of rights or warrants to acquire Common Shares) or from any event treated as such for income tax purposes or for any other reasons; provided that the same proportionate adjustment must be made to each Fixed Conversion Rate.

- 7.11.3 Calculation of Adjustments; Adjustments to Threshold Appreciation Price, Initial Price and Share Price.
- 7.11.3.1 All adjustments to each Fixed Conversion Rate shall be calculated to the nearest 1/10,000th of a Common Share. Prior to the Mandatory Conversion Date, no adjustment in a Fixed Conversion Rate shall be required unless such adjustment would require an increase or decrease of at least one percent (1%) therein; provided, that any adjustments which by reason of this Article 7.11.3.1 are not required to be made shall be carried forward and taken into account in any subsequent adjustment; provided, however that with respect to adjustments to be made to the Fixed Conversion Rates in connection with cash dividends or distributions paid by the Company, the Fixed Conversion Rates shall be adjusted regardless of whether such aggregate adjustments amount to one percent (1%) or more of the Fixed Conversion Rates no later than November 15 of each calendar year; provided, further that on the earlier of the Mandatory Conversion Date, an Early Conversion Date and the Effective Date of a Cash Acquisition, adjustments to each Fixed Conversion Rate shall be made with respect to any such adjustment carried forward that has not been taken into account before such date.
- 7.11.3.2 If an adjustment is made to the Fixed Conversion Rates pursuant to Article 7.11.1 or Article 7.11.2, an inversely proportional adjustment shall also be made to the Threshold Appreciation Price and the Initial Price solely for purposes of determining which of Articles 7.5.2.1, 7.5.2.2, or 7.5.2.3 of Article 7.5.2 shall apply on the Mandatory Conversion Date. Such adjustment shall be made by dividing each of the Threshold Appreciation Price and the Initial Price by a fraction, the numerator of which shall be either Fixed Conversion Rate immediately after such adjustment pursuant to Article 7.11.1 or Article 7.11.2 and the denominator of which shall be such Fixed Conversion Rate immediately before such adjustment. The Company shall make appropriate adjustments to the Closing Prices prior to the relevant Ex-Date, effective date or Expiration Date, as the case may be, used to calculate the Applicable Market Value to account for any adjustments to the Initial Price, the Threshold Appreciation Price and the Fixed Conversion Rates that become effective during the forty (40) consecutive Trading Day period used for calculating the Applicable Market Value.

7.11.3.3 If:

(A) the record date for a dividend or distribution on Common Shares occurs after the end of the forty (40) consecutive Trading Day period used for calculating the Applicable Market Value and before the Mandatory Conversion Date; and

- (B) such dividend or distribution would have resulted in an adjustment of the number of Common Shares issuable to the Preferred A Shareholders had such record date occurred on or before the last Trading Day of such forty (40) Trading Day period, then the Company shall deem the Preferred A Shareholders to be holders of record of Common Shares for purposes of that dividend or distribution. In this case, the Preferred A Shareholders would receive the dividend or distribution on Common Shares together with the number of Common Shares issuable upon the Mandatory Conversion Date.
- 7.11.3.4 If an adjustment is made to the Fixed Conversion Rates pursuant to Article 7.11.1 or Article 7.11.2, a proportional adjustment shall be made to each Share Price column heading set forth in the table included in the definition of "Cash Acquisition Conversion Rate." Such adjustment shall be made by multiplying each Share Price included in such table by a fraction, the numerator of which is the Minimum Conversion Rate immediately prior to such adjustment and the denominator of which is the Minimum Conversion Rate immediately after such adjustment.
- 7.11.3.5 No adjustment to the Fixed Conversion Rates shall be made if Preferred A Shareholders may participate in the transaction that would otherwise give rise to an adjustment as if they held, for each Preferred A Share, a number of Common Shares equal to the Maximum Conversion Rate then in effect. In addition, the applicable Fixed Conversion Rate shall not be adjusted:
- (A) upon the issuance of any Common Shares pursuant to any present or future plan providing for the reinvestment of dividends or interest payable on the Company's securities and the investment of additional optional amounts in Common Shares under any plan;
- (B) upon the issuance of Common Shares or rights or warrants to purchase those shares pursuant to any present or future benefit or other incentive plan or program of or assumed by the Company or any of its subsidiaries;
- (C) upon the issuance of any Common Shares pursuant to any option, warrant, right or exercisable, exchangeable or convertible security outstanding as of the Preferred A Issue Date;
 - (D) for a change in the nominal value or no nominal value of the Common Shares; or
 - (E) for accumulated Preferred Dividends on the Preferred A Shares, except as provided under Articles 7.5, 7.6 and 7.7.
 - 7.11.4 Notice of Adjustment.

Whenever the Fixed Conversion Rates and the Cash Acquisition Conversion Rates are to be adjusted, the Company shall:

- 7.11.4.1 compute such adjusted Fixed Conversion Rates and Cash Acquisition Conversion Rates and prepare and transmit to the Transfer Agent an Officer's Certificate setting forth such adjusted Fixed Conversion Rates and Cash Acquisition Conversion Rates, the method of calculation thereof in reasonable detail and the facts requiring such adjustment and upon which such adjustment is based;
- 7.11.4.2 within five (5) Business Days following the occurrence of an event that requires an adjustment to the Fixed Conversion Rates and the Cash Acquisition Conversion Rates (or if the Company is not aware of such occurrence, as soon as practicable after becoming so aware), give notice, or cause notice to be given to the Preferred A Shareholders of the occurrence of such event; and
- 7.11.4.3 within five (5) Business Days following the determination of such adjusted Fixed Conversion Rates and Cash Acquisition Conversion Rates provide, or cause to be provided, to the Preferred A Shareholders a statement setting forth in reasonable detail the method by which the adjustment to such Fixed Conversion Rates and Cash Acquisition Conversion Rates, as applicable, was determined and setting forth such adjusted Fixed Conversion Rates or Cash Acquisition Conversion Rates.
 - 7.11.5 Reorganization Events.
 - 7.11.5.1 In the event of:
- (i) any consolidation or merger of the Company with or into another Person (other than a merger or consolidation in which the Company is the continuing company and in which the Common Shares outstanding immediately prior to the merger or consolidation is not exchanged for cash, securities or other property of the Company or another Person);
 - (ii) any sale, transfer, lease or conveyance to another Person of all or substantially all of the property and assets of the Company;

- (iii) any reclassification of Common Shares into securities including securities other than Common Shares; or
- (iv) any statutory exchange of securities of the Company with another Person (other than in connection with a merger or acquisition),

in each case, as a result of which the Company's Common Shares would be converted into, or exchanged for, securities, cash or property (each, a "Reorganization Event"), each Preferred A Share outstanding immediately prior to such Reorganization Event shall, without the consent of Preferred A Shareholders, become convertible into the kind of securities, cash and other property (the "Exchange Property") that such Preferred A Shareholder would have been entitled to receive if such Preferred A Shareholder had converted its Preferred A Shares into Common Shares immediately prior to such Reorganization Event. For purposes of the foregoing, the type and amount of Exchange Property in the case of any Reorganization Event that causes the Common Shares to be converted into the right to receive more than a single type of consideration (determined based in part upon any form of shareholder election) shall be deemed to be the weighted average of the types and amounts of consideration received by the holders of Common Shares that affirmatively make such an election. For purposes of this Article 7.11.5, a "Unit of Exchange Property" means the type and amount of such Exchange Property attributable to one Common Share. The number of Units of Exchange Property for each Preferred A Share converted following the effective date of such Reorganization Event shall be determined based on the Mandatory Conversion Rate, Minimum Conversion Rate or Cash Acquisition Conversion Rate, as the case may be, then in effect on the applicable Conversion Date (without any interest thereon and without any right to dividends or distributions thereon which have a record date that is prior to the Conversion Date). In the event of any such Reorganization Event, the applicable conversion rate shall be (1) in the case of an Early Conversion, the Minimum Conversion Rate (with any adjustment thereto under Article 7.6.2 based on the Applicable Early Conversion Market Value as determined using the alternative formulation of Applicable Early Conversion Market Value set forth in the following paragraph) and (2) in the case of a Mandatory Conversion, the Mandatory Conversion Rate (determined under Article 7.5 based upon the Applicable Market Value as determined using the alternative formulation of Applicable Market Value set forth in the following paragraph).

For purposes of this Article 7.11.5, "Applicable Market Value" and "Applicable Early Conversion Market Value" shall be deemed to refer to the Applicable Market Value or Applicable Early Conversion Market Value, as the case may be, of the Exchange Property and such value shall be determined (A) with respect to any publicly traded securities that compose all or part of the Exchange Property, based on the Closing Price of such securities, (B) in the case of any cash that composes all or part of the Exchange Property, based on the amount of such cash and (C) in the case of any other property that composes all or part of the Exchange Property, based on the value of such property, as determined by a (U.S.) nationally recognized independent investment banking firm retained by the Company for this purpose. For purposes of this Article 7.11.5, the term "Closing Price" shall be deemed to refer to the closing sale price, last quoted bid price or mid-point of the last bid and ask prices, as the case may be, of any publicly traded securities that comprise all or part of the Exchange Property. For purposes of this Article 7.11.5, references to Common Shares in the definitions of "Trading Day," "Applicable Market Value" and "Applicable Early Conversion Market Value" shall be replaced by references to any publicly traded securities that comprise all or part of the Exchange Property.

The above provisions of this Article 7.11.5 shall similarly apply to successive Reorganization Events and the provisions of Article 7.11 shall apply to any Shares of the Company (or any successor) received by the holders of Common Shares in any such Reorganization Event.

The Company (or any successor) shall, within twenty (20) days of the occurrence of any Reorganization Event, give notice to the Preferred A Shareholders of such occurrence of such event and of the kind and amount of the cash, securities or other property that constitute the Exchange Property. Failure to deliver such notice shall not affect the operation of this Article 7.11.5.

7.12 Notices to Preferred A Shareholders

All notices or other communications, other than as may be required by applicable law with respect to General Meetings, in respect of the Preferred A Shares shall be sufficiently given if given by the Company (i) with respect to Preferred A Shares the holders of which are (directly) inscribed in the register of shareholders of the Company to such registered holders of Preferred A Shares in writing and delivered in person or by first class mail, postage prepaid, or in such other manner as may be permitted in these Articles of Incorporation or by applicable law and (ii) with respect to Preferred A Shares held by or through DTC (and any other depository or settlement system, by notice to DTC (or such other depository or settlement).

7.13 Miscellaneous.

- 7.13.1 The Company shall pay any and all share transfer and documentary stamp taxes that may be payable in respect of any issuance or delivery Preferred A Shares or Common Shares or other securities issued on account of Preferred A Shares pursuant hereto. The Company shall not, however, be required to pay any such tax that may be payable in respect of any transfer involved in the issuance or delivery of Common Shares or other securities in a name other than that in which the Preferred A Shares with respect to which such shares or other securities are issued or delivered were registered, and shall not be required to make any such issuance or delivery unless and until the Person otherwise entitled to such issuance or delivery has paid to the Company the amount of any such tax or has established, to the satisfaction of the Company, that such tax has been paid or is not payable.
- 7.13.2 The Liquidation Preference and the Dividend Rate each shall be subject to equitable adjustment whenever there shall occur a share split, combination, reclassification or other similar event involving the Preferred A Shares. Such adjustments shall be determined in good faith by the Board of Directors and submitted by the Board of Directors to the Transfer Agent.

Art. 8. Limitation of Ownership—Communications Laws.

- 8.1 The Company may restrict the ownership, or proposed ownership, of Shares or other equity securities of the Company by any Person or the transfer of Shares (or other equity securities) to any Person if the ownership or proposed ownership of Shares (or other equity securities) (or the transfer of Shares or other equity securities to) of such Person (i) is or could be, as determined by the Board of Directors, inconsistent with, or in violation of, any provision of, the Communications Laws, (ii) will or may limit or impair, as determined by the Board of Directors, any business activities or proposed business activities of the Company and/or its group or any group entity under the Communications Laws or (iii) will, or could, make the Company and/or its group or any group entity, subject to any specific law, rule, regulation, provision or policy under the Communications Laws to which the Company, its group or group entity would not be subject to but for such ownership, proposed ownership or transfer ((i), (ii) and (iii) collectively the "Communications Law Limitations").
- 8.2 If the Company believes that the ownership or proposed ownership of Shares or other equity securities of the Company by any Person may result in a Communications Law Limitation, the Company may at any time request information from Shareholders, other equity securities holders, transferees or proposed transferees, including without limitation information on citizenship, affiliations, and ownership or other interests in other companies or enterprises, and such Person shall furnish promptly the Company with such information.
- 8.3 If (A) the Company does not receive the relevant information requested pursuant to Article 8.2 or (B) the Company determines that the ownership or proposed ownership of Shares or other equity securities by a Person or that the exercise of any rights of Shares or other equity securities by a Person, results or could result, as determined by the Company, in a Communications Law Limitation, the Company has the absolute right to (i) refuse to issue Shares or other equity securities to such Person, (ii) refuse to permit or recognise a transfer (or attempted transfer) of Shares or other equity securities to such Person and any such transfer or attempted transfer shall not be inscribed in the register(s) of the Company, (iii) suspend any rights attached to such Shares or equity securities (including without limitation the right to attend and vote at General Meetings and the right to receive dividends or other distributions) and which causes or could cause such Communications Law Limitation, (iv) compulsorily redeem the Shares or other

equity securities of the Company held by such Person. The Company shall in addition have the right to exercise any and all appropriate remedies, at law or in equity in any court of competent jurisdiction, against any such Person, with a view towards obtaining such information or preventing or curing any situation which causes or could cause a Communications Law Limitation. Any measure taken by the Company pursuant to (i), (ii) or (iii), respectively, shall remain in effect until the requested information has been received and/or the Company has determined that the ownership, proposed ownership or transfer of Shares or other equity securities by (or to) the relevant Person or that the exercise of any rights of Shares or other equity securities by such Person as the case may be, will not result in a Communications Law Limitation.

- 8.4 In case of a compulsory redemption,
- 8.4.1 the Company shall serve a notice (a "Redemption Notice") upon the relevant Shareholder(s), specifying (1) the Shares to be redeemed, (2) the redemption price for such Shares, and (3) the place at which the redemption price in respect for such Shares is payable. Immediately after the close of business on the date specified in the Redemption Notice, each such Shareholder shall cease to be the owner of the Shares specified in such notice and, as the case may be, such Shareholder's name shall be removed from the relevant register of Shareholders.
- 8.4.2 The price at which the Shares specified in any Redemption Notice shall be redeemed (the "Redemption Price") shall be an amount equal to the lesser of (A) the aggregate amount paid for such Shares (if acquired within the preceding twelve months from the date of the relevant Redemption Notice), (B) in case the Shares of the Company are listed on a Regulated Market, the last price quoted for the Shares on the business day immediately preceding the day on which the Redemption Notice is served, and (C) the book value per Share determined on the basis of the last published accounts prior to the day of service of the Redemption Notice.
- 8.4.3 Payment of the Redemption Price may be made directly to the holder of the Shares so redeemed or may be deposited by the Company on an account with a bank in Luxembourg, the United States or elsewhere (as specified in the Redemption Notice) for payment to such holder. Upon payment of the Redemption Price (either directly or through the deposit of such price as aforesaid), no Person interested in the Shares specified in such Redemption Notice shall have any further interest in such Shares or any of them, or any claim against the Company or its assets in respect thereof, except in the case of a deposit of the Redemption Price as aforesaid, the right to receive the Redemption Price so deposited (without interest).
- 8.4.4 The exercise by the Company of the powers conferred by this Article shall not be questioned or invalidated in any case, on the ground that there was insufficient evidence of ownership of Shares by any Person or that the true ownership of any Shares was otherwise than appeared to the Company at the date of any Redemption Notice.

Art. 9. Shares-Voting Rights.

- 9.1 Except and subject as set forth in the present Articles, each Share shall be entitled to one vote at all General Meetings of Shareholders.
- 9.2 Except as otherwise mandatorily provided for by Company Law or as set forth in the Articles, the Preferred A Shares shall not have any voting rights at any General Meeting of the Company or otherwise.

Art. 10. Management of the Company—Board of Directors.

- 10.1 The Company shall be managed by a Board of Directors which is vested with the broadest powers to manage the business of the Company and to authorise and/or perform all acts of disposal, management and administration falling within the purposes of the Company.
 - 10.2 All powers not expressly reserved by the law or by these Articles to the General Meeting shall be within the competence of the Board of Directors.

10.3 Except as otherwise provided herein or by law, the Board of Directors of the Company is authorised to take such action (by resolution or otherwise) and to adopt such provisions as shall be necessary, appropriate, convenient or deemed fit to implement the purpose of the Company.

Art. 11. Composition of the Board of Directors.

11.1 The Company shall be managed by a Board of Directors composed of a minimum of three (3) Directors and a maximum of twenty (20) (unless otherwise provided for herein) who may but do not need to be Shareholders of the Company.

The Directors are appointed by the General Meeting of Shareholders for a period of up to three (3) years (provided however that such three (3) year term may be exceeded by a period up to the annual General Meeting held following the third anniversary of the appointment); provided however the Directors shall be divided into three (3) classes, namely class I, class II and class III, so that, subject to the number of Directors, each class will consist (as near as possible) of one third (1/3) of the Directors. Directors are elected on a staggered basis, with the Directors of one of the classes being elected each year for a term of up to three (3) years (subject as provided above as to the extension of the term), and provided that the initial class I Directors and the class II Directors shall be elected until the first (for class I) and the second (for class II) annual General Meeting, respectively, held following their appointment. The Directors may be removed with or without cause (ad nutum) by the General Meeting of Shareholders by a simple majority vote of votes cast at a General Meeting of Shareholders. The Directors shall be eligible for re-election indefinitely.

- 11.2 In the event of a vacancy in the office of a Director because of death, retirement, resignation, dismissal, removal or otherwise, the remaining Directors may fill such vacancy by simple majority vote and appoint a successor in accordance with applicable law.
- 11.3 (A) Unless otherwise determined by the Board of Directors, candidates for election to the Board must provide to the Company, (i) a written completed questionnaire with respect to the background and qualification of such Person (which questionnaire shall be provided by the Company upon written request), (ii) such information as the Company may request including without limitation as may be required, necessary or appropriate pursuant to any laws or regulation (including any rules, policies or regulation of any Regulated Market where Shares of the Company are listed or trading) applicable to the Company and (iii) the written representation and undertaking that such Person would be in compliance, and will comply with all applicable publicly disclosed corporate governance, conflict of interest, confidentiality and stock ownership and trading and other policies and guidelines of the Company or under applicable law that are applicable to Directors. (B) Any candidate to be considered must comply as to his/her qualification and affiliations with any laws, regulations, rules or policies (including any rules, policies or regulation of any Regulated Market where Shares of the Company are listed or trading) applicable to the Company.
- 11.4 Any proposal by Shareholder(s) holding less than ten percent (10%) of the issued share capital (the "Nominating Shareholder(s)"), of candidate(s) for election to the Board of Directors by the General Meeting (a "Proposal") must be received by the Company in writing pursuant to the provisions set forth hereafter, unless otherwise expressly provided by mandatory law:
 - 11.4.1 Notice of Candidates—Timing
- 11.4.1.1 Any Proposal must be made to the Company by timely written notice by the Nominating Shareholder(s) (the "Notice of Candidates"). To be timely, the Notice of Candidates must be received at the registered office of the Company by the following dates prior to the relevant General Meeting where the election of members to the Board is on the agenda:
- 11.4.1.2 in the case of a Proposal for election to the Board at an annual General Meeting, not less than ninety (90) days and no more than one hundred and twenty (120) days prior to the one (1) year anniversary of the first mailing of the notice relating to the preceding year's annual General Meeting; provided that, in the event the date of such annual General Meeting is advanced by more than thirty (30) days prior to, or delayed by more than thirty (30) days after, the one (1) year anniversary of the previous year's annual General Meeting, the Notice of Candidates must be received in writing by the Company not earlier than the close of business (local time, CET) on the one hundred and twentieth (120th) day prior to such annual General Meeting and not later than the close of business (CET) on the later of the ninetieth (90th) day prior to such annual General Meeting and the tenth (10th) day following the day on which the first public announcement of such (advanced or delayed) annual General Meeting is made;

- 11.4.1.3 in the case of a Proposal for election to the Board at a General Meeting other than the annual General Meeting (it being understood that such Proposal is only admissible if the election of members to the Board is referenced as an agenda item of such General Meeting), the Notice of Candidates in writing must be received by the Company not earlier than the close of business (local time, CET) on the one hundred and twentieth (120th) day prior to such General Meeting and not later than the close of business (CET) on the later of the ninetieth (90th) day prior to such General Meeting and the tenth (10th) day following the day on which the first public announcement of such General Meeting is made.
- 11.4.1.4 An adjournment, postponement or deferral, or announcement of an adjournment, postponement or deferral, of an annual or other General Meeting will not commence a new time period (or extend any time period) for the receipt of a Notice of Candidates by the Company.
 - 11.4.2 The Notice of Candidates must at least include the following information or evidence:
 - 11.4.2.1 the name and record address of each Nominating Shareholder;
- 11.4.2.2 a representation that each Nominating Shareholder is a holder of Shares of the Company and intends to appear in Person or by proxy at the General Meeting to make the Proposal, and the evidence of such Nominating Shareholder's holding of Shares;
- 11.4.2.3 the written consent of the candidate contained therein to being named as a candidate for the election to the Board and in any announcement, proxy statement or other document, and to serve as a Director of the Company if elected;
- 11.4.2.4 the information under Article 11.3 as to the candidate named therein and evidence that the candidate named therein complies with the provisions of Article 11.3 (B); and the written representation by the Nominating Shareholder(s) and by the candidate contained therein that such information and evidence is true, correct and up to date;
- 11.4.2.5 the written undertaking by the candidate to promptly provide such further information and/or evidence as may be required by the Company pursuant to Article 11.3;
- 11.4.2.6 the written undertaking by the Nominating Shareholder(s) to provide the Company promptly with any information or evidence reasonably requested by the Company in order for the Company to comply with any laws, regulations, rules or policies (including any rules, policies or regulation of any Regulated Market where Shares of the Company are listed or trading) applicable to the Company.
- 11.5 If the Nominating Shareholder(s) (or a qualified representative thereof) does not appear at the applicable General Meeting to make the Proposal, such Proposal shall be disregarded, notwithstanding that proxies in respect thereof may have been received by the Company.

Art. 12. Chairman.

- 12.1 The Board of Directors shall, to the extent required by law and otherwise may, appoint the chairman of the Board of Directors amongst its members (the "Chairman"). The Chairman shall preside over all meetings of the Board of Directors and of Shareholders. In the absence of the Chairman of the Board, a chairman determined ad hoc, shall chair the relevant meeting.
 - 12.2 In case of a tie, neither the Chairman nor any other Board member shall have a casting (tie breaking) vote.

Art. 13. Board Proceedings.

- 13.1 The Board of Directors shall meet upon call by (or on behalf of) the Chairman or any two Directors. The Board of Directors shall meet as often as required by the interest of the Company.
- 13.2 Notice of any meeting of the Board of Directors must be given by letter, cable, telegram, telephone, facsimile transmission, or e-mail advice to each Director, two (2) days before the meeting, except in the case of an emergency, in which event twenty four

- (24) hours' notice shall be sufficient. No convening notice shall be required for meetings held pursuant to a schedule previously approved by the Board and communicated to all Board members. A meeting of the Board may also be validly held without convening notice to the extent the Directors present or represented do not object and those Directors not present or represented have waived the convening notice in writing, by facsimile transmission, email or otherwise.
- 13.3 Meetings of the Board of Directors may be held physically or, in all circumstances, by way of telephone conference call, video conference or similar means of communication which permit the participants to communicate with each other. A Director attending in such manner shall be deemed present at the meeting for as long as he is connected.
- 13.4 Any Director may act at any meeting of the Board of Directors by appointing in writing by letter or by cable, telegram, facsimile transmission or e-mail another Director as his proxy. A Director may represent more than one of the other Directors.
- 13.5 The Board of Directors may deliberate and act validly only if a majority of the Board members (entitled to vote) are present or represented. Decisions shall be taken by a simple majority of the votes validly cast by the Board members present or represented (and entitled to vote).
- 13.6 The Board of Directors may also in all circumstances with unanimous consent pass resolutions by circular means and written resolutions signed by all members of the Board will be as valid and effective as if passed at a meeting duly convened and held. Such signatures may appear on a single document or multiple copies of an identical resolution and may be evidenced by letters, cables, facsimile transmission, or e-mail.
- 13.7 The minutes of any meeting of the Board of Directors (or copies or extracts of such minutes which may be produced in judicial proceedings or otherwise) shall be signed by the Chairman, the chairman (ad hoc) of the relevant meeting or by any two (2) Directors or as resolved at the relevant Board meeting or any subsequent Board meeting. Minutes or resolutions of the Board (or copies or extracts thereof) may further be certified by the secretary of the Board.

Art. 14. Delegation of power, committees, secretary.

- 14.1 The Board may delegate the daily management of the business of the Company, as well as the power to represent the Company in its day to day business, to individual Directors or other officers or agents of the Company (with power to sub-delegate). In addition the Board of Directors may delegate the daily management of the business of the Company, as well as the power to represent the Company in its day to day business, to an executive or other committee as it deems fit. The Board of Directors shall determine the conditions of appointment and dismissal as well as the remuneration and powers of any Person or Persons so appointed.
- 14.2 The Board of Directors may (but shall not be obliged to unless required by law) establish one or more committees and for which it shall, if one or more of such committees are set up, appoint the members (who may be but do not need to be Board members), determine the purpose, powers and authorities as well as the procedures and such other rules as may be applicable thereto.
- 14.3 The Board of Directors may appoint a secretary of the Company who may but does not need to be a member of the Board of Directors and determine his/her responsibilities, powers and authorities.
- Art. 15. Binding Signature. The Company will be bound by the sole signature of the Chairman or the sole signature of any one (1) Director or by the sole or joint signatures of any Persons to whom such signatory power shall have been delegated by the Board of Directors. For the avoidance of doubt, for acts regarding the daily management of the Company, the Company will be bound by the sole signature of the administrateur délégué ("Chief Executive Officer" or "CEO") or any Person or Persons to whom such signatory power is delegated by the Board of Directors (with or without power of substitution).

Art. 16. Board Liability, Indemnification.

16.1 The Directors are not held personally liable for the indebtedness or other obligations of the Company. As agents of the Company, they are responsible for the performance of their duties. Subject to the exceptions and limitations listed in Article 16.2, every person who is, or has been, a director or officer of the Company or a direct or indirect subsidiary of the Company shall be

indemnified by the Company to the fullest extent permitted by law against liability and against all expenses reasonably incurred or paid by him in connection with any claim, action, suit or proceeding which he becomes involved as a party or otherwise by virtue of his being or having been a director or officer of the Company or a direct or indirect subsidiary of the Company and against amounts paid or incurred by him in the settlement thereof. The words "claim", "action", "suit" or "proceeding" shall apply to all claims, actions, suits or proceedings (civil, criminal or otherwise including appeals) actual or threatened and the words "liability" and "expenses" shall include without limitation attorneys' fees, costs, judgements, amounts paid in settlement and other liabilities

- 16.2 No indemnification shall be provided to any director or officer of the Company or a direct or indirect subsidiary of the Company:
- 16.2.1 Against any liability to the Company or its shareholders by reason of wilful misfeasance, bad faith, gross negligence or reckless disregard of the duties involved in the conduct of his/her office;
- 16.2.2 With respect to any matter as to which he/she shall have been finally adjudicated to have acted in bad faith and not in the interest of the Company (or as the case may be the relevant subsidiary); or
 - 16.2.3 In the event of a settlement, unless the settlement has been approved by a court of competent jurisdiction or by the Board of Directors.
- 16.3 The Company may, to the fullest extent permitted by law, purchase and maintain insurance or furnish similar protection or make other arrangements, including, but not limited to, providing a trust fund, letter of credit, or surety bond on behalf of a director or officer of the Company or a direct or indirect subsidiary of the Company against any liability asserted against him or incurred by or on behalf of him in his capacity as a director or officer of the Company or a direct or indirect subsidiary of the Company.
- 16.4 The right of indemnification herein provided shall be severable, shall not affect any other rights to which any director or officer of the Company or a direct or indirect subsidiary of the Company may now or hereafter be entitled, shall continue as to a person who has ceased to be such director or officer and shall inure to the benefit of the heirs, executors and administrators of such a person. The right to indemnification provided herein is not exclusive, and nothing contained herein shall affect any rights to indemnification to which corporate personnel, including directors and officers, may be entitled by contract or otherwise under law.
- 16.5 Expenses in connection with the preparation and representation of a defence of any claim, action, suit or proceeding of the character described in this Article shall be advanced by the Company prior to final disposition thereof upon receipt of an undertaking by or on behalf of the officer or director, to repay such amount if it is ultimately determined that he/she is not entitled to indemnification under this Article.

Art. 17. Conflicts of Interest.

- 17.1 No contract or other transaction between the Company and any other company or firm shall be affected or invalidated by the fact that any one or more of the Directors or officers of the Company is interested in, or is a director, associate, officer, agent, adviser or employee of such other company or firm. Any Director or officer who serves as a director, officer or employee or otherwise of any company or firm with which the Company shall contract or otherwise engage in business shall not, by reason of such affiliation with such other company or firm only, be prevented from considering and voting or acting upon any matters with respect to such contract or other business.
- 17.2 In the case of a conflict of interest of a Director, such Director shall indicate such conflict of interest to the Board and shall not deliberate or vote on the relevant matter. Any conflict of interest arising at Board level shall be reported to the next General Meeting of Shareholders before any resolution as and to the extent required by law.

Art. 18. General Meetings of Shareholders.

18.1 Any regularly constituted General Meeting of Shareholders of the Company shall represent the entire body of Shareholders of the Company. It shall have the broadest powers to order, carry out or ratify acts relating to the operations of the Company.

- 18.2 The annual General Meeting shall be held, in accordance with Luxembourg law, at the registered office of the Company, or at such other place in Luxembourg as may be specified in the notice of the meeting within six months of the end of the accounting year.
 - 18.3 Other General Meetings may be held at such place and time as may be specified in the respective notices of meeting.
- 18.4 General Meetings shall be convened in accordance with the provisions of law. If all of the Shareholders are present or represented at a general meeting of Shareholders, the General Meeting may be held without prior notice or publication.
- 18.5 Proposals from Shareholders for any General Meeting, excluding Proposals pursuant to Article 11.4 and including, as to in particular without limitation regarding agenda items, resolutions or any other business, may only be made in compliance with the Company Law and Rule 14a-8 and these Articles and will only be accepted by the Company if required by the Company Law and Rule 14a-8 and these Articles.
- 18.6 The Board of Directors may determine a date preceding the General Meeting as the record date for admission to, and voting any Shares at, the General Meeting (the "GM Record Date"). If a GM Record Date is determined for the admission to and voting at a General Meeting only those Persons holding Shares on the GM Record Date may attend and vote at the General Meeting (and only with respect to those Shares held by them on the GM Record Date).
- 18.7 Where, in accordance with the provisions of Article 6.1.7 of the present Articles, Shares are recorded in the register(s) of Shareholders in the name of a Depositary or sub-depositary of the former, the certificates provided for in Article 6.1.7 must be received by the Company (or its agents as set forth in the convening notice) no later than the day determined by the Board. Such certificates must (unless otherwise required by applicable law) certify, in case a GM Record Date has been determined, that the Shares were held for the relevant Person on the GM Record Date.
- 18.8 Proxies for a General Meeting must be received by the Company (or its agents) by the deadline determined by the Board, provided that the Board of Directors may, if it deems so advisable amend these periods of time for all Shareholders and admit Shareholders (or their proxies) who have provided the appropriate documents to the Company (or its agents as aforesaid) to the General Meeting, irrespective of these time limits.
- 18.9 The Board of Directors shall adopt all other regulations and rules concerning the attendance to the General Meeting, and availability of access cards, proxy forms and/or voting forms in order to enable Shareholders to exercise their right to vote.
 - 18.10 Any Shareholder may be represented at a General Meeting by appointing as his or her proxy another Person, who need not be a Shareholder.
- 18.11 Holders of notes or bonds or other securities issued by the Company (if any) shall not, unless compulsorily otherwise provided for by law, be entitled to assist or attend General Meetings or receive notice thereof.

Art. 19. Majority and Quorum at the General Meeting.

- 19.1 At any General Meeting of Shareholders other than a General Meeting convened for the purpose of amending the Company's Articles of Incorporation or voting on resolutions whose adoption is subject to the quorum and majority requirements for amendments of the Articles of Incorporation, no presence quorum is required and resolutions shall be adopted, irrespective of the number of Shares represented, by a simple majority of votes validly cast.
- 19.2 At any extraordinary General Meeting of Shareholders for the purpose of amending the Company's Articles of Incorporation or voting on resolutions whose adoption is subject to the quorum and majority requirements for amendments of the Articles of Incorporation, the quorum shall be at least one half of the issued share capital of the Company. If the said quorum is not present, a second General Meeting may be convened at which there shall be no quorum requirement (subject to the provisions of Article 19.3). Resolutions amending the Company's Articles of Incorporation or whose adoption is subject to the quorum and majority requirements for amendments of the Articles of Incorporation shall only be validly passed by a two thirds (2/3) majority of the votes validly cast at any such General Meeting, save as otherwise provided by law or the present Articles (including in particular Article 19.3 and Article 20.2).

19.3 Any resolutions for the amendment of the provisions of Article 8 (Limitation of Ownership-Communications Laws), Article 11.1 (with respect to the staggering of Board terms), Articles 11.4 (as to proposal(s) of candidates for election to the Board of Directors), and the present Article 19.3 (and any cross references thereto), shall only be validly passed by the favorable vote of a two thirds (2/3) majority of the Common Shares in issue and entitled to vote.

Art. 20. Amendments of Articles.

- 20.1 The Articles of Incorporation may be amended from time to time by a resolution of the General Meeting of Shareholders to the quorum and voting requirements provided by the laws of Luxembourg and as may otherwise be provided herein (including without limitation Article 19.3 and Article 20.2).
- 20.2 The Company shall not, without the affirmative vote of (i) at least two-thirds of the outstanding Preferred A Shares as a separate class or (ii) at least two-thirds of the outstanding Preferred A Shares and all other series of preferred Shares entitled to vote thereon under the Articles of Incorporation or applicable law:
- 20.2.1 amend or alter the provisions of the Articles of Incorporation so as to authorize or create, or increase the authorized amount of, any specific class or series of Shares ranking senior to the Preferred A Shares with respect to payment of dividends or the distribution, to the extent this adversely impacts the Preferred A Shares, of assets upon the liquidation, dissolution or winding up of the Company; or
- 20.2.2 amend, alter or repeal the provisions of the Articles of Incorporation which materially and adversely affect the special rights, preferences, privileges and voting powers of the Preferred A Shares; or
- 20.2.3 consummate a binding Share exchange or reclassification involving the Preferred A Shares or a merger or consolidation of the Company into or with another entity, unless in each case: (i) the Preferred A Shares remain outstanding and are not amended in any respect or, in the case of any such merger or consolidation with respect to which the Company is not the surviving or resulting entity, are converted into or exchanged for preference securities of the surviving or resulting entity or its ultimate parent; and (ii) such Preferred A Shares remaining outstanding or such preference securities, as the case may be, have such rights, preferences, privileges and voting powers, taken as a whole, as are not materially less favorable to the Preferred A Shareholders than the rights, preferences, privileges and voting powers of the Preferred A Shares immediately prior to such consummation, taken as a whole, provided, however, that, unless otherwise required by law, (1) any increase in the number of the authorized but unissued preferred Shares, (2) any increase in the authorized or issued number of preferred shares and (3) the creation and issuance, or an increase in the authorized or issued amount, of any other series of preferred Shares ranking equally with or junior to the Preferred A Shares with respect to the payment of dividends (whether such dividends are cumulative or non-cumulative) and/or the distribution of assets upon the liquidation, dissolution or winding up of the Company, will be deemed not to materially and adversely affect the special rights, preferences, privileges or voting powers of the Preferred A Shares.

Notwithstanding the foregoing, unless otherwise required by law, such vote shall not be required for, and amendments, alteration, supplements or repealing to the terms of the Preferred A Shares may be made without such affirmative vote so long as such action does not adversely affect the special rights, preferences, privileges and voting powers of the Preferred A Shares, taken as a whole, for the following purposes: (i) to cure any ambiguity or mistake, or to correct or supplement any provision contained in the Articles of Incorporation relating to the Preferred A Shares that may be defective or inconsistent with any other provision contained in the Articles of Incorporation relating to the Preferred A Shares; or (ii) to make any provision with respect to matters or questions relating to the Preferred A Shares that is not inconsistent with the provisions of the Articles of Incorporation relating to the Preferred A Shares.

- Art. 21. Accounting Year. The accounting year of the Company shall begin on first of January and shall terminate on thirty-first of December of each year.
- Art. 22. Auditor. The operations of the Company shall be supervised by a supervisory auditor (commissaire aux comptes) who may but need not be a shareholder. The supervisory auditor shall be elected by the General Meeting for a period ending at the next annual General Meeting or until a successor is elected. The supervisory auditor in office may be removed at any time by the General Meeting with or without cause.

In the event the thresholds set by law as to the appointment of an approved statutory auditor (réviseur d'entreprises agréé) are met or otherwise required or permitted by law, the accounts of the Company shall (and in case only permitted but not required by law, may) be supervised by an approved statutory auditor (réviseur d'entreprises agréé).

Art. 23. Dividends/Distributions.

- 23.1 From the annual net profits of the Company, five per cent (5%) shall be allocated to an un-distributable reserve required by law. This allocation shall cease to be required as soon and as long as such reserve amounts to ten per cent (10%) of the issued share capital of the Company.
- 23.2 The General Meeting of Shareholders, upon recommendation of the Board of Directors, shall determine how the remainder of the annual net profits will be disposed of.
- 23.3 Interim distributions (including for the avoidance of doubt, interim dividends) may be declared and paid (including by way of staggered payments) by the Board of Directors (including out of any premium or other capital or other reserves) subject to observing the terms and conditions provided by law either by way of a cash distribution or by way of an in kind distribution (including Shares).
- 23.4 The distributions declared may be paid in United States Dollars (USD) or any other currency selected by the Board of Directors and may be paid at such places and times as may be determined by the Board of Directors (subject to the resolutions of the General Meeting of Shareholders). The Board of Directors may make a final determination of the rate of exchange applicable to translate distributions of funds into the currency of their payment. Distributions may be made in specie (including by way of Shares).
- 23.5 In the event it is decided by the General Meeting or the Board (in the case interim distributions declared by the Board or otherwise), that a distribution be paid in Shares or other securities of the Company, the Board of Directors may exclude from such offer such Shareholders it deems necessary or advisable due to legal or practical problems in any territory or for any other reasons as the Board may determine (including Communications Law Limitations).
- 23.6 A distribution declared but not paid (and not claimed) on a Share after five years cannot thereafter be claimed by the holder of such Share and shall be forfeited by the holder of such Share, and revert to the Company. No interest will be paid on distributions declared and unclaimed which are held by the Company on behalf of holders of Shares.

Art. 24. Liquidation.

- 24.1 In the event of the dissolution of the Company for whatever reason or at whatever time, the liquidation will be performed by liquidators or by the Board of Directors then in office who will be endowed with the powers provided by articles 144 et seq. of the Company Law. Once all debts, charges and liquidation expenses have been met, any balance resulting shall be paid to the holders of Shares in the Company in accordance with the provisions of these Articles.
- Art. 25. Sole Shareholder. If, and as long as one Shareholder holds all the Shares of the Company, the Company shall exist as a single Shareholder company pursuant to the provisions of Company Law. In the event the Company has only one Shareholder, the Company may at the option of the sole Shareholder be managed by one Director as provided for by law and all provisions in the present Articles referring to the Board of Directors shall be deemed to refer to the sole Director (mutatis mutandis), who shall have all such powers as provided for by law and as set forth in the present Articles with respect to the Board of Directors.

Art. 26. Definitions.

Affiliate

Means of any specified Person, any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For purposes of this definition, "control" (including, with correlative meanings, the terms "controlling," "controlled by" and "under common control with"), as used with respect to any Person, means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person, whether through the ownership of voting securities, by agreement or otherwise.

Applicable Market Value

Means the average of the Closing Prices per Common Share over the forty (40) consecutive Trading Day period ending on the third (3rd) Trading Day immediately preceding the Mandatory Conversion Date.

Articles or Articles of Incorporation

Means the present articles of incorporation of the Company as amended from time to time.

Board or Board of Directors

Means the board of directors (conseil d"administration) of the Company.

Business Day

Means any day other than a Saturday or Sunday or any other day on which commercial banks in New York City, New York or Luxembourg city, Luxembourg are authorized or required by law or executive order to close.

Cash Acquisition

Shall be deemed to have occurred, at such time after the Preferred A Issue Date upon: (i) the consummation of any transaction or event (whether by means of an exchange offer, liquidation, tender offer, consolidation, merger, combination, recapitalization or otherwise) in connection with which 90% or more of the Common Shares is exchanged for, converted into, acquired for or constitutes solely the right to receive, consideration 10% or more of which is not common stock that is listed on, or immediately after the transaction or event will be listed on, a United States national securities exchange; (ii) any "person" or "group" (as such terms are used for purposes of Sections 13(d) and 14(d) of the Exchange Act, whether or not applicable), other than the Company, any of its majority-owned subsidiaries or any of the Company's or its majority-owned subsidiaries" employee benefit plans, or any of the Permitted Holder becoming the "beneficial owner," directly or indirectly, of more than 50% of the total voting power in the aggregate of all classes of share capital then outstanding entitled to vote generally in elections of the Company's directors, or (iii) our Common Shares (or any Common Shares, depositary receipts or other securities representing common equity interests into which the Preferred A Shares become convertible in connection with a Reorganization Event) cease (further to admission to the New York Stock Exchange in 2013) to be listed for trading on the New York Stock Exchange, The NASDAQ Global Select Market or The NASDAQ Global Market (or any of their respective successors) or other United States national securities exchange.

Cash Acquisition Conversion Rate Means the conversion rate set forth in the table below for the Effective Date and the Share Price applicable to any Cash Acquisition Conversion that occurs on or prior to the Mandatory Conversion Date:

Effective date	Share price on effective date					
	\$ 5.00	\$ 10.00	\$ 12.50	\$ 15.00	\$ 18.00	\$ 20.00
April 17, 2013	2.7297	2.6281	2.5428	2.4597	2.3780	2.3368
May 1, 2014	2.7493	2.6952	2.6199	2.5295	2.4292	2.3759
May 1, 2015	2.7639	2.7534	2.7120	2.6280	2.5000	2.4226
May 1, 2016	2.7778	2.7778	2.7778	2.7778	2.7778	2.5000
	Share price	Share price on effective date				
Effective date	\$ 22.05	\$ 25.00	\$ 30.00	\$ 40.00	\$ 50.00	\$ 60.00
April 17, 2013	2.3047	2.2729	2.2451	2.2313	2.2311	2.2321
May 1, 2014	2.3340	2.2932	2.2596	2.2450	2.2445	2.2448
May 1, 2015	2.3608	2.3044	2.2665	2.2564	2.2562	2.2562
May 1, 2016	2.2676	2.2676	2.2676	2.2676	2.2676	2.2676

If the Share Price falls between two Share Prices set forth in the table above, or if the Effective Date falls between two Effective Dates set forth in the table above, the Cash Acquisition Conversion Rate shall be determined by straight-line interpolation between the Cash Acquisition Conversion Rates set forth for the higher and lower Share Prices and the earlier and later Effective Dates, as applicable, based on a 365-day year.

If the Share Price is in excess of sixty US Dollars (USD 60.00) per Common Share (subject to adjustment in the same manner as adjustments are made to the Share Price in accordance with the provisions of Article 7.11.3.4, then the Cash Acquisition Conversion Rate shall be the Minimum Conversion Rate. If the Share Price is less than five US Dollars (USD 5.00) per Common Share (subject to adjustment in the same manner as adjustments are made to the Share Price in accordance with the provisions of Article 7.11.3.4, then the Cash Acquisition Conversion Rate shall be the Maximum Conversion Rate. The Share Prices in the column headings in the table above are subject to adjustment in accordance with the provisions of Article 7.11.3.4. The conversion rates set forth in the table above are each subject to adjustment in the same manner as each Fixed Conversion Rate as set forth in Article 7.11.

Class

Means a class or series of Shares of the Company, namely the series of Common Shares and the series of Preferred A Shares.

Closing Price

Means for the Common Shares or any securities distributed in a Spin-Off, as the case may be, as of any date of determination:

- (i) the closing price or, if no closing price is reported, the last reported sale price, of the Common Shares or such other securities on the New York Stock Exchange on that date; or
- (ii) if the Common Shares or such other securities are not traded on the New York Stock Exchange, the closing price on that date as reported in composite transactions for the principal U.S. national or regional securities exchange on which the Common Shares or such other securities are so traded or, if no closing price is reported, the last reported sale price of the Common Shares or such other securities on the principal U.S. national or regional securities exchange on which the Common Shares or such other securities are so traded on that date; or

(iii) if the Common Shares or such other securities are not traded on a U.S. national or regional securities exchange, the last quoted bid price on that date for the Common Shares or such other securities in the over-the-counter market as reported by Pink OTC Markets Inc. or a similar organization; or

(iv) if the Common Shares or such other securities are not so quoted by Pink OTC Markets Inc. or a similar organization, the market price of the Common Shares or such other securities on that date as determined by a nationally recognized independent investment banking firm retained by the Company for this purpose.

For the purposes of these Articles of Incorporation, all references herein to the closing price and the last reported sale price of the Common Shares on the New York Stock Exchange shall be such closing price and last reported sale price as reflected on the website of the New York Stock Exchange (www.nyse.com) and as reported by Bloomberg Professional Service; provided that in the event that there is a discrepancy between the closing price and the last reported sale price as reflected on the website of the New York Stock Exchange and as reported by Bloomberg Professional Service, the closing price and the last reported sale price on the website of the New York Stock Exchange shall govern.

Common Shareholder

Means a holder of one or more Common Shares (with respect to his/her/its Common Shares).

Common Shares

Means the common shares (actions ordinaires) of the Company with the rights and obligations as set forth in the Articles other than the Preferred A Shares.

Communications Laws

Means the United States Communications Act of 1934, as amended, the United States Telecommunications Act of 1996, any rule, regulation or policy of the Federal Communications Commission, and/or any statute, rule, regulation or policy of any other U.S., federal, state or local governmental or regulatory authority, agency, court commission, or other governmental body with respect to the operation of channels of radio communication and/or the provision of communications services.

Company Law

Means the law of 10th August 1915 on commercial companies as amended (and any replacement law thereof).

Current Market Price

Means per Common Share (or, in the case of Article 7.11.1.4, per Common Share, the Company's Share capital or equity interest, as applicable) on any date means for the purposes of determining an adjustment to the Fixed Conversion Rate:

(i) for purposes of adjustments pursuant to Article 7.11.1.2, Article 7.11.1.4 in the event of an adjustment not relating to a Spin-Off, and Article 7.11.1.5, the average of the Closing Prices of the Common Shares over the five (5) consecutive Trading Day period ending on the Trading Day immediately preceding the Ex-Date with respect to the issuance or distribution requiring such computation;

(ii) for purposes of adjustments pursuant to Article 7.11.1.4 in the event of an adjustment relating to a Spin-Off, the average of the Closing Prices of the Common Shares, the Company's share capital or equity interests, as applicable, over the first ten consecutive Trading Days commencing on and including the fifth (5 th) Trading Day immediately following the effective date of such distribution; and

(iii) for purposes of adjustments pursuant to Article 7.11.1.6, the average of the Closing Prices of the Common Shares over the five (5) consecutive Trading Day period ending on the seventh Trading Day after the Expiration Date of the relevant tender offer or exchange offer.

Director Means a member of the Board of Director or, as the case may be, the sole Director of the Company.

dividend or distribution Means any dividend or other distribution whether made out of profits, premium or any other available reserves.

Dividend Payment Date Means (subject to the relevant declaration being made) February 1, May 1, August 1 and November 1, of each year

commencing on August 1, 2013 to and including the Mandatory Conversion Date

Dividend Period Means the period from, and including, a Dividend Payment Date to, but excluding, the next Dividend Payment Date, except

that the initial Dividend Period shall commence on, and include, the Preferred A Issue Date and shall end on, but exclude,

August 1, 2013.

DTC Means The Depository Trust Corporation or any similar facility or depository used for the settlement of transactions in the

Preferred A Shares.

Exchange Act Means the United States Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder.

Ex-Date Means when used with respect to any issuance or distribution, means the first date on which Common Shares trade without the

right to receive such issuance or distribution.

Fair Market Value Means the fair market value as determined in good faith by the Board of Directors, whose determination shall be conclusive.

Fixed Conversion Rate and the Minimum Conversion Rate.

General Meeting Means the general meeting of Shareholders.

Junior Shares Means (i) the Common Shares and (ii) each other class or series of share capital or series of preferred shares established after

the Preferred A Issue Date, the terms of which do not expressly provide that such class or series ranks senior to or on a parity with the Preferred A Shares as to dividend or distribution rights or rights upon the Company's liquidation, winding-up or

dissolution.

Liquidation Preference Means, as to the Preferred A Shares, USD 50.00 per Preferred A Share.

Management Group Means the group consisting of the directors, executive officers and other management personnel of the Company on the

Preferred A Issue Date.

Mandatory Conversion

Date

Means May 1, 2016.

Officers Certificate Means a certificate of the Company, signed by any of the Chief Executive Officer, the Chief Financial Officer, the President,

any Executive Vice President, any Senior Vice President, any Vice President, the Treasurer or the Secretary of the Company

duly authorized therefore.

outstanding Means with respect to Shares, Shares that are in issue and not held in treasury by the Company or a subsidiary of the

Company.

Parity Shares Means any class or series of share capital or class or series of preferred shares established after the Preferred A Issue Date, the

terms of which expressly provide that such class or series shall rank on a parity with the Preferred A Shares as to dividend or

distribution rights or rights upon the Company's liquidation, winding-up or dissolution.

Permitted Holders Means, at any time, (i) the Sponsors, (ii) the Management Group and (iii) any group (within the meaning of Section 13(d)(3) or

Section 14(d)(2) of the Exchange Act, or any successor provision) the members of which include any of the Permitted Holders specified in clauses (i) and/or (ii) above, and that (directly or indirectly) hold or acquire beneficial ownership of the share capital of the Company entitled to vote in elections of the Company's directors (a "Permitted Holder Group"), so long as no Person or other "group" (other than Permitted Holders specified in clauses (i) and (ii) above) beneficially owns more than 50% on a fully diluted basis of the share capital of the Company entitled to vote in elections of the Company's directors held by

such Permitted Holder Group.

Person Means any individual, partnership, firm, corporation, limited liability company, business trust, joint-stock company, trust,

unincorporated association, joint venture, governmental authority or other entity of whatever nature.

Preferred A Issue Date Shall mean April 23, 2013, the first original issue date of the Preferred A Shares.

Preferred A Record Date Means the January 15, April 15, July 15 and October 15, immediately preceding the Dividend Payment Date on February 1,

May 1, August 1 and November 1, respectively. These Preferred A Record Dates shall apply regardless of whether a particular

Preferred A Record Date is a Business Day.

Preferred A Record Holders Means a holder of record of Preferred A Shares at 5:00 p.m., New York City time, on a Preferred A Record Date.

Preferred A Shareholder Means a holder of one or more Preferred A Shares (with respect to his/her/its Preferred A Shares).

Preferred A Shares Means the Series A mandatory convertible junior non-voting preferred shares (actions préférentielles junior sans droits de

vote convertibles obligatoirement en actions ordinaires) of the Company with the rights and obligations as set forth in the

Articles.

RCS Law Means the law dated 19 December 2002 concerning the register of commerce and of companies as well as the accounting and

the annual accounts of undertakings.

Regulated Market Means any official stock exchange or securities exchange market in the European Union, the United States of America or

elsewhere.

Rule 14a-8 Means Rule 14a-8 of the Exchange Act and any successor rule promulgated thereunder.

SEC Means the United States Securities and Exchange Commission.

Senior Shares Means each class or series of share capital or series of preferred shares established after the Preferred A Issue Date, the terms of

which expressly provide that such class or series shall rank senior to the Preferred A Shares as to dividend or distribution

rights or rights upon the Company's liquidation, winding-up or dissolution.

set apart Means with respect to treasury Shares, such treasury Shares which have been set apart for a specific purpose or with respect to

authorized unissued Shares, Shares for which the issuance has been decided in principle by the Board for a specific purpose.

Share Dilution Amount Means the increase in the number of diluted shares outstanding (determined in accordance with generally accepted

accounting principles in the United States, and as measured from the Preferred A Issue Date) resulting from the grant, vesting or exercise of equity-based compensation to employees and equitably adjusted for any share split, share dividend, reverse

share split, reclassification or similar transaction.

Share Price Means the price paid per Common Share in a Cash Acquisition. If the consideration paid consists only of cash, the Share Price

shall equal the amount of cash paid per Common Share. If the consideration paid consists, in whole or in part, of any property other than cash, the Share Price shall be the average VWAP per Common Share over the ten (10) consecutive Trading Day

period ending on the Trading Day preceding the Effective Date.

Shareholder Means subject to the Articles a duly registered holder of one or more Shares of the Company.

Shares Means the shares (actions) of the Company regardless of class or series.

Shelf Registration Shall mean a shelf registration statement filed with the SEC in connection with the issuance of or resales of Common Shares

Statement issued as payment of a Preferred Dividend, including Preferred Dividends paid in connection with a conversion.

Spin-Off Means a dividend or distribution to all holders of Common Shares consisting of share capital of, or similar equity interests in,

or relating to a subsidiary or other business unit of the Company.

Sponsors Means (1) one or more investment funds advised, managed or controlled by BC Partners Holdings Limited or any Affiliate

thereof, (2) one or more investment funds advised, managed or controlled by Silver Lake or any Affiliate thereof and (3) one or more investment funds advised, managed or controlled by any of the Persons described in (1) and (2) of this definition, and,

in each case, (whether individually or as a group) their Affiliates.

Trading Days Means days on which the Common Shares: a) are not suspended from trading on any U.S. national or regional securities

exchange or association or over-the-counter market at the close of business; and

(b) have traded at least once on the U.S. national or regional securities exchange or association or over-the-counter market

that is the primary market for the trading of the Common Shares.

VWAP Means per Common Share on any Trading Day the per Common Share volume-weighted average price as displayed on

Bloomberg page "IAQR" (or its equivalent successor if such page is not available) in respect of the period from 9:30 a.m. to 4:00 p.m., New York City time, on such Trading Day; or, if such price is not available, "VWAP" means the market value per Common Share on such Trading Day as determined by a nationally recognized independent investment banking firm retained by the Company for this purpose. The "average VWAP" means the average of the VWAP for each Trading Day in the relevant

period.

Art. 27. Applicable law, Forum.

27.1 For anything not dealt with in the present Articles of Incorporation, the Shareholders refer to the relevant legislation.

27.2 The competent Luxembourg courts shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Company, (ii) any action asserting a claim of breach of a duty owed by any director or officer of the Company to the Company or the Company's Shareholders, (iii) any action asserting a claim against the Company arising pursuant to any provision of the Company Law and the RCS Law or the Company's Articles of Incorporation, and (iv) any action asserting a claim against the Company with respect to its internal affairs, relationship with its Shareholders or other holders of interest, its directors, officers, or any action as to its Articles of Incorporation or other constitutional or governing documents.

For the Company,

Me Cosita DELVAUX, Notary

LIST OF SIGNIFICANT SUBSIDIARIES

- 1. Intelsat Africa (Pty) Ltd., a company organized under the laws of South Africa.
- 2. Intelsat Align S.à r.l., a company organized under the laws of Luxembourg.
- 3. Intelsat Brasil Ltda., a company organized under the laws of Brazil.
- 4. Intelsat Brasil Servicos de Telecomunicacao Ltda., a company organized under the laws of Brazil.
- 5. Intelsat Clearinghouse Corporation, a corporation organized under the laws of Delaware.
- 6. Intelsat Connect Finance S.A., a company organized under the laws of Luxembourg.
- 7. Intelsat Corporation, a corporation organized under the laws of Delaware.
- 8. Intelsat Finance Bermuda Ltd., a company organized under the laws of Bermuda.
- 9. Intelsat General Corporation, a corporation organized under the laws of Delaware.
- 10. Intelsat Global Sales & Marketing Ltd., a company organized under the laws of England and Wales.
- 11. Intelsat Global Service LLC, a limited liability company organized under the laws of Delaware.
- 12. Intelsat Holdings LLC, a limited liability company organized under the laws of Delaware.
- 13. Intelsat Holdings S.A., a company organized under the laws of Luxembourg.
- 14. Intelsat Horizons-3 Corporation, a corporation organized under the laws of Delaware.
- 15. Intelsat Intermediate LLC, a limited liability company organized under the laws of Delaware.
- 16. Intelsat International Systems LLC, a limited liability company organized under the laws of Delaware.
- 17. Intelsat Investment Holdings S.à r.l., a company organized under the laws of Luxembourg.
- 18. Intelsat Investments S.A., a company organized under the laws of Luxembourg.
- 19. Intelsat Ireland Operations Unlimited Company, a company organized under the laws of Ireland.
- 20. Intelsat Jackson Holdings S.A., a company organized under the laws of Luxembourg.
- 21. Intelsat Kommunikations GmbH, a company organized under the laws of Germany.
- 22. Intelsat License Holdings LLC, a limited liability company organized under the laws of Delaware.
- 23. Intelsat License LLC, a limited liability company organized under the laws of Delaware.
- 24. Intelsat (Luxembourg) S.A., a company organized under the laws of Luxembourg.
- 25. Intelsat Management LLC, a limited liability company organized under the laws of Delaware.
- 26. Intelsat Operations S.A., a company organized under the laws of Luxembourg.
- 27. Intelsat Satellite LLC, a limited liability company organized under the laws of Delaware.
- 28. Intelsat Subsidiary (Gibraltar) Limited, a company organized under the laws of Gibraltar.
- 29. Intelsat UK Financial Services Ltd., a company organized under the laws of England and Wales.
- 30. Intelsat USA License LLC, a limited liability company organized under the laws of Delaware.
- 31. Intelsat USA Sales LLC, a limited liability company organized under the laws of Delaware.
- 32. Horizons-3 License LLC, a limited liability company organized under the laws of Delaware.
- 33. Mountainside Teleport LLC, a limited liability company organized under the laws of Delaware.
- 34. PanAmSat Europe Corporation, a corporation organized under the laws of Delaware.
- 35. PanAmSat International Holdings, LLC, a limited liability company organized under the laws of Delaware.
- 36. PanAmSat Satellite Europe Limited, a company organized under the laws of England and Wales.
- 37. Pan Am Sat Sistemas de Comunicacao DTH do Brasil Ltda., a company organized under the laws of Brazil.

CERTIFICATIONS

- I, Stephen Spengler, Principal Executive Officer of Intelsat S.A. (the "Company") certify that:
 - 1. I have reviewed the Company's Annual Report on Form 20-F for the year ended December 31, 2017 (the "Report");
 - 2. Based on my knowledge, this Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this Report;
 - 3. Based on my knowledge, the financial statements, and other financial information included in this Report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this Report;
 - 4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this Report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this Report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this Report based on such evaluation; and
 - (d) Disclosed in this Report any change in the Company's internal control over financial reporting that occurred during the period covered by this Report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
 - 5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: February 26, 2018	/s/ Stephen Spengler
	Stephen Spengler
	Principal Executive Officer

CERTIFICATIONS

- I, Jacques Kerrest, Executive Vice President and Principal Financial Officer of Intelsat S.A. (the "Company") certify that:
 - 1. I have reviewed the Company's Annual Report on Form 20-F for the year ended December 31, 2017 (the "Report");
 - 2. Based on my knowledge, this Report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this Report;
 - 3. Based on my knowledge, the financial statements, and other financial information included in this Report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this Report;
 - 4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this Report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this Report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this Report based on such evaluation; and
 - (d) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the period covered by this Report that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
 - 5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: February 26, 2018

/s/ Jacques Kerrest

Jacques Kerrest

Executive Vice President & Principal Financial Officer

CERTIFICATION BY CHIEF EXECUTIVE OFFICER Pursuant To 18 U.S.C. Section 1350, As Adopted Pursuant To Section 906 of the Sarbanes-Oxley Act Of 2002

Pursuant to 18 U.S.C. § 1350, the undersigned officer of Intelsat S.A. (the "Company") hereby certifies that to such officer's knowledge, the Company's Annual Report on Form 20-F for the year ended December 31, 2017 (the "Report") fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 26, 2018	/s/ Stephen Spengler		
• ,	Stephen Spengler		
	Chief Executive Officer		

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and is not being filed as part of the Report or as a separate disclosure document.

CERTIFICATION BY CHIEF FINANCIAL OFFICER Pursuant To 18 U.S.C. Section 1350, As Adopted Pursuant To Section 906 of the Sarbanes-Oxley Act Of 2002

Pursuant to 18 U.S.C. § 1350, the undersigned officer of Intelsat S.A. (the "Company") hereby certifies that to such officer's knowledge, the Company's Annual Report on Form 20-F for the year ended December 31, 2017 (the "Report") fully complies with the requirements of Section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934 and that the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: February 26, 2018	/s/ Jacques Kerrest
	Jacques Kerrest
	Executive Vice President & Chief Financial Officer

The foregoing certification is being furnished solely pursuant to 18 U.S.C. § 1350 and is not being filed as part of the Report or as a separate disclosure document.

Consent of Independent Registered Public Accounting Firm

The Board of Directors Intelsat S.A.:

We consent to the incorporation by reference in the registration statement (No. 333-212417) on Form S-8 of Intelsat S.A. of our report dated February 26, 2018, with respect to the consolidated balance sheets of Intelsat S.A. as of December 31, 2016 and 2017, and the related consolidated statements of operations, comprehensive income (loss), changes in shareholders' deficit, and cash flows for each of the years in the three-year period ended December 31, 2017, and the related notes and financial statement Schedule II – Valuation and Qualifying Accounts (collectively, the consolidated financial statements), and the effectiveness of internal control over financial reporting as of December 31, 2017, which report appears in the December 31, 2017 annual report on Form 20-F of Intelsat S.A.

/s/ KPMG LLP

McLean, Virginia February 26, 2018