# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

## FORM 20-F/A

(Amendment No. 1)

(Marl	One) REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR 12(g) OF THE SECURITIES EXCHANGE ACT OF 1934
_	OR
$\boxtimes$	ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
	For the fiscal year ended December 31, 2016 OR
	TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
_	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 27-84-1600 (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:
	Title of Each Class Common Shares, nominal value \$0.01 per share  5.75% Series A mandatory convertible junior non-voting preferred shares, nominal value \$0.01 per share  Series A mandatory convertible junior non-voting preferred shares, nominal value \$0.01 per share
	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
Indica	e the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the Annual Report.
	118,028,651 common shares, nominal value \$0.01 per share
	e by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes No 🗵
	report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes Union Sections.
Indica	by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter perior registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes 🗵 No 🗆
Indica	tion S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes 🗵 No 🗆
Indica	by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or an emerging growth company. See definitions of "large accelerated filer," "accelerated ind "emerging growth company" in Rule 12b-2 of the Exchange Act (Check one):
- ,	Large accelerated filer □ Accelerated filer □ Emerging growth company □
	nerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying ynew or revised financial accounting standards+ provided pursuant to Section 13(a) of the Exchange Act.
	erm "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.
Indica	e by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:
	U.S. GAAP ⊠ International Financial Reporting Standards as issued by the International Accounting Standards Board □
	er" has been checked in response to the previous question indicate by check mark which financial statement item the registrant has elected to follow. Item 17 🗆 Item 18 🗀 s 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 🗵

#### **Explanatory Note**

This Amendment No. 1 to the Annual Report on Form 20-F filed with the Securities and Exchange Commission (the "SEC") on October 11, 2017 (this "Amendment") amends the Annual Report on Form 20-F for the fiscal year ended December 31, 2016 originally filed with the SEC on February 28, 2017 (the "Original Filing") by Intelsat S.A., a Luxembourg company ("we," "us," "our," "the Company" and "Intelsat" refer to Intelsat S.A. and its subsidiaries on a consolidated basis).

This Amendment is filed solely to correct an inadvertent error contained in the Report of Independent Registered Public Accounting Firm of KPMG LLP ("KPMG") relating to the audit of the Company's consolidated financial statements. The KPMG report appears on page F-2 of the Original Filing. Except for the correction in the introductory paragraph of the KPMG report as further described below, no other changes have been made to the Original Filing.

The introductory paragraph of the KPMG report, as revised in this Amendment on page F-2, corrects an inadvertent error in the Original Filing in the description of the financial statements and schedules audited. The KPMG report, as replaced in this Amendment, does not modify the unqualified opinion previously expressed in the Original Filing. Moreover, there have been no changes made to the consolidated financial statements in the Original Filing.

The Company is filing this Amendment solely to: (i) file the revised KPMG report, (ii) resubmit the unchanged consolidated financial statements of the Company to which the revised KPMG report relates, (iii) file KPMG's consent, and (iv) file currently dated certifications of our principal executive officer and our principal financial officer pursuant to Rule 12b-15 under the Securities and Exchange Act of 1934, as amended, and Sections 302 and 906 of the Sarbanes-Oxley Act of 2002.

Except as described above, no other changes have been made to the Original Filing. The Original Filing continues to speak as of the date of the Original Filing, and we have not modified or updated the disclosures contained therein to reflect any events which occurred at a date subsequent to the Original Filing date.

## PART III

## Item 18. Financial Statements

(a)(1) The following financial statements are included in this Amendment:

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(a)(2) The following Financial Statement Schedule is included in this Amendment:	
Schedule II—Valuation and Qualifying Accounts for the Vears Ended December 31, 2014, 2015 and 2016	F-63

## Item 19. Exhibits

The exhibits listed in the Exhibit Index of the Original Filing are incorporated by reference in this Amendment and the exhibits listed in the Exhibit Index are filed herewith.

## EXHIBIT INDEX

Exhibit No.	Document Description
12.3	Rule 13a-14(a)/15d-14(a) Certification of Principal Executive Officer.
12.4	Rule 13a-14(a)/15d-14(a) Certification of Principal Financial Officer.
13.3	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.
13.4	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.
15.2	Consent of KPMG LLP

Date: October 11, 2017

Date: October 11, 2017

## **SIGNATURES**

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

INTELSAT S.A	<b>.</b>
Ву	/S/ STEPHEN SPENGLER
	Stephen Spengler
	Chief Executive Officer
By	/s/ Jacques Kerrest
	Jacques Kerrest
E	executive Vice President and Chief Financial Officer

## Intelsat S.A. Index to Consolidated Financial Statements

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#### Report of Independent Registered Public Accounting Firm

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

We have audited the consolidated financial statements of Intelsat S.A. and subsidiaries as listed in the accompanying index. In connection with our audits of the consolidated financial statements, we also have audited the financial statement schedule as listed in the accompanying index. These consolidated financial statements and financial statement schedule are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements and financial statements schedule based on our audits.

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

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Intelsat S.A. and subsidiaries as of December 31, 2015 and 2016, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2016, in conformity with U.S. generally accepted accounting principles. Also in our opinion, the related financial statement schedule, when considered in relation to the basic consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Intelsat S.A.'s internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated February 28, 2017 expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG LLP

McLean, Virginia February 28, 2017

#### Report of Independent Registered Public Accounting Firm

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

We have audited Intelsat S.A.'s internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Intelsat S.A.'s management is responsible 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 Management's Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit 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 audit also included performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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.

In our opinion, Intelsat S.A. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2016, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Intelsat S.A. and subsidiaries as of December 31, 2015 and 2016, and the related consolidated statements of operations, comprehensive income (loss), shareholders' deficit, and cash flows for each of the years in the three-year period ended December 31, 2016 and our report dated February 28, 2017 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

McLean, Virginia February 28, 2017

## INTELSAT S.A.

## CONSOLIDATED BALANCE SHEETS (in thousands, except per share amounts)

	As of December 31, 2015		As of December 31, 2016	
ASSETS				
Current assets:				
Cash and cash equivalents	\$	171,541	\$	666,024
Receivables, net of allowance of \$37,178 in 2015 and \$54,744 in 2016		232,775		203,036
Prepaid expenses and other current assets		35,784		55,908
Total current assets		440,100		924,968
Satellites and other property and equipment, net	5	,988,317		6,185,842
Goodwill	2	,620,627		2,620,627
Non-amortizable intangible assets	2	,452,900		2,452,900
Amortizable intangible assets, net		440,330		391,838
Other assets		311,316		365,834
Total assets	\$ 12	,253,590	\$	12,942,009
LIABILITIES AND SHAREHOLDERS' DEFICIT				
Current liabilities:				
Accounts payable and accrued liabilities	\$	164,381	\$	215,987
Taxes payable		11,742		16,733
Employee related liabilities		35,361		50,178
Accrued interest payable		161,493		204,840
Deferred satellite performance incentives		19,411		23,455
Deferred revenue		108,779		157,684
Other current liabilities		63,275		64,786
Total current liabilities		564,442		733,663
Long-term debt, net of current portion	14	,611,379		14,198,084
Deferred satellite performance incentives, net of current portion		162,177		210,706
Deferred revenue, net of current portion	1	,010,242		906,744
Deferred income taxes		160,802		168,445
Accrued retirement benefits		195,385		186,284
Other long-term liabilities		169,516		148,081
Commitments and contingencies (Notes 15 and 16)				
Shareholders' deficit:				
Common shares; nominal value \$0.01 per share		1,076		1,180
5.75% Series A mandatory convertible junior non-voting preferred shares; nominal value \$0.01 per share;				
aggregate liquidation preference of \$172,500 (\$50 per share)		35		_
Paid-in capital		,133,891		2,156,911
Accumulated deficit	(6	,706,128)		(5,715,931)
Accumulated other comprehensive loss		(78,439)		(76,305)
Total Intelsat S.A. shareholders' deficit	(4	,649,565)		(3,634,145)
Noncontrolling interest		29,212		24,147
Total liabilities and shareholders' deficit	\$ 12	,253,590	\$	12,942,009

## INTELSAT S.A.

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

	Year Ended December 31, 2014	Year Ended December 31, 2015	Year Ended December 31, 2016
Revenue	\$2,472,386	\$ 2,352,521	\$2,188,047
Operating expenses:			
Direct costs of revenue (excluding depreciation and amortization)	348,348	328,501	341,147
Selling, general and administrative	197,407	199,412	231,397
Impairment of goodwill and other intangibles	_	4,165,400	_
Depreciation and amortization	679,351	687,729	694,891
Total operating expenses	1,225,106	5,381,042	1,267,435
Income (loss) from operations	1,247,280	(3,028,521)	920,612
Interest expense, net	944,787	890,279	938,501
Gain (loss) on early extinguishment of debt	(40,423)	7,061	1,030,092
Other expense, net	(2,593)	(6,201)	(2,105)
Income (loss) before income taxes	259,477	(3,917,940)	1,010,098
Provision for income taxes	22,971	1,513	15,986
Net income (loss)	236,506	(3,919,453)	994,112
Net income attributable to noncontrolling interest	(3,974)	(3,934)	(3,915)
Net income (loss) attributable to Intelsat S.A.	\$ 232,532	\$(3,923,387)	\$ 990,197
Cumulative preferred dividends	(9,917)	(9,919)	_
Net income (loss) attributable to common shareholders	\$ 222,615	\$(3,933,306)	\$ 990,197
Net income (loss) per common share attributable to Intelsat S.A.:			
Basic	\$ 2.09	\$ (36.68)	\$ 8.65
Diluted	\$ 1.99	\$ (36.68)	\$ 8.36

## INTELSAT S.A.

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

	Year Ended December 31, 2014	Year Ended December 31, 2015	Year Ended December 31, 2016
Net income (loss)	\$ 236,506	\$(3,919,453)	\$ 994,112
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	(109)	(248)	(5)
Reclassification adjustment for amortization of unrecognized actuarial loss included in			
net periodic pension costs, net of tax	6,510	5,244	2,223
Actuarial gain (loss) arising during the year, net of tax	(58,403)	22,943	(177)
Curtailment gain, net of tax of \$3.8 million	_	6,510	_
Marketable securities:			
Unrealized gains (losses) on investments, net of tax	258	(21)	285
Reclassification adjustment for realized gain on investments, net of tax	(390)	(340)	(192)
Other comprehensive income (loss)	(52,134)	34,088	2,134
Comprehensive income (loss)	184,372	(3,885,365)	996,246
Comprehensive income attributable to noncontrolling interest	(3,974)	(3,934)	(3,915)
Comprehensive income (loss) attributable to Intelsat S.A.	\$ 180,398	\$(3,889,299)	\$ 992,331

## INTELSAT S.A.

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

	Preferred		Common				Ac	cumulated Other	Total Intelsat S.A.		
	Shares (in millions)	Amount	Shares (in millions)	Amount	Paid-in Capital	Accumulated Deficit	Comprehensive Loss		Shareholders' Deficit		controlling interest
Balance, December 31, 2013	3.5	\$ 35	106.0	\$1,060	\$2,099,218	\$(3,015,273)	\$	(60,393)	\$ (975,353)	\$	40,686
Net income						232,532			232,532		3,974
Dividends paid to noncontrolling interests	_	_	_	_	_	_		_	_		(8,744)
Share-based compensation	_	_	0.7	7	26,382			_	26,389		_
Declaration of preferred stock dividend	_	_	_	_	(9,917)	_		_	(9,917)		_
Acquisition of non-controlling interests	_	_	_	_	2,215	_		_	2,215		(2,215)
Postretirement/pension liability adjustment, net of											
tax of (\$30.3) million	_	_	_	_	_	_		(52,002)	(52,002)		_
Other comprehensive loss, net of tax of \$0.1											
million								(132)	(132)		
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 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	96.0	(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

## INTELSAT S.A.

## CONSOLIDATED STATEMENTS OF CASH FLOWS (in thousands)

	Year Ended December 31, 2014	Year Ended December 31, 2015	Year Ended December 31, 2016
Cash flows from operating activities:		* (D.040, 450)	
Net income (loss)	\$ 236,506	\$ (3,919,453)	\$ 994,112
Adjustments to reconcile net income (loss) to net cash provided by operating activities:		4.165.400	
Impairment of goodwill and other intangibles Depreciation and amortization	679,351	4,165,400	694,891
Provision for doubtful accounts	2,306	7,432	24,591
Foreign currency transaction (gain) loss	6,560	11,374	(3,300)
Loss on disposal of assets	927	16	20
Share-based compensation	22.494	25,768	23,222
Deferred income taxes	(12,646)	(9,348)	(9,737)
Amortization of discount, premium, issuance costs and related costs	22,256	20,119	24,622
(Gain) loss on early extinguishment of debt	40,423	(7,061)	(1,030,092)
Unrealized gains on derivative financial instruments	(22,790)	(24,024)	(764)
Amortization of actuarial loss and prior service credits for retirement benefits	10,147	7,899	3,361
Other non-cash items	166	75	1,186
Changes in operating assets and liabilities:	4 202	(0.4.6.40)	6.450
Receivables	1,382	(34,642)	6,478
Prepaid expenses and other assets	(22,331)	(25,780)	(51,321)
Accounts payable and accrued liabilities Accrued interest payable	7,598 (24,997)	1,542	35,850 47.065
Deferred revenue	108,545	(2) 51,805	(58,796)
Accrued retirement benefits	(26,019)	(20,707)	(9,385)
Other long-term liabilities	16,292	(28,111)	(8,497)
Net cash provided by operating activities	1,046,170	910,031	683,506
	1,040,170	310,031	005,500
Cash flows from investing activities:  Payments for satellites and other property and equipment (including capitalized interest)	(645,424)	(724,362)	(714,570)
Purchase of cost method investments	(645,424)	(25,000)	(4,000)
Capital contribution to unconsolidated affiliates		(23,000)	(10,340)
Other investing activities	174	8	(1,679)
Net cash used in investing activities	(645,250)	(749,354)	(730,589)
Cash flows from financing activities:	(043,230)	(743,334)	(730,303)
Proceeds from issuance of long-term debt	135,000	430,000	1,250,000
Repayments of long-term debt	(610,418)	(496,829)	(328,944)
Debt issuance costs	(010,410)	(430,023)	(38,393)
Payment of premium on early extinguishment of debt	(21,250)	_	(32)
Payments on tender, debt exchange and consent	_	_	(293,276)
Dividends paid to preferred shareholders	(9,919)	(9,919)	(4,959)
Other payments for satellites	<u> </u>	· — ·	(18,333)
Principal payments on deferred satellite performance incentives	(19,774)	(19,568)	(17,429)
Capital contribution from noncontrolling interest	12,209	_	_
Dividends paid to noncontrolling interest	(8,744)	(8,423)	(8,980)
Other financing activities	3,893	<u>1,753</u>	1,942
Net cash provided by (used in) financing activities	(519,003)	(102,986)	541,596
Effect of exchange rate changes on cash and cash equivalents	(6,560)	(9,297)	(30)
Net change in cash and cash equivalents	(124,643)	48,394	494,483
Cash and cash equivalents, beginning of period	247,790	123,147	171,541
Cash and cash equivalents, end of period	\$ 123,147	\$ 171,541	\$ 666,024
Supplemental cash flow information:	<del></del>		
Interest paid, net of amounts capitalized	\$ 970,345	\$ 894,465	\$ 870,370
Income taxes paid, net of refunds	37,805	26,324	22,687
Supplemental disclosure of non-cash investing activities:	0.,000	,	,
Accrued capital expenditures	\$ 80,621	\$ 82,208	\$ 127,008
Capitalization of deferred satellite performance incentives	27,681	16,800	69,909
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	<del>-</del>	_	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)

#### 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.

#### **Recent Developments**

On February 28, 2017, Intelsat entered into a combination agreement with WorldVu Satellites Limited ("OneWeb") (the "Combination Agreement") pursuant to which, and subject to the terms and conditions thereof, OneWeb will merge with and into Intelsat, with Intelsat being the surviving entity (the "Merger"). OneWeb is the builder of a new Low Earth Orbit ("LEO") global communications system.

Also on February 28, 2017, the Company entered into a share purchase agreement with SoftBank Group Corp. ("SoftBank") (the "Share Purchase Agreement") pursuant to which, and subject to the terms and conditions thereof, SoftBank will acquire common shares and nonvoting redeemable convertible preferred shares of the Company for aggregate cash consideration of \$1.7 billion (the "SoftBank Investment" and, together with the Merger, the "Transactions").

Under the terms of the Combination Agreement, at the effective time of the Merger, each common share of OneWeb issued and outstanding immediately prior to the effective time will be converted into the right to receive common shares of Intelsat. Intelsat's shareholders will retain the common shares of Intelsat that they currently hold. Based on the terms of the transactions announced on February 28, 2017, current Intelsat shareholders are expected to hold approximately 19% of the common shares of Intelsat following completion of the Transaction.

Consummation of the Merger pursuant to the Combination Agreement, and of the SoftBank Investment pursuant to the Share Purchase Agreement, are cross-conditioned on one another. Consummation of the Merger and the SoftBank Investment also are subject to Intelsat's subsidiaries completing certain debt exchange offers, as well as certain regulatory approvals and other customary closing conditions. The proceeds of the SoftBank Investment will be used in part to fund the cash payments to be made at closing of the Transactions to bondholders that participate in the exchange offers. The Combination Agreement and the Share Purchase Agreement (together, the "Transaction Agreements"), each provide that any party thereto may terminate such agreement if sufficient tenders are not received in the exchange offers within 90 days of the date of the agreements. Shareholders of the Company and shareholders of OneWeb have agreed to vote sufficient shares in favor of the Transactions in order to obtain the required shareholder approvals. The Company expects to complete the Transactions late in the third quarter of 2017.

There can be no assurance that the Transactions will be completed, or whether the terms will be amended from those described above.

#### **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	11 - 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 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 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 previously held undesignated interest rate swaps which matured in January 2016. The swaps were marked-to-market quarterly, with any change in fair value recorded as interest expense, net.

In December 2016, we accounted for a contingent put option embedded within Intelsat Connect Finance S.A.'s ("ICF's") 12  $\frac{1}{2}$ % Senior Notes due April 2022 (the "2022 ICF Notes") under FASB ASC Topic 815, *Derivatives and Hedging* ("FASB ASC 815"). We bifurcated the put option from the debt host instrument and recorded it as a derivative instrument in other long term liabilities in the accompanying consolidated balance sheet. We estimated the fair value of the embedded derivative on the issuance date, and we subsequently revalue the derivative at the end of each reporting period with any change in fair value recognized in interest expense, net.

### (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.

• In August 2015, the FASB issued ASU 2015-14, Revenue from Contracts with Customers (Topic 606): Deferral of the Effective Date, to defer the effective date of ASU 2014-09 by one year. Public entities

can now elect to defer implementation of ASU 2014-09 to interim and annual periods beginning after December 15, 2017. Additionally, ASU 2015-14 permits early adoption of the standard but not before the original effective date, i.e. annual periods beginning after December 15, 2016. The standard permits the use of either the retrospective or cumulative effect transition method.

- In February 2016, the FASB issued ASU 2016-08, *Revenue from Contracts with Customers (Topic 606): Principal versus Agent Considerations (Reporting Revenue Gross versus Net)*. The standard amends the principal versus agent guidance in ASU 2014-09 and clarifies that the analysis must focus on whether the entity has control of the goods or services before they are transferred to the customer.
- In April 2016, the FASB issued ASU 2016-10, Revenue from Contracts with Customers (Topic 606): Identifying Performance Obligations and
  Licensing. The standard amends the guidance in ASU 2014-09 about identifying performance obligations and accounting for licenses of
  intellectual property.
- In May 2016, the FASB issued ASU 2016-12, *Revenue from Contracts with Customers (Topic 606): Narrow-Scope Improvements and Practical Expedients*. The standard makes narrow-scope amendments to ASU 2014-09 and provides practical expedients to simplify the transition to the new standard and to clarify certain aspects of the standard.
- In December 2016, the FASB issued ASU 2016-20, Technical Corrections and Improvements to Topic 606, Revenue from Contracts with Customers. The standard affects certain narrow aspects of the guidance issued in ASU 2014-09.

We are still in the process of evaluating the impact that these standards will have on our consolidated financial statements and associated disclosures, and have not yet selected a transition method. Based on our initial assessment, we believe that the main changes from the new revenue standard will include: adjustments to the promised amount of consideration for effects of the time value of money for prepayment contracts with a significant financing component; capitalization of incremental costs for obtaining a contract; allocation of transaction price to all performance obligations in arrangements, irrespective of whether goods or services are provided before consideration is paid; changes to the accounting for contract modifications; and additional 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 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. ASU 2016-09 changes several aspects of accounting for share-based payment award transactions, including changes to accounting for income taxes and forfeitures. The ASU is effective for fiscal years beginning after December 15, 2016, and interim periods within those years for public business entities. We will adopt ASU 2016-09 in the first quarter of 2017 and do not expect the adoption of ASU 2016-09 to have a material impact 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, 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 2016-05 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. For the year ended December 31, 2016, the amendments in ASU 2016-18 would have resulted in a reclassification of \$480.2 million, currently presented as debt financing and restricted cash received and restricted cash used under supplemental disclosure of non-cash financing activities, to proceeds from issuance of long-term debt and repayments of long-term debt under cash flows from financing activities.

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 retained earnings on January 1, 2018. Based on our existing intercompany structure, we expect the benefit to retained earnings to be between \$4 million and \$10 million. The benefit relates to certain deferred intercompany gains/losses, mostly in connection with a series of intercompany transactions in 2011 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 expect the amendments in ASU 2017-04 to simplify the process of testing for goodwill impairment, if required.

#### **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, 2016, there were 118.0 million common shares issued and outstanding.

On May 1, 2016, each of our 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.

In 2014 and 2015, the shareholders of Intelsat S.A. declared a \$9.9 million dividend for each respective year to be paid to holders of our Series A Preferred Shares in four equal installments. The final installment of \$0.71875 per share was paid on May 2, 2016 to the holders of record as of April 15, 2016.

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

	(in thousands, except per share data or where otherwise noted)					d)
	Year Ended Year Ended			Year Ended		
Numerator:	Decer	nber 31, 2014	ресс	ember 31, 2015	Decen	nber 31, 2016
Net income (loss)	\$	236,506	\$	(3,919,453)	\$	994,112
Net income attributable to noncontrolling interest		(3,974)		(3,934)		(3,915)
Net income (loss) attributable to Intelsat S.A.		232,532		(3,923,387)		990,197
Less: Preferred Shares dividends declared		(9,917)		(9,919)		_
Net income (loss) attributable to common shareholders	\$	222,615	\$	(3,933,306)	\$	990,197
Numerator for Basic EPS—income/(loss) available to common						
shareholders	\$	222,615	\$	(3,933,306)	\$	990,197
Dilutive effect of Preferred shares		9,917		_		
Numerator for Diluted EPS	\$	232,532	\$	(3,933,306)	\$	990,197
Denominator:						
Basic weighted average shares outstanding (in millions)		106.5		107.2		114.5
Weighted average dilutive shares outstanding (in millions):						
Preferred shares (in millions)		9.6		_		3.2
Employee compensation related shares including options and						
restricted stock units (in millions)		0.6		<u> </u>		8.0
Diluted weighted average shares outstanding (in millions)		116.7		107.2		118.5
Basic net income (loss) per common share attributable to Intelsat S.A.	\$	2.09	\$	(36.68)	\$	8.65
Diluted net income (loss) per common share attributable to Intelsat S.A.	\$	1.99	\$	(36.68)	\$	8.36

Due to a net loss in the year ended December 31, 2015, 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 1.4 million, 5.1 million and 6.2 million (consisting of restricted share units and options to purchase common shares) for the years ended December 31, 2014, 2015 and 2016, 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 10.6 million as of December 31, 2016.

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, 2014, 2015 and 2016, we recorded compensation expense of \$22.5 million, \$25.8 million, and \$23.2 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 2016 was as follows:

	Number of Stock Options (in thousands)	Weighted Average Exercise price	Weighted Average remaining contractual term (in years)	Aggregate intrinsic value (in millions)
Outstanding at January 1, 2016	1,163	\$ 20.42		
Granted	1,500	3.70		
Modified—amended options(1)	923	3.77		
Modified—original options(1)	(923)	22.80		
Forfeited	(80)	3.77		
Expired	(292)	9.22		
Outstanding at December 31, 2016	2,291	\$ 3.82	7.6	<u> </u>
Exercisable at December 31, 2016	1,473	\$ 3.91	6.8	<u> </u>

 During the year ended December 31, 2016, 0.5 million stock options under the 2008 Equity Plan and 0.4 million stock options under the 2013 Equity Plan were amended in order to modify the exercise price to \$3.77 per option.

We measure the fair value of stock options at the date of grant using a Black-Scholes option pricing model. We granted 1.5 million stock options during the year ended December 31, 2016. These options vest over a service period of two or three years. The fair value was measured using the Black-Scholes option pricing model and the following assumptions were used: risk-free interest rates of 1.6% to 1.9%; dividend yield of 0.0%; expected volatility of 60%; and expected life of six to seven years. The weighted average grant date fair value of options granted during the year ended December 31, 2016 was \$2.25 per option.

The total intrinsic value of stock options exercised during the years ended December 31, 2014 and 2015 was \$2.6 million and \$0.3 million, respectively. No stock options were exercised during the year ended December 31, 2016. As of December 31, 2016, there was \$1.6 million of total unrecognized compensation cost related to unvested options, which is expected to be recognized over a weighted average period of 1.2 years.

During the years ended December 31, 2014, 2015 and 2016, we recorded compensation expense of \$3.0 million, \$0.8 million and \$2.6 million, respectively, including compensation expense from option modifications in 2014 and 2016, further described below. During the years ended December 31, 2014 and 2015, we received cash of \$1.0 million and \$0.2 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 the 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.

#### Anti-Dilution Option activity during 2016 was as follows:

Number of Stock Options (in thousands)			Weighted Average remaining contractual term (in years)	Aggre intrinsio (in mill	value
2,016	\$	18.00			
700		4.16			
(700)		18.00			
(406)		18.00			
1,610	\$	11.98	6.1	\$	_
1,610	\$	11.98	6.1	\$	
	Stock Options (in thousands)  2,016  700  (700)  (406)  1,610	Stock Options (in thousands)   Weighted A   Exercise	Stock Options (in thousands)         Weighted Average Exercise price           2,016         \$ 18.00           700         4.16           (700)         18.00           (406)         18.00           1,610         \$ 11.98	Number of Stock Options (in thousands)         Weighted Average Exercise price         Item (in years)           2,016         \$ 18.00           700         4.16           (700)         18.00           (406)         18.00           1,610         \$ 11.98	Number of Stock Options (in thousands)         Weighted Average Exercise price         Average remaining contractual term (in years)         Aggree intrinsic (in mill was)           2,016         \$ 18.00         \$ 18.00           700         4.16         \$ 18.00           (700)         18.00         \$ 18.00           (406)         18.00         \$ 11.98           1,610         \$ 11.98         6.1

(1) During the year ended December 31, 2016, 0.7 million anti-dilution stock options under the 2008 Equity Plan were amended in order to modify the exercise price to \$4.16 per option.

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, 2014, 2015 and 2016.

The total intrinsic value of anti-dilution options exercised during the year ended December 31, 2014 was \$0.6 million. During the year ended December 31, 2014, we recorded compensation expense associated with anti-dilution option awards of \$4.1 million related to 2014 option modifications further described below. No compensation expense was recorded for these awards during the year ended December 31, 2015. 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.

During the year ended December 31, 2014, we received cash of \$3.2 million from the exercise of anti-dilution options. There were no anti-dilution options exercised in 2015 or 2016.

#### 2014 Option modifications

During the year ended December 31, 2014, 1.9 million stock options, including 1.6 million anti-dilution options, were amended to (a) extend the expiration date by five years; and (b) extend the duration of exercisability from one year to three years after ceasing to be an employee of the company. We estimated an additional expense of \$2.52 per option resulting from the amendment, being the difference between the fair value of the amended option and the fair value of the original award before amendment. The fair value was measured using the Black-Scholes option pricing model and the following assumptions were used:

For the fair value of the amended options: risk-free interest rates of 1.3%; dividend yields of 0.0%; expected volatility of 45%; and expected life of 4.1 years.

For the fair value of the original award before amendment: risk-free interest rates of 0.3%; dividend yields of 0.0%; expected volatility of 45%; and expected life of 1.6 years.

All such options were fully vested and we recognized an additional compensation expense associated with such options of \$4.7 million during the year ended December 31, 2014, which has been included in the respective sections above.

#### 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 2016 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, 2016	2,880	\$ 16.13		
Granted	1,701	1.67		
Vested	(814)	15.70		
Forfeited	(173)	14.42		
Outstanding at December 31, 2016	3,594	\$ 9.52	1.4	\$ 9.6

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, 2014, 2015, and 2016 was \$17.45, \$11.64, and \$1.67, respectively. The total intrinsic value of time-based RSUs vested during the years ended December 31, 2014, 2015 and 2016 was \$8.6 million, \$8.0 million, and \$1.7 million, respectively. As of December 31, 2016, there was \$14.0 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, 2014, 2015, and 2016, we recorded compensation expense associated with these time-based RSUs of \$13.0 million, \$22.8 million, and \$17.9 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 2016 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, 2016	1,195	\$ 17.48		
Granted	1,186	0.94		
Cancelled	(461)	21.96		
Forfeited	(91)	5.62		
Outstanding at December 31, 2016	1,829	\$ 6.22	1.6	\$ 4.9

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, 2014, 2015, and 2016 was \$21.48, \$8.97, and \$0.94, respectively. As of December 31, 2016, there was \$1.4 million of total unrecognized compensation cost related to unvested performance-based RSUs, which is expected to be recognized over a weighted average period of 1.6 years.

Achievement of the adjusted EBITDA target for awards granted in 2014 and 2015 is not currently considered probable, therefore, no compensation cost associated with these awards (based on the adjusted EBITDA condition) was recognized during the years ended December 31, 2014 and 2015. We recorded compensation expense associated with the RSR portion of performance-based RSUs of \$2.4 million and \$2.2 million, during the years ended December 31, 2014 and 2015, respectively. Achievement of the adjusted EBITDA target for awards granted in 2016 is currently considered probable, and we recorded compensation expense associated with these awards (based on the adjusted EBITDA condition and the RSR portion of performance-based RSUs) of \$1.7 million during the year ended December 31, 2016.

#### **Note 6 Fair Value Measurements**

We have identified investments in marketable securities and interest rate financial 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 level within the fair value hierarchy (in thousands), excluding long-term debt (see Note 12—Long-Term Debt). We did not have any transfers between Level 1 and Level 2 fair value measurements during the year ended December 31, 2016.

		Fair Value Mea December	
Description	As of December 31, 2015	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)
<u>Assets</u>			
Marketable securities(1)	\$ 5,486	\$ 5,486	\$
Total assets	\$ 5,486	\$ 5,486	<u> </u>
<u>Liabilities</u>			
Undesignated interest rate swaps(2)	\$ 2,013	\$ —	\$ 2,013
Total liabilities	\$ 2,013	\$	\$ 2,013

		Fair Value Measurements at December 31, 2016				
Description	As of December 31, 2016	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)		
Assets		, <u> </u>				
Marketable securities(1)	\$ 5,381	\$ 5,381	<u> </u>	\$		
Total assets	\$ 5,381	\$ 5,381	\$ <u> </u>	\$ —		
<u>Liabilities</u>						
Put option embedded derivative(3)	\$ 1,496	\$ —	\$ —	\$ 1,496		
Total liabilities	\$ 1,496	<u> </u>	<u> </u>	\$ 1,496		

<sup>(1)</sup> 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 \$5.3 million at December 31, 2015 and \$5.0 million at December 31, 2016. We sold marketable securities with a cost basis of \$1.8 million during the year ended December 31, 2016 and recorded a gain on the sale of \$0.1 million, which was included within other expense, net in our consolidated statement of operations.

<sup>(2)</sup> The fair value of our interest rate financial derivative instruments reflects the estimated amounts that we would pay or receive to terminate the agreement at the reporting date, taking into account current interest rates, the market expectation for future interest rates and current creditworthiness of both the counterparties and ourselves. Observable inputs utilized in the income approach valuation technique incorporate identical contractual notional amounts, fixed coupon rates, periodic terms for interest payments and contract maturity. Although we have determined that the majority of the inputs used to value our derivatives fall within Level 2 of the fair value hierarchy, the credit valuation adjustments, if any, associated with our derivatives utilize Level 3 inputs, such as the estimates of the current credit spread, to evaluate the likelihood of default by us or our counterparties. We have assessed the significance of the inputs of the credit valuation adjustments to the overall valuation of our derivative positions and have

- determined that the credit valuation adjustments are not significant to the valuation of our derivatives. 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 contingent put option embedded within the 2022 ICF Notes 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**

#### (a) 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.

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 2017 will be approximately \$2.9 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 2017 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, 2016. 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):

	r Ended ber 31, 2014	r Ended oer 31, 2015	r Ended oer 31, 2016
Amortization of prior service credits reclassified from other comprehensive loss to net periodic pension benefit costs included in:	· ·	<u> </u>	
Direct costs of revenue (excluding depreciation and amortization)	\$ (68)	\$ (141)	\$ (3)
Selling, general and administrative	 (41)	 (107)	 (2)
Total	\$ (109)	\$ (248)	\$ (5)
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)	\$ 4,070	\$ 3,196	\$ 1,372
Selling, general and administrative	 2,440	 2,048	 851
Total	\$ 6,510	\$ 5,244	\$ 2,223
Realized (gain) loss on investments included in:			
Other expense, net	\$ (390)	\$ (340)	\$ (192)
Total	\$ (390)	\$ (340)	\$ (192)

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 E December		Year Ended December 31, 2016	
	Pension Benefits	Other Post- retirement Benefits	Pension Benefits	Other Post- retirement Benefits
Change in benefit obligation				
Benefit obligation at beginning of period	\$ 491,118	\$ 116,086	\$ 435,462	\$ 90,583
Service cost	780	70	_	_
Interest cost	18,734	4,592	16,183	3,363
Employee contributions	_	403	_	422
Plan amendments	_	(202)	_	_
Plan curtailments	(10,314)	_	_	_
Benefits paid	(30,204)	(3,401)	(30,454)	(3,310)
Actuarial (gain) loss	(34,652)	(26,965)	3,738	(8,161)
Benefit obligation at end of period	\$ 435,462	\$ 90,583	\$ 424,929	\$ 82,897
Change in plan assets				
Plan assets at beginning of period	\$ 339,619	\$ —	\$ 326,458	\$ —
Employer contributions	16,435	2,998	606	2,888
Employee contributions	_	403	_	422
Actual return on plan assets	607	_	20,829	_
Benefits paid	(30,203)	(3,401)	(30,454)	(3,310)
Plan assets at fair value at end of period	\$ 326,458	<del>\$</del> —	\$ 317,439	<del>\$</del> —
Accrued benefit costs and funded status of the plans	\$(109,004)	\$ (90,583)	\$(107,490)	\$ (82,897)
Accumulated benefit obligation	\$ 435,462		\$ 424,929	
Weighted average assumptions used to determine accumulated benefit obligation and accrued benefit costs				
Discount rate	4.53%	4.50%	3.82%	4.19%
Weighted average assumptions used to determine net periodic benefit costs				
Discount rate	4.01%	4.04%	4.53%	4.50%
Expected rate of return on plan assets	7.80%	_	7.80%	_
Rate of compensation increase	3.25%	_	_	_
Amounts in accumulated other comprehensive loss recognized in net periodic benefit cost				
Actuarial loss, net of tax	\$ 4,883	\$ 361	\$ 2,228	\$ (5)
Prior service credits, net of tax	(383)	135	(8)	3
Total	\$ 4,500	\$ 496	\$ 2,220	\$ (2)
Amounts in accumulated other comprehensive loss not yet recognized in net periodic benefit cost	<del></del>			
Actuarial loss, net of tax	\$ 84,866	\$ (4,320)	\$ 87,981	\$ (9,468)
Prior service credits, net of tax	(348)		(343)	
Total	\$ 84,518	\$ (4,320)	\$ 87,638	\$ (9,468)
Amounts in accumulated other comprehensive loss expected to be recognized in net				
periodic benefit cost in the subsequent year Actuarial loss	\$ (3,370)	¢	\$ (3,751)	¢
Prior service credits	\$ (3,370)	\$ —	\$ (3,751)	\$ —
	e (2.270)	8	<u> </u>	8
Total	\$ (3,370)	\$ 8	\$ (3,751)	\$ 8

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 putable 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 smoothly continuous 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, 2016, associated with this change in estimate was approximately \$3.6 million.

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 and 2016. Our December 31, 2016 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 (33% U.S. equities and 16% 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 65 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 Decemb	As of December 31, 2015		As of December 31, 2016	
	Target Allocation	Actual Allocation	Target Allocation	Actual Allocation	
Asset Category				<u> </u>	
Equity securities	49%	49%	49%	47%	
Debt securities	36%	34%	36%	34%	
Other securities	15%	17%	15%	19%	
Total	100%	100%	100%	100%	

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

	Fair Value Measurements at December 31, 2015		Fair Value Measurements at December 31, 2016	
Asset Category				,
Equity Securities				
U.S. Large-Cap(1)	\$	87,383	\$	80,698
U.S. Small/Mid-Cap(2)		22,121		22,184
World Equity Ex-US(3)		51,720		46,999
Fixed Income Securities				
Short Duration Bonds(4)		91,897		90,099
High Yield Bonds(5)		13,638		14,125
Emerging Market Fixed income (Non-US)(6)		4,463		4,100
Other Securities				
Hedge Funds(7)		15,913		15,880
Core Property Fund(8)		39,176		43,266
Income earned but not yet received		147		159
Total	\$	326,458	\$	317,510

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.
- 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.
- 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.

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):

	Year Ended December 31, 2014	Year Ended December 31, 2015	Year Ended December 31, 2016
Service cost	\$ 2,854	\$ 780	\$ —
Interest cost	19,904	18,734	16,183
Expected return on plan assets	(24,130)	(25,926)	(25,535)
Amortization of unrecognized prior service credits	(172)	(43)	_
Amortization of unrecognized net loss	10,319	7,911	3,370
Curtailment (gain) loss		(564)	_
Special termination benefit recognized	48	_	_
Total benefit	\$ 8,823	\$ 892	\$ (5,982)

We had accrued benefit costs at December 31, 2015 and 2016 of \$109.0 million and \$107.5 million, respectively, related to the pension benefits, of which \$0.6 million and \$0.6 million was recorded within other current liabilities, respectively, and \$108.4 million and \$106.9 million was recorded in other long-term liabilities, respectively.

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

	Year Ended December 31, 2014	Year Ended December 31, 2015	Year Ended December 31, 2016
Service cost	\$ 128	\$ 70	\$ —
Interest cost	4,562	4,592	3,363
Amortization of unrecognized net loss	_	596	(8)
Total costs	\$ 4,690	\$ 5,258	\$ 3,355

We had accrued benefit costs at December 31, 2015 and 2016 related to the other postretirement benefits of \$90.6 million and \$82.9 million, respectively, of which \$4.3 million and \$4.1 million were recorded in other current liabilities, respectively, and \$86.3 million and \$78.8 million were recorded in other long-term liabilities, respectively.

Depending upon our actual future health care claims, our actual costs may vary significantly from those projected above. As of December 31, 2015 and December 31, 2016, the assumed health care cost trend rate was 7.5%. This rate is assumed to decrease gradually to 4.5% by the year 2038 and to remain at that level of annual increase thereafter. Increasing the assumed health care cost trend rate by 1% each year would increase the other postretirement benefits obligation as of December 31, 2016 by \$8.3 million. Decreasing this trend rate by 1% each year would reduce the other postretirement benefits obligation as of December 31, 2016 by \$7.1 million. A 1% increase in the assumed health care cost trend rate would have increased the net periodic other postretirement benefits cost by \$0.4 million and a 1% decrease would have decreased the cost by \$0.3 million for 2016.

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
2017	\$ 35,308	\$ 4,111
2018	28,540	4,399
2019	28,076	4,673
2020	27,360	4,913
2021	27,319	5,133
2022 to 2026	133,822	27,483
Total	\$280,425	\$ 50,712

#### (b) Other Retirement Plans

In connection with the amendment of the defined benefit retirement plan amendment in the first quarter of 2015, the two defined contribution retirement plans we previously maintained for the benefit of our employees in the United States, were merged into a single plan, which is 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 these plans of \$9.2 million, \$6.8 million and \$10.3 million for the years ended December 31, 2014, 2015 and 2016, 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):

	As of December 31, 2015	As of December 31, 2016
Service charges:		
Billed	\$ 258,034	\$ 246,833
Unbilled	9,658	8,872
Other	2,261	2,075
Allowance for doubtful accounts	(37,178)	(54,744)
Total	\$ 232,775	\$ 203,036

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, 2015	As of December 31, 2016
Satellites and launch vehicles	\$ 9,810,941	\$10,363,771
Information systems and ground segment	641,741	727,929
Buildings and other	241,273	250,369
Total cost	10,693,955	11,342,069
Less: accumulated depreciation	(4,705,638)	(5,156,227)
Total	\$ 5,988,317	\$ 6,185,842

Satellites and other property and equipment, net as of December 31, 2015 and 2016 included construction-in-progress of \$1.5 billion and \$1.1 billion, respectively. These amounts relate primarily to satellites under construction and related launch services. Interest costs of \$86.3 million and \$98.3 million were capitalized during the years ended December 31, 2015 and 2016, respectively. Additionally, we recorded depreciation expense of \$611.1 million, \$627.5 million and \$646.4 million during the years ended December 31, 2014, 2015 and 2016, 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 32e, a customized payload positioned on a third-party satellite, was successfully launched on February 14, 2017. Intelsat 32e is the third of seven in our planned Intelsat Epic<sup>NG</sup> 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.

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 direct-to-home ("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 seven high-throughput satellites ("HTS") 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. In-orbit testing was completed, and the satellite entered into service in late January 2017. The Intelsat 33e antennas and reflectors have been deployed, and currently, there is no evidence of any impact to the communications payload. A Failure

Review Board was established to determine the cause of the anomaly. As of December 31, 2016, a final conclusion had not been reached as to the likely cause of the anomaly. We continue to participate in the on-going investigation. Intelsat 33e delivers 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 Epic<sup>NG</sup> 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.

On October 16, 2014, we successfully launched our Intelsat 30 satellite into orbit. This satellite establishes long-term capacity at the 95°W orbital location and is co-located with our Galaxy 3C satellite. Intelsat 30 entered into service in the fourth quarter of 2014. It provides capacity for DTH television service in Latin America via Ku-band platforms, as well as additional capacity for media, government and network services customers via C-band platforms.

#### (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

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, 2016 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, 2016, 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 Space Systems/Loral, LLC ("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.

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 has filed a notice of occurrence 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 satellite control processor ("SCP") in Boeing 601 ("BSS 601") satellites;
- failure of the on-board Xenon-Ion Propulsion System ("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
- electrical distribution anomalies on older SSL FS 1300 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, 2016, 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 BS 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, 2016, 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, 2016, 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's estimated end of service life is in the first quarter of 2019 and Intelsat 1R's estimated end of service life is in the second quarter of 2017. Galaxy 11 was redeployed following its replacement by Intelsat 34 in 2015. Intelsat 1R was redeployed following its replacement by Intelsat 14. The third BSS 702 HP satellite that we operated as of December 31, 2016, 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.

#### **Note 10 Investments**

We have an ownership interest in two entities that meet the criteria of a VIE, Horizons Satellite Holdings, LLC ("Horizons Holdings") and Horizons-3 Satellite LLC ("Horizons 3"). Horizons Holdings is discussed in further detail below, including our analyses of the primary beneficiary determination as required under FASB ASC Topic 810, Consolidation ("FASB ASC 810"). Horizons 3 is discussed in further detail below. Further, we have cost method investments where we have a minority investment, 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 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 and liabilities of Horizons Holdings were \$58.7 million and \$0.3 million as of December 31, 2015. Total assets were \$48.3 million as of December 31, 2016, while total liabilities as of the same date were a nominal amount.

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 \$6.6 million and \$6.2 million as of December 31, 2015 and 2016, 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, and 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 and the investment balance was \$19.1 million and \$31.1 million as of December 31, 2015 and 2016, 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 \$19.1 million and \$10.3 million during the years ended December 31, 2015 and 2016, 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 \$25.0 million and \$29.0 million as of December 31, 2015 and 2016, respectively. The balance as of December 31, 2016 consists of two minority investments.

#### (d) 2017 Investments

In 2017, we made total payments of \$16.0 million for two additional investments. We are in the process of evaluating how we will account for these investments.

# (e) Equity Attributable to Intelsat S.A. and Noncontrolling 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.	Noncontrolling	Total Shareholders'
Balance at January 1, 2015	Shareholders' \$ (776,268)	Interest \$ 33,701	Deficit (742,567)
Net income (loss)	(3,923,387)	3,934	(3,919,453)
Dividends paid to noncontrolling interests	(3,923,307)		
	25.021	(8,423)	(8,423)
Share-based compensation	25,921		25,921
Declaration of preferred stock dividend	(9,919)	_	(9,919)
Postretirement/pension liability adjustment	34,449	_	34,449
Other comprehensive income	(361)	_	(361)
Balance at December 31, 2015	\$(4,649,565)	\$ 29,212	\$ (4,620,353)
	Intelsat S.A. Shareholders'	Noncontrolling Interest	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)

# 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 December 31, 2015	As of December 31, 2016
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.

During the fourth quarter of 2015, our share price experienced a sustained reduction in trading values. Secondly, the trading values of our debt securities also showed sustained deterioration. This was also reflective of broader difficulties in the credit markets for high yield issuers. Finally, our annual business planning process which we undertook in the fourth quarter showed a decline in our forecasted results as compared to previous levels. Based on our examination of these and other qualitative factors at December 31, 2015, we concluded that further testing of goodwill was required. See below for details of testing performed.

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.

The second step of the process applied at December 31 2015, required us to calculate a hypothetical purchase allocation to compare the current implied value of the goodwill to the current carrying value of the goodwill. The implied fair value of goodwill is determined in the same manner as the amount of goodwill recognized in a business combination, which is the excess of the fair value of the reporting unit over the aggregate fair values of the individual assets, liabilities and identifiable intangibles. If the implied fair value of goodwill as described above exceeds recorded goodwill, there is no impairment. If the recorded goodwill exceeds the implied fair value, an impairment charge would be recorded for the excess. Furthermore, an impairment loss cannot exceed the amount of goodwill assigned to a reporting unit. After recognizing the impairment loss, the corresponding loss establishes a new basis in the goodwill. Subsequent reversals of goodwill impairment losses are not permitted under applicable accounting standards.

At December 31, 2015, 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. The result of our analysis resulted in a non-cash impairment charge of \$4.2 billion for the year ended December 31, 2015, which is included within impairment of goodwill and other intangibles in the consolidated statement of operations.

The analysis was performed using information available at that time and was based on estimates of fair values of the assets acquired and liabilities. We believe that the estimates and assumptions underlying the valuation methodologies are reasonable.

The assessment of qualitative factors requires significant judgment. Alternative interpretations of the qualitative factors could have resulted in a different conclusion as to whether it was not more likely than not that the fair value of our reporting unit was less than its carrying value. A different conclusion would require a more detailed quantitative analysis to be performed, which could, in future years, result in an additional impairment charge for goodwill.

#### (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.

At December 31, 2015 we determined the estimated fair value of our rights to operate at orbital locations by using the build-up method to determine 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, each of which is considered Level 3 input within the fair value hierarchy under FASB ASC 820.

The key assumptions used in estimating the fair values for our rights to operate at our orbital locations included: (i) market penetration leading to revenue growth, (ii) profit margin, (iii) duration and profile of the build-up period, (iv) estimated start-up costs and losses incurred during the build-up period and (v) 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 transactions relating to similar orbital locations, each of which is considered a Level 3 input within the fair value hierarchy under FASB ASC 820.

At December 31, 2015, we completed our analysis of our orbital locations in connection with the analysis of goodwill described above, and concluded that there was no impairment. At December 31, 2016, we updated our assessment based on an examination of qualitative factors and concluded that there was no impairment related to our orbital slots.

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.

The key assumptions used in our model to estimate the fair value of the Intelsat trade name include forecasted revenues, the tax rate and the discount rate. A change in the estimated tax rates or discount rate could result in future impairments. At December 31, 2015, we completed our analysis of the Intelsat trade name in connection with the analysis of goodwill, and it resulted in an impairment of our trade name intangible of \$5.2 million, which is included within goodwill and other intangibles in the consolidated statement of operations. At December 31, 2016, we updated our assessment based on an examination of qualitative factors and concluded that there was no impairment related to the Intelsat trade name.

The carrying amount and accumulated amortization of acquired intangible assets subject to amortization consisted of the following (in thousands):

	As	of December 31, 2015	•	As	of December 31, 2016	
	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Backlog and other	\$ 743,760	\$ (647,534)	\$ 96,226	\$ 743,760	\$ (669,045)	\$ 74,715
Customer relationships	534,030	(189,926)	344,104	534,030	(216,907)	317,123
Total	\$ 1,277,790	\$ (837,460)	\$ 440,330	\$ 1,277,790	\$ (885,952)	\$ 391,838

Intangible assets are amortized based on the expected pattern of consumption. We recorded amortization expense of \$68.2 million, \$60.2 million and \$48.5 million for the years ended December 31, 2014, 2015 and 2016, respectively.

Scheduled amortization charges for the intangible assets over the next five years are as follows (in thousands):

Year	Amount
<u>Year</u> 2017	\$42,254
2018	38,481
2019	34,351
2020	31,103
2021	28,635

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, 2014, 2015 and 2016 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, 2015		As of December 31, 2016			1, 2016		
	Ca	rrying Value	]	Fair Value	Ca	rrying Value	]	Fair Value
Intelsat Luxembourg:								
6.75% Senior Notes due June 2018	\$	475,000	\$	355,063	\$	500,000	\$	410,000
Unamortized prepaid debt issuance costs and discount on 6.75% Senior Notes		(2,066)				(5,746)		
7.75% Senior Notes due June 2021		2,000,000		930,000		2,000,000		640,000
Unamortized prepaid debt issuance costs on 7.75% Senior Notes		(19,602)				(16,588)		
8.125% Senior Notes due June 2023		1,000,000		450,000		1,000,000		295,000
Unamortized prepaid debt issuance costs on 8.125% Senior Notes	_	(10,870)				(9,764)		
Total Intelsat Luxembourg obligations		3,442,462		1,735,063		3,467,902	_	1,345,000
Intelsat Connect Finance:								
12.5% Senior Notes due April 2022	\$	_	\$	_	\$	731,884	\$	475,725
Unamortized prepaid debt issuance costs and discount on 12.5% Senior Notes		_		_		(297,257)		_
Total Intelsat Connect Finance obligations		_				434,627		475,725
Intelsat Jackson:			_		_			
9.5% Senior Secured Notes due September 2022	\$	_	\$	_	\$	490,000	\$	543,900
Unamortized prepaid debt issuance costs and discount on 9.5% Senior Secured Notes		_	Ť	_	Ť	(20,243)	Ť	
8.00% Senior Secured Notes due February 2024		_		_		1,349,678		1,383,420
Unamortized prepaid debt issuance costs and premium on 8.0% Senior Secured Notes		_		_		(6,005)		<u> </u>
7.25% Senior Notes due October 2020		2,200,000		1,919,500		2,200,000		1,716,000
Unamortized prepaid debt issuance costs and premium on 7.25% Senior Notes		(8,248)		· ·		(6,756)		· · ·
7.25% Senior Notes due April 2019		1,500,000		1,368,750		1,500,000		1,260,000
Unamortized prepaid debt issuance costs on 7.25% Senior Notes		(8,203)		· ·		(5,886)		· · ·
7.5% Senior Notes due April 2021		1,150,000		1,000,500		1,150,000		879,750
Unamortized prepaid debt issuance costs on 7.5% Senior Notes		(8,137)		_		(6,828)		_
6.625% Senior Notes due December 2022		1,275,000		803,250				_
Unamortized prepaid debt issuance costs and premium on 6.625% Senior Notes		20,428		_		_		_
5.5% Senior Notes due August 2023		2,000,000		1,560,000		2,000,000		1,340,000
Unamortized prepaid debt issuance costs on 5.5% Senior Notes		(16,719)		_		(14,900)		_
Senior Secured Credit Facilities due June 2019		3,095,000		2,944,274		3,095,000		3,013,756
Jackson Revolver		_		_		_		_
Unamortized prepaid debt issuance costs and discount on Senior Secured Credit Facilities and Jackson Revolver		(30,204)	_			(21,682)		
Total Intelsat Jackson obligations		11,168,917		9,596,274		11,702,378		10,136,826
Eliminations:								
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)
Unamortized prepaid debt issuance costs on 7.75% Senior Notes		_		_		8,121		
8.125% Senior Notes due June 2023 owned by Intelsat Connect Finance		_		_		(111,663)		(32,941)
Unamortized prepaid debt issuance costs on 8.125% Senior Notes		_		_		1,090		
Unamortized prepaid debt issuance costs and discount on 12.5% Senior Notes		_		_		71,877		_
Total eliminations:						(1,406,823)		(676,382)
Total Intelsat S.A. long-term debt	\$	14,611,379	\$	11,331,337	\$	14,198,084	\$	11,281,169
Less:	<del>-</del>	, , , , <u>, , , , , , , , , , , , , , , </u>	÷	, ,- ,-	÷		_	
Current portion of long-term debt		_				_		
Total long-term debt, excluding current portion	\$	14,611,379			\$	14,198,084		
Total Tong-term acot, excluding current portion	Ψ	17,011,3/3			Ψ	17,130,004		

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.

In April 2015, the FASB issued ASU 2015-03, *Interest—Imputation of Interest (Subtopic 835-30)*, to simplify the presentation of debt issuance costs. The amendments in this update require that debt issuance costs related to a recognized debt liability are presented in the balance sheet as a direct deduction from the carrying value of that debt liability. ASU 2015-03 is effective for interim and annual periods beginning after December 15, 2015 on a retrospective basis with early adoption allowed. Additionally, in the third quarter of 2015, the FASB issued an amendment to this update to simplify the presentation of debt issuance costs to include line-of-credit arrangements. We adopted the amendments in the fourth quarter of 2015. The adoption of ASU 2015-03 had the effect of a reduction in each of our other assets and long-term debt, net of current portion of \$121.7 million as of December 31, 2015.

Required principal repayments of long-term debt over the next five years and thereafter as of December 31, 2016 are as follows (in thousands):

Year	Amount	
<u>Year</u> 2017	\$	
2018	97,430	0
2019	4,595,000	)
2020	2,200,000	0
2021	2,170,832	2
2022 and thereafter	5,459,899	9
Total principal repayments	14,523,161	1
Unamortized discounts, premium and prepaid issuance costs	(325,077	7)
Total Intelsat S.A. long-term debt	\$ 14,198,084	4

# 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 3/4% Senior Notes due 2018 (the "2018 Luxembourg Notes") for an equal aggregate principal amount of newly issued unsecured 12 1/2% 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. Accordingly, we do not expect the Second 2018 Luxembourg Exchange to have any material impact on our consolidated balance sheet or income statement.

#### 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 the Intercompany Loan described below under—2015 Debt Transactions—Significant Intercompany Transaction.

# 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 have determined the transaction will be accounted for as a modification and not as an extinguishment of debt under ASU 470, *Debt*. As a result, the fees paid to bondholders, including the consent payment, will be 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  $12 \frac{1}{2}\%$  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, *Debt*. 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, *Debt*. 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, *Debt.* 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.

#### 2015 Debt Transactions

#### 2015 Intelsat Luxembourg Notes Repurchases

During the fourth quarter of 2015, we repurchased \$25.0 million in aggregate principal amount of 2018 Luxembourg Notes. In connection with these repurchases, we recognized a gain on early extinguishment of debt of \$7.1 million in the fourth quarter of 2015, consisting of the difference between the carrying value of the debt purchased and the total cash amount paid, and a write-off of unamortized debt issuance costs.

# 2015 Significant Intercompany Transaction

During the third quarter of 2015, Intelsat Jackson declared and paid a dividend of \$360 million in cash to its direct parent at the time, Intelsat Luxembourg, also one of our subsidiaries. Subsequent to the payment of the dividend, a subsidiary of Intelsat Luxembourg loaned an aggregate principal amount of \$360 million to Intelsat Jackson (the "Intercompany Loan") pursuant to a promissory note. During the first quarter of 2016, Intelsat Jackson prepaid in full all amounts outstanding under the Intercompany Loan, using a portion of the proceeds of the issuance of the 2024 Secured Jackson Notes described above.

# **Description of Indebtedness**

# (a) Intelsat Luxembourg

#### 6 3/4% Senior Notes due 2018

Intelsat Luxembourg had \$500.0 million in aggregate principal amount outstanding of the 2018 Luxembourg Notes. Following completion of the Second 2018 Luxembourg Exchange described above, \$96.7 million remained outstanding in January 2017. 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, 2016. \$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 the 2021 Luxembourg Notes, in whole or in part, prior to June 1, 2017 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.

Intelsat Luxembourg may redeem up to 40% of the aggregate principal amount of the 2021 Luxembourg Notes on or prior to June 1, 2016, with the net cash proceeds of one or more equity offerings by Intelsat Luxembourg or its direct or indirect parent, under the conditions 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, 2016. \$111.7 million principal amount were held by ICF. The 2023 Luxembourg Notes bear interest at 8  $\frac{1}{8}$ % 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.

Intelsat Luxembourg may redeem up to 40% of the aggregate principal amount of the 2023 Luxembourg Notes on or prior to June 1, 2016, with the net cash proceeds of one or more equity offerings by Intelsat Luxembourg or its direct or indirect parent, under the conditions 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.

# (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, 2016. The 2022 ICF Notes bear interest at  $12 \frac{1}{2}\%$  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, 2016. The 2022 Jackson Secured Notes bear interest at 9 ½% 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, 2016. 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, 2016. The 2020 Jackson Notes bear interest at 7  $\frac{1}{4}$ % 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 1/4% Senior Notes due 2019 and 7 1/2% Senior Notes due 2021

Intelsat Jackson had \$1.5 billion in aggregate principal amount of its 7  $\frac{1}{4}$ % Senior Notes due 2019 (the "2019 Jackson Notes") and \$1.15 billion aggregate principal amount of its 7  $\frac{1}{2}$ % Senior Notes due 2021 (the

"2021 Jackson Notes" and, together with the 2019 Jackson Notes, the "New Jackson Notes") outstanding at December 31, 2016. The New Jackson 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 New 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, 2016. The 2023 Jackson Notes bear interest at 5 ½% 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.

Intelsat Jackson may redeem up to 40% of the aggregate principal amount of the 2023 Jackson Notes prior to August 1, 2016, with the net cash proceeds of one or more equity offerings by Intelsat Jackson or its direct or indirect parent, under the conditions 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.

#### 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.

Up to \$350.0 million of the revolving credit facility is available for issuance of letters of credit. Additionally, up to \$70.0 million of the revolving credit facility is available for swingline loans. Both the face amount of any outstanding letters of credit and any swingline loans reduce availability under the revolving credit facility on a dollar for dollar basis. Intelsat Jackson is required to pay a commitment fee for the unused commitments under the revolving credit facility, if any, at a rate per annum of 0.375%.

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 rates 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 are (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 are determined as specified in the Intelsat Jackson Secured Credit Agreement, as amended by the Second Jackson Credit Agreement Amendment, and the LIBOR will not 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.

On December 22, 2016, Intelsat Jackson, Intelsat Luxembourg and ICF entered into a Joinder Agreement and a Release Agreement, which further amended the Intelsat Jackson Secured Credit Agreement. These agreements provided for the entry of ICF into the Intelsat Jackson Secured Credit Agreement, as amended, in place of Intelsat Luxembourg and the release of Intelsat Luxembourg from certain of its previous obligations thereunder.

As of December 31, 2016, Intelsat Jackson had \$432.8 million of undrawn capacity under its revolving credit facility. However, use of such capacity was subject to the covenants contained in its other debt agreements. As a result of the completion of senior secured note issuances in March, June and September, 2016, Intelsat Jackson currently has limited access to the undrawn capacity under the revolving credit facility, and has been relying for liquidity purposes, and intends to rely in the future, on a portion of the net proceeds of the March 2016 notes issuance. In January 2017 Intelsat Jackson permanently reduced the revolving credit commitments as defined in the Intelsat Jackson Secured Credit Agreement (defined above) from \$450 million to \$35 million.

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, 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 2.65 to 1.00 and a consolidated EBITDA to consolidated interest expense ratio of 2.20 to 1.00 as of December 31, 2016.

#### **Note 13 Derivative Instruments and Hedging Activities**

# **Interest Rate Swaps**

We are subject to interest rate risk primarily associated with our variable-rate borrowings. Interest rate risk is the risk that changes in interest rates could adversely affect earnings and cash flows. Specific interest rate risk includes: the risk of increasing interest rates on short-term debt; the risk of increasing interest rates for planned new fixed long-term financings; and the risk of increasing interest rates for planned refinancing using long-term fixed-rate debt.

At December 31, 2015, we held interest rate swaps with an aggregate notional amount of \$1.6 billion, which matured in January 2016. These swaps were entered into to economically hedge the variability in cash flow on a portion of the floating-rate loans under our senior secured credit facilities, but were not designated as hedges for accounting purposes.

# **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 ASC 815, and have recorded the embedded derivative at fair value on the consolidated balance sheet in "Other 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. There was no change in fair value between the issuance date and December 31, 2016. The fair value of the embedded derivative was \$1.5 million at the issuance date of the 2022 ICF Notes and at December 31, 2016.

The following table sets forth the fair value of our derivatives by category (in thousands):

Derivatives not designated as hedging instruments	Balance Sheets Location	Dec	ember 31, 2015	ember 31, 2016
Undesignated interest rate swaps	Other current liabilities	\$	2,013	\$ 
Put option embedded derivative	Other current liabilities			 1,496
Total derivatives		\$	2,013	\$ 1,496

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	Dece	r Ended ember 31, 2014	 nr Ended ember 31, 2015	Dece	r Ended ember 31, 2016
Undesignated interest rate swaps	Included in interest expense, net	\$	5,649	\$ 3,483	\$	
Put option embedded derivative	Included in interest expense, net		_	_		_
Total loss on derivative financial instruments		\$	5,649	\$ 3,483	\$	_

# **Note 14 Income Taxes**

The following table summarizes our total income (loss) before income taxes (in thousands):

	Year Ended December 31, 2014	Year Ended December 31, 2015	Year Ended December 31, 2016
Domestic income (loss) before income taxes	\$ 199,682	\$(3,966,322)	\$ 938,156
Foreign income before income taxes	59,795	48,382	71,942
Total income (loss) before income taxes	\$ 259,477	\$(3,917,940)	\$ 1,010,098

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 2014.

The provision for (benefit from) income taxes consisted of the following (in thousands):

	Year Ended December 31, 2014	December 31, December 31,	
Current income tax provision		·	
Domestic	\$ 2,306	\$ —	\$ (35)
Foreign	33,311	10,817	25,721
Total	35,617	10,817	25,686
Deferred income tax benefit:			
Domestic	\$ —	\$ —	\$ (80)
Foreign	(12,646)	(9,304)	(9,620)
Total	(12,646)	(9,304)	(9,700)
Total income tax provision (benefit):	\$ 22,971	\$ 1,513	\$ 15,986

The income tax provision (benefit) was different from the amount computed using the Luxembourg statutory income tax rate of 29.22% for the reasons set forth in the following table (in thousands):

	Year Ended December 31, 2014	Year Ended December 31, 2015	Year Ended December 31, 2016
Expected tax provision (benefit) at Luxembourg statutory income tax rate	\$ 75,819	\$(1,144,822)	\$ 295,150
Foreign income tax differential	40,099	42,339	51,787
Nontaxable interest income	(53,361)	(67,651)	_
Domestic financing activities	6,038	40,169	(8,279)
Change in tax rate	_	_	416,156
Tax deductible impairment charges in Luxembourg subsidiaries	_	(854,393)	(1,280,759)
Goodwill impairment	_	599,974	_
Changes in unrecognized tax benefits	1,229	(15,465)	(1,629)
Changes in valuation allowance	(24,147)	1,463,774	554,479
Tax effect of 2011 Intercompany Sale	(6,740)	(6,112)	(6,701)
Foreign tax credits	(2,147)	(2,171)	(5,480)
Research and development tax credits	(5,564)	(2,103)	(3,275)
Other	(8,255)	(52,026)	4,537
Total income tax provision (benefit)	\$ 22,971	\$ 1,513	\$ 15,986

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 loss for the year ended December 31, 2016. 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 GAAP 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 GAAP 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, 2015 and 2016 (in thousands):

	As of December 31, 2015	As of December 31, 2016
Long-term deferred taxes, net	\$ (160,802)	\$ (168,445)
Other assets	12,203	15,181
Net deferred taxes	\$ (148,599)	\$ (153,264)

The components of the net deferred tax liability were as follows (in thousands):

	As of December 31, 2015	As of December 31, 2016
Deferred tax assets:		
Accruals and advances	\$ 26,672	\$ 31,015
Amortizable intangible assets	739,058	17,549
Performance incentives	17,596	14,599
Customer deposits	17,771	20,664
Bad debt reserve	3,607	8,659
Accrued retirement benefits	72,520	67,988
Disallowed interest expense carryforward	111,038	109,575
Net operating loss carryforward	2,232,359	3,937,736
Tax credits	36,656	17,562
Other	14,646	16,491
Total deferred tax assets	3,271,923	4,241,848

	As of December 31, 2015	As of December 31, 2016
Deferred tax liabilities:		
Satellites and other property and equipment	(172,574)	(186,390)
Amortizable intangible assets	(30,788)	(379,653)
Non-amortizable intangible assets	(116,526)	(109,844)
Tax basis differences in investments and affiliates	(218,583)	(231,210)
Other	(21,040)	(72,524)
Total deferred tax liabilities	(559,511)	(979,621)
Valuation allowance	(2,861,011)	(3,415,491)
Total net deferred tax liabilities	\$ (148,599)	\$ (153,264)

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, 2015 and 2016, our consolidated balance sheets included a deferred tax asset in the amount of \$2.2 billion and \$3.9 billion, respectively, attributable to the future benefit from the utilization of certain net operating loss carryforwards. The reason for this increase is that during the year ending December 31, 2016, our Luxembourg subsidiaries recorded various impairment charges in their Luxembourg GAAP books. Due to our full valuation allowance on deferred tax assets in our Luxembourg subsidiaries, these impairment charges had no impact on our tax expense. In addition, our balance sheets as of December 31, 2015 and December 31, 2016 included \$46.3 million and \$28.7 million of deferred tax assets, respectively, attributable to the future benefit from the utilization of tax credit carryforwards. As of December 31, 2016, we had tax-effected U.S. federal, state and other foreign tax net operating loss carryforwards of \$56.4 million expiring, for the most part, between 2021 and 2036, and tax effected Luxembourg net operating loss carryforwards of \$3.9 billion without expiration. These Luxembourg net operating loss carryforwards were caused primarily by our interest expense, satellite depreciation and amortization and impairment charges under Luxembourg GAAP related to investments in subsidiaries, goodwill and other intangible assets. Our alternative minimum tax credit carryforward of \$8.9 million may be carried forward indefinitely, our foreign tax credit carryforward of \$17.2 million may be carried forward to years between 2023 and 2026, and the \$2.6 million research and development credit may be carried forward to 2036.

Our valuation allowance as of December 31, 2015 and 2016 was \$2.9 billion and \$3.4 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.

The following table summarizes the activity related to our unrecognized tax benefits (in thousands):

	2015	2016
Balance at January 1	\$ 67,135	\$40,248
Increases related to current year tax positions	3,237	2,301
Increases related to prior year tax positions	962	1,530
Decreases related to prior year tax positions	(1,068)	(878)
Expiration of statute of limitations for the assessment of taxes	(30,018)	(7,034)
Balance at December 31	\$ 40,248	\$36,167

As of December 31, 2015 and December 31, 2016 our gross unrecognized tax benefits were \$40.2 million and \$36.2 million, respectively (including interest and penalties), of which \$29.6 million and \$27.9 million, respectively, if recognized, would affect our effective tax rate. As of December 31, 2015 and 2016, we had recorded reserves for interest and penalties in the amount of \$5.0 million and \$3.1 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, 2016, the change in the balance of unrecognized tax benefits consisted of an increase of \$2.3 million related to current tax positions, an increase of \$1.5 million related to prior tax positions, a decrease of \$0.8 million related to prior tax positions and due to a settlement of an audit, and a decrease of \$7.0 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, 2010. 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 2016, we received a notice of proposed audit changes with no material assessment.

# **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, 2016 and the expected year of payment are as follows (in thousands):

	Cons	Satellite truction and Launch bligations	Per	Satellite rformance ncentive bligations	Sar Co	orizons-3 tellite LLC ontribution ligations(1)	Operating Leases	Sublease Rental Income	stomer and Vendor Contracts	Total
2017	\$	482,546	\$	44,878	\$	21,700	\$ 14,304	\$ (410)	\$ 118,672	\$ 681,690
2018		234,238		34,147		36,400	13,795	(407)	47,327	365,500
2019		121,925		32,224		4,600	13,597	(355)	41,157	213,148
2020		32,269		32,150		11,700	13,128	(263)	17,336	106,320
2021		30,682		31,354		13,300	12,954	(48)	870	89,112
2022 and thereafter		47,814		187,459		74,700	106,357	(184)	_	416,146
Total contractual commitments	\$	949,474	\$	362,212	\$	162,400	\$ 174,135	\$(1,667)	\$ 225,362	\$ 1,871,916

<sup>(1)</sup> See Note 10(b)—Investments—Horizons-3 Satellite LLC.

#### (a) Satellite Construction and Launch Obligations

As of December 31, 2016, we had approximately \$949.5 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, 2016, 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, 2016, we had \$362.2 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, 2016, the total obligation related to operating leases, net of sublease income on leased facilities and rental income, was \$172.5 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, 2014, 2015 and 2016, was \$13.0 million, \$14.9 million and \$14.0 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, 2016, we had commitments under these customer and vendor contracts which totaled approximately \$225.4 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, 2014	Year Ended December 31, 2015	Year Ended December 31, 2016
North America	<del></del>	47%	49%
Europe	17%	15%	14%
Latin America and Caribbean	16%	15%	15%
Africa and Middle East	14%	14%	13%
Asia-Pacific	8%	9%	9%

Approximately 4%, 7% and 8% of our revenue was derived from our largest customer during each of the years ended December 31, 2014, 2015 and 2016, respectively. The ten largest customers accounted for approximately 26%, 29% and 31% of our revenue for the years ended December 31, 2014, 2015 and 2016, 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. In addition, effective first quarter 2015, certain revenues have been reclassified between transponder services and managed services across our customer sets in order to better reflect the nature of the underlying business.

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 Ende December 31,		Year Endec December 31, 2	-	Year Ended December 31, 2	_
On-Network Revenues						
Transponder services	\$ 1,779,458	72%	\$ 1,705,568	73%	\$ 1,561,108	71%
Managed services	415,269	17%	405,330	17%	414,758	19%
Channel	58,669	2%	38,872	2%	9,134	0%
Total on-network revenues	2,253,396	91%	2,149,770	91%	1,985,000	91%
Off-Network and Other Revenues						
Transponder, MSS and other off-network services	171,637	7%	160,063	7%	157,212	7%
Satellite-related services	47,353	2%	42,688	2%	45,835	2%
Total off-network and other revenues	218,990	9%	202,751	9%	203,047	9%
Total	\$ 2,472,386	100%	\$ 2,352,521	100%	\$ 2,188,047	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 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 (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 Satellite LLC 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										
2015	N	Iarch 31	Jı	ine 30	Sej	ptember 30	Dec	cember 31			
Revenue(1)	\$6	502,306	\$59	98,109	\$	580,847	\$	571,259			
Income (loss) from operations(1)		292,762	29	90,842		284,999	4,999 (3,897,1				
Net income (loss)		55,665	(	51,236		78,967	(4	,115,321)(3)			
Net income (loss) attributable to Intelsat S.A.		54,717	(	50,220		77,982	(4	,116,306)(3)			
Net income (loss) attributable to common shareholders		54,717	ļ	50,301 77,98				,116,306)(3)			
Net income (loss) per share attributable to Intelsat S.A.:											
Basic(2)	\$	0.51	\$	0.47	\$	0.73	\$	(38.29)			
Diluted(2)		0.47		0.47		0.66		(38.29)			

	Quarter Ended									
2016	March 31	June 30	September 30	December 31						
Revenue(1)	\$552,643	\$541,983	\$ 542,727	\$ 550,694						
Income from operations(1)	239,17	3 227,324	220,410	233,705						
Net income	16,29	2 117,412(4)	196,605(4)	663,803(4)						
Net income attributable to Intelsat S.A.	15,320	5 116,429(4)	195,622(4)	662,820(4)						
Net income attributable to common shareholders	15,320	5 116,429(4)	195,622(4)	662,820(4)						
Net income per share attributable to Intelsat S.A.:										
Basic(2)	\$ 0.14	4 \$ 1.02	\$ 1.66	\$ 5.62						
Diluted(2)	0.13	3 0.98	1.65	5.56						

- (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) Includes a \$4.2 billion impairment of goodwill and other intangibles.
- (4) 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.

# **Note 20 Supplemental Consolidating Financial Information**

On April 5, 2011, Intelsat Jackson completed an offering of \$2.65 billion aggregate principal amount of 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 wholly-owned subsidiaries of Intelsat Jackson (the "Subsidiary Guarantors").

On April 26, 2012, Intelsat Jackson completed an offering of \$1.2 billion aggregate principal amount of the 2020 Jackson Notes, 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 loss of \$52.1 million for the year ended December 31, 2014, and other comprehensive income of \$34.1 million and \$2.1 million for the years ended December 31, 2015 and 2016, respectively. 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, 2016 (in thousands)

	and Pa	at S.A. Other rent antors		Intelsat xembourg	C	Intelsat Connect Finance		Intelsat Jackson	S	Jackson ubsidiary uarantors	Non- uarantor bsidiaries		nsolidation and iminations	Coi	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 receivables						8,867		557,959			 302,118		(868,944)		
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 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	(3,0)	86,095)		(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	\$(3,0	84,490)	\$	36,642	\$	68,853	\$ 1	13,303,100	\$1	2,664,175	\$ 592,526	\$ (	10,638,797)	\$ 12	2,942,009
LIABILITIES AND SHAREHOLDERS' EQUITY (DEFICIT)															
Current liabilities:															
Accounts payable and accrued liabilities	\$	23,153	\$	_	\$	10,830	\$	221,564	\$	218,897	\$ 27,351	\$	(218,897)	\$	282,898
Accrued interest payable				13,158		2,287		189,395		3,146	_		(3,146)		204,840
Deferred satellite 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	5	02,355		366,589						2,183,616			(3,052,560)		
Total current liabilities	5.	25,508		379,747		13,117		653,803		2,648,503	30,432		(3,517,447)		733,663
Long-term debt, net of current portion		_	3	3,467,902		434,627	1	11,702,378		· ·	<u> </u>		(1,406,823)	14	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)	(3,6	11,178)	(3	3,818,20 <u>9</u> )	(	380,445)		(652,109)		2,858,778	542,112		1,449,873	_(	3,611,178)
Total liabilities and shareholders' equity	\$(3,0	84,490)	\$	36,642	\$	68,853	\$ 1	13,303,100	\$1	2,664,175	\$ 592,526	\$ (	10,638,797)	\$ 12	2,942,009

# INTELSAT S.A. AND SUBSIDIARIES CONDENSED CONSOLIDATING BALANCE SHEET AS OF DECEMBER 31, 2015 (in thousands)

	Intelsat S.A. and Other Parent Intelsat Guarantors Luxembourg		Intelsat Jackson		Jackson Subsidiary Guarantors		Non- Guarantor Subsidiaries		Consolidation and Eliminations		Co	nsolidated		
ASSETS														
Current assets:														
Cash and cash equivalents	\$	16,941	\$	760	\$	109,959	\$	89,641	\$	43,881		9,641)	\$	171,541
Receivables, net of allowance		_		_		173,869		173,638		58,906		3,638)		232,775
Prepaid expenses and other current assets		919		_		28,633		28,593		6,680		9,041)		35,784
Intercompany receivables				116,396		49,539				323,173	(489	0,108		
Total current assets		17,860		117,156		362,000		291,872		432,640	(783	1,428)		440,100
Satellites and other property and equipment, net		_		_		5,897,103		5,897,103		91,214	(5,897	7,103)		5,988,317
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	2,900)		2,452,900
Amortizable intangible assets, net		_		_		440,330		440,330		_	(440	),330)		440,330
Investment in affiliates	(4	,120,570)		(769,452)		139,983		139,983		_	4,610	0,056		_
Other assets		87				278,771		278,771		32,458	(278	3,77 <u>1</u> )		311,316
Total assets	\$ (4	,102,623)	\$	(652,296)	\$ 1	2,191,714	\$ 1	2,121,586	\$	556,312	\$ (7,86)	l,103)	\$ 1	2,253,590
LIABILITIES AND SHAREHOLDERS' EQUITY														
Current liabilities:														
Accounts payable and accrued liabilities	\$	28,622	\$	10	\$	154,247	\$	154,861	\$	29,053	\$ (155	5,309)	\$	211,484
Accrued interest payable		_		22,360		139,133		1,964		_	(:	1,964)		161,493
Deferred satellite performance incentives		_		_		19,411		19,411		_	(19	9,411)		19,411
Other current liabilities		_		_		168,261		166,248		3,793	(160	5,248)		172,054
Intercompany payables		489,108						2,038,908			(2,528	3,016)		
Total current liabilities		517,730		22,370		481,052		2,381,392		32,846	(2,870	),948)		564,442
Long-term debt, net of current portion		_		3,442,462	1	1,168,917		_		_		_	1	4,611,379
Deferred satellite performance incentives, net of current portion		_		_		162,177		162,177		_	(162	2,177)		162,177
Deferred revenue, net of current portion		_		_		1,010,019		1,010,019		223	(1,010	),019)		1,010,242
Deferred income taxes		_		_		150,283		150,283		10,519	(150	),283)		160,802
Accrued retirement benefits		_		_		195,170		195,170		215	(195	5,170)		195,385
Other long-term liabilities		_		_		161,420		161,420		8,096	(163	1,420)		169,516
Shareholders' equity (deficit):														
Common shares		1,076		7,202		3,114,981		5,558,066		24	(8,680	),273)		1,076
Preferred shares		35		_		_		_		_		_		35
Other shareholders' equity (deficit)	(4	,621,464)	_(	<u>4,124,330</u> )	(	4,252,305)		2,503,059		504,389	5,369	9,187	(	4,621,464)
Total liabilities and shareholders' equity	\$ (4	,102,623)	\$	(652,296)	\$ 1	2,191,714	\$ 1	2,121,586	\$	556,312	\$ (7,86)	1,103)	\$ 1	2,253,590

# 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	\$ —	\$ —	\$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 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		<u> </u>				(3,915)		(3,915)
Net income attributable to Intelsat S.A.	\$ 990,197	\$ 332,726	\$597,926	\$ 597,994	\$ 735,972	\$ 17,628	\$ (2,282,246)	\$ 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	<del>\$</del> —	\$ —	\$ 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 OPERATIONS FOR THE YEAR ENDED DECEMBER 31, 2014 (in thousands)

	Intelsat S.A. and Other Parent Guarantors	Intelsat Luxembourg	Intelsat Jackson	Jackson Subsidiary Guarantors	Non- Guarantor Subsidiaries	Consolidation and Eliminations	Consolidated
Revenue	\$ —	\$ —	\$ 2,281,331	\$ 2,281,348	\$ 592,317	\$ (2,682,610)	\$ 2,472,386
Operating expenses:							
Direct costs of revenue (exclusive of							
depreciation and amortization)	_	_	257,999	257,999	491,460	(659,110)	348,348
Selling, general and administrative	7,547	139	132,379	131,874	57,493	(132,025)	197,407
Depreciation and amortization	_	_	644,597	644,597	34,754	(644,597)	679,351
Total operating expenses	7,547	139	1,034,975	1,034,470	583,707	(1,435,732)	1,225,106
Income (loss) from operations	(7,547)	(139)	1,246,356	1,246,878	8,610	(1,246,878)	1,247,280
Interest expense, net	10,153	274,253	660,763	6,605	(382)	(6,605)	944,787
Loss on early extinguishment of debt	_	_	(40,423)	_	_	_	(40,423)
Subsidiary income	250,281	545,402	14,729	14,729	_	(825,141)	_
Other income (expense), net	2	_	2,864	2,770	(5,461)	(2,768)	(2,593)
Income before income taxes	232,583	271,010	562,763	1,257,772	3,531	(2,068,182)	259,477
Provision for income taxes	53	_	17,361	17,268	5,557	(17,268)	22,971
Net income (loss)	232,530	271,010	545,402	1,240,504	(2,026)	(2,050,914)	236,506
Net income attributable to noncontrolling interest	_	_	_	_	(3,974)		(3,974)
Net income (loss) attributable to Intelsat S.A.	232,530	271,010	545,402	1,240,504	(6,000)	(2,050,914)	232,532
Cumulative preferred dividends	(9,917)						(9,917)
Net income (loss) attributable to common shareholders	\$ 222,613	\$ 271,010	\$ 545,402	\$ 1,240,504	\$ (6,000)	\$ (2,050,914)	\$ 222,615

# 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 intercompany loans	4,895	_	_			359,237	(364,132)	· - 1
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 affiliates	_	_	_			(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)
Disbursements for intercompany loans	_	_	_	(364,132)	(12,438)	_	376,570	
Payment of premium on early extinguishment of debt	_	_	_	(32)	` <i>_</i> ′	_		(32)
Debt issuance costs	_	_	(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 shareholders	(4,959)	_	_		_	_	_	(4,959)
Other payments for satellites	· — ·	_	_	(18,333)	(18,333)	_	18,333	(18,333)
Capital contribution from parent	_	_	300,050		96,658	36,742	(433,450)	
Dividends to shareholders	_	_	_	(269,700)	(524,327)	(8,980)	803,007	_
Principal payments on deferred satellite performance incentives	_	_	_	(17,429)	(17,429)	_	17,429	(17,429)
Dividends paid to noncontrolling interest	_	_	_			(8,980)	<u></u>	(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 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
, or period	<del>- 552</del>	<del>- 30,732</del>	= _5,565	55,225	- 12 1,000	<del>+ 10,010</del>	<del>+ (111,000</del> )	<del>+ + + + + + + + + + + + + + + + + + + </del>

# 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)	_	657,997	_
Dividend from affiliates	19,000	898,400	28,423	28,423	_	(974,246)	_
Purchase of cost method investment	_	_	(25,000)	(25,000)	_	25,000	(25,000)
Other investing activities			432	432	(424)	(432)	8
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)	_	_	_	<u> </u>	· — ·	(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 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

# INTELSAT S.A. AND SUBSIDIARIES CONDENSED CONSOLIDATING STATEMENT OF CASH FLOWS FOR THE YEAR ENDED DECEMBER 31, 2014 (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:	\$ (1,366)	\$ (270,171)	\$1,253,342	\$ 1,887,340	\$ 64,363	\$(1,887,338)	\$1,046,170
Cash flows from investing activities:							
Payments for satellites and other property and equipment							
(including capitalized interest)	_	_	(639,603)	(639,603)	(5,821)	639,603	(645,424)
Repayment from (disbursements for) intercompany loans	9,214	_	3,873	3,873	_	(16,960)	_
Investment in subsidiaries	(3,790)	_	(194)	(194)	_	4,178	_
Dividend from affiliates	8,300	279,400	33,943	33,943	_	(355,586)	_
Other investing activities			174	174		(174)	174
Net cash provided by (used in)investing activities	13,724	279,400	(601,807)	(601,807)	(5,821)	271,061	(645,250)
Cash flows from financing activities:							
Repayments of long-term debt	_	_	(586,000)	_	(24,418)	_	(610,418)
Payment of premium on early extinguishment of debt	_	_	(21,250)	_	· — 1	_	(21,250)
Proceeds from issuance of long-term debt	_	_	135,000	_	_	_	135,000
Proceeds from (repayment of) intercompany borrowing	(4,233)	_	(9,214)	_	360	13,087	_
Dividends paid to preferred shareholders	(9,919)	_		_	_	_	(9,919)
Capital contribution from parent		_	_	103,698	3,984	(107,682)	_
Dividends to shareholders	_	(8,300)	(279,400)	(1,473,781)	(33,943)	1,795,424	
Principal payments on deferred satellite performance incentives	_	_	(18,705)	(18,705)	(1,069)	18,705	(19,774)
Capital contribution from noncontrolling interest					12,209		12,209
Dividends paid to noncontrolling interest	_	_	_	_	(8,744)	_	(8,744)
Other financing activities	4,231		(338)	(338)		338	3,893
Net cash provided by (used in) financing activities	(9,921)	(8,300)	(779,907)	(1,389,126)	(51,621)	1,719,872	(519,003)
Effect of exchange rate changes on cash and cash equivalents			(1,085)	(1,063)	(5,473)	1,061	(6,560)
Net change in cash and cash equivalents	2,437	929	(129,457)	(104,656)	1,448	104,656	(124,643)
Cash and cash equivalents, beginning of period	3,792	139	193,090	167,800	50,769	(167,800)	247,790
Cash and cash equivalents, end of period	\$ 6,229	\$ 1,068	\$ 63,633	\$ 63,144	\$ 52,217	\$ (63,144)	\$ 123,147

# SCHEDULE II—VALUATION AND QUALIFYING ACCOUNTS

<u>Description</u>	Balance at Beginning of Period	Charged to Costs and Expenses (in thou	<b>Deductions</b>	Balance at End of Period
Year ended December 31, 2014:			,	
Allowance for doubtful accounts	\$ 35,288	\$ 2,306	\$ (2,420)	\$ 35,174
Year ended December 31, 2015:				
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

See accompanying notes to consolidated financial statements.

#### **CERTIFICATIONS**

- I, Stephen Spengler, Principal Executive Officer of Intelsat S.A. (the "Company") certify that:
  - 1. I have reviewed this Annual Report on Form 20-F/A of Intelsat S.A.;
  - 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; and
  - 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.

Date: October 11, 2017	/s/ Stephen Spengler
	Stephen Spengler
	Principal Executive Officer

#### **CERTIFICATIONS**

- I, Jacques Kerrest, Principal Financial Officer of Intelsat S.A. (the "Company") certify that:
  - 1. I have reviewed this Annual Report on Form 20-F/A of Intelsat S.A.;
  - 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; and
  - 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.

Date: October 11, 2017	/s/ Jacques Kerrest
	Jacques Kerrest
	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/A for the year ended December 31, 2016 (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: October 11, 2017	/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/A for the year ended December 31, 2016 (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: October 11, 2017	/s/ Jacques Kerrest
	Jacques Kerrest 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 reports dated February 28, 2017, with respect to the consolidated balance sheets of Intelsat S.A. as of December 31, 2015 and 2016, and the related consolidated statements of operations, comprehensive income (loss), shareholders' deficit, and cash flows for each of the years in the three-year period ended December 31, 2016, and related financial statement schedule, and the effectiveness of internal control over financial reporting as of December 31, 2016, which reports appear in the December 31, 2016 annual report on Form 20-F/A of Intelsat S.A.

/s/ KPMG LLP

McLean, Virginia October 11, 2017



#### Via EDGAR

United States Securities and Exchange Commission Division of Corporation Finance 100 F Street NE Washington, D.C. 20549 Attn: Terry French, Accounting Branch Chief

Re: Intelsat S.A.

Form 20-F for the fiscal year ended December 31, 2016

Filed February 28, 2017 File No. 1-35878

Dear Mr. French:

In connection with Intelsat S.A's ("Intelsat", "we", "us", or "our") Form 20-F filed with the Securities and Exchange Commission (the "Commission") as referenced above (the "Original Filing"), we are writing in response to the comment of the staff in the Division of Corporation Finance (the "Staff") of the Commission received by letter, dated September 28, 2017. For the convenience of the Staff's review, the Staff's comment is set forth below and indicated in bold, followed by our response. In addition to the response below, an amendment to the Original Filing (the "Amendment") has been filed today to address the Staff's comment.

# Form 20-F for the fiscal year ended December 31, 2016

# Report of Independent Registered Public Accounting Firm, Page F-2

We note your response to our comment and re-issue our comment as the audit report filed contains a significant omission. In the first sentence of the audit opinion, your auditors only identified the consolidated balance sheets of Intelsat S.A. and subsidiaries. Please amend your filing to include an audit report that clearly identifies all of the financial statements that are audited. Please refer to PCAOB Auditing Standards 3101.06-08. In addition the audit report should refer to the supplemental statement schedule included in the index at page F-1, as required in Article 12 of Regulation S-X.

# Response

We acknowledge the Staff's comment and respectfully advise the Staff that we have filed the Amendment solely to correct the inadvertent error contained in the introductory paragraph of the previously filed Report of Independent Registered Public Accounting Firm of KPMG LLP relating to the audit of the Company's consolidated financial statements, appearing on page F-2 of the Amendment, and the audit of the Company's financial statement schedule as listed in the accompanying index.

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Intelsat S.A.

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R.C.S. Luxembourg B 149970, VAT number LU 23667625

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If you have any questions, please do not hesitate to contact Jacques Kerrest at (703) 559-6869, Sajid Ajmeri, Vice President, Corporate & Securities at (703) 559-7601, or Andrew J. Brady at Skadden, Arps, Slate, Meagher & Flom LLP at (202) 371-7513.

Sincerely yours,

Intelsat S.A.

/s/ Jacques Kerrest

Jacques Kerrest Executive Vice President & Chief Financial Officer

cc: S. Bacica M. Bryan