
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**Form 10-K/A
(Amendment No. 1)**

(Mark One)

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED DECEMBER 31, 2018

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD FROM TO .

Commission file number: 333-31929

DISH DBS Corporation

(Exact name of registrant as specified in its charter)

Colorado

(State or other jurisdiction of incorporation or organization)

84-1328967

(I.R.S. Employer Identification No.)

**9601 South Meridian Boulevard
Englewood, Colorado**

(Address of principal executive offices)

80112

(Zip Code)

Registrant's telephone number, including area code: **(303) 723-1000**

Securities registered pursuant to Section 12(b) of the Act: **None**

Securities registered pursuant to Section 12(g) of the Act: **None**

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

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

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

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes No

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

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

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act.

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

The aggregate market value of the registrant's voting interests held by non-affiliates on June 30, 2018 was \$0.

As of March 1, 2019, the registrant's outstanding common stock consisted of 1,015 shares of common stock, \$0.01 par value per share.

The registrant meets the conditions set forth in General Instructions (I)(1)(a) and (b) of Form 10-K and is therefore filing this Amendment No. 1 to the Annual Report on Form 10-K with the reduced disclosure format.

DOCUMENTS INCORPORATED BY REFERENCE

The following documents are incorporated into this Form 10-K by reference: **None**

EXPLANATORY NOTE

This Amendment No. 1 on Form 10-K/A (“Amendment No. 1”) hereby amends the Annual Report on Form 10-K of DISH DBS Corporation (the “Company”) for the fiscal year ended December 31, 2018, as filed with the Securities and Exchange Commission (“SEC”) on March 7, 2019 (the “Original 10-K”). The sole purpose of this Amendment No. 1 is to provide a revised version of KPMG LLP’s (“KPMG”) opinion included in Part IV, Item 15 of the Original 10-K that includes a statement inadvertently omitted by KPMG from the previously filed version that confirms KPMG did not audit the Company’s internal control over financial reporting. In accordance with rules adopted by the SEC, the Company is not required to have an audit of its internal control over financial reporting. The changes made to KPMG’s opinion do not in any way change the conclusions expressed by KPMG in the opinion included in the Original 10-K.

As required by Rule 12b-15 under the Securities Exchange Act of 1934, as amended, this Amendment No. 1 includes new certifications from the Company’s Principal Executive Officer and Principal Financial Officer dated as of the date of filing this Amendment No. 1.

This Amendment No. 1 consists solely of the preceding cover page, this explanatory note, Part IV., Item 15., “Exhibits and Financial Statement Schedules,” in its entirety, the signature page, and the new certifications from the Company’s Principal Executive Officer and Principal Financial Officer.

This Amendment No. 1 speaks as of the date of the Original 10-K, does not reflect events that may have occurred after the date of the Original 10-K and does not modify or update in any way the disclosures made in the Original 10-K, except as described above. This Amendment No. 1 should be read in conjunction with the Original 10-K and with the Company’s subsequent filings with the SEC.

TABLE OF CONTENTS

PART II

Item 8.	Financial Statements and Supplementary Data	3
-------------------------	---	---

PART IV

Item 15.	Exhibits, Financial Statement Schedules	4
	Signatures	

PART II

Item 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA

The financial statements required to be filed pursuant to this Item 8 are appended to this report beginning on page F-1. An index of those financial statements is included in Part IV, Item 15 below.

PART IV

Item 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES

- (a) The following financial statements are presented in response to Part II, Item 8, under the heading “Financial Statements and Supplementary Data”:

(1) *Financial Statements*

	<u>Page</u>
Report of KPMG LLP, Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets at December 31, 2018 and 2017	F-3
Consolidated Statements of Operations and Comprehensive Income (Loss) for the years ended December 31, 2018, 2017 and 2016	F-4
Consolidated Statements of Changes in Stockholder’s Equity (Deficit) for the years ended December 31, 2016, 2017 and 2018	F-5
Consolidated Statements of Cash Flows for the years ended December 31, 2018, 2017 and 2016	F-6
Notes to Consolidated Financial Statements	F-7

(2) *Financial Statement Schedules*

None. All schedules have been included in the consolidated financial statements or notes thereto.

(3) *Exhibits*

<u>Exhibit No.</u>	<u>Description</u>
3.1(a)*	Articles of Incorporation of DISH DBS Corporation (incorporated by reference to Exhibit 3.4(a) to the Registration Statement on Form S-4 of DISH DBS Corporation, Registration No. 333-31929), as amended by the Certificate of Amendment of the Articles of Incorporation of DISH DBS Corporation, dated as of August 25, 2003 (incorporated by reference to Exhibit 3.1(b) to the Annual Report on Form 10-K of DISH DBS Corporation for the year ended December 31, 2003, Commission File No. 333-31929), and as further amended by the Amendment of the Articles of Incorporation of DISH DBS Corporation, effective December 12, 2008 (incorporated by reference to Exhibit 3.1 to the Current Report on Form 8-K of DISH DBS Corporation filed December 12, 2008, Registration No. 333-31929).
3.1(b)*	Bylaws of DISH DBS Corporation (incorporated by reference to Exhibit 3.4(b) to the Registration Statement on Form S-4 of DISH DBS Corporation, Registration No. 333-31929).
4.1*	Indenture, relating to the 7 7/8% Senior Notes due 2019, dated as of August 17, 2009 between DISH DBS Corporation and U.S. Bank National Association, as Trustee (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K of DISH Network Corporation filed August 18, 2009, Commission File No. 0-26176).
4.2*	Indenture, relating to the 5 1/8% Senior Notes due 2020, dated as of April 5, 2013, among DISH DBS Corporation, the guarantors named on the signature pages thereto and Wells Fargo Bank, National Association, as Trustee (incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K of DISH DBS Corporation filed April 5, 2013, Commission File No. 333-31929).
4.3*	Indenture, relating to the 6 3/4% Senior Notes due 2021, dated as of May 5, 2011, among DISH DBS Corporation, the guarantors named on the signature pages thereto and Wells Fargo Bank, National Association, as Trustee (incorporated by reference from Exhibit 4.1 to the Current Report on Form 8-K of DISH Network Corporation filed May 5, 2011, Commission File No. 0-26176).

- 4.4* [Indenture, relating to the 5 7/8% Senior Notes due 2022, dated as of May 16, 2012 among DISH DBS Corporation, the guarantors named on the signature pages thereto and Wells Fargo Bank, National Association, as Trustee \(incorporated by reference to Exhibit 4.2 to the Current Report on Form 8-K of DISH DBS Corporation filed May 16, 2012, Commission File No. 333-31929\).](#)
- 4.5* [Indenture, relating to the 5% Senior Notes due 2023, dated as of December 27, 2012 among DISH DBS Corporation, the guarantors named on the signature pages thereto and Wells Fargo Bank, National Association, as Trustee \(incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K of DISH DBS Corporation filed December 27, 2012, Commission File No. 333-31929\).](#)
- 4.6* [Indenture, relating to the 5 7/8% Senior Notes due 2024, dated as of November 20, 2014 among DISH DBS Corporation, the guarantors named on the signature pages thereto and U.S. Bank National Association, as Trustee \(incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K of DISH DBS Corporation filed November 21, 2014, Commission File No. 333-31929\).](#)
- 4.7* [Indenture, relating to the 7 3/4% Senior Notes due 2026, dated as of June 13, 2016 among DISH DBS Corporation, the guarantors named on the signature pages thereto and U.S. Bank National Association, as Trustee \(incorporated by reference to Exhibit 4.1 to the Current Report on Form 8-K of DISH DBS Corporation filed June 13, 2016, Commission File No. 333-31929\).](#)
- 4.8* [Supplemental Indenture relating to the 7 7/8% Senior Notes due 2019 \(incorporated by reference to Exhibit 4.10 to the Annual Report on Form 10-K of DISH DBS Corporation filed March 29, 2018, Commission File No. 333-31929\).](#)
- 4.9* [Supplemental Indenture relating to the 5 1/8% Senior Notes due 2020 \(incorporated by reference to Exhibit 4.11 to the Annual Report on Form 10-K of DISH DBS Corporation filed March 29, 2018, Commission File No. 333-31929\).](#)
- 4.10* [Supplemental Indenture relating to the 6 3/4% Senior Notes due 2021 \(incorporated by reference to Exhibit 4.12 to the Annual Report on Form 10-K of DISH DBS Corporation filed March 29, 2018, Commission File No. 333-31929\).](#)
- 4.11* [Supplemental Indenture relating to the 5 7/8% Senior Notes due 2022 \(incorporated by reference to Exhibit 4.13 to the Annual Report on Form 10-K of DISH DBS Corporation filed March 29, 2018, Commission File No. 333-31929\).](#)
- 4.12* [Supplemental Indenture relating to the 5% Senior Notes due 2023 \(incorporated by reference to Exhibit 4.14 to the Annual Report on Form 10-K of DISH DBS Corporation filed March 29, 2018, Commission File No. 333-31929\).](#)
- 4.13* [Supplemental Indenture relating to the 5 7/8% Senior Notes due 2024 \(incorporated by reference to Exhibit 4.15 to the Annual Report on Form 10-K of DISH DBS Corporation filed March 29, 2018, Commission File No. 333-31929\).](#)
- 4.14* [Supplemental Indenture relating to the 7 3/4% Senior Notes due 2026 \(incorporated by reference to Exhibit 4.16 to the Annual Report on Form 10-K of DISH DBS Corporation filed March 29, 2018, Commission File No. 333-31929\).](#)
- 10.1* [2002 Class B CEO Stock Option Plan \(incorporated by reference to Appendix A to DISH Network Corporation's Definitive Proxy Statement on Schedule 14A dated April 9, 2002\). **](#)

- 10.2* [Satellite Service Agreement, dated February 19, 2004, between SES Americom, Inc. and DISH Network Corporation \(incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q of DISH Network Corporation for the quarter ended March 31, 2004, Commission File No. 0-26176\).***](#)
- 10.3* [Amendment No. 1 to Satellite Service Agreement, dated March 10, 2004, between SES Americom, Inc. and DISH Network Corporation \(incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q of DISH Network Corporation for the quarter ended March 31, 2004, Commission File No. 0-26176\).***](#)
- 10.4* [Whole RF Channel Service Agreement, dated February 4, 2004, between Telesat Canada and DISH Network Corporation \(incorporated by reference to Exhibit 10.4 to the Quarterly Report on Form 10-Q of DISH Network Corporation for the quarter ended March 31, 2004, Commission File No. 0-26176\).***](#)
- 10.5* [Letter Amendment to Whole RF Channel Service Agreement, dated March 25, 2004, between Telesat Canada and DISH Network Corporation \(incorporated by reference to Exhibit 10.5 to the Quarterly Report on Form 10-Q of DISH Network Corporation for the quarter ended March 31, 2004, Commission File No. 0-26176\).***](#)
- 10.6* [Amendment No. 2 to Satellite Service Agreement, dated April 30, 2004, between SES Americom, Inc. and DISH Network Corporation \(incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q of DISH Network Corporation for the quarter ended June 30, 2004, Commission File No. 0-26176\).***](#)
- 10.7* [Second Amendment to Whole RF Channel Service Agreement, dated May 5, 2004, between Telesat Canada and DISH Network Corporation \(incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q of DISH Network Corporation for the quarter ended June 30, 2004, Commission File No. 0-26176\).***](#)
- 10.8* [Third Amendment to Whole RF Channel Service Agreement, dated October 12, 2004, between Telesat Canada and DISH Network Corporation \(incorporated by reference to Exhibit 10.22 to the Annual Report on Form 10-K of DISH Network Corporation for the year ended December 31, 2004, Commission File No. 0-26176\).***](#)
- 10.9* [Amendment No. 3 to Satellite Service Agreement, dated November 19, 2004 between SES Americom, Inc. and DISH Network Corporation \(incorporated by reference to Exhibit 10.24 to the Annual Report on Form 10-K of DISH Network Corporation for the year ended December 31, 2004, Commission File No. 0-26176\).***](#)
- 10.10* [Amendment No. 4 to Satellite Service Agreement, dated April 6, 2005, between SES Americom, Inc. and DISH Network Corporation \(incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q of DISH Network Corporation for the quarter ended June 30, 2005, Commission File No. 0-26176\).***](#)
- 10.11* [Amendment No. 5 to Satellite Service Agreement, dated June 20, 2005, between SES Americom, Inc. and DISH Network Corporation \(incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q of DISH Network Corporation for the quarter ended June 30, 2005, Commission File No. 0-26176\).***](#)
- 10.12* [Incentive Stock Option Agreement \(Form A\) \(incorporated by reference to Exhibit 99.1 to the Current Report on Form 8-K of DISH Network Corporation filed July 7, 2005, Commission File No. 0-26176\).**](#)
- 10.13* [Incentive Stock Option Agreement \(Form B\) \(incorporated by reference to Exhibit 99.2 to the Current Report on Form 8-K of DISH Network Corporation filed July 7, 2005, Commission File No. 0-26176\).**](#)
- 10.14* [Restricted Stock Unit Agreement \(Form A\) \(incorporated by reference to Exhibit 99.3 to the Current Report on Form 8-K of DISH Network Corporation filed July 7, 2005, Commission File No. 0-26176\).**](#)

- 10.15* [Restricted Stock Unit Agreement \(Form B\) \(incorporated by reference to Exhibit 99.4 to the Current Report on Form 8-K of DISH Network Corporation filed July 7, 2005, Commission File No. 0-26176\).**](#)
- 10.16* [Nonemployee Director Stock Option Agreement \(incorporated by reference to Exhibit 99.6 to the Current Report on Form 8-K of DISH Network Corporation filed July 7, 2005, Commission File No. 0-26176\).**](#)
- 10.17* [Separation Agreement between EchoStar Corporation and DISH Network Corporation \(incorporated by reference from Exhibit 2.1 to the Amendment No. 1 to the Form 10 of EchoStar Corporation filed December 12, 2007, Commission File No. 001-33807\).](#)
- 10.18* [Tax Sharing Agreement between EchoStar Corporation and DISH Network Corporation \(incorporated by reference from Exhibit 10.2 to the Amendment No. 1 to the Form 10 of EchoStar Corporation filed December 12, 2007, Commission File No. 001-33807\).](#)
- 10.19* [Employee Matters Agreement between EchoStar Corporation and DISH Network Corporation \(incorporated by reference from Exhibit 10.3 to the Amendment No. 1 to the Form 10 of EchoStar Corporation filed December 12, 2007, Commission File No. 001-33807\).](#)
- 10.20* [Intellectual Property Matters Agreement between EchoStar Corporation, EchoStar Acquisition L.L.C., Echosphere L.L.C., DISH DBS Corporation, EIC Spain SL, EchoStar Technologies L.L.C. and DISH Network Corporation \(incorporated by reference from Exhibit 10.4 to the Amendment No. 1 to the Form 10 of EchoStar Corporation filed December 12, 2007, Commission File No. 001-33807\).](#)
- 10.21* [Form of Satellite Capacity Agreement between EchoStar Corporation and DISH Network L.L.C. \(incorporated by reference from Exhibit 10.28 to the Amendment No. 2 to Form 10 of EchoStar Corporation filed December 26, 2007, Commission File No. 001-33807\).](#)
- 10.22* [Description of the 2008 Long-Term Incentive Plan dated December 22, 2008 \(incorporated by reference to Exhibit 10.42 to the Annual Report on Form 10-K of DISH Network Corporation for the year ended December 31, 2008, Commission File No. 0-26176\).**](#)
- 10.23* [DISH Network Corporation 2009 Stock Incentive Plan \(incorporated by reference to Appendix A to DISH Network Corporation's Definitive Proxy Statement on Form 14A filed September 19, 2014, Commission File No. 0-26176\).**](#)
- 10.24* [Amended and Restated DISH Network Corporation 2001 Nonemployee Director Stock Option Plan \(incorporated by reference to Appendix B to DISH Network Corporation's Definitive Proxy Statement on Form 14A filed March 31, 2009, Commission File No. 0-26176\).**](#)
- 10.25* [Amended and Restated DISH Network Corporation 1999 Stock Incentive Plan \(incorporated by reference to Appendix C to DISH Network Corporation's Definitive Proxy Statement on Form 14A filed March 31, 2009, Commission File No. 0-26176\).**](#)
- 10.26* [NIMIQ 5 Whole RF Channel Service Agreement, dated September 15, 2009, between Telesat Canada and EchoStar Corporation \(incorporated by reference from Exhibit 10.30 to the Annual Report on Form 10-K of EchoStar Corporation for the year ended December 31, 2009, Commission File No. 001-33807\).***](#)
- 10.27* [NIMIQ 5 Whole RF Channel Service Agreement, dated September 15, 2009, between EchoStar Corporation and DISH Network L.L.C. \(incorporated by reference from Exhibit 10.31 to the Annual Report on Form 10-K of EchoStar Corporation for the year ended December 31, 2009, Commission File No. 001-33807\).***](#)

- 10.28* [Professional Services Agreement, dated August 4, 2009, between EchoStar Corporation and DISH Network Corporation \(incorporated by reference from Exhibit 10.3 to the Quarterly Report on Form 10-Q of EchoStar Corporation for the quarter ended September 30, 2009, Commission File No. 001-33807\).***](#)
- 10.29* [Allocation Agreement, dated August 4, 2009, between EchoStar Corporation and DISH Network Corporation \(incorporated by reference from Exhibit 10.4 to the Quarterly Report on Form 10-Q of EchoStar Corporation for the quarter ended September 30, 2009, Commission File No. 001-33807\).](#)
- 10.30* [Amendment to Form of Satellite Capacity Agreement \(Form A\) between EchoStar Corporation and DISH Network L.L.C. \(incorporated by reference from Exhibit 10.34 to the Annual Report on Form 10-K of EchoStar Corporation for the year ended December 31, 2009, Commission File No. 001-33807\).](#)
- 10.31* [Amendment to Form of Satellite Capacity Agreement \(Form B\) between EchoStar Corporation and DISH Network L.L.C. \(incorporated by reference from Exhibit 10.35 to the Annual Report on Form 10-K of EchoStar Corporation for the year ended December 31, 2009, Commission File No. 001-33807\).](#)
- 10.32* [EchoStar XVI Satellite Capacity Agreement between EchoStar Satellite Services L.L.C. and DISH Network L.L.C. \(incorporated by reference from Exhibit 10.36 to the Annual Report on Form 10-K of EchoStar Corporation for the year ended December 31, 2009, Commission File No. 001-33807\).***](#)
- 10.33* [Cost Allocation Agreement, dated April 29, 2011, between EchoStar Corporation and DISH Network Corporation \(incorporated by reference from Exhibit 10.2 to the Quarterly Report on Form 10-Q of EchoStar Corporation for the quarter ended June 30, 2011, Commission File No. 001-33807\).](#)
- 10.34* [Settlement and Patent License between TiVo Inc. and DISH Network Corporation and EchoStar Corporation, dated as of April 29, 2011 \(incorporated by reference to Exhibit 10.9 to the Quarterly Report on Form 10-Q/A of EchoStar Corporation filed February 21, 2012, Commission File No. 001-33807\).***](#)
- 10.35* [QuetzSat-1 Transponder Service Agreement, dated November 24, 2008, between EchoStar 77 Corporation, a direct wholly-owned subsidiary of EchoStar Corporation, and DISH Network L.L.C. \(incorporated by reference to Exhibit 10.25 to the Annual Report on Form 10-K of EchoStar Corporation for the year ended December 31, 2009, Commission File No. 001-33807\).***](#)
- 10.36* [Receiver Agreement dated January 1, 2012 between Echosphere L.L.C. and EchoStar Technologies L.L.C. \(incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q of DISH Network Corporation for the quarter ended March 31, 2012, Commission File No. 0-26176\) ***](#)
- 10.37* [Broadcast Agreement dated January 1, 2012 between EchoStar Broadcasting Corporation and DISH Network L.L.C. \(incorporated by reference to Exhibit 10.2 to the Quarterly Report on Form 10-Q of DISH Network Corporation for the quarter ended March 31, 2012, Commission File No. 0-26176\) ***](#)
- 10.38* [Confidential Settlement Agreement and Release dated as of October 21, 2012 by and between Voom HD Holdings LLC and CSC Holdings, LLC, on the one hand, and DISH Network L.L.C., on the other hand, and for certain limited purposes, DISH Media Holdings Corporation, MSG Holdings, L.P., The Madison Square Garden Company and EchoStar Corporation \(incorporated by reference to Exhibit 10.1 to the Quarterly Report on Form 10-Q of DISH Network Corporation for the quarter ended September 30, 2012, Commission File No. 0-26176\).***](#)
- 10.39* [Description of the 2013 Long-Term Incentive Plan dated November 30, 2012 \(incorporated by reference to the Current Report on Form 8-K of DISH Network Corporation filed December 6, 2012, Commission File No. 0-26176\).**](#)

- 10.40* [Amendment to EchoStar XVI Satellite Capacity Agreement between EchoStar Satellite Services L.L.C. and DISH Network L.L.C. dated December 21, 2012 \(incorporated by reference to Exhibit 10.62 to the Annual Report on Form 10-K of DISH Network Corporation for the year ended December 31, 2012, Commission File No. 0-26176\),***](#)
- 10.41* [Form of Satellite Capacity Agreement between EchoStar Satellite Operating Corporation and DISH Operating L.L.C. \(incorporated by reference to Exhibit 10.3 to the Quarterly Report on Form 10-Q of DISH Network Corporation for the quarter ended March 31, 2014, Commission File No. 0-26176\),***](#)
- 10.42* [Share Exchange Agreement dated January 31, 2017, between DISH Network Corporation, DISH Network L.L.C., DISH Operating L.L.C., EchoStar Corporation, EchoStar Broadcasting Holding Parent L.L.C., EchoStar Broadcasting Holding Corporation, EchoStar Technologies Holding Corporation, and EchoStar Technologies L.L.C. \(incorporated by reference in Exhibit 10.1 to the Quarterly Report on Form 10-Q of DISH Network Corporation for the quarter ended March 31, 2017, Commission File No. 0-26176\),***](#)
- 10.43* [Description of the 2017 Long-Term Incentive Plan dated December 2, 2016 \(incorporated by reference to the Current Report on Form 8-K of DISH Network Corporation filed December 8, 2016, Commission File No. 0-26176\).**](#)
- 10.44* [Description of the 2019 Long-Term Incentive Plan dated August 17, 2018 \(incorporated by reference to the Current Report on Form 8-K of DISH Network Corporation filed August 23, 2018, Commission File No. 0-26176\).**](#)
- 31.1 [Section 302 Certification of Chief Executive Officer.](#)
- 31.2 [Section 302 Certification of Principal Financial Officer.](#)
- 32.1 [Section 906 Certification of Chief Executive Officer.](#)
- 32.2 [Section 906 Certification of Principal Financial Officer.](#)
- 101^ The following materials from the Annual Report on Form 10-K of DISH DBS Corporation for the year ended December 31, 2018, filed on March 7, 2019, formatted in eXtensible Business Reporting Language (“XBRL”): (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations and Comprehensive Income (Loss), (iii) Consolidated Statement of Changes in Stockholder’s Equity (Deficit), (iv) Consolidated Statements of Cash Flows, and (v) related notes to these financial statements.

Filed herewith.

* Incorporated by reference.

** Constitutes a management contract or compensatory plan or arrangement.

*** Certain portions of the exhibit have been omitted and separately filed with the Securities and Exchange Commission with a request for confidential treatment.

^ Previously filed with the Registrant’s Annual Report on Form 10-K filed on March 7, 2019 (File No. 333-31929).

INDEX TO CONSOLIDATED FINANCIAL STATEMENTS

	<u>Page</u>
Consolidated Financial Statements:	
Report of KPMG LLP, Independent Registered Public Accounting Firm	F-2
Consolidated Balance Sheets at December 31, 2018 and 2017	F-3
Consolidated Statements of Operations and Comprehensive Income (Loss) for the years ended December 31, 2018, 2017 and 2016	F-4
Consolidated Statements of Changes in Stockholder's Equity (Deficit) for the years ended December 31, 2016, 2017 and 2018	F-5
Consolidated Statements of Cash Flows for the years ended December 31, 2018, 2017 and 2016	F-6
Notes to Consolidated Financial Statements	F-7

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Stockholder and Board of Directors
DISH DBS Corporation:

Opinion on the Consolidated Financial Statements

We have audited the accompanying consolidated balance sheets of DISH DBS Corporation and subsidiaries (the Company) as of December 31, 2018 and 2017, the related consolidated statements of operations and comprehensive income (loss), changes in stockholder's equity (deficit), and cash flows for each of the years in the three-year period ended December 31, 2018, and the related notes (collectively, the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the years in the three-year period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

Change in Accounting Principle

As discussed in Note 2 to the consolidated financial statements, the Company has changed its method of accounting for revenue contracts with customers in 2018 due to the adoption of Accounting Standards Update No. 2014-09, Revenue from Contracts with Customers, as amended.

Transaction Between Entities Under Common Control

As discussed in Note 2 to the consolidated financial statements, the 2016 consolidated financial statements have been retrospectively revised for the effects of consolidating entities acquired under common control.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ KPMG LLP

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

Denver, Colorado
March 7, 2019

DISH DBS CORPORATION
CONSOLIDATED BALANCE SHEETS
(Dollars in thousands, except share amounts)

	As of December 31,	
	2018	2017
Assets		
<i>Current Assets:</i>		
Cash and cash equivalents	\$ 129,498	\$ 364,673
Marketable investment securities	149,740	185,513
Trade accounts receivable, net of allowance for doubtful accounts of \$16,956 and \$15,056, respectively	623,602	628,278
Inventory	290,697	320,899
Other current assets	234,054	189,480
Total current assets	1,427,591	1,688,843
<i>Noncurrent Assets:</i>		
Restricted cash, cash equivalents and marketable investment securities	67,597	72,407
Property and equipment, net	1,377,949	1,632,161
FCC authorizations	637,346	636,275
Other investment securities	108,308	113,460
Other noncurrent assets, net	286,753	236,041
Total noncurrent assets	2,477,953	2,690,344
Total assets	\$ 3,905,544	\$ 4,379,187
Liabilities and Stockholder's Equity (Deficit)		
<i>Current Liabilities:</i>		
Trade accounts payable	\$ 217,268	\$ 361,759
Deferred revenue and other	644,920	693,595
Accrued programming	1,474,207	1,571,273
Accrued interest	222,996	236,509
Other accrued expenses	756,534	759,639
Current portion of long-term debt and capital lease obligations	1,338,527	1,064,474
Total current liabilities	4,654,452	4,687,249
<i>Long-Term Obligations, Net of Current Portion:</i>		
Long-term debt and capital lease obligations, net of current portion	10,632,960	12,046,173
Deferred tax liabilities	461,452	485,099
Long-term deferred revenue and other long-term liabilities	198,840	207,329
Total long-term obligations, net of current portion	11,293,252	12,738,601
Total liabilities	15,947,704	17,425,850
Commitments and Contingencies (Note 11)		
<i>Stockholder's Equity (Deficit):</i>		
Common stock, \$.01 par value, 1,000,000 shares authorized, 1,015 shares issued and outstanding	—	—
Additional paid-in capital	1,152,369	1,116,848
Accumulated other comprehensive income (loss)	(376)	935
Accumulated earnings (deficit)	(13,194,440)	(14,168,047)
Total DISH DBS stockholder's equity (deficit)	(12,042,447)	(13,050,264)
Noncontrolling interests	287	3,601
Total stockholder's equity (deficit)	(12,042,160)	(13,046,663)
Total liabilities and stockholder's equity (deficit)	\$ 3,905,544	\$ 4,379,187

The accompanying notes are an integral part of these consolidated financial statements.

DISH DBS CORPORATION
CONSOLIDATED STATEMENTS OF OPERATIONS AND COMPREHENSIVE INCOME (LOSS)
(In thousands)

	For the Years Ended December 31,		
	2018	2017	2016
Revenue:			
Subscriber-related revenue	\$ 13,197,994	\$ 13,877,196	\$ 14,578,414
Equipment sales and other revenue	164,145	130,315	177,525
Total revenue	<u>13,362,139</u>	<u>14,007,511</u>	<u>14,755,939</u>
Costs and Expenses (exclusive of depreciation shown separately below - Note 6):			
Subscriber-related expenses	8,392,150	8,692,676	8,639,893
Satellite and transmission expenses	637,160	717,231	725,307
Cost of sales - equipment and other	143,671	95,116	135,321
<i>Subscriber acquisition costs:</i>			
Cost of sales - subscriber promotion subsidies	50,253	72,955	131,492
Other subscriber acquisition costs	292,824	563,952	666,482
Subscriber acquisition advertising	426,230	548,304	588,805
Total subscriber acquisition costs	769,307	1,185,211	1,386,779
General and administrative expenses	692,881	669,934	705,935
Litigation expense (Note 11)	—	295,695	21,148
Depreciation and amortization (Note 6)	660,460	741,772	832,435
Total costs and expenses	<u>11,295,629</u>	<u>12,397,635</u>	<u>12,446,818</u>
Operating income (loss)	<u>2,066,510</u>	<u>1,609,876</u>	<u>2,309,121</u>
Other Income (Expense):			
Interest income	8,923	9,855	6,537
Interest expense, net of amounts capitalized	(792,436)	(865,181)	(825,765)
Other, net	8,994	88,511	32,805
Total other income (expense)	<u>(774,519)</u>	<u>(766,815)</u>	<u>(786,423)</u>
Income (loss) before income taxes	1,291,991	843,061	1,522,698
Income tax (provision) benefit, net	(318,305)	(117,616)	(357,586)
Net income (loss)	973,686	725,445	965,112
Less: Net income (loss) attributable to noncontrolling interests, net of tax	2,399	1,919	498
Net income (loss) attributable to DISH DBS	<u>\$ 971,287</u>	<u>\$ 723,526</u>	<u>\$ 964,614</u>
Comprehensive Income (Loss):			
Net income (loss)	\$ 973,686	\$ 725,445	\$ 965,112
<i>Other comprehensive income (loss):</i>			
Foreign currency translation adjustments	(1,343)	1,027	—
Unrealized holding gains (losses) on available-for-sale securities	69	(33)	(1,488)
Recognition of previously unrealized (gains) losses on available-for-sale securities included in net income (loss)	—	—	(18,357)
Deferred income tax (expense) benefit, net	(37)	57	7,690
Total other comprehensive income (loss), net of tax	<u>(1,311)</u>	<u>1,051</u>	<u>(12,155)</u>
Comprehensive income (loss)	972,375	726,496	952,957
Less: Comprehensive income (loss) attributable to noncontrolling interests, net of tax	2,399	1,919	498
Comprehensive income (loss) attributable to DISH DBS	<u>\$ 969,976</u>	<u>\$ 724,577</u>	<u>\$ 952,459</u>

The accompanying notes are an integral part of these consolidated financial statements.

DISH DBS CORPORATION
CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDER'S EQUITY (DEFICIT)
(In thousands)

	Common Stock	Additional Paid-In Capital	Accumulated Other Comprehensive Income (Loss)	Accumulated Earnings (Deficit)	Noncontrolling Interests	Total
Balance, December 31, 2015	\$ —	\$ 1,118,947	\$ 12,039	\$ (14,356,187)	\$ 2,109	\$ (13,223,092)
Dividends to DISH Orbital Corporation (Note 16)	—	—	—	(1,500,000)	—	(1,500,000)
Non-cash, stock-based compensation	—	13,037	—	—	—	13,037
Change in unrealized holding gains (losses) on available-for-sale securities, net	—	—	(19,845)	—	—	(19,845)
Deferred income tax (expense) benefit attributable to unrealized gains (losses) on available-for-sale securities	—	—	7,690	—	—	7,690
Payments made to parent of transferred businesses	—	(34,372)	—	—	(74)	(34,446)
Net income (loss) attributable to noncontrolling interests	—	—	—	—	498	498
Net income (loss) attributable to DISH DBS	—	—	—	964,614	—	964,614
Other	—	(6)	—	—	(600)	(606)
Balance, December 31, 2016	\$ —	\$ 1,097,606	\$ (116)	\$ (14,891,573)	\$ 1,933	\$ (13,792,150)
Non-cash, stock-based compensation	—	29,941	—	—	—	29,941
Change in unrealized holding gains (losses) on available-for-sale securities, net	—	—	(33)	—	—	(33)
Deferred income tax (expense) benefit attributable to unrealized gains (losses) on available-for-sale securities	—	—	57	—	—	57
Foreign currency translation	—	—	1,027	—	—	1,027
Payments made to parent of transferred businesses	—	(7,372)	—	—	274	(7,098)
Net income (loss) attributable to noncontrolling interests	—	—	—	—	1,919	1,919
Net income (loss) attributable to DISH DBS	—	—	—	723,526	—	723,526
Other	—	(3,327)	—	—	(525)	(3,852)
Balance, December 31, 2017	\$ —	\$ 1,116,848	\$ 935	\$ (14,168,047)	\$ 3,601	\$ (13,046,663)
Non-cash, stock-based compensation	—	35,521	—	—	—	35,521
Change in unrealized holding gains (losses) on available-for-sale securities, net	—	—	69	—	—	69
Deferred income tax (expense) benefit attributable to unrealized gains (losses) on available-for-sale securities	—	—	(37)	—	—	(37)
Foreign currency translation	—	—	(1,343)	—	—	(1,343)
ASU 2014-09 cumulative catch-up adjustment	—	—	—	2,320	—	2,320
Net income (loss) attributable to noncontrolling interests	—	—	—	—	2,399	2,399
Net income (loss) attributable to DISH DBS	—	—	—	971,287	—	971,287
Other	—	—	—	—	(5,713)	(5,713)
Balance, December 31, 2018	\$ —	\$ 1,152,369	\$ (376)	\$ (13,194,440)	\$ 287	\$ (12,042,160)

The accompanying notes are an integral part of these consolidated financial statements.

DISH DBS CORPORATION
CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)

	For the Years Ended December 31,		
	2018	2017	2016
Cash Flows From Operating Activities:			
Net income (loss)	\$ 973,686	\$ 725,445	\$ 965,112
<i>Adjustments to reconcile net income (loss) to net cash flows from operating activities:</i>			
Depreciation and amortization	660,460	741,772	832,435
Realized and unrealized losses (gains) on investments	(9,056)	(85,550)	(32,509)
Non-cash, stock-based compensation	35,521	29,941	13,037
Deferred tax expense (benefit)	(24,477)	(297,012)	(84,970)
Other, net	(67,672)	(3,431)	67,366
Changes in current assets and current liabilities:			
Trade accounts receivable	2,137	114,962	104,869
Allowance for doubtful accounts	1,900	(2,384)	(4,329)
Inventory	15,754	37,028	(41,694)
Other current assets	(39,822)	(76,735)	12,323
Trade accounts payable	(145,891)	(142,803)	50,497
Deferred revenue and other	(93,093)	(57,802)	(94,584)
Accrued programming and other accrued expenses	(111,987)	303,901	46,815
Net cash flows from operating activities	1,197,460	1,287,332	1,834,368
Cash Flows From Investing Activities:			
(Purchases) Sales and maturities of marketable investment securities, net	41,155	(88,346)	136,014
Purchases of property and equipment	(348,023)	(419,445)	(544,413)
Purchases of strategic investments	—	(90,381)	—
Other, net	24,816	19,996	15,621
Net cash flows from investing activities	(282,052)	(578,176)	(392,778)
Cash Flows From Financing Activities:			
Proceeds from issuance of senior notes	—	—	2,000,000
Dividend to DISH Orbital Corporation	—	—	(1,500,000)
Redemption and repurchases of senior notes	(1,108,489)	(1,074,139)	(1,500,000)
Payments made to parent of transferred businesses	—	(7,098)	(34,446)
Repayment of long-term debt and capital lease obligations	(38,639)	(39,118)	(41,449)
Debt issuance costs	—	—	(7,676)
Other, net	(3,270)	(1,994)	(606)
Net cash flows from financing activities	(1,150,398)	(1,122,349)	(1,084,177)
Net increase (decrease) in cash, cash equivalents, restricted cash and cash equivalents			
	(234,990)	(413,193)	357,413
Cash, cash equivalents, restricted cash and cash equivalents, beginning of period (Note 4)	365,066	778,259	420,846
Cash, cash equivalents, restricted cash and cash equivalents, end of period (Note 4)	\$ 130,076	\$ 365,066	\$ 778,259

The accompanying notes are an integral part of these consolidated financial statements.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

1. Organization and Business Activities

Principal Business

DISH DBS Corporation (which together with its subsidiaries is referred to as “DISH DBS,” the “Company,” “we,” “us” and/or “our,” unless otherwise required by the context) is a holding company and an indirect, wholly-owned subsidiary of DISH Network Corporation (“DISH Network”). DISH DBS was formed under Colorado law in January 1996 and its common stock is held by DISH Orbital Corporation (“DOC”), a direct subsidiary of DISH Network. Our subsidiaries operate one business segment.

Pay-TV

We offer pay-TV services under the DISH® brand and the Sling® brand (collectively “Pay-TV” services). The DISH branded pay-TV service consists of, among other things, Federal Communications Commission (“FCC”) licenses authorizing us to use direct broadcast satellite (“DBS”) and Fixed Satellite Service (“FSS”) spectrum, our owned and leased satellites, receiver systems, broadcast operations, customer service facilities, a leased fiber optic network, in-home service and call center operations, and certain other assets utilized in our operations (“DISH TV”). We also design, develop and distribute receiver systems and provide digital broadcast operations, including satellite uplinking/downlinking, transmission and other services to third-party pay-TV providers. See Note 2 and Note 16 for further information. The Sling branded pay-TV services consist of, among other things, multichannel, live-linear streaming over-the-top (“OTT”) Internet-based domestic, international and Latino video programming services (“Sling TV”). As of December 31, 2018, we had 12.322 million Pay-TV subscribers in the United States, including 9.905 million DISH TV subscribers and 2.417 million Sling TV subscribers.

2. Summary of Significant Accounting Policies

Principles of Consolidation and Basis of Presentation

We consolidate all majority owned subsidiaries, investments in entities in which we have controlling influence and variable interest entities where we have been determined to be the primary beneficiary. Minority interests are recorded as noncontrolling interests or redeemable noncontrolling interests. See below for further information. Non-consolidated investments are accounted for using the equity method when we have the ability to significantly influence the operating decisions of the investee. When we do not have the ability to significantly influence the operating decisions of an investee, these equity securities are classified as either marketable investment securities or other investments and recorded at fair value with changes recognized in “Other, net” within “Other Income (Expense)” on our Consolidated Statements of Operations and Comprehensive Income (Loss). All significant intercompany accounts and transactions have been eliminated in consolidation. Certain prior period amounts have been reclassified to conform to the current period presentation.

On February 28, 2017, DISH Network and EchoStar and certain of their respective subsidiaries completed the transactions contemplated by the Share Exchange Agreement (the “Share Exchange Agreement”) that was previously entered into on January 31, 2017 (the “Share Exchange”). Pursuant to the Share Exchange Agreement, among other things, EchoStar transferred to us certain assets and liabilities of the EchoStar technologies and EchoStar broadcasting businesses, consisting primarily of the businesses that design, develop and distribute digital set-top boxes, provide satellite uplink services and develop and support streaming video technology, as well as certain investments in joint ventures, spectrum licenses, real estate properties and EchoStar’s ten percent non-voting interest in Sling TV Holding L.L.C. (the “Transferred Businesses”), and in exchange, we transferred to EchoStar the 6,290,499 shares of preferred tracking stock issued by EchoStar (the “EchoStar Tracking Stock”) and 81,128 shares of preferred tracking stock issued by Hughes Satellite Systems Corporation, a subsidiary of EchoStar (the “HSSC Tracking Stock,” and together with the EchoStar Tracking Stock, collectively, the “Tracking Stock”), that tracked the residential retail satellite broadband business of Hughes Network Systems, L.L.C. (“HNS”), a wholly-owned subsidiary of Hughes.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

In connection with the Share Exchange, DISH Network and EchoStar and certain of their respective subsidiaries entered into certain agreements covering, among other things, tax matters, employee matters, intellectual property matters and the provision of transitional services. See Note 16 for further information.

As the Share Exchange was a transaction between entities that are under common control, accounting rules require that our Consolidated Financial Statements include the results of the Transferred Businesses for all periods presented, including periods prior to the completion of the Share Exchange. We initially recorded the Transferred Businesses at EchoStar's historical cost basis. The difference between the historical cost basis of the Transferred Businesses and the net carrying value of the Tracking Stock was recorded in "Additional paid-in capital" on our Consolidated Balance Sheets. The results of the Transferred Businesses were prepared from separate records maintained by EchoStar for the periods prior to March 1, 2017, and may not necessarily be indicative of the conditions that would have existed, or the results of operations, if the Transferred Businesses had been operated on a combined basis with our subsidiaries. Our financial statements include the results of the Transferred Businesses as described above for all periods presented, including periods prior to the completion of the Share Exchange.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States ("GAAP") requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expense for each reporting period. Estimates are used in accounting for, among other things, allowances for doubtful accounts, self-insurance obligations, deferred taxes and related valuation allowances, uncertain tax positions, loss contingencies, fair value of financial instruments, fair value of options granted under our stock-based compensation plans, fair value of assets and liabilities acquired in business combinations, relative standalone selling prices of performance obligations, capital leases, asset impairments, estimates of future cash flows used to evaluate impairments, useful lives of property, equipment and intangible assets, independent third-party retailer incentives, programming expenses and subscriber lives. Economic conditions may increase the inherent uncertainty in the estimates and assumptions indicated above. Actual results may differ from previously estimated amounts, and such differences may be material to our consolidated financial statements. Estimates and assumptions are reviewed periodically, and the effects of revisions are reflected prospectively in the period they occur.

Cash and Cash Equivalents

We consider all liquid investments purchased with a remaining maturity of 90 days or less at the date of acquisition to be cash equivalents. Cash equivalents as of December 31, 2018 and 2017 may consist of money market funds, government bonds, corporate notes and commercial paper. The cost of these investments approximates their fair value.

Marketable Investment Securities

Historically, we classified all marketable investment securities as available-for-sale, except for investments which were accounted for as trading securities, and adjusted the carrying amount of our available-for-sale securities to fair value and reported the related temporary unrealized gains and losses as a separate component of "Accumulated other comprehensive income (loss)" within "Total stockholder's equity (deficit)," net of related deferred income tax on our Consolidated Balance Sheets. Our trading securities were carried at fair value, with changes in fair value recognized in "Other, net" within "Other Income (Expense)" on our Consolidated Statements of Operations and Comprehensive Income (Loss).

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Subsequent to the adoption of ASU 2016-01 during the first quarter 2018, all equity securities are carried at fair value, with changes in fair value recognized in “Other, net” within “Other Income (Expense)” on our Consolidated Statements of Operations and Comprehensive Income (Loss). All debt securities are classified as available-for-sale. We adjust the carrying amount of our debt securities to fair value and report the related temporary unrealized gains and losses as a separate component of “Accumulated other comprehensive income (loss)” within “Total stockholder’s equity (deficit),” net of related deferred income tax on our Consolidated Balance Sheets. Declines in the fair value of a marketable debt security which are determined to be “other-than-temporary” are recognized on our Consolidated Statements of Operations and Comprehensive Income (Loss), thus establishing a new cost basis for such investment.

We evaluate our debt investment portfolio on a quarterly basis to determine whether declines in the fair value of these securities are other-than-temporary. This quarterly evaluation consists of reviewing, among other things:

- the fair value of our debt investments compared to the carrying amount,
- the historical volatility of the price of each security, and
- any market and company specific factors related to each security.

Declines in the fair value of debt investments below cost basis are generally accounted for as follows:

Length of Time Investment Has Been In a Continuous Loss Position	Treatment of the Decline in Value (absent specific factors to the contrary)
Less than six months	Generally, considered temporary. Evaluated on a case by case basis to determine whether any company or market-specific factors exist indicating that such decline is other-than-temporary.
Six to nine months	Generally, considered other-than-temporary. The decline in value is recorded as a charge to earnings.
Greater than nine months	

Additionally, in situations where the fair value of a debt security is below its carrying amount, we consider the decline to be other-than-temporary and record a charge to earnings if any of the following factors apply:

- we have the intent to sell the security,
- it is more likely than not that we will be required to sell the security before maturity or recovery, or
- we do not expect to recover the security’s entire amortized cost basis, even if there is no intent to sell the security.

In general, we use the first in, first out method to determine the cost basis on sales of marketable investment securities.

Trade Accounts Receivable

Management estimates the amount of required allowances for the potential non-collectability of accounts receivable based upon past collection experience and consideration of other relevant factors. However, past experience may not be indicative of future collections and therefore additional charges could be incurred in the future to reflect differences between estimated and actual collections.

Inventory

Inventory is stated at the lower of cost or net realizable value. Cost is determined using the first-in, first-out method. The cost of manufactured inventory includes the cost of materials, labor, freight-in, royalties and manufacturing overhead. Net realizable value is calculated as the estimated selling price less reasonable costs necessary to complete, sell, transport and dispose of the inventory.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Property and Equipment

Property and equipment are stated at amortized cost less impairment losses, if any. Our set-top boxes are generally capitalized when they are installed in customers' homes. The costs of satellites under construction, including interest and certain amounts prepaid under our satellite service agreements, are capitalized during the construction phase, assuming the eventual successful launch and in-orbit operation of the satellite. If a satellite were to fail during launch or while in-orbit, the resultant loss would be charged to expense in the period such loss was incurred. The amount of any such loss would be reduced to the extent of insurance proceeds estimated to be received, if any. Depreciation is recorded on a straight-line basis over useful lives ranging from two to 40 years. Repair and maintenance costs are charged to expense when incurred. Renewals and improvements that add value or extend the asset's useful life are capitalized. Costs related to the procurement and development of software for internal-use are capitalized and amortized using the straight-line method over the estimated useful life of the software.

Impairment of Long-Lived Assets

We review our long-lived assets and identifiable finite-lived intangible assets for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. For assets which are held and used in operations, the asset would be impaired if the carrying amount of the asset (or asset group) exceeded its undiscounted future net cash flows. Once an impairment is determined, the actual impairment recognized is the difference between the carrying amount and the fair value as estimated using one of the following approaches: income, cost and/or market. Assets which are to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell. The carrying amount of a long-lived asset or asset group is considered impaired when the anticipated undiscounted cash flows from such asset or asset group is less than its carrying amount. In that event, a loss is recorded in "Impairment of long-lived assets" on our Consolidated Statements of Operations and Comprehensive Income (Loss) based on the amount by which the carrying amount exceeds the fair value of the long-lived asset or asset group. Fair value, using the income approach, is determined primarily using a discounted cash flow model that uses the estimated cash flows associated with the asset or asset group under review, discounted at a rate commensurate with the risk involved. Fair value, utilizing the cost approach, is determined based on the replacement cost of the asset reduced for, among other things, depreciation and obsolescence. Fair value, utilizing the market approach, benchmarks the fair value against the carrying amount. See Note 6 for further information.

DBS Satellites. We currently evaluate our DBS satellite fleet for impairment as one asset group whenever events or changes in circumstances indicate that its carrying amount may not be recoverable. We do not believe any triggering event has occurred which would indicate impairment as of December 31, 2018.

Indefinite-Lived Intangible Assets and Goodwill

We do not amortize indefinite lived intangible assets and goodwill but test these assets for impairment annually during the fourth quarter or more often if indicators of impairment arise. We have the option to first perform a qualitative assessment to determine whether it is necessary to perform a quantitative impairment test. However, we may elect to bypass the qualitative assessment in any period and proceed directly to performing the quantitative impairment test. Intangible assets that have finite lives are amortized over their estimated useful lives and tested for impairment as described above for long-lived assets. Our intangible assets with indefinite lives primarily consist of FCC licenses. Generally, we have determined that our DBS licenses have indefinite useful lives due to the following:

- FCC licenses are a non-depleting asset;
- existing FCC licenses are integral to our business segments and will contribute to cash flows indefinitely;
- replacement DBS satellite applications are generally authorized by the FCC subject to certain conditions, without substantial cost under a stable regulatory, legislative and legal environment;
- maintenance expenditures to obtain future cash flows are not significant;
- FCC licenses are not technologically dependent; and

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

we intend to use these assets indefinitely.

DBS Licenses. We combine all of our indefinite-lived DBS licenses that we currently utilize or plan to utilize in the future into a single unit of accounting. For 2018, 2017 and 2016, management performed a qualitative assessment to determine whether it is more likely than not that the fair value of the DBS licenses exceeds its carrying amount. In our assessment, we considered several qualitative factors, including, among others, overall financial performance, industry and market considerations, and relevant company specific events. In contemplating all factors in their totality, we concluded that it is more likely than not that the fair value of the DBS licenses exceeds its carrying amount. As such, no further analysis was required.

MVDDS Licenses. During 2018, 2017, and 2016, our multichannel video distribution and data service (“MVDDS”) wireless spectrum licenses were assessed as a single unit of accounting. For 2018, 2017, and 2016, management assessed these licenses quantitatively. Our quantitative assessment in each year for the MVDDS wireless spectrum licenses consisted of a market approach. The market approach uses prior transactions including auctions to estimate the fair value of the licenses. In conducting these quantitative assessments, we determined that the fair value of our MVDDS wireless spectrum licenses exceeded their carrying amount.

Business Combinations

When we acquire a business, we allocate the purchase price to the various components of the acquisition based upon the fair value of each component using various valuation techniques, including the market approach, income approach and/or cost approach. The accounting standard for business combinations requires most identifiable assets, liabilities, noncontrolling interests and goodwill acquired to be recorded at fair value. Transaction costs related to the acquisition of the business are expensed as incurred. Costs associated with the issuance of debt associated with a business combination are capitalized and included as a yield adjustment to the underlying debt’s stated rate. Acquired intangible assets other than goodwill are amortized over their estimated useful lives unless the lives are determined to be indefinite. Amortization of these intangible assets are recorded on a straight-line basis over an average finite useful life primarily ranging from approximately one to 20 years or in relation to the estimated discounted cash flows over the life of the intangible asset.

Long-Term Deferred Revenue and Other Long-Term Liabilities

Certain programmers provide us up-front payments. Such amounts are deferred and recognized as reductions to “Subscriber-related expenses” on a straight-line basis over the relevant remaining contract term (generally up to ten years). The current and long-term portions of these deferred credits are recorded on our Consolidated Balance Sheets in “Deferred revenue and other” and “Long-term deferred revenue and other long-term liabilities,” respectively.

Sales Taxes

We account for sales taxes imposed on our goods and services on a net basis on our Consolidated Statements of Operations and Comprehensive Income (Loss). Since we primarily act as an agent for the governmental authorities, the amount charged to the customer is collected and remitted directly to the appropriate jurisdictional entity.

Income Taxes

We establish a provision for income taxes currently payable or receivable and for income tax amounts deferred to future periods. Deferred tax assets and liabilities are recorded for the estimated future tax effects of differences that exist between the book and tax basis of assets and liabilities. Deferred tax assets are offset by valuation allowances when we believe it is more likely than not that such net deferred tax assets will not be realized.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

From time to time, we engage in transactions where the tax consequences may be subject to uncertainty. We record a liability when, in management's judgment, a tax filing position does not meet the more likely than not threshold. For tax positions that meet the more likely than not threshold, we may record a liability depending on management's assessment of how the tax position will ultimately be settled. We adjust our estimates periodically for ongoing examinations by and settlements with various taxing authorities, as well as changes in tax laws, regulations and precedent. We classify interest and penalties, if any, associated with our uncertain tax positions as a component of "Interest expense, net of amounts capitalized" and "Other, net," respectively, on our Consolidated Statements of Operations and Comprehensive Income (Loss).

Fair Value Measurements

We determine fair value based on the exchange price that would be received for an asset or paid to transfer a liability (an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants. Market or observable inputs are the preferred source of values, followed by unobservable inputs or assumptions based on hypothetical transactions in the absence of market inputs. We apply the following hierarchy in determining fair value:

- Level 1, defined as observable inputs being quoted prices in active markets for identical assets;
- Level 2, defined as observable inputs other than quoted prices included in Level 1, including quoted prices for similar assets and liabilities in active markets; and quoted prices for identical or similar instruments in markets that are not active; and
- Level 3, defined as unobservable inputs for which little or no market data exists, consistent with reasonably available assumptions made by other participants therefore requiring assumptions based on the best information available.

As of December 31, 2018 and 2017, the carrying amount for cash and cash equivalents, trade accounts receivable (net of allowance for doubtful accounts) and current liabilities (excluding the "Current portion of long-term debt and capital lease obligations") was equal to or approximated fair value due to their short-term nature or proximity to current market rates. See Note 4 for the fair value of our marketable investment securities.

Fair values for our publicly traded debt securities are based on quoted market prices, when available. The fair values of private debt are based on, among other things, available trade information, and/or an analysis in which we evaluate market conditions, related securities, various public and private offerings, and other publicly available information. In performing this analysis, we make various assumptions regarding, among other things, credit spreads, and the impact of these factors on the value of the debt securities. See Note 7 for the fair value of our long-term debt.

Deferred Debt Issuance Costs

Costs of issuing debt are generally deferred and amortized to interest expense using the effective interest rate method over the terms of the respective notes. See Note 7 for further information.

Revenue Recognition

Our revenue is primarily derived from Pay-TV programming services that we provide to our subscribers. We also generate revenue from equipment rental fees and other hardware related fees, including DVRs and fees from subscribers with multiple receivers; advertising services; fees earned from our Smart Home service operations; warranty services; and sales of digital receivers and related equipment to third-party pay-TV providers. See Note 13 for further information, including revenue disaggregated by major source.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Our residential video subscribers contract for individual services or combinations of services, as discussed above, the majority of which are generally distinct and are accounted for as separate performance obligations. We consider our installations for first time DISH TV subscribers to be a service. However, since we provide a significant integration service combining the installation with programming services, we have concluded that the installation is not distinct from programming and thus the installation and programming services are accounted for as a single performance obligation. We generally satisfy these performance obligations and recognize revenue as the services are provided, for example as the programming is broadcast to subscribers, as this best represents the transfer of control of the services to the subscriber.

In cases where a subscriber is charged certain nonrefundable upfront fees, those fees are generally considered to be material rights to the subscriber related to the subscriber's option to renew without having to pay an additional fee upon renewal. These fees are deferred and recognized over the estimated period of time during which the fee remains material to the customer, which we estimate to be less than one year. Revenues arising from our in-home service operations that are separate from the initial installation, such as mounting a TV on a subscriber's wall, are generally recognized when these services are performed.

For our residential video subscribers, we have concluded that the contract term under Accounting Standard Codification Topic 606 ("ASC 606") is one month and as a result the revenue recognized for these subscribers for a given month is equal to the amount billed in that month, except for certain nonrefundable upfront fees that are accounted for as material rights, as discussed above.

Revenues from our advertising services are typically recognized as the advertisements are broadcast. Sales of equipment to subscribers or other third parties are recognized when control is transferred under the contract. Revenue from our commercial video subscribers typically follows the residential model described above, with the exception that the contract term for most of our commercial subscribers exceeds one month and can be multiple years in length. However, commercial subscribers typically do not receive time-limited discounts or free service periods and accordingly, while they may have multiple performance obligations, revenue is equal to the amount billed in a given month.

Contract Balances

The timing of revenue recognition generally differs from the timing of invoicing to customers. When revenue is recognized prior to invoicing, we record a receivable. When revenue is recognized subsequent to invoicing, we record deferred revenue. Our residential video subscribers are typically billed monthly, and the contract balances for those customers arise from the timing of the monthly billing cycle. We do not adjust the amount of consideration for financing impacts as we apply a practical expedient when we anticipate that the period between transfer of goods and services and eventual payment for those goods and services will be less than one year. See Note 14 for further information, including balance and activity detail about our allowance for doubtful accounts and deferred revenue related to contracts with subscribers.

Assets Recognized Related to the Costs to Obtain a Contract with a Subscriber

We recognize an asset for the incremental costs of obtaining a contract with a subscriber if we expect the benefit of those costs to be longer than one year. We have determined that certain sales incentive programs, including those with our independent third-party retailers, meet the requirements to be capitalized, and payments made under these programs are capitalized and amortized to expense over the estimated subscriber life. During the year ended December 31, 2018, we capitalized \$183 million under these programs. The amortization expense related to these programs was \$28 million for the year ended December 31, 2018. As of December 31, 2018, we had a total of \$169 million capitalized on our Consolidated Balance Sheets, of which \$14 million related to open contracts as of January 1, 2018. These amounts are capitalized in "Other current assets" and "Other noncurrent assets, net" on our Consolidated Balance Sheets, and then amortized in "Other subscriber acquisition costs" on our Consolidated Statements of Operations and Comprehensive Income (Loss).

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Impact of Adoption of ASU 2014-09

On May 28, 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update 2014-09 *Revenue from Contracts with Customers* (“ASU 2014-09”) and modified the standard thereafter. We adopted ASU 2014-09, as modified, and now codified as ASC 606 and Accounting Standard Codification Topic 340-40 (“ASC 340-40”) on January 1, 2018, using the modified retrospective method. Under that method, we applied the new guidance to all open contracts existing as of January 1, 2018, recognizing in beginning retained earnings an adjustment for the cumulative effect of the change, which was \$2 million, net of deferred taxes of \$1 million.

In addition, we are providing additional disclosures comparing the results under previous guidance to those as follows:

Consolidated Statements of Operations	DISH DBS (as would have been reported under previous standards)	Impact of adopting ASU 2014-09	DISH DBS (as currently reported)
	(In thousands)		
For the Year Ended December 31, 2018			
Subscriber-related revenue	\$ 13,215,083	\$ (17,089)	\$ 13,197,994
Subscriber-related expenses	\$ 8,405,311	\$ (13,161)	\$ 8,392,150
Total subscriber acquisition costs	\$ 927,547	\$ (158,240)	\$ 769,307
Operating income (loss)	\$ 1,912,198	\$ 154,312	\$ 2,066,510
Income (loss) before income taxes	\$ 1,137,679	\$ 154,312	\$ 1,291,991
Income tax (provision) benefit, net	\$ (280,179)	\$ (38,126)	\$ (318,305)
Net income (loss) attributable to DISH DBS	\$ 855,101	\$ 116,186	\$ 971,287

Consolidated Balance Sheets	DISH DBS (as would have been reported under previous standards)	Impact of adopting ASU 2014-09	DISH DBS (as currently reported)
	(In thousands)		
As of December 31, 2018			
Inventory	\$ 261,160	\$ 29,537	\$ 290,697
Other current assets	\$ 184,725	\$ 49,329	\$ 234,054
Other noncurrent assets, net	\$ 167,172	\$ 119,581	\$ 286,753
Total assets	\$ 3,707,097	\$ 198,447	\$ 3,905,544
Deferred revenue and other	\$ 606,551	\$ 38,369	\$ 644,920
Deferred tax liabilities	\$ 422,533	\$ 38,919	\$ 461,452
Long-term deferred revenue and other long-term liabilities	\$ 196,187	\$ 2,653	\$ 198,840
Total liabilities	\$ 15,867,763	\$ 79,941	\$ 15,947,704
Total stockholder's equity (deficit)	\$ (12,160,666)	\$ 118,506	\$ (12,042,160)
Total liabilities and stockholder's equity (deficit)	\$ 3,707,097	\$ 198,447	\$ 3,905,544

The adoption of ASU 2014-09 had no impact to cash flows from operating, investing and financing activities on our Consolidated Statements of Cash Flows.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Subscriber-Related Expenses

The cost of television programming distribution rights is generally incurred on a per subscriber basis and various upfront carriage payments are recognized when the related programming is distributed to subscribers. Long-term flat rate programming contracts are generally charged to expense using the straight-line method over the term of the agreement. The cost of television programming rights to distribute live sporting events for a season or tournament is charged to expense using the straight-line method over the course of the season or tournament. “Subscriber-related expenses” on our Consolidated Statements of Operations and Comprehensive Income (Loss) principally include programming expenses, costs for Pay-TV services incurred in connection with our Smart Home service and call center operations, billing costs, refurbishment and repair costs related to DBS receiver systems, subscriber retention and other variable subscriber expenses. These costs are recognized as the services are performed or as incurred.

Cost of Sales – Equipment and Other

Costs include the cost of non-subsidized sales of DBS accessories and the cost of sales of digital receivers and related components to third-party pay-TV providers, both of which include freight and royalties. Costs are generally recognized as products are delivered to customers and the related revenue is recognized.

Subscriber Acquisition Costs

Subscriber acquisition costs on our Consolidated Statements of Operations and Comprehensive Income (Loss) consist of costs incurred to acquire new Pay-TV subscribers through independent third-party retailers, third-party marketing agreements and our direct sales distribution channel. Subscriber acquisition costs include the following line items from our Consolidated Statements of Operations and Comprehensive Income (Loss):

- “*Cost of sales - subscriber promotion subsidies*” includes the cost of our DBS receiver systems sold to independent third-party retailers and other distributors of our equipment and DBS receiver systems sold directly by us to DISH TV subscribers.
- “*Other subscriber acquisition costs*” includes net costs related to promotional incentives and costs related to installation and other promotional subsidies for our DISH TV services as well as our direct sales efforts and commissions for our Sling TV services.
- “Subscriber acquisition advertising” includes advertising and marketing expenses related to the acquisition of new Pay-TV subscribers. Advertising costs are expensed as incurred.

We characterize amounts paid to our independent third-party retailers as consideration for equipment installation services and for equipment buydowns (incentives and rebates) as a reduction of revenue. We expense payments for equipment installation services as “Other subscriber acquisition costs.” Our payments for equipment buydowns represent a partial or complete return of the independent third-party retailer’s purchase price and are, therefore, netted against the proceeds received from the independent third-party retailer. We report the net cost from our various sales promotions through our independent third-party retailer network as a component of “Other subscriber acquisition costs.”

Research and Development

Research and development costs are expensed as incurred. Research and development costs totaled \$24 million, \$33 million and \$41 million for the years ended December 31, 2018, 2017 and 2016, respectively.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Equipment Lease Programs

DISH TV subscribers have the choice of leasing or purchasing the satellite receiver and other equipment necessary to receive our DISH TV services. Most of our new DISH TV subscribers choose to lease equipment and thus we retain title to such equipment. Equipment leased to new and existing DISH TV subscribers is capitalized and depreciated over their estimated useful lives.

New Accounting Pronouncements

Leases. In February 2016, the FASB issued ASU 2016-02 *Leases* (“ASU 2016-02”), and has modified the standard thereafter. ASU 2016-02 amends the existing accounting standards for lease accounting, including requiring that lessees recognize right of use assets and lease liabilities for the vast majority of leases. For income statement purposes, the FASB retained a dual model, requiring leases to be classified as either operating or finance. Classification is based on criteria that are largely similar to those applied in current lease accounting, but without explicit bright lines. The accounting guidance for lessors remains largely unchanged.

This standard became effective for us on January 1, 2019, and we elected to adopt the standard using the modified retrospective approach. Under the modified retrospective approach, we will recognize in beginning retained earnings as of January 1, 2019 an adjustment for the cumulative effect of the adoption, which we believe will be immaterial. We will also recognize right of use assets and lease liabilities for periods ending after January 1, 2019 for the majority of our operating leases, which will be the primary impact of the standard on our results. Our operating leases consist principally of satellites, real estate, vehicles used in our in-home service operations and other equipment.

As permitted under the standard, we do not intend to recognize right of use assets or lease liabilities for leases with a term of 12 months or less. In transition, we plan to apply practical expedients that permit us not to reassess (i) whether expired or existing contracts contain a lease under the new standard, (ii) the lease classification for expired or existing leases, or (iii) whether previously-capitalized initial direct costs would qualify for capitalization under the new standard. In addition, we do not intend to use hindsight during transition. We do not expect the adoption of ASU 2016-02 to have a significant impact to our Consolidated Statements of Operations or Cash Flows. We will provide additional disclosures for periods ending in 2019 comparing the results under previous guidance to those under the new standard.

Financial Instruments – Credit Losses. On June 16, 2016, the FASB issued ASU 2016-13 *Financial Instruments – Credit Losses, Measurement of Credit Losses on Financial Instruments* (“ASU 2016-13”), which changes the way entities measure credit losses for most financial assets and certain other instruments that are not measured at fair value through net earnings. This standard will be effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted. We are evaluating the impact the adoption of ASU 2016-13 will have on our Consolidated Financial Statements and related disclosures.

Fair Value Measurement. On August 28, 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement* (“ASU 2018-13”), which modifies the disclosure requirements on fair value measurements by adding, modifying or removing certain disclosures. This standard will be effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption is permitted. Certain disclosures in ASU 2018-13 are required to be applied on a retrospective basis and others on a prospective basis. We are evaluating the impact the adoption of ASU 2018-13 will have on our Consolidated Financial Statements and related disclosures.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

3. Supplemental Data - Statements of Cash Flows

The following table presents our supplemental cash flow and other non-cash data.

	For the Years Ended December 31,		
	2018	2017	2016
	(In thousands)		
Cash paid for interest	\$ 793,506	\$ 878,772	\$ 773,500
Cash received for interest	6,043	9,855	2,936
Cash paid for income taxes	18,683	29,961	25,839
Cash paid for income taxes to DISH Network	302,329	408,265	551,693
Capitalized interest	1,071	481	—
Assets financed under capital lease obligations	142	1,573	7,850

Our parent, DISH Network, provides a centralized system for the management of our cash and marketable investment securities as it does for all of its subsidiaries, among other reasons, to maximize yield of the portfolio. As a result, the cash and marketable investment securities included on our Consolidated Balance Sheets is a component or portion of the overall cash and marketable investment securities portfolio included on DISH Network's Consolidated Balance Sheets and managed by DISH Network. We are reflecting the purchases and sales of marketable investment securities on a net basis for each year presented on our Consolidated Statements of Cash Flows as we believe the net presentation is more meaningful to our cash flows from investing activities.

4. Marketable Investment Securities, Restricted Cash and Cash Equivalents, and Other Investment Securities

Our marketable investment securities, restricted cash and cash equivalents, and other investment securities consisted of the following:

	As of December 31,	
	2018	2017
	(In thousands)	
Marketable investment securities:		
Current marketable investment securities:		
Trading/equity (Note 2)	\$ 2,370	\$ 93,367
Other	147,370	92,146
Total current marketable investment securities	149,740	185,513
Restricted marketable investment securities (1)	67,019	72,014
Total marketable investment securities	216,759	257,527
Restricted cash and cash equivalents (1)	578	393
Other investment securities:		
Other investment securities	108,308	113,460
Total other investment securities	108,308	113,460
Total marketable investment securities, restricted cash and cash equivalents, and other investment securities	\$ 325,645	\$ 371,380

(1) Restricted marketable investment securities and restricted cash and cash equivalents are included in "Restricted cash, cash equivalents and marketable investment securities" on our Consolidated Balance Sheets.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Marketable Investment Securities

Our marketable investment securities portfolio consists of various debt and equity instruments. All debt securities are classified as available-for-sale. Subsequent to the adoption of ASU 2016-01 during the first quarter 2018, all equity securities are carried at fair value, with changes in fair value recognized in “Other, net” within “Other Income (Expense)” on our Consolidated Statements of Operations and Comprehensive Income (Loss). See Note 2 for further information.

Current Marketable Investment Securities - Trading

We had an investment in non-marketable preferred shares of a non-public company, which was received for no cash consideration and was previously accounted for as a cost method investment and included in “Other investment securities” on our Consolidated Balance Sheets. During the third quarter 2017, our non-marketable preferred shares converted into common shares in conjunction with the issuer’s initial public offering, and, accordingly, we classified the new equity securities as “Marketable investment securities” on our Consolidated Balance Sheets.

Current Marketable Investment Securities - Other

Our current other marketable investment securities portfolio includes investments in various debt instruments including, among others, commercial paper, corporate securities and United States treasury and/or agency securities.

Commercial paper consists mainly of unsecured short-term, promissory notes issued primarily by corporations with maturities ranging up to 365 days. Corporate securities consist of debt instruments issued by corporations with various maturities normally less than 18 months. U.S. Treasury and agency securities consist of debt instruments issued by the federal government and other government agencies.

Restricted Cash, Cash Equivalents and Marketable Investment Securities

As of December 31, 2018 and 2017, our restricted marketable investment securities, together with our restricted cash and cash equivalents, included amounts required as collateral for our letters of credit.

Other Investment Securities

We have strategic investments in certain debt and/or equity securities that are included in noncurrent “Other investment securities” on our Consolidated Balance Sheets. Our debt securities are classified as available-for-sale and our equity securities are accounted for using the equity method of accounting or recorded at fair value. Certain of our equity method investments are detailed below.

NagraStar L.L.C. As a result of the completion of the Share Exchange on February 28, 2017, we own a 50% interest in NagraStar L.L.C. (“NagraStar”), a joint venture that is our primary provider of encryption and related security systems intended to assure that only authorized customers have access to our programming.

Invidi Technologies Corporation. In November 2016, we, DIRECTV, LLC, a wholly-owned indirect subsidiary of AT&T Inc., and Cavendish Square Holding B.V., an affiliate of WPP plc, entered into a series of agreements to acquire Invidi Technologies Corporation (“Invidi”), an entity that provides proprietary software for the addressable advertising market. The transaction closed in January 2017.

Our ability to realize value from our strategic investments in securities that are not publicly traded depends on the success of the issuers’ businesses and their ability to obtain sufficient capital, on acceptable terms or at all, and to execute their business plans. Because private markets are not as liquid as public markets, there is also increased risk that we will not be able to sell these investments, or that when we desire to sell them, we will not be able to obtain fair value for them.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Unrealized Gains (Losses) on Marketable Investment Securities

As of December 31, 2018 and 2017, we had accumulated net unrealized losses of less than \$1 million. These amounts, net of related tax effect, were accumulated net unrealized losses of less than \$1 million. All of these amounts are included in “Accumulated other comprehensive income (loss)” within “Total stockholder’s equity (deficit).” The components of our available-for-sale investments are summarized in the table below.

	2018			2017				
	Marketable Investment Securities	Unrealized		Net	Marketable Investment Securities	Unrealized		Net
	Gains	Losses		Gains	Losses			
	(In thousands)							
Debt securities (including restricted):								
U.S. Treasury and agency securities	\$ 66,823	\$ 40	\$ (19)	\$ 21	\$ 74,788	\$ 22	\$ (141)	\$ (119)
Commercial paper	45,938	—	—	—	24,407	—	(2)	(2)
Corporate securities	100,662	11	(113)	(102)	63,809	—	(29)	(29)
Other	966	—	—	—	1,156	—	—	—
Total	\$ 214,389	\$ 51	\$ (132)	\$ (81)	\$ 164,160	\$ 22	\$ (172)	\$ (150)

As of December 31, 2018, restricted and non-restricted marketable investment securities included debt securities of \$180 million with contractual maturities within one year and \$34 million with contractual maturities extending longer than one year through and including five years. Actual maturities may differ from contractual maturities as a result of our ability to sell these securities prior to maturity.

Marketable Investment Securities in a Loss Position

The following table reflects the length of time that the individual debt securities, accounted for as available-for-sale, have been in an unrealized loss position, aggregated by investment category. As of December 31, 2018, the unrealized losses related to our investments in debt securities primarily represented investments in United States treasury and agency securities and corporate securities. We have the ability to hold and do not intend to sell our investments in these debt securities before they recover or mature, and it is more likely than not that we will hold these investments until that time. In addition, we are not aware of any specific factors indicating that the underlying issuers of these debt securities would not be able to pay interest as it becomes due or repay the principal at maturity. Therefore, we believe that these changes in the estimated fair values of these marketable investment securities are related to temporary market fluctuations.

	As of December 31,			
	2018		2017	
	Fair Value	Unrealized Loss	Fair Value	Unrealized Loss
	(In thousands)			
Debt securities:				
Less than 12 months	\$ 111,480	\$ (132)	\$ 109,853	\$ (53)
12 months or more	—	—	34,203	(119)
Total	\$ 111,480	\$ (132)	\$ 144,056	\$ (172)

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Fair Value Measurements

Our investments measured at fair value on a recurring basis were as follows:

	As of December 31,							
	2018				2017			
	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
	(In thousands)							
Cash equivalents (including restricted)	\$ 114,464	\$ 12,493	\$ 101,971	\$ —	\$ 315,030	\$ 140	\$ 314,890	\$ —
Debt securities (including restricted):								
U.S. Treasury and agency securities	\$ 66,823	\$ 66,823	\$ —	\$ —	\$ 74,788	\$ 74,788	\$ —	\$ —
Commercial paper	45,938	—	45,938	—	24,407	—	24,407	—
Corporate securities	100,662	—	100,662	—	63,809	—	63,809	—
Other	966	—	966	—	1,156	—	1,156	—
Equity securities	2,370	2,370	—	—	93,367	93,367	—	—
Total	\$ 216,759	\$ 69,193	\$ 147,566	\$ —	\$ 257,527	\$ 168,155	\$ 89,372	\$ —

During the years ended December 31, 2018 and 2017, we had no transfers in or out of Level 1 and Level 2 fair value measurements.

Gains and Losses on Sales and Changes in Carrying Amounts of Investments

“Other, net” within “Other Income (Expense)” included on our Consolidated Statements of Operations and Comprehensive Income (Loss) is as follows:

	For the Years Ended December 31,		
	2018	2017	2016
Other, net:	(In thousands)		
Marketable investment securities - realized and unrealized gains (losses) (1)	\$ 5,313	\$ 87,020	\$ 32,509
Costs related to early redemption of debt	(3,261)	(1,470)	—
Gain (loss) on sale of subsidiary	7,004	—	—
Equity in earnings of affiliates	(2,110)	2,163	2,508
Other	2,048	798	(2,212)
Total	\$ 8,994	\$ 88,511	\$ 32,805

- (1) During the year ended December 31, 2018, we recorded unrealized losses of \$2 million related to equity securities held as of December 31, 2018.

5. Inventory

Inventory consisted of the following:

	As of December 31,	
	2018	2017
	(In thousands)	
Finished goods	\$ 215,150	\$ 248,233
Work-in-process and service repairs	56,871	54,445
Raw materials	18,676	18,221
Total inventory	\$ 290,697	\$ 320,899

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

6. Property and Equipment and Intangible Assets

Property and Equipment

Property and equipment consisted of the following:

	Depreciable Life (In Years)	As of December 31,	
		2018	2017
(In thousands)			
Equipment leased to customers	2-5	\$ 1,980,808	\$ 2,264,653
EchoStar XV	15	277,658	277,658
Satellites acquired under capital lease agreements	10-15	499,819	499,819
Furniture, fixtures, equipment and other	2-10	1,820,883	1,680,492
Buildings and improvements	4-40	289,244	292,191
Land	-	13,186	14,057
Construction in progress	-	47,077	92,946
Total property and equipment		4,928,675	5,121,816
Accumulated depreciation		(3,550,726)	(3,489,655)
Property and equipment, net		\$ 1,377,949	\$ 1,632,161

Depreciation and amortization expense consisted of the following:

	For the Years Ended December 31,		
	2018	2017	2016
(In thousands)			
Equipment leased to customers	\$ 437,342	\$ 539,434	\$ 643,114
Satellites	61,045	61,045	61,045
Buildings, furniture, fixtures, equipment and other	162,073	141,293	128,276
Total depreciation and amortization	\$ 660,460	\$ 741,772	\$ 832,435

Cost of sales and operating expense categories included in our accompanying Consolidated Statements of Operations and Comprehensive Income (Loss) do not include depreciation expense related to satellites or equipment leased to customers.

Satellites

Pay-TV Satellites. We currently utilize 11 satellites in geostationary orbit approximately 22,300 miles above the equator, one of which we own and depreciate over its estimated useful life. We currently utilize certain capacity on seven satellites that we lease from EchoStar and one satellite that we lease from DISH Network, which are accounted for as operating leases. We also lease two satellites from third parties, which are accounted for as capital leases and are depreciated over the shorter of the economic life or the term of the satellite agreement.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

As of December 31, 2018, our pay-TV satellite fleet consisted of the following:

Satellites	Launch Date	Degree Orbital Location	Estimated Useful Life (Years) / Lease Termination Date
Owned:			
EchoStar XV	July 2010	61.5	15
Leased from DISH Network (1):			
EchoStar XVIII	June 2016	61.5	Month to month
Leased from EchoStar (2):			
EchoStar IX	August 2003	121	Month to month
EchoStar X (3)	February 2006	110	February 2021
EchoStar XI (3)	July 2008	110	September 2021
EchoStar XIV (3)	March 2010	119	February 2023
EchoStar XVI (4)	November 2012	61.5	January 2023
Nimiq 5	September 2009	72.7	September 2019
QuetzSat-1	September 2011	77	November 2021
Leased from Other Third Party:			
Anik F3	April 2007	118.7	April 2022
Ciel II (5)	December 2008	129	January 2020

- (1) See Note 16 for further information on our Related Party Transactions with DISH Network.
- (2) See Note 16 for further information on our Related Party Transactions with EchoStar.
- (3) We generally have the option to renew each lease on a year-to-year basis through the end of the useful life of the respective satellite.
- (4) We have the option to renew this lease for an additional five-year period.
- (5) During the fourth quarter 2018, we renewed this lease.

Satellite Anomalies

Operation of our DISH TV services requires that we have adequate satellite transmission capacity for the programming that we offer. While we generally have had in-orbit satellite capacity sufficient to transmit our existing channels and some backup capacity to recover the transmission of certain critical programming, our backup capacity is limited.

In the event of a failure or loss of any of our owned or leased satellites, we may need to acquire or lease additional satellite capacity or relocate one of our other owned or leased satellites and use it as a replacement for the failed or lost satellite. Such a failure could result in a prolonged loss of critical programming or a significant delay in our plans to expand programming as necessary to remain competitive and thus may have a material adverse effect on our business, financial condition and results of operations.

In the past, certain of our owned and leased satellites have experienced anomalies, some of which have had a significant adverse impact on their remaining useful life and/or commercial operation. There can be no assurance that future anomalies will not impact the remaining useful life and/or commercial operation of any of the owned and leased satellites in our fleet. See Note 2 "Impairment of Long-Lived Assets" for further information on evaluation of impairment. There can be no assurance that we can recover critical transmission capacity in the event one or more of our owned or leased in-orbit satellites were to fail. We generally do not carry commercial launch or in-orbit insurance on any of the satellites that we use, other than certain satellites leased from third parties, and therefore, we will bear the risk associated with any uninsured launch or in-orbit satellite failures.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Intangible Assets

As of December 31, 2018 and 2017, our identifiable intangibles subject to amortization consisted of the following:

	As of December 31,			
	2018		2017	
	Intangible Assets	Accumulated Amortization	Intangible Assets	Accumulated Amortization
	(In thousands)			
Technology-based	\$ 58,162	\$ (51,204)	\$ 58,162	\$ (47,746)
Trademarks	35,010	(27,106)	35,010	(23,426)
Contract-based	4,500	(4,500)	4,500	(4,500)
Customer relationships	23,632	(23,632)	23,632	(23,632)
Total	\$ 121,304	\$ (106,442)	\$ 121,304	\$ (99,304)

These identifiable intangibles are included in “Other noncurrent assets, net” on our Consolidated Balance Sheets. Amortization of these intangible assets is recorded on a straight-line basis over an average finite useful life primarily ranging from approximately five to 20 years. Amortization was \$7 million, \$7 million and \$8 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Estimated future amortization of our identifiable intangible assets as of December 31, 2018 is as follows (in thousands):

For the Years Ended December 31,	
2019	\$ 5,793
2020	3,285
2021	835
2022	666
2023	654
Thereafter	3,629
Total	\$ 14,862

As of December 31, 2018 and 2017, we had goodwill of \$6 million, which is included in “Other noncurrent assets, net” on our Consolidated Balance Sheets.

FCC Authorizations

As of December 31, 2018 and 2017, our FCC Authorizations consisted of the following:

	As of December 31,	
	2018	2017
	(In thousands)	
DBS Licenses	\$ 611,794	\$ 611,794
MVDDS Licenses	24,000	24,000
Capitalized Interest	1,552	481
Total	\$ 637,346	\$ 636,275

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

7. Long-Term Debt and Capital Lease Obligations

Fair Value of our Long-Term Debt

The following table summarizes the carrying amount and fair value of our debt facilities as of December 31, 2018 and 2017:

	As of December 31,			
	2018		2017	
	Carrying Amount	Fair Value	Carrying Amount	Fair Value
	(In thousands)			
4 1/4% Senior Notes due 2018 (1)	\$ —	\$ —	\$ 1,025,861	\$ 1,031,596
7 7/8% Senior Notes due 2019 (2)	1,317,372	1,343,298	1,400,000	1,501,206
5 1/8% Senior Notes due 2020	1,100,000	1,089,957	1,100,000	1,127,588
6 3/4% Senior Notes due 2021	2,000,000	1,974,940	2,000,000	2,120,480
5 7/8% Senior Notes due 2022	2,000,000	1,833,140	2,000,000	2,014,140
5 % Senior Notes due 2023	1,500,000	1,247,445	1,500,000	1,432,335
5 7/8% Senior Notes due 2024	2,000,000	1,611,960	2,000,000	1,952,220
7 3/4% Senior Notes due 2026	2,000,000	1,653,720	2,000,000	2,118,400
Other notes payable	10,346	10,346	11,509	11,509
Subtotal	11,927,718	\$ 10,764,806	13,037,370	\$ 13,309,474
Unamortized deferred financing costs and debt discounts, net	(23,215)		(31,041)	
Capital lease obligations (3)	66,984		104,318	
Total long-term debt and capital lease obligations (including current portion)	\$ 11,971,487		\$ 13,110,647	

- (1) On April 2, 2018, we redeemed the principal balance of our 4 1/4% Senior Notes due 2018.
- (2) During 2018, we repurchased \$82 million of our 7 7/8% Senior Notes due 2019 in open market trades. The remaining balance of \$1.318 billion matures on September 1, 2019 and is included in “Current portion of long-term debt and capital lease obligations” on our Consolidated Balance Sheets as of December 31, 2018.
- (3) Disclosure regarding fair value of capital leases is not required.

We estimated the fair value of our publicly traded long-term debt using market prices in less active markets (Level 2).

Our Senior Notes are:

- general unsecured senior obligations of DISH DBS;
- ranked equally in right of payment with all of DISH DBS’ and the guarantors’ existing and future unsecured senior debt; and
- ranked effectively junior to our and the guarantors’ current and future secured senior indebtedness up to the value of the collateral securing such indebtedness.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

The indentures related to our Senior Notes contain restrictive covenants that, among other things, impose limitations on the ability of DISH DBS and its restricted subsidiaries to:

- incur additional debt;
- pay dividends or make distributions on DISH DBS' capital stock or repurchase DISH DBS' capital stock;
- make certain investments;
- create liens or enter into sale and leaseback transactions;
- enter into transactions with affiliates;
- merge or consolidate with another company; and
- transfer or sell assets.

In the event of a change of control, as defined in the related indentures, we would be required to make an offer to repurchase all or any part of a holder's Senior Notes at a purchase price equal to 101% of the aggregate principal amount thereof, together with accrued and unpaid interest thereon, to the date of repurchase.

7 7/8% Senior Notes due 2019

On August 17, 2009 and October 5, 2009, we issued \$1.0 billion and \$400 million, respectively, aggregate principal amount of our ten-year 7 7/8% Senior Notes due September 1, 2019. During 2018, we repurchased \$82 million of our ten-year 7 7/8% Senior Notes due September 1, 2019 in open market trades. The remaining balance of \$1.318 billion matures on September 1, 2019. Interest accrues at an annual rate of 7 7/8% and is payable semi-annually in cash, in arrears on March 1 and September 1 of each year.

The 7 7/8% Senior Notes are redeemable, in whole or in part, at any time at a redemption price equal to 100% of the principal amount plus a "make-whole" premium, as defined in the related indenture, together with accrued and unpaid interest.

5 1/8% Senior Notes due 2020

On April 5, 2013, we issued \$1.1 billion aggregate principal amount of our seven-year 5 1/8% Senior Notes due May 1, 2020. Interest accrues at an annual rate of 5 1/8% and is payable semi-annually in cash, in arrears on May 1 and November 1 of each year.

The 5 1/8% Senior Notes are redeemable, in whole or in part, at any time at a redemption price equal to 100% of the principal amount plus a "make-whole" premium, as defined in the related indenture, together with accrued and unpaid interest.

6 3/4% Senior Notes due 2021

On May 5, 2011, we issued \$2.0 billion aggregate principal amount of our ten-year 6 3/4% Senior Notes due June 1, 2021. Interest accrues at an annual rate of 6 3/4% and is payable semi-annually in cash, in arrears on June 1 and December 1 of each year.

The 6 3/4% Senior Notes are redeemable, in whole or in part, at any time at a redemption price equal to 100% of the principal amount plus a "make-whole" premium, as defined in the related indenture, together with accrued and unpaid interest.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

5 7/8% Senior Notes due 2022

On May 16, 2012 and July 26, 2012, we issued \$1.0 billion and \$1.0 billion, respectively, aggregate principal amount of our ten-year 5 7/8% Senior Notes due July 15, 2022. Interest accrues at an annual rate of 5 7/8% and is payable semi-annually in cash, in arrears on January 15 and July 15 of each year.

The 5 7/8% Senior Notes due 2022 are redeemable, in whole or in part, at any time at a redemption price equal to 100% of the principal amount plus a “make-whole” premium, as defined in the related indenture, together with accrued and unpaid interest.

5% Senior Notes due 2023

On December 27, 2012, we issued \$1.5 billion aggregate principal amount of our 5% Senior Notes due March 15, 2023. Interest accrues at an annual rate of 5% and is payable semi-annually in cash, in arrears on March 15 and September 15 of each year.

The 5% Senior Notes are redeemable, in whole or in part, at any time at a redemption price equal to 100% of the principal amount plus a “make-whole” premium, as defined in the related indenture, together with accrued and unpaid interest.

5 7/8% Senior Notes due 2024

On November 20, 2014, we issued \$2.0 billion aggregate principal amount of our ten-year 5 7/8% Senior Notes due November 15, 2024. Interest accrues at an annual rate of 5 7/8% and is payable semi-annually in cash, in arrears on May 15 and November 15 of each year.

The 5 7/8% Senior Notes due 2024 are redeemable, in whole or in part, at any time at a redemption price equal to 100% of the principal amount plus a “make-whole” premium, as defined in the related indenture, together with accrued and unpaid interest.

7 3/4% Senior Notes due 2026

On June 13, 2016, we issued \$2.0 billion aggregate principal amount of our ten-year 7 3/4% Senior Notes due July 1, 2026. Interest accrues at an annual rate of 7 3/4% and is payable semi-annually in cash, in arrears on January 1 and July 1 of each year.

The 7 3/4% Senior Notes are redeemable, in whole or in part, at any time at a redemption price equal to 100% of the principal amount plus a “make-whole” premium, as defined in the related indenture, together with accrued and unpaid interest. Prior to July 1, 2019, we may also redeem up to 35% of the 7 3/4% Senior Notes at a specified premium with the net cash proceeds from certain equity offerings or capital contributions.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Interest on Long-Term Debt

	Semi-Annual Payment Dates	Annual Debt Service Requirements
(In thousands)		
7 7/8% Senior Notes due 2019	March 1 and September 1	\$ 110,250
5 1/8% Senior Notes due 2020	May 1 and November 1	\$ 56,375
6 3/4% Senior Notes due 2021	June 1 and December 1	\$ 135,000
5 7/8% Senior Notes due 2022	January 15 and July 15	\$ 117,500
5% Senior Notes due 2023	March 15 and September 15	\$ 75,000
5 7/8% Senior Notes due 2024	May 15 and November 15	\$ 117,500
7 3/4% Senior Notes due 2026	January 1 and July 1	\$ 155,000

Our ability to meet our debt service requirements will depend on, among other factors, the successful execution of our business strategy, which is subject to uncertainties and contingencies beyond our control.

Other Long-Term Debt and Capital Lease Obligations

Other long-term debt and capital lease obligations consisted of the following:

	As of December 31,	
	2018	2017
(In thousands)		
Satellites and other capital lease obligations	\$ 66,984	\$ 104,318
Notes payable related to satellite vendor financing and other debt payable in installments through 2025 with interest rates of approximately 6.0%	10,346	11,509
Total	77,330	115,827
Less: current portion	(21,155)	(38,613)
Other long-term debt and capital lease obligations, net of current portion	\$ 56,175	\$ 77,214

Capital Lease Obligations

Anik F3. Anik F3, an FSS satellite, was launched and commenced commercial operation in April 2007. This satellite is accounted for as a capital lease and depreciated over the term of the satellite service agreement. We have leased 100% of the Ku-band capacity on Anik F3 for a period of 15 years.

Ciel II. Ciel II, a Canadian DBS satellite, was launched in December 2008 and commenced commercial operation in February 2009. This satellite is accounted for as a capital lease and depreciated over the term of the satellite service agreement. We lease 100% of the capacity on Ciel II. The initial 10-year term expired in January 2019 and during the fourth quarter 2018, we renewed this lease through January 2020.

As of December 31, 2018 and 2017, we had \$500 million capitalized for the estimated fair value of satellites acquired under capital leases included in "Property and equipment, net," with related accumulated depreciation of \$449 million and \$407 million, respectively. On our Consolidated Statements of Operations and Comprehensive Income (Loss), we recognized \$42 million in depreciation expense on satellites acquired under capital lease agreements during each of the years ended December 31, 2018, 2017 and 2016.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Future minimum lease payments under the capital lease obligations, together with the present value of the net minimum lease payments as of December 31, 2018 are as follows (in thousands):

For the Years Ended December 31,	
2019	\$ 50,751
2020	48,032
2021	48,032
2022	16,032
2023	—
Thereafter	—
Total minimum lease payments	162,847
Less: Amount representing lease of the orbital location and estimated executory costs (primarily insurance and maintenance) including profit thereon, included in total minimum lease payments	(87,248)
Net minimum lease payments	75,599
Less: Amount representing interest	(8,615)
Present value of net minimum lease payments	66,984
Less: Current portion	(19,923)
Long-term portion of capital lease obligations	\$ 47,061

The summary of future maturities of our outstanding long-term debt as of December 31, 2018 is included in the commitments table in Note 11.

8. Income Taxes and Accounting for Uncertainty in Income Taxes

Income Taxes

DISH DBS and its domestic subsidiaries join with DISH Network in filing U.S. consolidated federal income tax returns and, in some states, combined or consolidated returns. The federal and state income tax provisions or benefits recorded by DISH DBS are generally those that would have been recorded if DISH DBS and its domestic subsidiaries had filed returns as a consolidated group independent of DISH Network. Cash is due and paid to DISH Network based on amounts that would be payable based on DISH DBS consolidated or combined group filings. Amounts are receivable from DISH Network on a basis similar to when they would be receivable from the IRS or other state taxing authorities. The amounts paid to DISH Network during the years ended December 31, 2018, 2017 and 2016 were \$302 million, \$408 million and \$552 million, respectively.

Our income tax policy is to record the estimated future tax effects of temporary differences between the tax bases of assets and liabilities and amounts reported on our Consolidated Balance Sheets, as well as probable operating loss, tax credit and other carryforwards. Deferred tax assets are offset by valuation allowances when we believe it is more likely than not that net deferred tax assets will not be realized. We periodically evaluate our need for a valuation allowance. Determining necessary valuation allowances requires us to make assessments about historical financial information as well as the timing of future events, including the probability of expected future taxable income and available tax planning opportunities.

As of December 31, 2018, we had no net operating loss carryforwards (“NOLs”) for federal and state income tax purposes. In addition, there are \$10 million of tax benefits related to credit carryforwards which are partially offset by a valuation allowance. Portions of the credit carryforwards may begin to lapse in 2019.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 (the “Tax Reform Act”) was enacted making significant changes to the Internal Revenue Code. Such changes include, but are not limited to, a reduction in the corporate tax rate and certain limitations on corporate deductions (e.g., a limitation on the interest expense deduction available to companies). The Tax Reform Act, among other things, lowered the federal statutory corporate tax rate effective January 1, 2018 from 35% to 21%. Consequently, we remeasured our deferred tax assets and liabilities as of December 31, 2017 which positively impacted our “Income tax (provision) benefit, net” by approximately \$291 million.

The components of the (benefit from) provision for income taxes were as follows:

	For the Years Ended December 31,		
	2018	2017	2016
	(In thousands)		
Current (benefit) provision:			
Federal	\$ 273,632	\$ 356,759	\$ 567,850
State	64,534	54,133	64,453
Foreign	4,616	3,736	10,253
Total current (benefit) provision	342,782	414,628	642,556
Deferred (benefit) provision:			
Federal	(25,934)	(308,028)	(83,638)
State	(123)	11,954	(837)
Increase (decrease) in valuation allowance	1,580	(938)	(495)
Total deferred (benefit) provision	(24,477)	(297,012)	(84,970)
Total (benefit) provision	\$ 318,305	\$ 117,616	\$ 557,586

Our \$1.292 billion of “Income (loss) before income taxes” on our Consolidated Statements of Operations and Comprehensive Income (Loss) included income of \$14 million related to our foreign operations.

The following table shows the principal reasons for the difference between the effective income tax rate and the statutory federal tax rate:

	For the Years Ended December 31,		
	2018	2017	2016
	% of pre-tax income/(loss)		
Statutory rate	21.0	35.0	35.0
State income taxes, net of federal benefit	4.4	4.2	2.9
Tax Reform Act (1)	-	(34.5)	—
Nondeductible/Nontaxable items (2)	-	11.5	—
Other, net	(0.8)	(2.2)	(1.3)
Total (benefit) provision for income taxes	24.6	14.0	36.6

- (1) On December 22, 2017, the Tax Reform Act was enacted, which, among other things, lowered the federal statutory corporate tax rate effective January 1, 2018 from 35% to 21%. Consequently, we remeasured our deferred tax assets and liabilities as of December 31, 2017 which positively impacted our “Income tax (provision) benefit, net” by approximately \$291 million.
- (2) During the year ended December 31, 2017, we recorded \$255 million of “Litigation expense” related to the FTC Action on our Consolidated Statements of Operations and Comprehensive Income (Loss). Any eventual payments made with respect to the FTC Action may not be deductible for tax purposes, which had a negative impact on our effective tax rate for the year ended December 31, 2017. The tax deductibility of any eventual payments made with respect to the FTC Action may change, based upon, among other things, further developments in the FTC Action, including final adjudication of the FTC Action. See Note 11 for further information.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Deferred taxes arise because of the differences in the book and tax bases of certain assets and liabilities. Significant components of deferred tax assets and liabilities were as follows:

	As of December 31,	
	2018	2017
	(In thousands)	
Deferred tax assets:		
NOL, interest, credit and other carryforwards	\$ 10,915	\$ 11,197
Accrued and prepaid expenses	—	35,776
Stock-based compensation	21,198	14,875
Deferred revenue	18,361	15,236
Total deferred tax assets	50,474	77,084
Valuation allowance	(7,467)	(5,887)
Deferred tax asset after valuation allowance	43,007	71,197
Deferred tax liabilities:		
Depreciation	(345,358)	(394,528)
Accrued and prepaid expenses	(15,537)	—
FCC authorizations and other intangible amortization	(131,452)	(123,963)
Bases difference in partnerships and other investments	(12,112)	(32,199)
Other liabilities	—	(5,606)
Total deferred tax liabilities	(504,459)	(556,296)
Net deferred tax asset (liability)	\$ (461,452)	\$ (485,099)

Accounting for Uncertainty in Income Taxes

In addition to filing federal income tax returns, we and one or more of our subsidiaries file income tax returns in all states that impose an income tax and a small number of foreign jurisdictions where we have immaterial operations. We are subject to United States federal, state and local income tax examinations by tax authorities for the years beginning in 2008 due to the carryover of previously incurred NOLs. We are currently under a federal income tax examination for fiscal years 2008 through 2015.

A reconciliation of the beginning and ending amount of unrecognized tax benefits included in “Long-term deferred revenue and other long-term liabilities” on our Consolidated Balance Sheets was as follows:

Unrecognized tax benefit	For the Years Ended December 31,		
	2018	2017	2016
	(In thousands)		
Balance as of beginning of period	\$ 201,162	\$ 201,693	\$ 203,053
Additions based on tax positions related to the current year	10,550	684	39,752
Additions based on tax positions related to prior years	1,154	4,593	395
Reductions based on tax positions related to prior years	(4,479)	(1,061)	(34,761)
Reductions based on tax positions related to settlements with taxing authorities	(8,328)	(1,634)	(3,628)
Reductions based on tax positions related to the lapse of the statute of limitations	(5,923)	(3,113)	(3,118)
Balance as of end of period	\$ 194,136	\$ 201,162	\$ 201,693

We have \$186 million in unrecognized tax benefits that, if recognized, could favorably affect our effective tax rate. We do not expect any material portion of this amount to be paid or settled within the next twelve months.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Accrued interest and penalties on uncertain tax positions are recorded as a component of “Interest expense, net of amounts capitalized” and “Other, net,” respectively, on our Consolidated Statements of Operations and Comprehensive Income (Loss). During the years ended December 31, 2018, 2017 and 2016, we recorded \$2 million, \$4 million and \$5 million in net interest and penalty expense to earnings, respectively. Accrued interest and penalties were \$26 million and \$24 million at December 31, 2018 and 2017, respectively. The above table excludes these amounts.

9. Employee Benefit Plans

Employee Stock Purchase Plan

Our employees participate in the DISH Network employee stock purchase plan (the “ESPP”), in which DISH Network is authorized to issue up to 3.8 million shares of Class A common stock. At December 31, 2018, DISH Network had 0.8 million shares of Class A common stock which remain available for issuance under the ESPP. Substantially all full-time employees who have been employed by DISH Network for at least one calendar quarter are eligible to participate in the ESPP. Employee stock purchases are made through payroll deductions. Under the terms of the ESPP, employees may not deduct an amount which would permit such employee to purchase DISH Network’s capital stock under all of DISH Network’s stock purchase plans at a rate which would exceed \$25,000 in fair value of capital stock in any one year. The purchase price of the stock is 85% of the closing price of DISH Network’s Class A common stock on the last business day of each calendar quarter in which such shares of DISH Network’s Class A common stock are deemed sold to an employee under the ESPP. During the years ended December 31, 2018, 2017 and 2016, employee purchases of DISH Network’s Class A common stock through the ESPP totaled approximately 0.6 million, 0.3 million and 0.2 million shares, respectively.

401(k) Employee Savings Plan

DISH Network sponsors a 401(k) Employee Savings Plan (the “401(k) Plan”) for eligible employees. Voluntary employee contributions to the 401(k) Plan may be matched 50% by DISH Network, subject to a maximum annual contribution of \$2,500 per employee. Forfeitures of unvested participant balances which are retained by the 401(k) Plan may be used to fund matching and discretionary contributions. DISH Network’s board of directors may also authorize an annual discretionary contribution to the 401(k) Plan with authorization by our Board of Directors, subject to the maximum deductible limit provided by the Internal Revenue Code of 1986, as amended. These contributions may be made in cash or in DISH Network’s stock.

The following table summarizes the expense associated with our matching contributions and discretionary contributions:

Expense Recognized Related to the 401(k) Plan	For the Years Ended December 31,		
	2018	2017	2016
	(In thousands)		
Matching contributions, net of forfeitures	\$ 10,300	\$ 7,070	\$ 6,546
Discretionary stock contributions, net of forfeitures	\$ 27,048	\$ 27,969	\$ 23,158

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

10. Stock-Based Compensation

Stock Incentive Plans

DISH Network maintains stock incentive plans to attract and retain officers, directors and key employees. Our employees participate in the DISH Network stock incentive plans. Stock awards under these plans include both performance and non-performance based stock incentives. As of December 31, 2018, there were outstanding under these plans stock options to acquire 13.4 million shares of DISH Network's Class A common stock and 1.7 million restricted stock units and awards associated with our employees. Stock options granted on or prior to December 31, 2018 were granted with exercise prices equal to or greater than the market value of DISH Network Class A common stock at the date of grant and with a maximum term of approximately ten years. While historically DISH Network has issued stock awards subject to vesting, typically at the rate of 20% per year, some stock awards have been granted with immediate vesting and other stock awards vest only upon the achievement of certain DISH Network-specific subscriber, operational and/or financial goals. As of December 31, 2018, DISH Network had 60.1 million shares of its Class A common stock available for future grant under its stock incentive plans.

Exercise prices for DISH Network stock options outstanding and exercisable associated with our employees as of December 31, 2018 were as follows:

	Options Outstanding			Options Exercisable		
	Number Outstanding as of December 31, 2018	Weighted-Average Remaining Contractual Life	Weighted-Average Exercise Price	Number Exercisable as of December 31, 2018	Weighted-Average Remaining Contractual Life	Weighted-Average Exercise Price
\$ — - \$ 10.00	18,800	0.25	\$ 6.34	18,800	0.25	\$ 6.34
\$ 10.01 - \$ 20.00	621,087	1.49	\$ 15.37	21,087	1.33	\$ 15.06
\$ 20.01 - \$ 30.00	1,284,283	2.73	\$ 27.61	744,283	2.72	\$ 27.40
\$ 30.01 - \$ 40.00	6,286,386	8.71	\$ 35.79	209,131	3.71	\$ 34.81
\$ 40.01 - \$ 50.00	1,633,405	8.53	\$ 47.50	126,900	6.44	\$ 46.57
\$ 50.01 - \$ 60.00	2,318,878	7.37	\$ 57.52	328,252	6.05	\$ 57.00
\$ 60.01 - \$ 70.00	1,182,650	7.32	\$ 64.20	236,650	6.13	\$ 65.48
\$ 70.01 - \$ 80.00	20,000	1.00	\$ 72.89	20,000	1.00	\$ 72.89
\$ — - \$ 80.00	13,365,489	7.40	\$ 41.78	1,705,103	4.17	\$ 40.87

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Stock Award Activity

DISH Network stock option activity associated with our employees was as follows:

	For the Years Ended December 31,					
	2018		2017		2016	
	Options	Weighted-Average Exercise Price	Options	Weighted-Average Exercise Price	Options	Weighted-Average Exercise Price
Total options outstanding, beginning of period	8,847,734	\$ 43.90	7,913,733	\$ 36.22	6,807,169	\$ 31.17
Granted	7,026,512	\$ 38.44	3,468,626	\$ 59.66	1,901,000	\$ 54.41
Exercised	(267,905)	\$ 16.43	(505,125)	\$ 28.73	(403,834)	\$ 23.26
Forfeited and cancelled (1)	(2,240,852)	\$ 39.73	(2,029,500)	\$ 44.64	(390,602)	\$ 50.28
Total options outstanding, end of period	13,365,489	\$ 41.78	8,847,734	\$ 43.90	7,913,733	\$ 36.22
Performance-based options outstanding, end of period (2)	8,671,886	\$ 39.95	5,490,626	\$ 42.81	4,312,000	\$ 31.39
Exercisable at end of period	1,705,103	\$ 40.87	1,772,608	\$ 35.13	1,883,533	\$ 29.98

- (1) Certain of these stock options include options that were granted to individuals who transferred to and/or from another DISH Network subsidiary not a part of DISH DBS.
- (2) These stock options are included in the caption "Total options outstanding, end of period." See discussion of the 2008 LTIP, 2013 LTIP, 2017 LTIP, 2019 LTIP and Other Employee Performance Awards below.

We realized tax benefits from stock awards exercised as follows:

	For the Years Ended December 31,		
	2018	2017	2016
	(In thousands)		
Tax benefit from stock awards exercised	\$ 1,664	\$ 9,347	\$ 5,006

Based on the closing market price of DISH Network Class A common stock on December 31, 2018, the aggregate intrinsic value of stock options associated with our employees was as follows:

	As of December 31, 2018	
	Options Outstanding	Options Exercisable
	(In thousands)	
Aggregate intrinsic value	\$ 6,504	\$ 750

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

DISH Network restricted stock unit and award activity associated with our employees was as follows:

	For the Years Ended December 31,					
	2018		2017		2016	
	Restricted Stock Units/Awards	Weighted- Average Grant Date Fair Value	Restricted Stock Units/Awards	Weighted- Average Grant Date Fair Value	Restricted Stock Units/Awards	Weighted- Average Grant Date Fair Value
Total restricted stock units/awards outstanding, beginning of period	2,484,720	\$ 51.16	1,336,000	\$ 32.11	1,382,250	\$ 32.01
Granted	—	\$ —	1,871,375	\$ 63.87	67,060	\$ 56.35
Vested	(10,475)	\$ 63.49	(14,845)	\$ 62.58	(60)	\$ 49.15
Forfeited and cancelled (1)	(755,300)	\$ 48.51	(707,810)	\$ 48.59	(113,250)	\$ 45.12
Total restricted stock units/awards outstanding, end of period	1,718,945	\$ 52.16	2,484,720	\$ 51.16	1,336,000	\$ 32.11
Restricted Performance Units/Awards outstanding, end of period (2)	1,689,350	\$ 51.97	2,435,500	\$ 50.91	1,336,000	\$ 32.11

- (1) Certain of these restricted stock units/awards include restricted stock units/awards that were granted to individuals who transferred to and/or from another DISH Network subsidiary not a part of DISH DBS.
- (2) These stock units/awards are included in the caption “Total restricted stock units/awards outstanding, end of period.” See discussion of the 2008 LTIP, 2013 LTIP, 2017 LTIP, 2019 LTIP and Other Employee Performance Awards below.

Long-Term Performance-Based Plans

2008 LTIP. During 2008, DISH Network adopted a long-term, performance-based stock incentive plan (the “2008 LTIP”). The 2008 LTIP provided stock options and restricted stock units, either alone or in combination, which vested based on DISH Network-specific subscriber and financial performance conditions. As of June 30, 2013, 100% of the eligible 2008 LTIP awards had vested.

2013 LTIP. During 2013, DISH Network adopted a long-term, performance-based stock incentive plan (the “2013 LTIP”). The 2013 LTIP provides stock options and restricted stock units in combination, which vest based on DISH Network-specific subscriber and financial performance conditions. Exercise of the stock awards is contingent on achieving these performance conditions by September 30, 2022.

Although no awards vest until DISH Network attains the performance conditions described above, compensation related to the 2013 LTIP will be recorded based on DISH Network’s assessment of the probability of meeting the remaining performance conditions. If the remaining performance conditions are probable of being achieved, we will begin recognizing the associated non-cash, stock-based compensation expense on our Consolidated Statements of Operations and Comprehensive Income (Loss) over the estimated period to achieve the performance condition.

During the years ended December 31, 2015, 2014, 2013, DISH Network determined that 30%, 10% and 20%, respectively, of the 2013 LTIP performance conditions were probable of achievement. During the years ended December 31, 2018, 2017 and 2016, no additional 2013 LTIP performance conditions were deemed probable of achievement. During 2018, management determined the 2013 LTIP performance conditions were neither probable nor improbable of achievement. As a result, we are no longer recording non-cash, stock-based compensation expense for the 2013 LTIP. We recorded non-cash, stock-based compensation expense for the years ended December 31, 2018, 2017 and 2016, as indicated in the table below titled “Non-Cash, Stock-Based Compensation Expense Recognized.” As of December 31, 2018, approximately 20% of the 2013 LTIP awards had vested.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

2017 LTIP. On December 2, 2016, DISH Network adopted a long-term, performance-based stock incentive plan (the “2017 LTIP”). The 2017 LTIP provides stock options, which vest based on DISH Network-specific subscriber and financial performance conditions. Awards were initially granted under the 2017 LTIP as of January 1, 2017. Exercise of the stock awards is contingent on achieving these performance conditions by December 31, 2020.

Although no awards vest until DISH Network attains the performance conditions described above, compensation related to the 2017 LTIP will be recorded based on DISH Network’s assessment of the probability of meeting the performance conditions. If the performance conditions are probable of being achieved, we will begin recognizing the associated non-cash, stock-based compensation expense on our Consolidated Statements of Operations and Comprehensive Income (Loss) over the estimated period to achieve the performance condition.

During both the years ended December 31, 2018 and 2017, DISH Network determined that 75% of the 2017 LTIP performance conditions were probable of achievement. During 2018, management determined the 2017 LTIP performance conditions were neither probable nor improbable of achievement. As a result, we are no longer recording non-cash, stock-based compensation expense for the 2017 LTIP. We recorded non-cash, stock-based compensation expense for the years ended December 31, 2018 and 2017, as indicated in the table below titled “Non-Cash, Stock-Based Compensation Expense Recognized.”

2019 LTIP. On August 17, 2018, DISH Network adopted a long-term, performance-based stock incentive plan (the “2019 LTIP”). The 2019 LTIP provides stock options, which vest based on certain DISH Network-specific subscriber, operational and/or financial performance conditions. Vesting of the stock awards is contingent on achieving these conditions by December 31, 2023.

Although no awards vest until the DISH Network attains the performance conditions described above, compensation related to the 2019 LTIP will be recorded based on management’s assessment of the probability of meeting the performance conditions. If the performance conditions are probable of being achieved, DISH Network will begin recognizing the associated non-cash, stock-based compensation expense on its Consolidated Statements of Operations and Comprehensive Income (Loss) over the estimated period to achieve the performance condition.

During the year ended December 31, 2018, DISH Network determined that 82% of the 2019 LTIP performance conditions were probable of achievement. As a result, non-cash, stock-based compensation expense was recorded for the year ended December 31, 2018, as indicated in the table below titled “Non-Cash, Stock-Based Compensation Expense Recognized.”

Other Employee Performance Awards. In addition to the above long-term, performance stock incentive plans, DISH Network has other stock awards that vest based on certain other DISH Network-specific subscriber, operational and/or financial performance conditions. Exercise of these stock awards is contingent on achieving certain performance conditions.

Additional compensation related to these awards will be recorded based on DISH Network’s assessment of the probability of meeting the remaining performance conditions. If the remaining performance conditions are probable of being achieved, we will begin recognizing the associated non-cash, stock-based compensation expense on our Consolidated Statements of Operations and Comprehensive Income (Loss) over the estimated period to achieve the performance condition. See the table below titled “Estimated Remaining Non-Cash, Stock-Based Compensation Expense.”

Although no awards vest until the performance conditions are attained, DISH Network determined that certain performance conditions described above were probable of achievement and, as a result, we recorded non-cash, stock-based compensation expense for the years ended December 31, 2018, 2017 and 2016, as indicated in the table below titled “Non-Cash, Stock-Based Compensation Expense Recognized.”

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Given the competitive nature of DISH Network’s business, small variations in subscriber churn, gross new subscriber activation rates and certain other factors can significantly impact subscriber growth. Consequently, while it was determined that achievement of certain DISH Network-specific subscriber, operational and/or financial performance conditions were not probable as of December 31, 2018, that assessment could change in the future.

The non-cash, stock-based compensation expense associated with these awards for our employees was as follows:

Non-Cash, Stock-Based Compensation Expense Recognized	For the Years Ended December 31,		
	2018	2017	2016
	(In thousands)		
2019 LTIP	\$ 3,475	\$ —	\$ —
2017 LTIP	3,293	10,640	—
2013 LTIP (1)	(2,471)	(321)	2,565
Other employee performance awards	17,888	7,549	1,424
Total non-cash, stock-based compensation expense recognized for performance-based awards	\$ 22,185	\$ 17,868	\$ 3,989

(1) “Non-Cash, Stock-Based Compensation Expense Recognized” includes forfeitures.

Estimated Remaining Non-Cash, Stock-Based Compensation Expense	2019 LTIP	2017 LTIP	2013 LTIP	Other Employee Performance Awards
	(In thousands)			
Expense estimated to be recognized during 2019	\$ 13,888	\$ —	\$ —	\$ 17,850
Estimated contingent expense subsequent to 2019	25,974	19,497	32,365	64,298
Total estimated remaining expense over the term of the plan	\$ 39,862	\$ 19,497	\$ 32,365	\$ 82,148

Of the 13.4 million stock options and 1.7 million restricted stock units and awards outstanding under the DISH Network stock incentive plans associated with our employees as of December 31, 2018, the following awards were outstanding pursuant to the performance-based stock incentive plans:

Performance-Based Stock Options	As of December 31, 2018	
	Number of Awards	Weighted-Average Grant Price
2019 LTIP	4,225,000	\$ 35.42
2017 LTIP	2,348,386	\$ 56.75
2013 LTIP	958,500	\$ 40.95
Other employee performance awards	1,140,000	\$ 21.31
Total	8,671,886	\$ 39.95
Restricted Performance Units/Awards		
2013 LTIP	479,250	
Other employee performance awards	1,210,100	
Total	1,689,350	

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Stock-Based Compensation

Total non-cash, stock-based compensation expense for all of our employees is shown in the following table for the years ended December 31, 2018, 2017 and 2016 and was allocated to the same expense categories as the base compensation for such employees:

	For the Years Ended December 31,		
	2018	2017	2016
	(In thousands)		
Subscriber-related	\$ 1,150	\$ 1,562	\$ 694
Satellite and transmission	262	1,761	—
General and administrative	34,109	26,618	12,343
Total non-cash, stock based compensation	\$ 35,521	\$ 29,941	\$ 13,037

As of December 31, 2018, our total unrecognized compensation cost related to the non-performance based unvested stock awards was \$31 million and will be recognized over a weighted-average period of approximately 3.6 years. Share-based compensation expense is recognized based on stock awards ultimately expected to vest.

Valuation

The fair value of each stock option granted for the years ended December 31, 2018, 2017 and 2016 was estimated at the date of the grant using a Black-Scholes option valuation model with the following assumptions:

Stock Options	For the Years Ended December 31,					
	2018		2017		2016	
Risk-free interest rate	2.09 %	- 2.98 %	1.34 %	- 2.29 %	1.06 %	- 2.27 %
Volatility factor	23.33 %	- 30.22 %	22.25 %	- 26.15 %	26.12 %	- 33.37 %
Expected term of options in years	2.8	- 5.5	3.8	- 5.5	5.4	- 10.0
Fair value of options granted	\$ 7.10	- \$ 12.53	\$ 11.95	- \$ 16.69	\$ 12.45	- \$ 26.86

While DISH Network currently does not intend to declare dividends on its common stock, it may elect to do so from time to time. Accordingly, the dividend yield percentage used in the Black-Scholes option valuation model was set at zero for all periods. The Black-Scholes option valuation model was developed for use in estimating the fair value of traded stock options which have no vesting restrictions and are fully transferable. Consequently, our estimate of fair value may differ from other valuation models. Further, the Black-Scholes option valuation model requires the input of highly subjective assumptions. Changes in these subjective input assumptions can materially affect the fair value estimate.

We will continue to evaluate the assumptions used to derive the estimated fair value of DISH Network's stock options as new events or changes in circumstances become known.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

11. Commitments and Contingencies

Commitments

As of December 31, 2018, future maturities of our long-term debt, capital lease and contractual obligations are summarized as follows:

	Payments due by period						
	Total	2019	2020	2021	2022	2023	Thereafter
	(In thousands)						
Long-term debt obligations	\$ 11,927,718	\$ 1,318,605	\$ 1,101,307	\$ 2,001,384	\$ 2,001,468	\$ 1,501,556	\$ 4,003,398
Capital lease obligations	66,984	19,922	19,166	20,645	7,251	—	—
Interest expense on long-term debt and capital lease obligations	3,286,292	761,738	631,597	534,352	465,499	310,297	582,809
Satellite-related obligations	887,386	311,374	236,913	206,111	124,668	8,320	—
Operating lease obligations	152,349	37,380	22,150	17,940	14,873	9,786	50,220
Purchase obligations	1,340,128	1,243,847	48,966	29,284	18,031	—	—
Total	\$ 17,660,857	\$ 3,692,866	\$ 2,060,099	\$ 2,809,716	\$ 2,631,790	\$ 1,829,959	\$ 4,636,427

In certain circumstances the dates on which we are obligated to make these payments could be delayed. These amounts will increase to the extent that we procure launch and/or in-orbit insurance on our satellites or contract for the construction, launch or lease of additional satellites.

The table above does not include \$194 million of liabilities associated with unrecognized tax benefits that were accrued, as discussed in Note 8, and are included on our Consolidated Balance Sheets as of December 31, 2018. We do not expect any portion of this amount to be paid or settled within the next twelve months.

DISH Network Spectrum

Since 2008, DISH Network has directly invested over \$11 billion to acquire certain wireless spectrum licenses and related assets and made over \$10 billion in non-controlling investments in certain entities, for a total of over \$21 billion, as described further below.

DISH Network has directly invested over \$11 billion to acquire certain wireless spectrum licenses and related assets. These wireless spectrum licenses are subject to certain interim and final build-out requirements, as well as certain renewal requirements. In March 2017, DISH Network notified the FCC that it plans to deploy a next-generation 5G-capable network, focused on supporting narrowband IoT (“IoT”), which is the first phase of its network deployment (“First Phase”). DISH Network expects to complete the First Phase by March 2020, with subsequent phases to be completed thereafter. As of December 31, 2018, DISH Network had entered into vendor contracts with multiple parties for, among other things, base stations, chipsets, modules, tower leases, the core network, Radio Frequency (“RF”) design, and deployment services for the First Phase. Among other things, initial RF design in connection with the First Phase is now complete, DISH Network has secured certain tower sites, and they are in the process of identifying and securing additional tower sites. The core network has been installed and commissioned. DISH Network installed the first base stations on sites in 2018, and it plans to continue deployment until complete. DISH Network currently expects expenditures for its wireless projects to be between \$500 million and \$1.0 billion through 2020. DISH Network expects the second phase of its network deployment (“Second Phase”) to follow once the 3GPP Release 16 is standardized and as it plans for its other spectrum holdings develop, DISH Network plans to upgrade and expand its network to full 5G to support new use cases. DISH Network currently expects expenditures for the Second Phase to be approximately \$10 billion. DISH Network will need to make significant additional investments or partner with others to, among other things, commercialize, build-out, and integrate these licenses and related assets, and any additional acquired licenses and related assets; and comply with regulations applicable to such licenses.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Depending on the nature and scope of such commercialization, build-out, integration efforts, and regulatory compliance, any such investments or partnerships could vary significantly. In addition, as DISH Network considers its options for the commercialization of its wireless spectrum, it will incur significant additional expenses and will have to make significant investments related to, among other things, research and development, wireless testing and wireless network infrastructure. DISH Network may also determine that additional wireless spectrum licenses may be required to commercialize its wireless business and to compete with other wireless service providers.

In connection with the development of DISH Network's wireless business, including, without limitation, the efforts described above, we have made cash distributions to partially finance these efforts to date and may make additional cash distributions to finance, in whole or in part, DISH Network's future efforts. See Note 16 for further information regarding our dividends to DOC. There can be no assurance that DISH Network will be able to develop and implement a business model that will realize a return on these wireless spectrum licenses or that DISH Network will be able to profitably deploy the assets represented by these wireless spectrum licenses.

DISH Network Non-Controlling Investments in the Northstar Entities and the SNR Entities Related to AWS-3 Wireless Spectrum Licenses

During 2015, through its wholly-owned subsidiaries American AWS-3 Wireless II L.L.C. ("American II") and American AWS-3 Wireless III L.L.C. ("American III"), DISH Network initially made over \$10 billion in certain non-controlling investments in Northstar Spectrum, LLC ("Northstar Spectrum"), the parent company of Northstar Wireless, LLC ("Northstar Wireless," and collectively with Northstar Spectrum, the "Northstar Entities"), and in SNR Wireless HoldCo, LLC ("SNR HoldCo"), the parent company of SNR Wireless LicenseCo, LLC ("SNR Wireless," and collectively with SNR HoldCo, the "SNR Entities"), respectively. On October 27, 2015, the FCC granted certain AWS-3 wireless spectrum licenses (the "AWS-3 Licenses") to Northstar Wireless (the "Northstar Licenses") and to SNR Wireless (the "SNR Licenses"), respectively. The Northstar Entities and/or the SNR Entities may need to raise significant additional capital in the future, which may be obtained from third party sources or from DISH Network, so that the Northstar Entities and the SNR Entities may commercialize, build-out and integrate these AWS-3 Licenses, comply with regulations applicable to such AWS-3 Licenses, and make any potential payments related to the re-auction of AWS-3 licenses retained by the FCC. Depending upon the nature and scope of such commercialization, build-out, integration efforts, regulatory compliance, and potential re-auction payments, any such loans, equity contributions or partnerships could vary significantly. For further information regarding the potential re-auction of AWS-3 licenses retained by the FCC, see Note 14 "*Commitments and Contingencies – Commitments – DISH Network Non-Controlling Investments in the Northstar Entities and the SNR Entities Related to AWS-3 Wireless Spectrum Licenses*" in the Notes to DISH Network's Annual Report on Form 10-K for the year ended December 31, 2018.

In connection with certain funding obligations related to the investments by American II and American III discussed above, in February 2015, we paid a dividend of \$8.250 billion to DOC for, among other things, general corporate purposes, which included such funding obligations, and to fund other DISH Network cash needs. We may make additional cash distributions to finance, in whole or in part, loans that DISH Network may make to the Northstar Entities and the SNR Entities in the future related to DISH Network's non-controlling investments in these entities. There can be no assurance that DISH Network will be able to obtain a profitable return on its non-controlling investments in the Northstar Entities and the SNR Entities.

We may need to raise significant additional capital in the future, which may not be available on acceptable terms or at all, to among other things, make additional cash distributions to DISH Network, continue investing in our business and to pursue acquisitions and other strategic transactions.

See Note 14 "*Commitments and Contingencies – Wireless*" in the Notes to DISH Network's Annual Report on Form 10-K for the year ended December 31, 2018 for further information.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Guarantees

During the third quarter 2009, EchoStar entered into a satellite transponder service agreement for Nimiq 5 through 2024. We sublease this capacity from EchoStar and DISH Network guarantees a certain portion of EchoStar's obligation under its satellite transponder service agreement through 2019. As of December 31, 2018, the remaining obligation of the DISH Network guarantee was \$53 million.

As of December 31, 2018, we have not recorded a liability on the balance sheet for this guarantee.

Purchase Obligations

Our 2019 purchase obligations primarily consist of binding purchase orders for certain fixed contractual commitments to purchase programming content, receiver systems and related equipment, broadband equipment, digital broadcast operations, transmission costs, streaming delivery technology and infrastructure, engineering services, and other products and services related to the operation of our Pay-TV services. Our purchase obligations can fluctuate significantly from period to period due to, among other things, management's timing of payments and inventory purchases, and can materially impact our future operating asset and liability balances, and our future working capital requirements.

Programming Contracts

In the normal course of business, we enter into contracts to purchase programming content in which our payment obligations are generally contingent on the number of Pay-TV subscribers to whom we provide the respective content. These programming commitments are not included in the "Commitments" table above. The terms of our contracts typically range from one to ten years with annual rate increases. Our programming expenses will increase to the extent we are successful in growing our Pay-TV subscriber base. In addition, programming costs per subscriber continue to increase due to contractual price increases and the renewal of long-term programming contracts on less favorable pricing terms.

Rent Expense

Total rent expense for operating leases was \$449 million, \$473 million and \$431 million in 2018, 2017 and 2016, respectively.

Patents and Intellectual Property

Many entities, including some of our competitors, have or may in the future obtain patents and other intellectual property rights that cover or affect products or services that we offer or that we may offer in the future. We may not be aware of all intellectual property rights that our products or services may potentially infringe. Damages in patent infringement cases can be substantial, and in certain circumstances can be trebled. Further, we cannot estimate the extent to which we may be required in the future to obtain licenses with respect to patents held by others and the availability and cost of any such licenses. Various parties have asserted patent and other intellectual property rights with respect to components of our products and services. We cannot be certain that these persons do not own the rights they claim, that our products do not infringe on these rights, and/or that these rights are not valid. Further, we cannot be certain that we would be able to obtain licenses from these persons on commercially reasonable terms or, if we were unable to obtain such licenses, that we would be able to redesign our products to avoid infringement.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Contingencies

Separation Agreement

On January 1, 2008, DISH Network completed the distribution of its technology and set-top box business and certain infrastructure assets (the “Spin-off”) into a separate publicly-traded company, EchoStar. In connection with the Spin-off, DISH Network entered into a separation agreement with EchoStar that provides, among other things, for the division of certain liabilities, including liabilities resulting from litigation. Under the terms of the separation agreement, EchoStar has assumed certain liabilities that relate to its business, including certain designated liabilities for acts or omissions that occurred prior to the Spin-off. Certain specific provisions govern intellectual property related claims under which, generally, EchoStar will only be liable for its acts or omissions following the Spin-off and DISH Network will indemnify EchoStar for any liabilities or damages resulting from intellectual property claims relating to the period prior to the Spin-off, as well as our acts or omissions following the Spin-off. On February 28, 2017, DISH Network and EchoStar completed the Share Exchange pursuant to which certain assets that were transferred to EchoStar in the Spin-off were transferred back to us. The Share Exchange Agreement contains additional indemnification provisions between us and EchoStar for certain liabilities and legal proceedings.

Litigation

We are involved in a number of legal proceedings (including those described below) concerning matters arising in connection with the conduct of our business activities. Many of these proceedings are at preliminary stages, and many of these proceedings seek an indeterminate amount of damages. We regularly evaluate the status of the legal proceedings in which we are involved to assess whether a loss is probable or there is a reasonable possibility that a loss or an additional loss may have been incurred and to determine if accruals are appropriate. If accruals are not appropriate, we further evaluate each legal proceeding to assess whether an estimate of the possible loss or range of possible loss can be made.

For certain cases described on the following pages, management is unable to provide a meaningful estimate of the possible loss or range of possible loss because, among other reasons, (i) the proceedings are in various stages; (ii) damages have not been sought; (iii) damages are unsupported and/or exaggerated; (iv) there is uncertainty as to the outcome of pending appeals or motions; (v) there are significant factual issues to be resolved; and/or (vi) there are novel legal issues or unsettled legal theories to be presented or a large number of parties. For these cases, however, management does not believe, based on currently available information, that the outcomes of these proceedings will have a material adverse effect on our financial condition, though the outcomes could be material to our operating results for any particular period, depending, in part, upon the operating results for such period.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Blue Spike, LLC

On July 6, 2018, Blue Spike, LLC (“Blue Spike”) filed a complaint against DISH Network and our wholly-owned subsidiaries DISH Network L.L.C. and Dish Network Service L.L.C. in the United States District Court for the Eastern District of Texas. The complaint alleges infringement of Reissued United States Patent RE44,222E1 (the “222 patent”), entitled “Methods, systems and devices for packet watermarking and efficient provisioning of bandwidth”; Reissued United States Patent RE44,307 (the “307 patent”), entitled “Methods, systems and devices for packet watermarking and efficient provisioning of bandwidth”; and United States Patent Nos. 7,287,275B2 (the “275 patent”), entitled “Methods, systems and devices for packet watermarking and efficient provisioning of bandwidth”; 8,473,746 (the “746 patent”), entitled “Methods, systems and devices for packet watermarking and efficient provisioning of bandwidth”; 8,224,705 (the “705 patent”), entitled “Methods, systems and devices for packet watermarking and efficient provisioning of bandwidth”; 7,475,246 (the “246 patent”), entitled “Secure personal content server”; 8,739,295B2 (the “295 patent”), entitled “Secure personal content server”; 9,021,602 (the “602 patent”), entitled “Data Protection and Device”; 9,104,842 (the “842 patent”), entitled “Data Protection and Device”; 9,934,408 (the “408 patent”), entitled “Secure personal content server”; 7,159,116B2 (the “116 patent”), entitled “Systems, methods and devices for trusted transactions”; and 8,538,011B2 (the “011 patent”), entitled “Systems, methods and devices for trusted transactions.” On September 5, 2018, pursuant to a joint motion of the parties, the Court ordered the case transferred to the United States District Court for the District of Delaware. In a First Amended Complaint filed on October 12, 2018, Blue Spike dropped its claims for infringement of the 222 patent, the 307 patent, the 275 patent, the 705 patent, and the 746 patent. On November 11, 2018, Blue Spike dismissed its complaint.

On January 28, 2019, Blue Spike, along with Blue Spike International, Ltd. and Wistaria Trading Ltd., filed a new action against us and our wholly-owned subsidiaries DISH Network L.L.C. and Dish Network Service L.L.C. in the United States District Court for the District of Delaware. The complaint alleges infringement of the 246 patent, the 295 patent, the 408 patent, the 116 patent, the 011 patent, the 602 patent and the 842 patent, all of which were asserted in the prior action.

We intend to vigorously defend this case. In the event that a court ultimately determines that we infringe the asserted patents, we may be subject to substantial damages, which may include treble damages, and/or an injunction that could require us to materially modify certain features that we currently offer to consumers. We cannot predict with any degree of certainty the outcome of the suit or determine the extent of any potential liability or damages. Each of the plaintiffs is an entity that seeks to license a patent portfolio without itself practicing any of the claims recited therein.

ClearPlay, Inc.

On March 13, 2014, ClearPlay, Inc. (“ClearPlay”) filed a complaint against DISH Network, our wholly-owned subsidiary DISH Network L.L.C., EchoStar, and its then wholly-owned subsidiary EchoStar Technologies L.L.C., in the United States District Court for the District of Utah. The complaint alleges infringement of United States Patent Nos. 6,898,799 (the “799 patent”), entitled “Multimedia Content Navigation and Playback”; 7,526,784 (the “784 patent”), entitled “Delivery of Navigation Data for Playback of Audio and Video Content”; 7,543,318 (the “318 patent”), entitled “Delivery of Navigation Data for Playback of Audio and Video Content”; 7,577,970 (the “970 patent”), entitled “Multimedia Content Navigation and Playback”; and 8,117,282 (the “282 patent”), entitled “Media Player Configured to Receive Playback Filters From Alternative Storage Mediums.” ClearPlay alleges that the AutoHop™ feature of our Hopper set-top box infringes the asserted patents. On February 11, 2015, the case was stayed pending various third-party challenges before the United States Patent and Trademark Office regarding the validity of certain of the patents asserted in the action. In those third-party challenges, the United States Patent and Trademark Office found that all claims of the 282 patent are unpatentable, and that certain claims of the 784 patent and 318 patent are unpatentable. ClearPlay appealed as to the 784 patent and the 318 patent, and on August 23, 2016, the United States Court of Appeals for the Federal Circuit affirmed the findings of the United States Patent and Trademark Office. On October 31, 2016, the stay was lifted. No trial date has been set.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

We intend to vigorously defend this case. In the event that a court ultimately determines that we infringe the asserted patents, we may be subject to substantial damages, which may include treble damages, and/or an injunction that could require us to materially modify certain features that we currently offer to consumers. We cannot predict with any degree of certainty the outcome of the suit or determine the extent of any potential liability or damages.

Contemporary Display LLC

On June 4, 2018, Contemporary Display LLC (“Contemporary”) filed a complaint against DISH Network and our wholly-owned subsidiary DISH Network L.L.C. in the United States District Court for the Western District of Texas. The complaint alleges infringement of United States Patent No. 6,028,643 (the “643 patent”), entitled “Multiple-Screen Video Adapter with Television Tuner”; United States Patent No. 6,429,903 (the “903 patent”), entitled “Video Adapter for Supporting at Least One Television Monitor”; United States Patent No. 6,492,997 (the “997 patent”), entitled “Method and System for Providing Selectable Programming in a Multi-Screen Mode”; United States Patent No. 7,500,202 (the “202 patent”), “Remote Control for Navigating Through Content in an Organized and Categorized Fashion”; and United States Patent No. 7,809,842 (the “842 patent”), entitled “Transferring Sessions Between Devices.” The 643 patent and the 903 patent are directed to video adapters for use with multiple displays. The 997 patent is directed to a system for presenting multiple video programs on a display device simultaneously. The 202 patent is directed to a remote control for interacting with a set-top box having programmable features and “operational controls” on at least three sides of the remote control. The 842 patent is directed to a system for managing online communication sessions between multiple devices. Contemporary is an entity that seeks to license a patent portfolio without itself practicing any of the claims recited therein.

In a First Amended Complaint filed on August 6, 2018, Contemporary added our wholly-owned subsidiary DISH Network L.L.C. as a defendant. In a Second Amended Complaint filed on October 9, 2018, Contemporary named only our wholly-owned subsidiary DISH Network L.L.C. as a defendant and dropped certain indirect infringement allegations.

We intend to vigorously defend this case. In the event that a court ultimately determines that we infringe the asserted patents, we may be subject to substantial damages, which may include treble damages, and/or an injunction that could require us to materially modify certain features that we currently offer to consumers. We cannot predict with any degree of certainty the outcome of the suit or determine the extent of any potential liability or damages.

Customedia Technologies, L.L.C.

On February 10, 2016, Customedia Technologies, L.L.C. (“Customedia”) filed a complaint against DISH Network and our wholly-owned subsidiary DISH Network L.L.C. in the United States District Court for the Eastern District of Texas. The complaint alleges infringement of four patents: United States Patent No. 8,719,090 (the “090 patent”); United States Patent No. 9,053,494 (the “494 patent”); United States Patent No. 7,840,437 (the “437 patent”); and United States Patent No. 8,955,029 (the “029 patent”). Each patent is entitled “System for Data Management And On-Demand Rental And Purchase Of Digital Data Products.” Customedia alleges infringement in connection with our addressable advertising services, our DISH Anywhere feature, and our Pay-Per-View and video-on-demand offerings. Customedia is an entity that seeks to license a patent portfolio without itself practicing any of the claims recited therein.

In December 2016 and January 2017, DISH Network L.L.C. filed petitions with the United States Patent and Trademark Office challenging the validity of the asserted claims of each of the asserted patents. On June 12, 2017, the United States Patent and Trademark Office agreed to institute proceedings on our petitions challenging the 090 patent and the 437 patent; on July 18, 2017, it agreed to institute proceedings on our petitions challenging the 029 patent; and on July 28, 2017, it agreed to institute proceedings on our petitions challenging the 494 patent. These instituted proceedings cover all asserted claims of each of the asserted patents. The litigation in the District Court has been stayed since August 8, 2017 pending resolution of the proceedings at the United States Patent and Trademark Office.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Pursuant to an agreement between the parties, on December 20, 2017, DISH Network L.L.C. dismissed its petitions challenging the 029 patent in the United States Patent and Trademark Office, and on January 9, 2018, the parties dismissed their claims, counterclaims and defenses as to that patent in the litigation. On March 5, 2018, the United States Patent and Trademark Office conducted a trial on the remaining petitions. On June 11, 2018, the United States Patent and Trademark Office issued final written decisions on DISH Network L.L.C.'s petitions challenging the 090 patent and it invalidated all of the asserted claims. On July 25, 2018, the United States Patent and Trademark Office issued final written decisions on DISH Network L.L.C.'s petitions challenging the 437 patent and the 494 patent and it invalidated all of the asserted claims.

Customedia has filed notices of appeal from all of the final written decisions adverse to it, and DISH Network L.L.C. cross-appealed to the extent that its petitions were not successful. On February 6, 2019, the Court of Appeals granted DISH Network L.L.C.'s motion to dismiss its cross-appeals related to the 090 patent and, on February 26, 2019, granted DISH Network L.L.C.'s motion to dismiss its cross-appeals related to the 437 patent.

We intend to vigorously defend this case. In the event that a court ultimately determines that we infringe the asserted patents, we may be subject to substantial damages, which may include treble damages, and/or an injunction that could require us to materially modify certain features that we currently offer to consumers. We cannot predict with any degree of certainty the outcome of the suit or determine the extent of any potential liability or damages.

Dragon Intellectual Property, LLC

On December 20, 2013, Dragon Intellectual Property, LLC ("Dragon IP") filed complaints against our wholly-owned subsidiary DISH Network L.L.C., as well as Apple Inc.; AT&T, Inc.; Charter Communications, Inc.; Comcast Corp.; Cox Communications, Inc.; DirecTV; Sirius XM Radio Inc.; Time Warner Cable Inc. and Verizon Communications, Inc., in the United States District Court for the District of Delaware, alleging infringement of United States Patent No. 5,930,444 (the "444 patent"), which is entitled "Simultaneous Recording and Playback Apparatus." Dragon IP alleges that various of our DVR receivers infringe the 444 patent. Dragon IP is an entity that seeks to license an acquired patent portfolio without itself practicing any of the claims recited therein. On December 23, 2014, DISH Network L.L.C. filed a petition before the United States Patent and Trademark Office challenging the validity of certain claims of the 444 patent. On April 10, 2015, the Court granted DISH Network L.L.C.'s motion to stay the action in light of DISH Network L.L.C.'s petition and certain other defendants' petitions pending before the United States Patent and Trademark Office challenging the validity of certain claims of the 444 patent. On July 17, 2015, the United States Patent and Trademark Office agreed to institute a proceeding on our petition. Pursuant to a stipulation between the parties, on April 27, 2016, the Court entered an order of non-infringement and judgment in favor of DISH Network L.L.C. On June 15, 2016, the United States Patent and Trademark Office entered an order that the patent claims being asserted against DISH Network L.L.C. with respect to the 444 patent are unpatentable. On August 8, 2016, Dragon filed notices of appeal with respect to the Court's judgment and the United States Patent and Trademark Office's decision and, on October 5, 2017, the United States Court of Appeals for the Federal Circuit heard oral argument. On November 1, 2017, the United States Court of Appeals for the Federal Circuit affirmed the unpatentability of the 444 patent based on the petition filed in the United States Patent and Trademark Office by DISH Network L.L.C., and dismissed as moot the appeal of the order of non-infringement from the District Court. On December 1, 2017, Dragon IP filed a petition for panel rehearing with the United States Court of Appeals for the Federal Circuit, which the Court of Appeals denied on January 31, 2018. On March 16, 2018, Dragon IP filed a petition asking the United States Supreme Court to hear a further appeal on the constitutionality of the procedure by which the United States Patent and Trademark Office invalidated the asserted claims of the 444 patent. That petition was dismissed on June 18, 2018. Dragon IP's case against DISH Network L.L.C. is now concluded.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Grecia

On March 27, 2015, William Grecia (“Grecia”) filed a complaint against our wholly-owned subsidiary DISH Network L.L.C. in the United States District Court for the Northern District of Illinois, alleging infringement of United States Patent No. 8,533,860 (the “860 patent”), which is entitled “Personalized Digital Media Access System—PDMAS Part II.” Grecia alleges that we violate the 860 patent in connection with our digital rights management. Grecia is the named inventor on the 860 patent. On June 22, 2015, the case was transferred to the United States District Court for the Northern District of California. On November 18, 2015, Grecia filed an amended complaint adding allegations that we infringe United States Patent No. 8,402,555 (the “555 patent”), which is entitled “Personalized Digital Media Access System (PDMAS).” Grecia is the named inventor on the 555 patent. Grecia alleges that we violate the 555 patent in connection with our digital rights management. Grecia dismissed his action with prejudice on February 3, 2016.

On February 3, 2016, Grecia filed a new complaint against our wholly-owned subsidiary DISH Network L.L.C. in the United States District Court for the Northern District of California, alleging infringement of United States Patent No. 8,887,308 (the “308 patent”), which is entitled “Digital Cloud Access—PDMAS Part III,” on which Grecia is also the named inventor. Grecia alleges that we violate the 308 patent in connection with our DISH Anywhere feature. On July 29, 2016, DISH Network L.L.C. filed a petition before the United States Patent and Trademark Office challenging the validity of certain claims of the 308 patent. On January 19, 2017, the United States Patent and Trademark Office declined to institute a proceeding on our petition. The litigation in the District Court, which had been stayed since June 13, 2016 pending resolution of DISH Network L.L.C.’s petition to the United States Patent and Trademark Office, was further stayed on February 23, 2017 pending a claim construction order from the United States District Court for the Southern District of New York in a separate action in which Grecia is asserting the same patent. On September 4, 2018, the Court entered a scheduling order, effectively lifting the stay. On November 12, 2018, the parties filed a stipulation to dismiss the matter with prejudice. This matter is now concluded.

IPA Technologies Inc.

On December 9, 2016, IPA Technologies Inc. (“IPA”) filed suit against DISH Network and our wholly-owned subsidiary DISH Network L.L.C. in the United States District Court for the District of Delaware. IPA alleges that our Voice Remote with Hopper 3 infringes United States Patent Number 6,742,021 (the “021 patent”), which is entitled “Navigating Network-based Electronic Information Using Spoken Input with Multimodal Error Feedback”; United States Patent Number 6,523,061 (the “061 patent”), which is entitled “System, Method, and Article of Manufacture for Agent-Based Navigation in a Speech-Based Data Navigation System”; and United States Patent Number 6,757,718 (the “718 patent”), which is entitled “Mobile Navigation of Network-Based Electronic Information Using Spoken Input.” IPA is an entity that seeks to license a patent portfolio without itself practicing any of the claims recited therein. On December 20, 2017, we and DISH Network L.L.C. filed petitions with the United States Patent and Trademark Office challenging the validity of select claims of each of the asserted patents. On April 10, 2018, the litigation in the District of Delaware was dismissed with prejudice, and on April 23, 2018, DISH Network L.L.C.’s and our petitions before the United States Patent and Trademark Office were terminated. This matter is now concluded.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

LightSquared/Harbinger Capital Partners LLC (LightSquared Bankruptcy)

As previously disclosed in our public filings, L-Band Acquisition, LLC (“LBAC”), DISH Network’s wholly-owned subsidiary, entered into a Plan Support Agreement (the “PSA”) with certain senior secured lenders to LightSquared LP (the “LightSquared LP Lenders”) on July 23, 2013, which contemplated the purchase by LBAC of substantially all of the assets of LightSquared LP and certain of its subsidiaries (the “LBAC Bid”) that are debtors and debtors in possession in the LightSquared bankruptcy cases pending in the United States Bankruptcy Court for the Southern District of New York (the “Bankruptcy Court”), which cases are jointly administered under the caption *In re LightSquared Inc., et. al.*, Case No. 12 12080 (SCC).

Pursuant to the PSA, LBAC was entitled to terminate the PSA in certain circumstances, certain of which required three business days’ written notice, including, without limitation, in the event that certain milestones specified in the PSA were not met. On January 7, 2014, LBAC delivered written notice of termination of the PSA to the LightSquared LP Lenders. As a result, the PSA terminated effective on January 10, 2014, and the LBAC Bid was withdrawn.

On August 6, 2013, Harbinger Capital Partners LLC and other affiliates of Harbinger (collectively, “Harbinger”), a shareholder of LightSquared Inc., filed an adversary proceeding against DISH Network, LBAC, EchoStar, Charles W. Ergen (our Chairman), SP Special Opportunities, LLC (“SPSO”) (an entity controlled by Mr. Ergen), and certain other parties, in the Bankruptcy Court. Harbinger alleged, among other things, claims based on fraud, unfair competition, civil conspiracy and tortious interference with prospective economic advantage related to certain purchases of LightSquared secured debt by SPSO. Subsequently, LightSquared intervened to join in certain claims alleged against certain defendants other than DISH Network, LBAC and EchoStar.

On October 29, 2013, the Bankruptcy Court dismissed all of the claims in Harbinger’s complaint in their entirety, but granted leave for LightSquared to file its own complaint in intervention. On November 15, 2013, LightSquared filed its complaint, which included various claims against DISH Network, EchoStar, Mr. Ergen and SPSO. On December 2, 2013, Harbinger filed an amended complaint, asserting various claims against SPSO. On December 12, 2013, the Bankruptcy Court dismissed several of the claims asserted by LightSquared and Harbinger. The surviving claims included, among others, LightSquared’s claims against SPSO for declaratory relief, breach of contract and statutory disallowance; LightSquared’s tortious interference claim against DISH Network, EchoStar and Mr. Ergen; and Harbinger’s claim against SPSO for statutory disallowance. These claims proceeded to a non-jury trial on January 9, 2014. In its Post-Trial Findings of Fact and Conclusions of Law entered on June 10, 2014, the Bankruptcy Court rejected all claims against DISH Network and EchoStar, and it rejected some but not all claims against the other defendants. On July 7, 2015, the United States District Court for the Southern District of New York denied Harbinger’s motion for an interlocutory appeal of certain Bankruptcy Court orders in the adversary proceeding.

DISH Network intends to vigorously defend any claims against it in this proceeding and cannot predict with any degree of certainty the outcome of this proceeding or determine the extent of any potential liability or damages.

Michael Heskiaoff, Marc Langenohl, and Rafael Mann

On July 10, 2015, Messrs. Michael Heskiaoff and Marc Langenohl, purportedly on behalf of themselves and all others similarly situated, filed suit against our subsidiary Sling Media, Inc. (now known as “Sling Media L.L.C.,” which we acquired as a result of the completion of the Share Exchange on February 28, 2017) in the United States District Court for the Southern District of New York. The complaint alleges that Sling Media Inc.’s display of advertising to its customers violates a number of state statutes dealing with consumer deception. On September 25, 2015, the plaintiffs filed an amended complaint, and Mr. Rafael Mann, purportedly on behalf of himself and all others similarly situated, filed an additional complaint alleging similar causes of action. On November 16, 2015, the cases were consolidated. On August 12, 2016, the Court granted our motion to dismiss the consolidated case. On September 12, 2016, the plaintiffs moved the Court for leave to file an amended complaint, which we opposed. On March 22, 2017, the Court denied the plaintiffs’ motion for leave to file an amended complaint and entered judgment in favor of Sling Media L.L.C. On April 17, 2017, the plaintiffs filed a notice of appeal to the United States Court of Appeals for the Second Circuit, which heard oral argument on November 7, 2017. On November 22, 2017, the United States Court of Appeals for the Second Circuit affirmed the trial court’s judgment in favor of Sling Media L.L.C. This matter is now concluded.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Multimedia Content Management LLC

On July 25, 2018, Multimedia Content Management LLC (“Multimedia”) filed a complaint against DISH Network in the United States District Court for the Western District of Texas. Multimedia alleges that DISH Network infringes United States Patent No. 8,799,468 (the “468 patent”), entitled “System for Regulating Access to and Distributing Content in a Network,” and United States Patent No. 9,465,925 (the “925 patent”), entitled “System for Regulating Access to and Distributing Content in a Network,” in connection with impulse pay per view content offerings on certain set-top boxes. Multimedia is an entity that seeks to license a patent portfolio without itself practicing any of the claims recited therein.

DISH Network intends to vigorously defend this case. In the event that a court ultimately determines that we infringe the asserted patents, we may be subject to substantial damages, which may include treble damages, and/or an injunction that could require us to materially modify certain features that we currently offer to consumers. We cannot predict with any degree of certainty the outcome of the suit or determine the extent of any potential liability or damages.

Realtime Data LLC and Realtime Adaptive Streaming LLC

On June 6, 2017, Realtime Data LLC d/b/a IXO (“Realtime”) filed an amended complaint in the United States District Court for the Eastern District of Texas (the “Original Texas Action”) against DISH Network; our wholly-owned subsidiaries DISH Network L.L.C., DISH Technologies L.L.C. (then known as EchoStar Technologies L.L.C.), Sling TV L.L.C. and Sling Media L.L.C.; EchoStar, and EchoStar’s wholly-owned subsidiary Hughes Network Systems, LLC; and Arris Group, Inc. Realtime’s initial complaint in the Original Texas Action, filed on February 14, 2017, had named only EchoStar and Hughes Network Systems, LLC as defendants. The amended complaint in the Original Texas Action alleges infringement of United States Patent No. 8,717,204 (the “204 patent”), entitled “Methods for encoding and decoding data”; United States Patent No. 9,054,728 (the “728 patent”), entitled “Data compression systems and methods”; United States Patent No. 7,358,867 (the “867 patent”), entitled “Content independent data compression method and system”; United States Patent No. 8,502,707 (the “707 patent”), entitled “Data compression systems and methods”; United States Patent No. 8,275,897 (the “897 patent”), entitled “System and methods for accelerated data storage and retrieval”; United States Patent No. 8,867,610 (the “610 patent”), entitled “System and methods for video and audio data distribution”; United States Patent No. 8,934,535 (the “535 patent”), entitled “Systems and methods for video and audio data storage and distribution”; and United States Patent No. 8,553,759 (the “759 patent”), entitled “Bandwidth sensitive data compression and decompression.” Realtime alleges that DISH, Sling TV, Sling Media and Arris streaming video products and services compliant with various versions of the H.264 video compression standard infringe the 897 patent, the 610 patent and the 535 patent, and that the data compression system in Hughes’ products and services infringe the 204 patent, the 728 patent, the 867 patent, the 707 patent and the 759 patent.

On July 19, 2017, the Court severed Realtime’s claims against DISH Network, DISH Network L.L.C., Sling TV L.L.C., Sling Media L.L.C. and Arris Group, Inc. (alleging infringement of the 897 patent, the 610 patent and the 535 patent) from the Original Texas Action into a separate action in the United States District Court for the Eastern District of Texas (the “Second Texas Action”). On August 31, 2017, Realtime dismissed the claims against DISH Network, Sling TV L.L.C., Sling Media Inc., and Sling Media L.L.C. from the Second Texas Action and refiled these claims (alleging infringement of the 897 patent, the 610 patent and the 535 patent) against Sling TV L.L.C., Sling Media Inc., and Sling Media L.L.C. in a new action in the United States District Court for the District of Colorado (the “Colorado Action”). Also on August 31, 2017, Realtime dismissed DISH Technologies L.L.C. from the Original Texas Action, and on September 12, 2017, added it as a defendant in an amended complaint in the Second Texas Action. On November 6, 2017, Realtime filed a joint motion to dismiss the Second Texas Action without prejudice, which the Court entered on November 8, 2017.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

On October 10, 2017, Realtime Adaptive Streaming LLC (“Realtime Adaptive Streaming”) filed suit against our wholly-owned subsidiaries DISH Network L.L.C. and DISH Technologies L.L.C., as well as Arris Group, Inc., in a new action in the United States District Court for the Eastern District of Texas (the “Third Texas Action”), alleging infringement of the 610 patent and the 535 patent. Also on October 10, 2017, an amended complaint was filed in the Colorado Action, substituting Realtime Adaptive Streaming as the plaintiff instead of Realtime, and alleging infringement of only the 610 patent and the 535 patent, but not the 897 patent. On November 6, 2017, Realtime Adaptive Streaming filed a joint motion to dismiss the Third Texas Action without prejudice, which the court entered on November 8, 2017. Also on November 6, 2017, Realtime Adaptive Streaming filed a second amended complaint in the Colorado Action, adding our wholly-owned subsidiaries DISH Network L.L.C. and DISH Technologies L.L.C., as well as Arris Group, Inc., as defendants.

As a result, neither DISH Network nor any of its subsidiaries is a defendant in the Original Texas Action; the Court has dismissed without prejudice the Second Texas Action and the Third Texas Action; and our wholly-owned subsidiaries DISH Network L.L.C., DISH Technologies L.L.C., Sling TV L.L.C. and Sling Media L.L.C. as well as Arris Group, Inc., are defendants in the Colorado Action, which now has Realtime Adaptive Streaming as the named plaintiff.

On July 3, 2018, Sling TV L.L.C., Sling Media L.L.C., DISH Network L.L.C., and DISH Technologies L.L.C. filed petitions with the United States Patent and Trademark Office challenging the validity of each of the asserted patents. On January 31, 2019, the United States Patent and Trademark Office agreed to institute proceedings on our petitions challenging all asserted claims of each of the asserted patents. On February 26, 2019, the district court agreed to stay the Colorado Action pending resolution of the petitions.

Realtime Adaptive Streaming is an entity that seeks to license an acquired patent portfolio without itself practicing any of the claims recited therein.

We intend to vigorously defend this case. In the event that a court ultimately determines that we infringe the asserted patents, we may be subject to substantial damages, which may include treble damages, and/or an injunction that could require us to materially modify certain features that we currently offer to consumers. We cannot predict with any degree of certainty the outcome of the suit or determine the extent of any potential liability or damages.

Rothschild Broadcast Distribution Systems, LLC

On August 2, 2018, Rothschild Broadcast Distribution Systems, LLC (“Rothschild”) filed a complaint against us in the United States District Court for the Eastern District of Texas. The complaint, which accuses the DISH Anywhere feature, alleges infringement of United States Patent 8,856,221 (the “221 patent”), entitled “System and Method for Storing Broadcast Content in a Cloud-based Computing Environment.” Rothschild, an entity that seeks to license a patent portfolio without itself practicing any of the claims recited therein, has filed more than 35 patent infringement cases since 2015. On October 10, 2018, the Court granted Rothschild’s motion to dismiss the case without prejudice. This matter is now concluded.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Telemarketing Litigation

On March 25, 2009, our wholly-owned subsidiary DISH Network L.L.C. was sued in a civil action by the United States Attorney General and several states in the United States District Court for the Central District of Illinois (the “FTC Action”), alleging violations of the Telephone Consumer Protection Act (“TCPA”) and the Telemarketing Sales Rule (“TSR”), as well as analogous state statutes and state consumer protection laws. The plaintiffs alleged that we, directly and through certain independent third-party retailers and their affiliates, committed certain telemarketing violations. On December 23, 2013, the plaintiffs filed a motion for summary judgment, which indicated for the first time that the state plaintiffs were seeking civil penalties and damages of approximately \$270 million and that the federal plaintiff was seeking an unspecified amount of civil penalties (which could substantially exceed the civil penalties and damages being sought by the state plaintiffs). The plaintiffs were also seeking injunctive relief that if granted would, among other things, enjoin DISH Network L.L.C., whether acting directly or indirectly through authorized telemarketers or independent third-party retailers, from placing any outbound telemarketing calls to market or promote its goods or services for five years, and enjoin DISH Network L.L.C. from accepting activations or sales from certain existing independent third-party retailers and from certain new independent third-party retailers, except under certain circumstances. We also filed a motion for summary judgment, seeking dismissal of all claims. On December 12, 2014, the Court issued its opinion with respect to the parties’ summary judgment motions. The Court found that DISH Network L.L.C. was entitled to partial summary judgment with respect to one claim in the action. In addition, the Court found that the plaintiffs were entitled to partial summary judgment with respect to ten claims in the action, which included, among other things, findings by the Court establishing DISH Network L.L.C.’s liability for a substantial amount of the alleged outbound telemarketing calls by DISH Network L.L.C. and certain of its independent third-party retailers that were the subject of the plaintiffs’ motion. The Court did not issue any injunctive relief and did not make any determination on civil penalties or damages, ruling instead that the scope of any injunctive relief and the amount of any civil penalties or damages were questions for trial.

In pre-trial disclosures, the federal plaintiff indicated that it intended to seek up to \$900 million in alleged civil penalties, and the state plaintiffs indicated that they intended to seek as much as \$23.5 billion in alleged civil penalties and damages. The plaintiffs also modified their request for injunctive relief. Their requested injunction, if granted, would have enjoined DISH Network L.L.C. from placing outbound telemarketing calls unless and until: (i) DISH Network L.L.C. hired a third-party consulting organization to perform a review of its call center operations; (ii) such third-party consulting organization submitted a telemarketing compliance plan to the Court and the federal plaintiff; (iii) the Court held a hearing on the adequacy of the plan; (iv) if the Court approved the plan, DISH Network L.L.C. implemented the plan and verified to the Court that it had implemented the plan; and (v) the Court issued an order permitting DISH Network L.L.C. to resume placing outbound telemarketing calls. The plaintiffs’ modified request for injunctive relief, if granted, would have also enjoined DISH Network L.L.C. from accepting customer orders solicited by certain independent third-party retailers unless and until a similar third-party review and Court approval process was followed with respect to the telemarketing activities of its independent third-party retailer base to ensure compliance with the TSR.

The first phase of the bench trial took place January 19, 2016 through February 11, 2016. In closing briefs, the federal plaintiff indicated that it still was seeking \$900 million in alleged civil penalties; the California state plaintiff indicated that it was seeking \$100 million in alleged civil penalties and damages for its state law claims (in addition to any amounts sought on its federal law claims); the Ohio state plaintiff indicated that it was seeking approximately \$10 million in alleged civil penalties and damages for its state law claims (in addition to any amounts sought on its federal law claims); and the Illinois and North Carolina state plaintiffs did not state the specific alleged civil penalties and damages that they were seeking; but the state plaintiffs took the general position that any damages award less than \$1.0 billion (presumably for both federal and state law claims) would not raise constitutional concerns. Under the Eighth Amendment of the United States Constitution, excessive fines may not be imposed.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

On October 3, 2016, the plaintiffs further modified their request for injunctive relief and were seeking, among other things, to enjoin DISH Network L.L.C., whether acting directly or indirectly through authorized telemarketers or independent third-party retailers, from placing any outbound telemarketing calls to market or promote its goods or services for five years, and enjoin DISH Network L.L.C. from accepting activations or sales from some or all existing independent third-party retailers. The second phase of the bench trial, which commenced on October 25, 2016 and concluded on November 2, 2016, covered the plaintiffs' requested injunctive relief, as well as certain evidence related to the state plaintiffs' claims.

On June 5, 2017, the Court issued Findings of Fact and Conclusions of Law and entered Judgment ordering DISH Network L.L.C. to pay an aggregate amount of \$280 million to the federal and state plaintiffs. The Court also issued a Permanent Injunction (the "Injunction") against DISH Network L.L.C. that imposes certain ongoing compliance requirements on DISH Network L.L.C., which include, among other things: (i) the retention of a telemarketing-compliance expert to prepare a plan to ensure that DISH Network L.L.C. and certain independent third-party retailers will continue to comply with telemarketing laws and the Injunction; (ii) certain telemarketing records retention and production requirements; and (iii) certain compliance reporting and monitoring requirements. In addition to the compliance requirements under the Injunction, within ninety (90) days after the effective date of the Injunction, DISH Network L.L.C. is required to demonstrate that it and certain independent third-party retailers are in compliance with the Safe Harbor Provisions of the TSR and TCPA and have made no prerecorded telemarketing calls during the five (5) years prior to the effective date of the Injunction (collectively, the "Demonstration Requirements"). If DISH Network L.L.C. fails to prove that it meets the Demonstration Requirements, it will be barred from conducting any outbound telemarketing for two (2) years. If DISH Network L.L.C. fails to prove that a particular independent third-party retailer meets the Demonstration Requirements, DISH Network L.L.C. will be barred from accepting orders from that independent third-party retailer for two (2) years. On July 3, 2017, DISH Network L.L.C. filed two motions with the Court: (1) to alter or amend the Judgment or in the alternative to amend the Findings of Fact and Conclusions of Law; and (2) to clarify, alter and amend the Injunction. On August 10, 2017, the Court: (a) denied the motion to alter or amend the Judgment or in the alternative to amend the Findings of Fact and Conclusions of Law; and (b) allowed, in part, the motion to clarify, alter and amend the Injunction, and entered an Amended Permanent Injunction (the "Amended Injunction"). Among other things, the Amended Injunction provided DISH Network L.L.C. a thirty (30) day extension to meet the Demonstration Requirements, expanded the exclusion of certain independent third-party retailers from the Demonstration Requirements, and clarified that, with regard to independent third-party retailers, the Amended Injunction only applied to their telemarketing of DISH TV goods and services. On October 10, 2017, DISH Network L.L.C. filed a notice of appeal to the United States Court of Appeals for the Seventh Circuit, which heard oral argument on September 17, 2018.

During the second quarter 2017, we recorded \$255 million of "Litigation expense" related to the FTC Action on our Consolidated Statements of Operations and Comprehensive Income (Loss). We recorded \$25 million of "Litigation expense" related to the FTC Action during periods prior to 2017. Our total accrual at December 31, 2018 and 2017 related to the FTC Action was \$280 million and is included in "Other accrued expenses" on our Consolidated Balance Sheets. Any eventual payments made with respect to the FTC Action may not be deductible for tax purposes, which had a negative impact on our effective tax rate for the year ended December 31, 2017. The tax deductibility of any eventual payments made with respect to the FTC Action may change, based upon, among other things, further developments in the FTC Action, including final adjudication of the FTC Action.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

We may also from time to time be subject to private civil litigation alleging telemarketing violations. For example, a portion of the alleged telemarketing violations by an independent third-party retailer at issue in the FTC Action are also the subject of a certified class action filed against DISH Network L.L.C. in the United States District Court for the Middle District of North Carolina (the “Krakauer Action”). Following a five-day trial, on January 19, 2017, a jury in that case found that the independent third-party retailer was acting as DISH Network L.L.C.’s agent when it made the 51,119 calls at issue in that case, and that class members are eligible to recover \$400 in damages for each call made in violation of the TCPA. On March 7, 2017, DISH Network L.L.C. filed motions with the Court for judgment as a matter of law and, in the alternative, for a new trial, which the Court denied on May 16, 2017. On May 22, 2017, the Court ruled that the violations were willful and knowing, and trebled the damages award to \$1,200 for each call made in violation of TCPA. On April 5, 2018, the Court entered a \$61 million judgment in favor of the class. On May 4, 2018, DISH Network L.L.C. filed a notice of appeal to the United States Court of Appeals for the Fourth Circuit. The appeal has been tentatively calendared for oral argument during the May 7-9, 2019 argument session. During the second quarter 2017, we recorded \$41 million of “Litigation expense” related to the Krakauer Action on our Consolidated Statements of Operations and Comprehensive Income (Loss). We recorded \$20 million of “Litigation expense” related to the Krakauer Action during the fourth quarter 2016. Our total accrual related to the Krakauer Action at December 31, 2018 and 2017 was \$61 million and is included in “Other accrued expenses” on our Consolidated Balance Sheets.

We intend to vigorously defend these cases. We cannot predict with any degree of certainty the outcome of these suits.

Telemarketing Shareholder Derivative Litigation

On October 19, 2017, Plumbers Local Union No. 519 Pension Trust Fund (“Plumbers Local 519”), a purported shareholder of DISH Network, filed a putative shareholder derivative action in the District Court for Clark County, Nevada alleging, among other things, breach of fiduciary duty claims against the following current and former members of DISH Network’s Board of Directors: Charles W. Ergen; James DeFranco; Cantey M. Ergen; Steven R. Goodbarn; David K. Moskowitz; Tom A. Ortoff; Carl E. Vogel; George R. Brokaw; and Gary S. Howard (collectively, the “Director Defendants”). In its complaint, Plumbers Local 519 contends that, by virtue of their alleged failure to appropriately ensure DISH Network’s compliance with telemarketing laws, the Director Defendants exposed DISH Network to liability for telemarketing violations, including those in the Krakauer Action. It also contends that the Director Defendants caused DISH Network to pay improper compensation and benefits to themselves and others who allegedly breached their fiduciary duties to DISH Network. Plumbers Local 519 alleges causes of action for breach of fiduciary duties of loyalty and good faith, gross mismanagement, abuse of control, corporate waste and unjust enrichment. Plumbers Local 519 is seeking an unspecified amount of damages.

On November 13, 2017, City of Sterling Heights Police and Fire Retirement System (“Sterling Heights”), a purported shareholder of DISH Network, filed a putative shareholder derivative action in the District Court for Clark County, Nevada. Sterling Heights makes substantially the same allegations as Plumbers Union 519, and alleges causes of action against the Director Defendants for breach of fiduciary duty, waste of corporate assets and unjust enrichment. Sterling Heights is seeking an unspecified amount of damages.

Pursuant to a stipulation of the parties, on January 4, 2018, the District Court agreed to consolidate the Sterling Heights action with the Plumbers Local 519 action, and on January 12, 2018, the plaintiffs filed an amended consolidated complaint that largely duplicates the original Plumbers Local 519 complaint. DISH Network’s Board of Directors has established a Special Litigation Committee to review the factual allegations and legal claims in this action. On May 15, 2018, the District Court granted the Special Litigation Committee’s motion to stay the case pending its investigation. The Special Litigation Committee’s report was filed on November 27, 2018, and recommended that the Company not pursue the claims asserted by the derivative plaintiffs. On December 20, 2018, the Special Litigation Committee filed a motion for summary judgment seeking deferral to its determination that the claims should be dismissed, which, following a discovery period and further briefing, will be heard on November 4, 2019.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

DISH Network cannot predict with any degree of certainty the outcome of these suits or determine the extent of any potential liability or damages.

TQ Delta, LLC

On July 17, 2015, TQ Delta, LLC (“TQ Delta”) filed a complaint against us, DISH Network and our wholly-owned subsidiary DISH Network L.L.C. in the United States District Court for the District of Delaware. The Complaint alleges infringement of United States Patent No. 6,961,369 (the “369 patent”), which is entitled “System and Method for Scrambling the Phase of the Carriers in a Multicarrier Communications System”; United States Patent No. 8,718,158 (the “158 patent”), which is entitled “System and Method for Scrambling the Phase of the Carriers in a Multicarrier Communications System”; United States Patent No. 9,014,243 (the “243 patent”), which is entitled “System and Method for Scrambling Using a Bit Scrambler and a Phase Scrambler”; United States Patent No. 7,835,430 (the “430 patent”), which is entitled “Multicarrier Modulation Messaging for Frequency Domain Received Idle Channel Noise Information”; United States Patent No. 8,238,412 (the “412 patent”), which is entitled “Multicarrier Modulation Messaging for Power Level per Subchannel Information”; United States Patent No. 8,432,956 (the “956 patent”), which is entitled “Multicarrier Modulation Messaging for Power Level per Subchannel Information”; and United States Patent No. 8,611,404 (the “404 patent”), which is entitled “Multicarrier Transmission System with Low Power Sleep Mode and Rapid-On Capability.” On September 9, 2015, TQ Delta filed a first amended complaint that added allegations of infringement of United States Patent No. 9,094,268 (the “268 patent”), which is entitled “Multicarrier Transmission System With Low Power Sleep Mode and Rapid-On Capability.” On May 16, 2016, TQ Delta filed a second amended complaint that added EchoStar Corporation and its then wholly-owned subsidiary EchoStar Technologies L.L.C. as defendants. TQ Delta alleges that our satellite TV service, Internet service, set-top boxes, gateways, routers, modems, adapters and networks that operate in accordance with one or more Multimedia over Coax Alliance Standards infringe the asserted patents. TQ Delta has filed actions in the same court alleging infringement of the same patents against Comcast Corp., Cox Communications, Inc., DirecTV, Time Warner Cable Inc. and Verizon Communications, Inc. TQ Delta is an entity that seeks to license an acquired patent portfolio without itself practicing any of the claims recited therein.

On July 14, 2016, TQ Delta stipulated to dismiss with prejudice all claims related to the 369 patent and the 956 patent. On July 20, 2016, we filed petitions with the United States Patent and Trademark Office challenging the validity of all of the patent claims of the 404 patent and the 268 patent that have been asserted against us. Third parties have filed petitions with the United States Patent and Trademark Office challenging the validity of all of the patent claims that have been asserted against us in the action. On November 4, 2016, the United States Patent and Trademark Office agreed to institute proceedings on the third-party petitions related to the 158 patent, the 243 patent, the 412 patent and the 430 patent. On December 20, 2016, pursuant to a stipulation of the parties, the Court stayed the case until the resolution of all petitions to the United States Patent and Trademark Office challenging the validity of all of the patent claims at issue. On January 19, 2017, the United States Patent and Trademark Office granted our motions to join the instituted petitions on the 430 and 158 patents. On February 9, 2017, the United States Patent and Trademark Office agreed to institute proceedings on our petition related to the 404 patent, and on February 13, 2017, the United States Patent and Trademark Office agreed to institute proceedings on our petition related to the 268 patent. On February 27, 2017, the United States Patent and Trademark Office granted our motions to join the instituted petitions on the 243 and 412 patents. On October 26, 2017, the United States Patent and Trademark Office issued final written decisions on the petitions challenging the 158 patent, the 243 patent, the 412 patent and the 430 patent, and it invalidated all of the asserted claims of those patents. On February 7, 2018, the United States Patent and Trademark Office issued final written decisions on the petitions challenging the 404 patent, and it invalidated all of the asserted claims of that patent on the basis of our petition. On February 10, 2018, the United States Patent and Trademark Office issued a final written decision on our petition challenging the 268 patent, and it invalidated all of the asserted claims. On March 12, 2018, the United States Patent and Trademark Office issued a final written decision on a third-party petition challenging the 268 patent, and it invalidated all of the asserted claims. All asserted claims have now been invalidated by the United States Patent and Trademark Office. TQ Delta has filed notices of appeal from the nine final written decisions adverse to it.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

We intend to vigorously defend this case. In the event that a court ultimately determines that we infringe the asserted patents, we may be subject to substantial damages, which may include treble damages, and/or an injunction that could require us to materially modify certain features that we currently offer to consumers. We cannot predict with any degree of certainty the outcome of the suit or determine the extent of any potential liability or damages.

Turner Network Sales

On October 6, 2017, Turner Network Sales, Inc. (“Turner”) filed a complaint against our wholly-owned subsidiary DISH Network L.L.C. in the United States District Court for the Southern District of New York. The operative First Amended Complaint alleges that DISH Network L.L.C. improperly calculated and withheld licensing fees owing to Turner in connection with its carriage of CNN and other networks. Turner claims damages of \$183 million. On December 14, 2017, DISH Network L.L.C. filed its operative first amended counterclaims against Turner. In the counterclaims, DISH Network L.L.C. seeks a declaratory judgment that it properly calculated the licensing fees owed to Turner for carriage of CNN, and also alleges claims for unrelated breaches of the parties’ affiliation agreement.

We intend to vigorously defend this case. We cannot predict with any degree of certainty the outcome of the suit or determine the extent of any potential liability or damages.

Uniloc

On January 31, 2019, Uniloc 2017 LLC (“Uniloc”) filed a complaint against our wholly owned subsidiary Sling TV L.L.C. in the United States District Court for the District of Colorado. The Complaint alleges infringement of United States Patent No. 6,519,005 (the 005 patent), which is entitled “Method of Concurrent Multiple-Mode Motion Estimation for Digital Video”; United States Patent No. 6,895,118 (the 118 patent), which is entitled “Method of Coding Digital Image Based on Error Concealment”; United States Patent No. 9,721,273 (the 273 patent), which is entitled “System and Method for Aggregating and Providing Audio and Visual Presentations Via a Computer Network”; and United States Patent No. 8,407,609 (the 609 patent), which is entitled “System and Method for Providing and Tracking the Provision of Audio and Visual Presentations Via a Computer Network.” Uniloc is an entity that seeks to license an acquired patent portfolio without itself practicing any of the claims recited therein.

We intend to vigorously defend this case. In the event that a court ultimately determines that we infringe the asserted patents, we may be subject to substantial damages, which may include treble damages, and/or an injunction that could require us to materially modify certain features that we currently offer to consumers. We cannot predict with any degree of certainty the outcome of the suit or determine the extent of any potential liability or damages.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Vermont National Telephone Company

On September 22, 2016, the United States District Court for the District of Columbia unsealed a qui tam complaint that was filed by Vermont National Telephone Company (“Vermont National”) against DISH Network; DISH Network’s wholly-owned subsidiaries, American AWS-3 Wireless I L.L.C., American II, American III, and DISH Wireless Holding L.L.C.; Charles W. Ergen (our Chairman) and Cantey M. Ergen (a member of our board of directors); Northstar Wireless; Northstar Spectrum; Northstar Manager, LLC; SNR Wireless; SNR HoldCo; SNR Wireless Management, LLC; and certain other parties. The complaint was unsealed after the United States Department of Justice notified the Court that it had declined to intervene in the action. The complaint is a civil action that was filed under seal on May 13, 2015 by Vermont National, which participated in the AWS-3 Auction through its wholly-owned subsidiary, VTel Wireless. The complaint alleges violations of the federal civil False Claims Act (the “FCA”) based on, among other things, allegations that Northstar Wireless and SNR Wireless falsely claimed bidding credits of 25% in the AWS-3 Auction when they were allegedly under the de facto control of DISH Network and, therefore, were not entitled to the bidding credits as designated entities under applicable FCC rules. Vermont National seeks to recover on behalf of the United States government approximately \$10 billion, which reflects the \$3.3 billion in bidding credits that Northstar Wireless and SNR Wireless claimed in the AWS-3 Auction, trebled under the FCA. Vermont National also seeks civil penalties of not less than \$5,500 and not more than \$11,000 for each violation of the FCA. On March 2, 2017, the United States District Court for the District of Columbia entered a stay of the litigation until such time as the United States Court of Appeals for the District of Columbia (the “D.C. Circuit”) issued its opinion in *SNR Wireless LicenseCo, LLC, et al. v. F.C.C.* The D.C. Circuit issued its opinion on August 29, 2017 and remanded the matter to the FCC for further proceedings. See Note 11 “*Commitments – DISH Network Non-Controlling Investments in the Northstar Entities and the SNR Entities Related to AWS-3 Wireless Spectrum Licenses*” above for further information. Thereafter, the Court maintained the stay until it was lifted on October 26, 2018. On February 11, 2019, the Court granted Vermont National’s unopposed motion for leave to file an amended complaint.

DISH Network intends to vigorously defend this case. DISH Network cannot predict with any degree of certainty the outcome of this proceeding or determine the extent of any potential liability or damages.

Waste Disposal Inquiry

The California Attorney General and the Alameda County (California) District Attorney are investigating whether certain of our waste disposal policies, procedures and practices are in violation of the California Business and Professions Code and the California Health and Safety Code. We expect that these entities will seek injunctive and monetary relief. The investigation appears to be part of a broader effort to investigate waste handling and disposal processes of a number of industries. While we are unable to predict the outcome of this investigation, we do not believe that the outcome will have a material effect on our results of operations, financial condition or cash flows.

Other

In addition to the above actions, we are subject to various other legal proceedings and claims that arise in the ordinary course of business, including, among other things, disputes with programmers regarding fees. In our opinion, the amount of ultimate liability with respect to any of these actions is unlikely to materially affect our financial condition, results of operations or liquidity, though the outcomes could be material to our operating results for any particular period, depending, in part, upon the operating results for such period.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

12. Financial Information for Subsidiary Guarantors

Our senior notes are fully, unconditionally and jointly and severally guaranteed by all of our subsidiaries other than minor subsidiaries and the stand-alone entity DISH DBS has no independent assets or operations. Therefore, supplemental financial information on a condensed consolidating basis of the guarantor subsidiaries is not required. There are no restrictions on our ability to obtain cash dividends or other distributions of funds from the guarantor subsidiaries, except those imposed by applicable law.

13. Disaggregation of Revenue

Geographic Information. Revenue is attributed to geographic regions based upon the location where the goods and services are provided. All subscriber-related revenue was derived from the United States. Substantially all of our long-lived assets reside in the United States.

The following table summarizes revenue by geographic region:

Revenue:	For the Years Ended December 31,		
	2018	2017	2016
	(In thousands)		
United States	\$ 13,319,091	\$ 13,967,694	\$ 14,655,469
Canada and Mexico	43,048	39,817	100,470
Total revenue	\$ 13,362,139	\$ 14,007,511	\$ 14,755,939

The revenue from external customers disaggregated by major revenue source was as follows:

Category:	For the Years Ended December 31,		
	2018	2017	2016
	(In thousands)		
Pay-TV video and related revenue	\$ 13,197,994	\$ 13,877,196	\$ 14,578,414
Equipment sales and other revenue	164,145	130,315	177,525
Total	\$ 13,362,139	\$ 14,007,511	\$ 14,755,939

14. Contract Balances

Our valuation and qualifying accounts as of December 31, 2018, 2017 and 2016 were as follows:

Allowance for doubtful accounts	Balance at	Charged to		Balance at
	Beginning of	Costs and	Deductions	
	Year	Expenses	Deductions	
	(In thousands)			
For the years ended:				
December 31, 2018	\$ 15,056	\$ 98,461	\$ (96,561)	\$ 16,956
December 31, 2017	\$ 17,440	\$ 124,143	\$ (126,527)	\$ 15,056
December 31, 2016	\$ 21,769	\$ 149,599	\$ (153,928)	\$ 17,440

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Deferred revenue related to contracts with our customers is recorded in “Deferred revenue and other” and “Long-term deferred revenue and other long-term liabilities” on our Consolidated Balance Sheets. Changes in deferred revenue related to contracts with our customers were as follows:

	Contract Liabilities
	(In thousands)
Balance as of December 31, 2017	\$ 684,119
Recognition of unearned revenue	(6,850,394)
Deferral of revenue	6,790,901
Balance as of December 31, 2018	\$ 624,626

We apply a practical expedient and do not disclose the value of the remaining performance obligations for contracts that are less than one year in duration, which represent a substantial majority of our revenue. As such, the amount of revenue related to unsatisfied performance obligations is not necessarily indicative of our future revenue.

15. Quarterly Financial Data (Unaudited)

Our quarterly results of operations are summarized as follows:

	For the Three Months Ended			
	March 31	June 30	September 30	December 31
	(In thousands)			
Year ended December 31, 2018:				
Total revenue	\$ 3,383,222	\$ 3,393,307	\$ 3,334,444	\$ 3,251,166
Operating income (loss)	508,121	549,502	542,439	466,448
Net income (loss) attributable to DISH DBS	204,192	285,691	281,272	200,132
Year ended December 31, 2017:				
Total revenue	\$ 3,570,959	\$ 3,543,812	\$ 3,491,559	\$ 3,401,181
Operating income (loss)	588,793	219,720	424,559	376,804
Net income (loss) attributable to DISH DBS	241,715	(95,656)	158,424	419,043

16. Related Party Transactions

Related Party Transactions with DISH Network

On June 30, 2016, we paid a dividend of \$1.5 billion to DOC.

Advertising Sales. We provide advertising services to DISH Network’s broadband business. During the years ended December 31, 2018, 2017 and 2016, we received revenue associated with these services of zero, zero and \$2 million, respectively, in “Subscriber-related revenue” on our Consolidated Statements of Operations and Comprehensive Income (Loss).

Broadband, Wireless and Other Operations. We provide certain administrative, call center, installation, marketing and other services to DISH Network’s broadband, wireless and other operations. During the years ended December 31, 2018, 2017 and 2016, the costs associated with these services were \$40 million, \$48 million and \$66 million, respectively.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

EchoStar XVIII Satellite. The EchoStar XVIII satellite was launched on June 18, 2016 and became operational as an in-orbit spare at the 61.5 degree orbital location during the third quarter 2016, at which time we began leasing it from an indirect wholly-owned subsidiary of DISH Network. During the years ended December 31, 2018, 2017 and 2016, we incurred \$67 million, \$67 million and \$22 million, respectively, of expense related to this satellite. This amount is recorded in “Satellite and transmission expenses” on our Consolidated Statements of Operations and Comprehensive Income (Loss).

Related Party Transactions with EchoStar

Following the Spin-off, DISH Network and EchoStar have operated as separate publicly-traded companies and neither entity has any ownership interest in the other. However, a substantial majority of the voting power of the shares of both companies is owned beneficially by Charles W. Ergen, our Chairman, and by certain entities established by Mr. Ergen for the benefit of his family.

In connection with and following the Spin-off, we and EchoStar have entered into certain agreements pursuant to which we obtain certain products, services and rights from EchoStar, EchoStar obtains certain products, services and rights from us, and we and EchoStar have indemnified each other against certain liabilities arising from our respective businesses. In connection with the Share Exchange, DISH Network and EchoStar and certain of their respective subsidiaries entered into certain agreements covering, among other things, tax matters, employee matters, intellectual property matters and the provision of transitional services. In addition, certain agreements that we had with EchoStar have terminated, and we entered into certain new agreements with EchoStar. As the Share Exchange was a transaction between entities that are under common control, accounting rules require that our Consolidated Financial Statements include the results of the Transferred Businesses for all periods presented, including periods prior to the completion of the Share Exchange. Intercompany transactions between the Transferred Businesses and us, including, among others, the sale of set-top boxes and broadcast services from EchoStar to us, have been eliminated to the extent possible, including the margin EchoStar received on those sales. See Note 2 for further information. We also may enter into additional agreements with EchoStar in the future. The following is a summary of the terms of our principal agreements with EchoStar that may have an impact on our financial condition and results of operations.

“Trade accounts receivable”

As of December 31, 2018 and 2017, trade accounts receivable from EchoStar was \$4 million and \$2 million, respectively. These amounts are recorded in “Trade accounts receivable” on our Consolidated Balance Sheets.

“Trade accounts payable”

As of December 31, 2018 and 2017, trade accounts payable to EchoStar was \$6 million and \$29 million, respectively. These amounts are recorded in “Trade accounts payable” on our Consolidated Balance Sheets.

“Equipment sales and other revenue”

During the years ended December 31, 2018, 2017 and 2016, we received \$8 million, \$3 million and \$2 million, respectively, for services provided to EchoStar. These amounts are recorded in “Equipment sales and other revenue” on our Consolidated Statements of Operations and Comprehensive Income (Loss). The agreements pertaining to these revenues are discussed below.

Real Estate Lease Agreements. DISH Network has entered into lease agreements pursuant to which DISH Network leases certain real estate to EchoStar. The rent on a per square foot basis for each of the leases is comparable to per square foot rental rates of similar commercial property in the same geographic areas, and EchoStar is responsible for its portion of the taxes, insurance, utilities and maintenance of the premises. The term of each lease is set forth below:

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

- *El Paso Lease Agreement.* During 2012, DISH Network began leasing certain space at 1285 Joe Battle Blvd., El Paso, Texas to EchoStar for an initial period ending on August 1, 2015, which also provides EchoStar with renewal options for four consecutive three-year terms. During the second quarter 2015, EchoStar exercised its first renewal option for a period ending on August 1, 2018 and in April 2018 EchoStar exercised its second renewal option for a period ending in August 2021.
- *90 Inverness Lease Agreement.* In connection with the completion of the Share Exchange, effective March 1, 2017, EchoStar leases certain space from us at 90 Inverness Circle East, Englewood, Colorado for a period ending in February 2022. EchoStar has the option to renew this lease for four three-year periods.
- *Cheyenne Lease Agreement.* In connection with the completion of the Share Exchange, effective March 1, 2017, EchoStar leases certain space from us at 530 EchoStar Drive, Cheyenne, Wyoming for a period ending in February 2019. In August 2018, EchoStar exercised its option to renew this lease for a one-year period ending in February 2020. EchoStar has the option to renew this lease for twelve one-year periods.
- *Gilbert Lease Agreement.* In connection with the completion of the Share Exchange, effective March 1, 2017, EchoStar leases certain space from us at 801 N. DISH Dr., Gilbert, Arizona for a period ending in March 2019. In August 2018, EchoStar exercised its option to renew this lease for a one-year period ending in February 2020. EchoStar has the option to renew this lease for twelve one-year periods.
- *American Fork Occupancy License Agreement.* In connection with the completion of the Share Exchange, effective March 1, 2017, we acquired the lease for certain space at 796 East Utah Valley Drive, American Fork, Utah, and we sublease certain space at this location to EchoStar for a period ending in August 2017. In June 2017, EchoStar exercised its five-year renewal option for a period ending in August 2022.

Collocation and Antenna Space Agreements. In connection with the completion of the Share Exchange, effective March 1, 2017, we entered into certain agreements pursuant to which we will provide certain collocation and antenna space to HNS through February 2022 at the following locations: Cheyenne, Wyoming; Gilbert, Arizona; New Braunfels, Texas; Monee, Illinois; Englewood, Colorado and Spokane, Washington. During August 2017, we entered into certain other agreements pursuant to which we will provide certain collocation and antenna space to HNS through August 2022 at the following locations: Monee, Illinois and Spokane, Washington. HNS has the option to renew each of these agreements for four three-year periods. HNS may terminate certain of these agreements with 180 days' prior written notice to us at the following locations: New Braunfels, Texas; Englewood, Colorado; and Spokane, Washington. The fees for the services provided under these agreements depend, among other things, on the number of racks leased and/or antennas present at the location.

“Satellite and transmission expenses”

During the years ended December 31, 2018, 2017 and 2016, we incurred \$309 million, \$346 million and \$351 million, respectively, for satellite capacity leased from EchoStar and telemetry, tracking and control and other professional services provided to us by EchoStar. EchoStar is a supplier of the vast majority of our transponder capacity. These amounts are recorded in “Satellite and transmission expenses” on our Consolidated Statements of Operations and Comprehensive Income (Loss). The agreements pertaining to these expenses are discussed below.

Satellite Capacity Leased from EchoStar. We have entered into certain satellite capacity agreements pursuant to which we lease certain capacity on certain satellites owned or leased by EchoStar. The fees for the services provided under these satellite capacity agreements depend, among other things, upon the orbital location of the applicable satellite, the number of transponders that are leased on the applicable satellite and the length of the lease. See “Pay-TV Satellites” in Note 6 for further information. The term of each lease is set forth below:

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

- *EchoStar VII, X, XI and XIV.* On March 1, 2014, we began leasing all available capacity from EchoStar on the EchoStar VII, X, XI and XIV satellites. The term of each satellite capacity agreement generally terminates upon the earlier of: (i) the end-of-life of the satellite; (ii) the date the satellite fails; or (iii) a certain date, which depends upon, among other things, the estimated useful life of the satellite. We generally have the option to renew each satellite capacity agreement on a year-to-year basis through the end of the respective satellite's life. There can be no assurance that any options to renew such agreements will be exercised. The satellite capacity agreement for EchoStar VII expired on June 30, 2018.
- *EchoStar IX.* We lease certain satellite capacity from EchoStar on EchoStar IX. Subject to availability, we generally have the right to continue to lease satellite capacity from EchoStar on EchoStar IX on a month-to-month basis.
- *EchoStar XII.* The lease for EchoStar XII expired as of September 30, 2017.
- *EchoStar XVI.* In December 2009, we entered into a transponder service agreement with EchoStar to lease all of the capacity on EchoStar XVI, a DBS satellite, after its service commencement date. EchoStar XVI was launched in November 2012 to replace EchoStar XV at the 61.5 degree orbital location and is currently in service. Effective December 21, 2012, we and EchoStar amended the transponder service agreement to, among other things, change the initial term to generally expire upon the earlier of: (i) the end-of-life or replacement of the satellite; (ii) the date the satellite fails; (iii) the date the transponder(s) on which service is being provided under the agreement fails; or (iv) four years following the actual service commencement date. In July 2016, we and EchoStar amended the transponder service agreement to, among other things, extend the initial term by one additional year and to reduce the term of the first renewal option by one year. Prior to expiration of the initial term, we had the option to renew for an additional five-year period. In May 2017, we exercised our first renewal option for an additional five-year period ending in January 2023. We also have the option to renew for an additional five-year period prior to expiration of the first renewal period in January 2023. There can be no assurance that the option to renew this agreement will be exercised. During 2018, we and EchoStar further amended the agreement to, among other things, allow us to place and use certain satellites at the 61.5 degree orbital location.

Nimiq 5 Agreement. During 2009, EchoStar entered into a fifteen-year satellite service agreement with Telesat Canada ("Telesat") to receive service on all 32 DBS transponders on the Nimiq 5 satellite at the 72.7 degree orbital location (the "Telesat Transponder Agreement"). During 2009, EchoStar also entered into a satellite service agreement (the "DISH Nimiq 5 Agreement") with us, pursuant to which we currently receive service from EchoStar on all 32 of the DBS transponders covered by the Telesat Transponder Agreement. DISH Network has also guaranteed certain obligations of EchoStar under the Telesat Transponder Agreement. See discussion under "Guarantees" in Note 11.

Under the terms of the DISH Nimiq 5 Agreement, we make certain monthly payments to EchoStar that commenced in 2009 when the Nimiq 5 satellite was placed into service and continue through the service term. Unless earlier terminated under the terms and conditions of the DISH Nimiq 5 Agreement, the service term will expire ten years following the date the Nimiq 5 satellite was placed into service. Upon expiration of the initial term, we have the option to renew the DISH Nimiq 5 Agreement on a year-to-year basis through the end-of-life of the Nimiq 5 satellite. Upon in-orbit failure or end-of-life of the Nimiq 5 satellite, and in certain other circumstances, we have certain rights to receive service from EchoStar on a replacement satellite. There can be no assurance that any options to renew the DISH Nimiq 5 Agreement will be exercised or that we will exercise our option to receive service on a replacement satellite.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

QuetzSat-1 Lease Agreement. During 2008, EchoStar entered into a ten-year satellite service agreement with SES Latin America S.A. (“SES”), which provides, among other things, for the provision by SES to EchoStar of service on 32 DBS transponders on the QuetzSat-1 satellite. During 2008, EchoStar also entered into a transponder service agreement (“QuetzSat-1 Transponder Agreement”) with us pursuant to which we receive service from EchoStar on 24 DBS transponders. QuetzSat-1 was launched on September 29, 2011 and was placed into service during the fourth quarter 2011 at the 67.1 degree orbital location while we and EchoStar explored alternative uses for the QuetzSat-1 satellite. In the interim, EchoStar provided us with alternate capacity at the 77 degree orbital location. During the first quarter 2013, we and EchoStar entered into an agreement pursuant to which we sublease five DBS transponders back to EchoStar. In January 2013, QuetzSat-1 was moved to the 77 degree orbital location and we commenced commercial operations at that location in February 2013.

Unless earlier terminated under the terms and conditions of the QuetzSat-1 Transponder Agreement, the initial service term will expire in November 2021. Upon expiration of the initial term, we have the option to renew the QuetzSat-1 Transponder Agreement on a year-to-year basis through the end-of-life of the QuetzSat-1 satellite. Upon an in-orbit failure or end-of-life of the QuetzSat-1 satellite, and in certain other circumstances, we have certain rights to receive service from EchoStar on a replacement satellite. There can be no assurance that any options to renew the QuetzSat-1 Transponder Agreement will be exercised or that we will exercise our option to receive service on a replacement satellite.

103 Degree Orbital Location/SES-3. In May 2012, EchoStar entered into a spectrum development agreement (the “103 Spectrum Development Agreement”) with Ciel Satellite Holdings Inc. (“Ciel”) to develop certain spectrum rights at the 103 degree orbital location (the “103 Spectrum Rights”). In June 2013, we and EchoStar entered into a spectrum development agreement (the “DISH 103 Spectrum Development Agreement”) pursuant to which we may use and develop the 103 Spectrum Rights. Both the 103 Spectrum Development Agreement and DISH 103 Spectrum Development Agreement were terminated on March 31, 2018.

In connection with the 103 Spectrum Development Agreement, in May 2012, EchoStar also entered into a ten-year service agreement with Ciel pursuant to which EchoStar leases certain satellite capacity from Ciel on the SES-3 satellite at the 103 degree orbital location (the “103 Service Agreement”). In June 2013, we and EchoStar entered into an agreement pursuant to which we lease certain satellite capacity from EchoStar on the SES-3 satellite (the “DISH 103 Service Agreement”). Under the terms of the DISH 103 Service Agreement, we make certain monthly payments to EchoStar through the service term. Both the 103 Service Agreement and DISH 103 Service Agreement were terminated on March 31, 2018.

TT&C Agreement. Effective January 1, 2012, we entered into a telemetry, tracking and control (“TT&C”) agreement pursuant to which we receive TT&C services from EchoStar for certain satellites (the “TT&C Agreement”). In February 2018, we amended the TT&C Agreement to, among other things, extend the term for one-year with four automatic one-year renewal periods. The fees for services provided under the TT&C Agreement are calculated at either: (i) a fixed fee; or (ii) cost plus a fixed margin, which will vary depending on the nature of the services provided. We and EchoStar are able to terminate the TT&C Agreement for any reason upon 12 months’ notice.

“General and administrative expenses”

During the years ended December 31, 2018, 2017 and 2016, we incurred \$21 million, \$29 million and \$14 million, respectively, for general and administrative expenses for services provided to us by EchoStar. These amounts are recorded in “General and administrative expenses” on our Consolidated Statements of Operations and Comprehensive Income (Loss). The agreements pertaining to these expenses are discussed below.

Real Estate Lease Agreements. We have entered into lease agreements pursuant to which we lease certain real estate from EchoStar. The rent on a per square foot basis for each of the leases is comparable to per square foot rental rates of similar commercial property in the same geographic area, and EchoStar is responsible for its portion of the taxes, insurance, utilities and maintenance of the premises. The term of each lease is set forth below:

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

- *Meridian Lease Agreement.* The lease for all of 9601 S. Meridian Blvd. in Englewood, Colorado was for a period ending on December 31, 2018. In December 2018, we and EchoStar amended this lease to, among other things, extend the term thereof for one additional year until December 31, 2019.
- *Santa Fe Lease Agreement.* The lease for all of 5701 S. Santa Fe Dr. in Littleton, Colorado was for a period ending on December 31, 2018. In December 2018, we and EchoStar amended this lease to, among other things, extend the term thereof for one additional year until December 31, 2019.
- *Cheyenne Lease Agreement.* The lease for certain space at 530 EchoStar Drive in Cheyenne, Wyoming is for a period ending on December 31, 2031. In connection with the completion of the Share Exchange, EchoStar transferred ownership of a portion of this property to us, and, effective March 1, 2017, we and EchoStar amended this lease agreement to (i) terminate the lease of certain space at the portion of the property that was transferred to us and (ii) provide for the continued lease to us of certain space at the portion of the property that EchoStar retained.
- *100 Inverness Lease Agreement.* In connection with the completion of the Share Exchange, effective March 1, 2017, we lease certain space from EchoStar at 100 Inverness Terrace East, Englewood, Colorado for a period ending in December 2020. This agreement may be terminated by either party upon 180 days' prior notice.

Professional Services Agreement. Prior to 2010, in connection with the Spin-off, DISH Network entered into various agreements with EchoStar including the Transition Services Agreement, Satellite Procurement Agreement and Services Agreement, which all expired on January 1, 2010 and were replaced by a Professional Services Agreement. During 2009, DISH Network and EchoStar agreed that EchoStar shall continue to have the right, but not the obligation, to receive the following services from DISH Network, among others, certain of which were previously provided under the Transition Services Agreement: information technology, travel and event coordination, internal audit, legal, accounting and tax, benefits administration, program acquisition services and other support services. Additionally, DISH Network and EchoStar agreed that DISH Network shall continue to have the right, but not the obligation, to engage EchoStar to manage the process of procuring new satellite capacity for DISH Network (previously provided under the Satellite Procurement Agreement) and receive logistics, procurement and quality assurance services from EchoStar (previously provided under the Services Agreement) and other support services. The Professional Services Agreement renewed on January 1, 2018 for an additional one-year period until January 1, 2019 and renews automatically for successive one-year periods thereafter, unless terminated earlier by either party upon at least 60 days' notice. However, either party may terminate the Professional Services Agreement in part with respect to any particular service it receives for any reason upon at least 30 days' notice. In connection with the completion of the Share Exchange on February 28, 2017, DISH Network and EchoStar amended the Professional Services Agreement to, among other things, provide certain transition services to each other related to the Share Exchange Agreement.

Revenue for services provided by us to EchoStar under the Professional Services Agreement is recorded in "Equipment sales and other revenue" on our Consolidated Statements of Operations and Comprehensive Income (Loss).

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Other Agreements - EchoStar

Tax Sharing Agreement. In connection with the Spin-off, DISH Network entered into a tax sharing agreement (the “Tax Sharing Agreement”) with EchoStar which governs our respective rights, responsibilities and obligations after the Spin-off with respect to taxes for the periods ending on or before the Spin-off. Generally, all pre-Spin-off taxes, including any taxes that are incurred as a result of restructuring activities undertaken to implement the Spin-off, are borne by DISH Network, and DISH Network will indemnify EchoStar for such taxes. However, DISH Network is not liable for and will not indemnify EchoStar for any taxes that are incurred as a result of the Spin-off or certain related transactions failing to qualify as tax-free distributions pursuant to any provision of Section 355 or Section 361 of the Internal Revenue Code of 1986, as amended (the “Code”) because of: (i) a direct or indirect acquisition of any of EchoStar’s stock, stock options or assets; (ii) any action that EchoStar takes or fails to take; or (iii) any action that EchoStar takes that is inconsistent with the information and representations furnished to the Internal Revenue Service (“IRS”) in connection with the request for the private letter ruling, or to counsel in connection with any opinion being delivered by counsel with respect to the Spin-off or certain related transactions. In such case, EchoStar is solely liable for, and will indemnify DISH Network for, any resulting taxes, as well as any losses, claims and expenses. The Tax Sharing Agreement will only terminate after the later of the full period of all applicable statutes of limitations, including extensions, or once all rights and obligations are fully effectuated or performed.

Tax Matters Agreement. In connection with the completion of the Share Exchange, DISH Network and EchoStar entered into a Tax Matters Agreement, which governs certain rights, responsibilities and obligations with respect to taxes of the Transferred Businesses pursuant to the Share Exchange. Generally, EchoStar is responsible for all tax returns and tax liabilities for the Transferred Businesses for periods prior to the Share Exchange, and DISH Network are responsible for all tax returns and tax liabilities for the Transferred Businesses from and after the Share Exchange. Both DISH Network and EchoStar have made certain tax-related representations and are subject to various tax-related covenants after the consummation of the Share Exchange. Both DISH Network and EchoStar have agreed to indemnify each other if there is a breach of any such tax representation or violation of any such tax covenant and that breach or violation results in the Share Exchange not qualifying for tax free treatment for the other party. In addition, DISH Network has agreed to indemnify EchoStar if the Transferred Businesses are acquired, either directly or indirectly (e.g., via an acquisition of DISH Network), by one or more persons and such acquisition results in the Share Exchange not qualifying for tax free treatment. The Tax Matters Agreement supplements the Tax Sharing Agreement described above, which continues in full force and effect.

TiVo. On April 29, 2011, DISH Network and EchoStar entered into a settlement agreement with TiVo Inc. (“TiVo”). The settlement resolved all pending litigation between DISH Network and EchoStar, on the one hand, and TiVo, on the other hand, including litigation relating to alleged patent infringement involving certain DISH TV digital video recorders, or DVRs.

Under the settlement agreement, all pending litigation was dismissed with prejudice and all injunctions that permanently restrain, enjoin or compel any action by DISH Network or EchoStar were dissolved. DISH Network and EchoStar are jointly responsible for making payments to TiVo in the aggregate amount of \$500 million, including an initial payment of \$300 million and the remaining \$200 million in six equal annual installments between 2012 and 2017. Pursuant to the terms and conditions of the agreements entered into in connection with the Spin-off of EchoStar from DISH Network, DISH Network made the initial payment to TiVo in May 2011, except for the contribution from EchoStar totaling approximately \$10 million, representing an allocation of liability relating to EchoStar’s sales of DVR-enabled receivers to an international customer. Future payments were allocated between DISH Network and EchoStar based on historical sales of certain licensed products, with DISH Network being responsible for 95% of each annual payment. Pursuant to the Share Exchange Agreement, DISH Network was responsible for EchoStar’s allocation of the final payment to TiVo, which was paid July 31, 2017.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Patent Cross-License Agreements. In December 2011, DISH Network and EchoStar entered into separate patent cross-license agreements with the same third party whereby: (i) EchoStar and such third party licensed their respective patents to each other subject to certain conditions; and (ii) DISH Network and such third party licensed their respective patents to each other subject to certain conditions (each, a “Cross-License Agreement”). Each Cross License Agreement covers patents acquired by the respective party prior to January 1, 2017 and aggregate payments under both Cross-License Agreements total less than \$10 million. Each Cross License Agreement also contains an option to extend each Cross-License Agreement to include patents acquired by the respective party prior to January 1, 2022. In December 2016, DISH Network and EchoStar independently exercised their respective options to extend each Cross-License Agreement. The aggregate additional payments to such third-party was less than \$3 million. Since the aggregate payments under both Cross-License Agreements were based on the combined annual revenues of DISH Network and EchoStar, DISH Network and EchoStar agreed to allocate their respective payments to such third party based on their respective percentage of combined total revenue.

Rovi License Agreement. On August 19, 2016, we entered into a ten-year patent license agreement (the “Rovi License Agreement”) with Rovi Corporation (“Rovi”) and, for certain limited purposes, EchoStar. EchoStar is a party to the Rovi License Agreement solely with respect to certain provisions relating to the prior patent license agreement between EchoStar and Rovi. There are no payments between us and EchoStar under the Rovi License Agreement.

Sale of Orange, New Jersey Properties. In October 2016, we and EchoStar sold two parcels of real estate owned separately by us and EchoStar in Orange, New Jersey to a third party pursuant to a purchase and sale agreement. Pursuant to the agreement, we and EchoStar separately received our respective payments from the buyer.

Invidi. In November 2010 and April 2011, EchoStar made investments in Invidi in exchange for shares of Invidi’s Series D Preferred Stock. In November 2016, we, DIRECTV, LLC, a wholly-owned indirect subsidiary of AT&T Inc., and Cavendish Square Holding B.V., an affiliate of WPP plc, entered into a series of agreements to acquire Invidi. As a result of the transaction, EchoStar sold its ownership interest in Invidi on the same terms offered to the other shareholders of Invidi. The transaction closed in January 2017.

Hughes Broadband Master Services Agreement. In March 2017, DISH Network L.L.C. (“DNLLC”) and HNS entered into a master service agreement (the “MSA”) pursuant to which DNLLC, among other things: (i) has the right, but not the obligation, to market, promote and solicit orders for the Hughes broadband satellite service and related equipment; and (ii) installs Hughes service equipment with respect to activations generated by DNLLC. Under the MSA, HNS will make certain payments to DNLLC for each Hughes service activation generated, and installation performed, by DNLLC. Payments from HNS for services provided are recorded in “Subscriber-related revenue” on our Consolidated Statements of Operations and Comprehensive Income (Loss). The MSA has an initial term of five years with automatic renewal for successive one year terms. After the first anniversary of the MSA, either party has the ability to terminate the MSA, in whole or in part, for any reason upon at least 90 days’ notice to the other party. Upon expiration or termination of the MSA, HNS will continue to provide the Hughes service to subscribers and make certain payments to DNLLC pursuant to the terms and conditions of the MSA. For the years ended December 31, 2018 and 2017, we purchased broadband equipment from HNS of \$21 million and \$22 million under the MSA, respectively.

Employee Matters Agreement. In connection with the completion of the Share Exchange, effective March 1, 2017, DISH Network and EchoStar entered into an Employee Matters Agreement that addresses the transfer of employees from EchoStar to DISH Network, including certain benefit and compensation matters and the allocation of responsibility for employee-related liabilities relating to current and past employees of the Transferred Businesses. DISH Network assumed employee-related liabilities relating to the Transferred Businesses as part of the Share Exchange, except that EchoStar will be responsible for certain existing employee-related litigation as well as certain pre-Share Exchange compensation and benefits for employees transferring to DISH Network in connection with the Share Exchange.

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Intellectual Property and Technology License Agreement. In connection with the completion of the Share Exchange, effective March 1, 2017, DISH Network and EchoStar entered into an Intellectual Property and Technology License Agreement (“IPTLA”), pursuant to which DISH Network and EchoStar license to each other certain intellectual property and technology. The IPTLA will continue in perpetuity, unless mutually terminated by the parties. Pursuant to the IPTLA, EchoStar granted to DISH Network a license to its intellectual property and technology for use by DISH Network, among other things, in connection with its continued operation of the Transferred Businesses acquired pursuant to the Share Exchange Agreement, including a limited license to use the “ECHOSTAR” trademark during a transition period. EchoStar retains full ownership of the “ECHOSTAR” trademark. In addition, DISH Network granted a license back to EchoStar, among other things, for the continued use of all intellectual property and technology transferred to DISH Network pursuant to the Share Exchange Agreement that is used in EchoStar’s retained businesses.

Related Party Transactions with NagraStar L.L.C.

As a result of the completion of the Share Exchange on February 28, 2017, we own a 50% interest in NagraStar, a joint venture that is our primary provider of encryption and related security systems intended to assure that only authorized customers have access to our programming. Certain payments related to NagraStar are recorded in “Subscriber-related expenses” on our Consolidated Statements of Operations and Comprehensive Income (Loss). In addition, certain other payments are initially included in “Inventory” and are subsequently capitalized as “Property and equipment, net” on our Consolidated Balance Sheets or expensed as “Subscriber acquisition costs” or “Subscriber-related expenses” on our Consolidated Statements of Operations and Comprehensive Income (Loss) when the equipment is deployed. We record all payables in “Trade accounts payable” or “Other accrued expenses” on our Consolidated Balance Sheets. Our investment in NagraStar is accounted for using the equity method.

The table below summarizes our transactions with NagraStar.

	For the Years Ended December 31,		
	2018	2017	2016
	(In thousands)		
Purchases (including fees):			
Purchases from NagraStar	\$ 72,162	\$ 71,167	\$ 84,459
	As of December 31,		
	2018	2017	
	(In thousands)		
Amounts Payable and Commitments:			
Amounts payable to NagraStar	\$ 9,871	\$ 16,685	
Commitments to NagraStar	\$ 3,888	\$ 4,927	

DISH DBS CORPORATION
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS - Continued

Related Party Transactions with Dish Mexico

Dish Mexico, S. de R.L. de C.V. (“Dish Mexico”) is an entity that provides direct-to-home satellite services in Mexico, which is owned 49% by EchoStar. We provide certain broadcast services and sell hardware such as digital set-top boxes and related components to Dish Mexico, which are recorded in “Equipment sales and other revenue” on our Consolidated Statements of Operations and Comprehensive Income (Loss).

The table below summarizes our transactions with Dish Mexico:

	For the Years Ended December 31,		
	2018	2017	2016
	(In thousands)		
Sales:			
Digital receivers and related components	\$ 1,227	\$ 1,891	\$ 52,324
Uplink services	\$ 5,426	\$ 3,994	\$ 4,059
	As of December 31,		
	2018	2017	
	(In thousands)		
Amounts Receivable:			
Amounts receivable from Dish Mexico	\$ 1,370	\$ 3,027	

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

DISH DBS CORPORATION

By: /s/ Paul W. Orban
Paul W. Orban
Executive Vice President and Chief Financial Officer

Date: October 2, 2019

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ W. Erik Carlson</u> W. Erik Carlson	President and Chief Executive Officer <i>(Principal Executive Officer)</i>	October 2, 2019
<u>/s/ Paul W. Orban</u> Paul W. Orban	Executive Vice President and Chief Financial Officer <i>(Principal Financial Officer)</i>	October 2, 2019
<u>/s/ Charles W. Ergen</u> Charles W. Ergen	Chairman	October 2, 2019
<u>/s/ James DeFranco</u> James DeFranco	Director	October 2, 2019
<u>/s/ Timothy A. Messner</u> Timothy A. Messner	Director	October 2, 2019

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
Section 302 Certification

I, W. Erik Carlson, certify that:

1. I have reviewed this Annual Report on Form 10-K/A of DISH DBS Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 2, 2019

/s/ W. Erik Carlson

President and Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER
Section 302 Certification

I, Paul W. Orban, certify that:

1. I have reviewed this Annual Report on Form 10-K/A of DISH DBS Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 2, 2019

/s/ Paul W. Orban

Executive Vice President and Chief Financial Officer

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
Section 906 Certification

Pursuant to 18 U.S.C. § 1350, the undersigned officer of DISH DBS Corporation (the "Company") hereby certifies that to the best of his knowledge the Company's Annual Report on Form 10-K/A for the year ended December 31, 2018 (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.

Dated: October 2, 2019

Name: /s/ W. Erik Carlson

Title: President and 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.

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.

CERTIFICATION OF CHIEF FINANCIAL OFFICER
Section 906 Certification

Pursuant to 18 U.S.C. § 1350, the undersigned officer of DISH DBS Corporation (the “Company”) hereby certifies that to the best of his knowledge the Company’s Annual Report on Form 10-K/A for the year ended December 31, 2018 (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.

Dated: October 2, 2019

Name: /s/ Paul W. Orban

Title: Executive Vice President and 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.

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to the Company and will be retained by the Company and furnished to the Securities and Exchange Commission or its staff upon request.
