
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

Form 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

FOR THE QUARTERLY PERIOD ENDED SEPTEMBER 30, 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: 0-26176

DISH Network Corporation

(Exact name of registrant as specified in its charter)

Nevada
(State or other jurisdiction of incorporation or organization)

88-0336997
(I.R.S. Employer Identification No.)

9601 South Meridian Boulevard
Englewood, Colorado
(Address of principal executive offices)

80112
(Zip code)

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

Not Applicable
(Former name, former address and former fiscal year, if changed since last report)

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 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 Exchange Act). Yes No

As of November 1, 2018, the registrant's outstanding common stock consisted of 229,238,679 shares of Class A common stock and 238,435,208 shares of Class B common stock.

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PART I — FINANCIAL INFORMATION

DISCLOSURE REGARDING FORWARD-LOOKING STATEMENTS

Unless otherwise required by the context, in this report, the words “DISH Network,” the “Company,” “we,” “our” and “us” refer to DISH Network Corporation and its subsidiaries, “EchoStar” refers to EchoStar Corporation and its subsidiaries, and “DISH DBS” refers to DISH DBS Corporation, a wholly-owned, indirect subsidiary of DISH Network, and its subsidiaries.

This Quarterly Report on Form 10-Q contains “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995, including, in particular, statements about our plans, objectives and strategies, growth opportunities in our industries and businesses, our expectations regarding future results, financial condition, liquidity and capital requirements, our estimates regarding the impact of regulatory developments and legal proceedings, and other trends and projections. Forward-looking statements are not historical facts and may be identified by words such as “future,” “anticipate,” “intend,” “plan,” “goal,” “seek,” “believe,” “estimate,” “expect,” “predict,” “will,” “would,” “could,” “can,” “may,” and similar terms. These forward-looking statements are based on information available to us as of the date of this Quarterly Report on Form 10-Q and represent management’s current views and assumptions. Forward-looking statements are not guarantees of future performance, events or results and involve known and unknown risks, uncertainties and other factors, which may be beyond our control. Accordingly, actual performance, events or results could differ materially from those expressed or implied in the forward-looking statements due to a number of factors, including, but not limited to, the following:

Competition and Economic Risks

- As the pay-TV industry has matured and bundled offers combining video, broadband and/or wireless services have become more prevalent and competitive, we face intense and increasing competition from providers of video, broadband and/or wireless services, which may require us to further increase subscriber acquisition and retention spending or accept lower subscriber activations and higher subscriber chum.
- Changing consumer behavior and competition from digital media companies that provide or facilitate the delivery of video content via the Internet may reduce our subscriber activations and may cause our subscribers to purchase fewer services from us or to cancel our services altogether, resulting in less revenue to us.
- Economic weakness and uncertainty may adversely affect our ability to grow or maintain our business.
- Our competitors may be able to leverage their relationships with programmers to reduce their programming costs and/or offer exclusive content that will place them at a competitive advantage to us.
- Our over-the-top (“OTT”) Sling TV Internet-based services face certain risks, including, among others, significant competition.
- If government regulations relating to the Internet change, we may need to alter the manner in which we conduct our Sling TV business, and/or incur greater operating expenses to comply with those regulations.
- Changes in how network operators handle and charge for access to data that travels across their networks could adversely impact our business.
- We face increasing competition from other distributors of unique programming services such as foreign language, sports programming and original content that may limit our ability to maintain subscribers that desire these unique programming services.

Operational and Service Delivery Risks

- If our operational performance and customer satisfaction were to deteriorate, our subscriber activations and our subscriber churn rate may be negatively impacted, which could in turn adversely affect our revenue.
- If our subscriber activations continue to decrease, or if our subscriber churn rate, subscriber acquisition costs or retention costs increase, our financial performance will be adversely affected.
- Programming expenses are increasing and may adversely affect our future financial condition and results of operations.
- We depend on others to provide the programming that we offer to our subscribers and, if we fail to obtain or lose access to this programming, our subscriber activations and our subscriber churn rate may be negatively impacted.
- We may not be able to obtain necessary retransmission consent agreements at acceptable rates, or at all, from local network stations.
- We may be required to make substantial additional investments to maintain competitive programming offerings.
- Any failure or inadequacy of our information technology infrastructure and communications systems, including, without limitation, those caused by cyber-attacks or other malicious activities, could disrupt or harm our business.
- We currently depend on EchoStar to provide the vast majority of our satellite transponder capacity and other related services to us. Our business would be adversely affected if EchoStar ceases to provide these services to us and we are unable to obtain suitable replacement services from third parties.
- Technology in the pay-TV industry changes rapidly, and our success may depend in part on our timely introduction and implementation of, and effective investment in, new competitive products and services and more advanced equipment, and our failure to do so could cause our products and services to become obsolete and could negatively impact our business.
- We rely on a single vendor or a limited number of vendors to provide certain key products or services to us such as information technology support, billing systems and security access devices, and the inability of these key vendors to meet our needs could have a material adverse effect on our business.
- We rely on a few suppliers and in some cases a single supplier for many components of our new set-top boxes, and any reduction or interruption in supplies or significant increase in the price of supplies could have a negative impact on our business.
- Our programming signals are subject to theft, and we are vulnerable to other forms of fraud that could require us to make significant expenditures to remedy.
- We depend on independent third parties to solicit orders for our DISH TV services that represent a meaningful percentage of our total gross new DISH TV subscriber activations.
- We have limited satellite capacity and failures or reduced capacity could adversely affect our DISH TV services.
- Our owned and leased satellites are subject to construction, launch, operational and environmental risks that could limit our ability to utilize these satellites.

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- 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 could face significant impairment charges if any of our owned satellites fail.
- We may have potential conflicts of interest with EchoStar due to our common ownership and management.
- We rely on key personnel and the loss of their services may negatively affect our business.

Acquisition and Capital Structure Risks

- We have made substantial investments to acquire certain wireless spectrum licenses and other related assets. In addition, we have made substantial non-controlling investments in the Northstar Entities and the SNR Entities related to AWS-3 wireless spectrum licenses.
- We face certain risks related to our non-controlling investments in the Northstar Entities and the SNR Entities, which may have a material adverse effect on our business, results of operations and financial condition.
- To the extent that we commercialize our wireless spectrum licenses, we will face certain risks entering and competing in the wireless services industry and operating a wireless services business.
- Our wireless spectrum licenses are subject to certain interim and final build-out requirements and the failure to meet such build-out requirements may have a material adverse effect on our business, results of operations and financial condition.
- We rely on highly skilled personnel for our wireless business and, if we are unable to hire and retain key personnel or hire qualified personnel then our wireless business may be adversely affected.
- We may pursue acquisitions and other strategic transactions to complement or expand our business that may not be successful, and we may lose up to the entire value of our investment in these acquisitions and transactions.
- We may need additional capital, which may not be available on acceptable terms or at all, to continue investing in our business and to finance acquisitions and other strategic transactions.
- We have substantial debt outstanding and may incur additional debt.
- The conditional conversion features of our 3 3/8% Convertible Notes due 2026 (the “Convertible Notes due 2026”) and our 2 3/8% Convertible Notes due 2024 (the “Convertible Notes due 2024,” and collectively with the Convertible Notes due 2026, the “Convertible Notes”), if triggered, may adversely affect our financial condition.
- The convertible note hedge and warrant transactions that we entered into in connection with the offering of the Convertible Notes due 2026 may affect the value of the Convertible Notes due 2026 and our Class A common stock.
- We are subject to counterparty risk with respect to the convertible note hedge transactions.
- From time to time a portion of our investment portfolio may be invested in securities that have limited liquidity and may not be immediately accessible to support our financing needs, including investments in public companies that are highly speculative and have experienced and continue to experience volatility.
- It may be difficult for a third party to acquire us, even if doing so may be beneficial to our shareholders, because of our ownership structure.

- We are controlled by one principal stockholder who is also our Chairman.

Legal and Regulatory Risks

- The rulings in the Telemarketing litigation requiring us to pay up to an aggregate amount of \$341 million and imposing certain injunctive relief against us, if upheld, would have a material adverse effect on our cash, cash equivalents and marketable investment securities balances and our business operations.
- Our business may be materially affected by the Tax Cuts and Jobs Act of 2017 (the “Tax Reform Act”). Negative or unexpected tax consequences could adversely affect our business, financial condition and results of operations.
- Our business depends on certain intellectual property rights and on not infringing the intellectual property rights of others.
- We are, and may become, party to various lawsuits which, if adversely decided, could have a significant adverse impact on our business, particularly lawsuits regarding intellectual property.
- Our ability to distribute video content via the Internet, including our Sling TV services, involves regulatory risk.
- Changes in the Cable Act of 1992 (“Cable Act”), and/or the rules of the Federal Communications Commission (“FCC”) that implement the Cable Act, may limit our ability to access programming from cable-affiliated programmers at nondiscriminatory rates.
- The injunction against our retransmission of distant networks, which is currently waived, may be reinstated.
- We are subject to significant regulatory oversight, and changes in applicable regulatory requirements, including any adoption or modification of laws or regulations relating to the Internet, could adversely affect our business.
- Our business depends on FCC licenses that can expire or be revoked or modified and applications for FCC licenses that may not be granted.
- We are subject to digital high-definition (“HD”) “carry-one, carry-all” requirements that cause capacity constraints.
- Our business, investor confidence in our financial results and stock price may be adversely affected if our internal controls are not effective.
- We may face other risks described from time to time in periodic and current reports we file with the Securities and Exchange Commission (“SEC”).

Other factors that could cause or contribute to such differences include, but are not limited to, those discussed under the caption “Risk Factors” in Part I, Item 1A of our most recent Annual Report on Form 10-K (the “10-K”) and in Part II, Item 1A of our Quarterly Report on Form 10-Q for the quarter ended June 30, 2018, filed with the SEC, those discussed in “Management’s Discussion and Analysis of Financial Condition and Results of Operations” herein and in the 10-K and those discussed in other documents we file with the SEC. All cautionary statements made or referred to herein should be read as being applicable to all forward-looking statements wherever they appear. Investors should consider the risks and uncertainties described or referred to herein and should not place undue reliance on any forward-looking statements. The forward-looking statements speak only as of the date made, and we expressly disclaim any obligation to update these forward-looking statements.

Item 1. FINANCIAL STATEMENTS

DISH NETWORK CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(Dollars in thousands, except share amounts)
(Unaudited)

	As of	
	September 30, 2018	December 31, 2017
Assets		
<i>Current Assets:</i>		
Cash and cash equivalents	\$ 1,229,717	\$ 1,479,508
Marketable investment securities	635,432	501,165
Trade accounts receivable, net of allowance for doubtful accounts of \$12,931 and \$15,511, respectively	670,826	653,948
Inventory	304,944	321,008
Other current assets	197,990	329,394
Total current assets	3,038,909	3,285,023
<i>Noncurrent Assets:</i>		
Restricted cash, cash equivalents and marketable investment securities	67,199	72,407
Property and equipment, net	1,990,034	2,183,661
FCC authorizations	24,487,077	23,725,789
Other investment securities	109,546	113,460
Other noncurrent assets, net	444,645	393,426
Total noncurrent assets	27,098,501	26,488,743
Total assets	\$ 30,137,410	\$ 29,773,766
Liabilities and Stockholders' Equity (Deficit)		
<i>Current Liabilities:</i>		
Trade accounts payable	\$ 269,515	\$ 393,305
Deferred revenue and other	685,683	709,074
Accrued programming	1,535,187	1,571,273
Accrued interest	201,841	282,006
Other accrued expenses (Note 9)	818,255	803,822
Current portion of long-term debt and capital lease obligations	1,367,116	1,068,524
Total current liabilities	4,877,597	4,828,004
<i>Long-Term Obligations, Net of Current Portion:</i>		
Long-term debt and capital lease obligations, net of current portion	13,790,114	15,134,441
Deferred tax liabilities	2,329,011	2,019,538
Long-term deferred revenue and other long-term liabilities	457,479	470,487
Total long-term obligations, net of current portion	16,576,604	17,624,466
Total liabilities	21,454,201	22,452,470
Commitments and Contingencies (Note 9)		
Redeemable noncontrolling interests (Note 2)	440,171	383,390
<i>Stockholders' Equity (Deficit):</i>		
Class A common stock, \$.01 par value, 1,600,000,000 shares authorized, 229,236,679 and 228,033,671 shares issued and outstanding, respectively	2,292	2,280
Class B common stock, \$.01 par value, 800,000,000 shares authorized, 238,435,208 shares issued and outstanding	2,384	2,384
Additional paid-in capital	3,364,995	3,296,488
Accumulated other comprehensive income (loss)	(537)	882
Accumulated earnings (deficit)	4,875,711	3,635,380
Total DISH Network stockholders' equity (deficit)	8,244,845	6,937,414
Noncontrolling interests	(1,807)	492
Total stockholders' equity (deficit)	8,243,038	6,937,906
Total liabilities and stockholders' equity (deficit)	\$ 30,137,410	\$ 29,773,766

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

DISH NETWORK CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
AND COMPREHENSIVE INCOME (LOSS)

(Dollars in thousands, except per share amounts)
(Unaudited)

	For the Three Months Ended		For the Nine Months Ended	
	September 30,		September 30,	
	2018	2017	2018	2017
Revenue:				
Subscriber-related revenue	\$ 3,349,356	\$ 3,551,054	\$ 10,191,820	\$ 10,809,419
Equipment sales and other revenue	45,785	32,400	122,653	98,028
Total revenue	<u>3,395,141</u>	<u>3,583,454</u>	<u>10,314,473</u>	<u>10,907,447</u>
Costs and Expenses (exclusive of depreciation shown separately below - Note 7):				
Subscriber-related expenses	2,123,798	2,237,742	6,468,176	6,723,704
Satellite and transmission expenses	136,869	160,009	436,565	500,171
Cost of sales - equipment and other	40,309	21,563	108,052	71,672
<i>Subscriber acquisition costs:</i>				
Cost of sales - subscriber promotion subsidies	7,914	15,826	32,952	59,225
Other subscriber acquisition costs	73,614	155,870	219,420	432,631
Subscriber acquisition advertising	105,350	147,115	313,779	392,449
Total subscriber acquisition costs	186,878	318,811	566,151	884,305
General and administrative expenses	169,299	186,954	529,701	497,801
Litigation expense (Note 9)	—	—	—	295,695
Depreciation and amortization (Note 7)	175,285	209,324	540,959	625,625
Total costs and expenses	<u>2,832,438</u>	<u>3,134,403</u>	<u>8,649,604</u>	<u>9,598,973</u>
Operating income (loss)	<u>562,703</u>	<u>449,051</u>	<u>1,664,869</u>	<u>1,308,474</u>
Other Income (Expense):				
Interest income	10,525	7,240	30,461	33,979
Interest expense, net of amounts capitalized	(5,413)	(4,370)	(11,235)	(59,809)
Other, net	25,473	40,261	12,097	48,173
Total other income (expense)	<u>30,585</u>	<u>43,131</u>	<u>31,323</u>	<u>22,343</u>
Income (loss) before income taxes	593,288	492,182	1,696,192	1,330,817
Income tax (provision) benefit, net	(140,690)	(176,917)	(397,987)	(566,715)
Net income (loss)	452,598	315,265	1,298,205	764,102
Less: Net income (loss) attributable to noncontrolling interests, net of tax	20,864	17,890	60,194	50,896
Net income (loss) attributable to DISH Network	<u>\$ 431,734</u>	<u>\$ 297,375</u>	<u>\$ 1,238,011</u>	<u>\$ 713,206</u>
Weighted-average common shares outstanding - Class A and B common stock:				
Basic	467,570	466,240	467,216	465,893
Diluted	<u>525,995</u>	<u>525,246</u>	<u>525,752</u>	<u>521,639</u>
Earnings per share - Class A and B common stock:				
Basic net income (loss) per share attributable to DISH Network	\$ 0.92	\$ 0.64	\$ 2.65	\$ 1.53
Diluted net income (loss) per share attributable to DISH Network	<u>\$ 0.82</u>	<u>\$ 0.57</u>	<u>\$ 2.35</u>	<u>\$ 1.42</u>
Comprehensive Income (Loss):				
Net income (loss)	\$ 452,598	\$ 315,265	\$ 1,298,205	\$ 764,102
<i>Other comprehensive income (loss):</i>				
Foreign currency translation adjustments	(1,372)	232	(1,629)	1,078
Unrealized holding gains (losses) on available-for-sale securities	134	494	288	7,459
Recognition of previously unrealized (gains) losses on available-for-sale securities included in net income (loss)	(2)	(1)	(7)	(635)
Deferred income tax (expense) benefit, net	(32)	(183)	(71)	(2,509)
Total other comprehensive income (loss), net of tax	<u>(1,272)</u>	<u>542</u>	<u>(1,419)</u>	<u>5,393</u>
Comprehensive income (loss)	451,326	315,807	1,296,786	769,495
Less: Comprehensive income (loss) attributable to noncontrolling interests, net of tax	20,864	17,890	60,194	50,896
Comprehensive income (loss) attributable to DISH Network	<u>\$ 430,462</u>	<u>\$ 297,917</u>	<u>\$ 1,236,592</u>	<u>\$ 718,599</u>

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

DISH NETWORK CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(Unaudited)

	For the Nine Months Ended	
	September 30,	
	2018	2017
Cash Flows From Operating Activities:		
Net income (loss)	\$ 1,298,205	\$ 764,102
<i>Adjustments to reconcile net income (loss) to net cash flows from operating activities:</i>		
Depreciation and amortization	540,959	625,625
Realized and unrealized losses (gains) on investments	(13,153)	(44,467)
Non-cash, stock-based compensation	24,897	20,619
Deferred tax expense (benefit)	308,610	558,423
Other, net	(78,481)	17,976
Changes in current assets and current liabilities, net	(65,303)	284,805
Net cash flows from operating activities	2,015,734	2,227,083
Cash Flows From Investing Activities:		
Purchases of marketable investment securities	(801,916)	(282,919)
Sales and maturities of marketable investment securities	675,162	107,768
Purchases of property and equipment	(282,805)	(324,105)
Capitalized interest related to FCC authorizations (Note 2)	(765,239)	(769,046)
Purchases of FCC authorizations, including deposits (Note 9)	—	(4,711,154)
Purchases of strategic investments	—	(90,381)
Other, net	16,773	22,666
Net cash flows from investing activities	(1,158,025)	(6,047,171)
Cash Flows From Financing Activities:		
Proceeds from issuance of convertible notes	—	1,000,000
Redemption and repurchases of senior notes	(1,088,392)	(900,000)
Repayment of long-term debt and capital lease obligations	(32,651)	(32,409)
Payments made to parent of transferred businesses	—	(7,098)
Net proceeds from Class A common stock options exercised and stock issued under the Employee Stock Purchase Plan	16,300	24,171
Debt issuance costs	—	(6,158)
Other, net	(2,760)	(349)
Net cash flows from financing activities	(1,107,503)	78,157
Net increase (decrease) in cash, cash equivalents, restricted cash and cash equivalents	(249,794)	(3,741,931)
Cash, cash equivalents, restricted cash and cash equivalents, beginning of period (Note 5)	1,479,901	5,325,184
Cash, cash equivalents, restricted cash and cash equivalents, end of period (Note 5)	\$ 1,230,107	\$ 1,583,253

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

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(Unaudited)

1. Organization and Business Activities

Principal Business

DISH Network Corporation is a holding company. Its subsidiaries (which together with DISH Network Corporation are referred to as “DISH Network,” the “Company,” “we,” “us” and/or “our,” unless otherwise required by the context) operate two primary business segments.

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, 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”). As a result of the completion of the Share Exchange with EchoStar, described below, 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 12 for further information. The Sling branded pay-TV services consist of, among other things, multichannel, live, linear streaming OTT Internet-based domestic, international and Latino video programming services (“Sling TV”). As of September 30, 2018, we had 12.656 million Pay-TV subscribers in the United States, including 10.286 million DISH TV subscribers and 2.370 million Sling TV subscribers.

In addition, we have historically offered broadband services under the dishNET™ brand, which includes satellite broadband services that utilize advanced technology and high-powered satellites launched by Hughes Communications, Inc. (“Hughes”) and ViaSat, Inc. (“ViaSat”) and wireline broadband services. However, as of the first quarter 2018, we have transitioned our broadband business focus from wholesale to authorized representative arrangements, and we are no longer marketing dishNET broadband services. Our existing broadband subscribers will decline through customer attrition. Generally, under these authorized representative arrangements, we will receive certain payments for each broadband service activation generated and installation performed, and we will not incur subscriber acquisition costs for these activations.

Wireless

Since 2008, we have 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 CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

DISH Network Spectrum

We have 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. We 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. 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 we consider our options for the commercialization of our wireless spectrum, we 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. In March 2017, we notified the FCC that we plan to deploy a next-generation 5G-capable network, focused on supporting narrowband Internet of Things (“IoT”). The first phase of our network deployment will be completed by March 2020, with subsequent phases to be completed thereafter. As of September 30, 2018, we 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. Among other things, initial RF design in connection with the first phase of our network deployment is now complete, and we are in the process of identifying and securing tower sites. The core network has been installed and commissioned. Based on our vendors’ current forecast, we plan to install the first base stations on sites later this year, and to continue deployment until complete. We may also determine that additional wireless spectrum licenses may be required to commercialize our wireless business and to compete with other wireless service providers. See Note 9 for further information.

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

During 2015, through our wholly-owned subsidiaries American AWS-3 Wireless II L.L.C. (“American II”) and American AWS-3 Wireless III L.L.C. (“American III”), we initially made over \$10 billion in certain non-controlling investments in Northstar Spectrum, LLC (“Northstar Spectrum”), the parent company of Northstar Wireless, L.L.C. (“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 and to SNR Wireless, respectively, which are recorded in “FCC authorizations” on our Condensed Consolidated Balance Sheets. Under the applicable accounting guidance in Accounting Standards Codification 810, *Consolidation* (“ASC 810”), Northstar Spectrum and SNR HoldCo are considered variable interest entities and, based on the characteristics of the structure of these entities and in accordance with the applicable accounting guidance, we consolidate these entities into our financial statements. See Note 2 for further information.

The AWS-3 Licenses are subject to certain interim and final build-out requirements. 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 us, 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 Northstar Re-Auction Payment and the SNR Re-Auction Payment for the AWS-3 licenses retained by the FCC. Depending upon the nature and scope of such commercialization, build-out, integration efforts, regulatory compliance, and potential Northstar Re-Auction Payment and SNR Re-Auction Payment, any loans, equity contributions or partnerships could vary significantly. There can be no assurance that we will be able to obtain a profitable return on our non-controlling investments in the Northstar Entities and the SNR Entities. See Note 9 for further information.

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

2. Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited Condensed Consolidated Financial Statements have been prepared in accordance with accounting principles generally accepted in the United States (“GAAP”) and with the instructions to Form 10-Q and Article 10 of Regulation S-X for interim financial information. Accordingly, these statements do not include all of the information and notes required for complete financial statements prepared under GAAP. In our opinion, all adjustments (consisting of normal recurring adjustments) considered necessary for a fair presentation have been included. Our results of operations for the interim periods presented are not necessarily indicative of the results that may be expected for the full year. For further information, refer to the Consolidated Financial Statements and notes thereto included in our Annual Report on Form 10-K for the year ended December 31, 2017. Certain prior period amounts have been reclassified to conform to the current period presentation.

Principles of Consolidation

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 Condensed Consolidated Statements of Operations and Comprehensive Income (Loss). All significant intercompany accounts and transactions have been eliminated in consolidation.

On February 28, 2017, we and EchoStar and certain of our 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. In connection with the Share Exchange, we and EchoStar and certain of their subsidiaries entered into certain agreements covering, among other things, tax matters, employee matters, intellectual property matters and the provision of transitional services. See Note 12 for further information.

As the Share Exchange was a transaction between entities that are under common control, accounting rules require that our Condensed 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 Condensed Consolidated Balance Sheets.

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

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.

Redeemable Noncontrolling Interests

Northstar Wireless. Northstar Wireless is a wholly-owned subsidiary of Northstar Spectrum, which is an entity owned by Northstar Manager, LLC (“Northstar Manager”) and us. Under the applicable accounting guidance in ASC 810, Northstar Spectrum is considered a variable interest entity and, based on the characteristics of the structure of this entity and in accordance with the applicable accounting guidance, we consolidate Northstar Spectrum into our financial statements. The Northstar Operative Agreements, as amended, provide for, among other things, that after the fifth and sixth anniversaries of the grant of the AWS-3 Licenses to Northstar Wireless (and in certain circumstances, prior to the fifth anniversary of the grant of the AWS-3 Licenses to Northstar Wireless), Northstar Manager has the ability, but not the obligation, to require Northstar Spectrum to purchase Northstar Manager’s ownership interests in Northstar Spectrum (the “Northstar Put Right”) for a purchase price that generally equals its equity contribution to Northstar Spectrum plus a fixed annual rate of return. In the event that the Northstar Put Right is exercised by Northstar Manager, the consummation of the sale will be subject to FCC approval. Northstar Spectrum does not have a call right with respect to Northstar Manager’s ownership interests in Northstar Spectrum. Although Northstar Manager is the sole manager of Northstar Spectrum, Northstar Manager’s ownership interest is considered temporary equity under the applicable accounting guidance and is thus recorded as part of “Redeemable noncontrolling interests” in the mezzanine section of our Condensed Consolidated Balance Sheets. Northstar Manager’s ownership interest in Northstar Spectrum was initially accounted for at fair value. Subsequently, Northstar Manager’s ownership interest in Northstar Spectrum is increased by the fixed annual rate of return through “Redeemable noncontrolling interests” on our Condensed Consolidated Balance Sheets, with the offset recorded in “Net income (loss) attributable to noncontrolling interests, net of tax” on our Condensed Consolidated Statements of Operations and Comprehensive Income (Loss). The operating results of Northstar Spectrum attributable to Northstar Manager are recorded as “Redeemable noncontrolling interests” on our Condensed Consolidated Balance Sheets, with the offset recorded in “Net income (loss) attributable to noncontrolling interests, net of tax” on our Condensed Consolidated Statements of Operations and Comprehensive Income (Loss). See Note 9 for further information.

SNR Wireless. SNR Wireless is a wholly-owned subsidiary of SNR HoldCo, which is an entity owned by SNR Wireless Management, LLC (“SNR Management”) and us. Under the applicable accounting guidance in ASC 810, SNR HoldCo is considered a variable interest entity and, based on the characteristics of the structure of this entity and in accordance with the applicable accounting guidance, we consolidate SNR HoldCo into our financial statements. The SNR Operative Agreements, as amended, provide for, among other things, that after the fifth and sixth anniversaries of the grant of the AWS-3 Licenses to SNR Wireless (and in certain circumstances, prior to the fifth anniversary of the grant of the AWS-3 Licenses to SNR Wireless), SNR Management has the ability, but not the obligation, to require SNR HoldCo to purchase SNR Management’s ownership interests in SNR HoldCo (the “SNR Put Right”) for a purchase price that generally equals its equity contribution to SNR HoldCo plus a fixed annual rate of return. In the event that the SNR Put Right is exercised by SNR Management, the consummation of the sale will be subject to FCC approval. SNR HoldCo does not have a call right with respect to SNR Management’s ownership interests in SNR HoldCo. Although SNR Management is the sole manager of SNR HoldCo, SNR Management’s ownership interest is considered temporary equity under the applicable accounting guidance and is thus recorded as part of “Redeemable noncontrolling interests” in the mezzanine section of our Condensed Consolidated Balance Sheets. SNR Management’s ownership interest in SNR HoldCo was initially accounted for at fair value. Subsequently, SNR Management’s ownership interest in SNR HoldCo is increased by the fixed annual rate of return through “Redeemable noncontrolling interests” on our Condensed Consolidated Balance Sheets, with the offset recorded in “Net income (loss) attributable to noncontrolling interests, net of tax” on our Condensed Consolidated Statements of Operations and Comprehensive Income (Loss). The operating results of SNR HoldCo attributable to SNR Management are recorded as “Redeemable noncontrolling interests” on our Condensed Consolidated Balance Sheets, with the offset recorded in “Net income (loss) attributable to noncontrolling interests, net of tax” on our Condensed Consolidated Statements of Operations and Comprehensive Income (Loss). See Note 9 for further information.

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

Use of Estimates

The preparation of financial statements in conformity with 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 condensed consolidated financial statements. Estimates and assumptions are reviewed periodically, and the effects of revisions are reflected prospectively in the period they occur.

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 stockholders’ equity (deficit),” net of related deferred income tax on our Condensed 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 Condensed Consolidated Statements of Operations and Comprehensive Income (Loss).

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 Condensed 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 stockholders’ equity (deficit),” net of related deferred income tax on our Condensed Consolidated Balance Sheets. Declines in the fair value of a marketable debt security which are determined to be “other-than-temporary” are recognized in the Condensed Consolidated Statements of Operations and Comprehensive Income (Loss), thus establishing a new cost basis for such investment.

Capitalized Interest

We capitalize interest associated with the acquisition or construction of certain assets, including, among other things, our wireless spectrum licenses, build-out costs associated with our network deployment and satellites. Capitalization of interest begins when, among other things, steps are taken to prepare the asset for its intended use and ceases when the asset is ready for its intended use or when these activities are substantially suspended.

We are currently preparing for the commercialization of our AWS-4, H Block, 700 MHz, 600 MHz and MVDDS wireless spectrum licenses, and interest expense related to their carrying amount is being capitalized. In addition, the FCC has granted certain AWS-3 Licenses to Northstar Wireless and to SNR Wireless, respectively, in which we have made certain non-controlling investments. Northstar Wireless and SNR Wireless are preparing for the commercialization of their AWS-3 Licenses and interest expense related to their carrying amount is also being capitalized. On June 14, 2017, the FCC issued an order granting our application to acquire the 600 MHz Licenses, and we began preparing for the commercialization of our 600 MHz Licenses and began capitalizing interest related to these licenses on June 14, 2017. As the carrying amount of the licenses discussed above exceeded the carrying value of our long-term debt beginning on June 14, 2017, materially all of our interest expense is now being capitalized.

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

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; quoted prices for identical or similar instruments in markets that are not active; and derivative financial instruments indexed to marketable investment securities; 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 September 30, 2018 and December 31, 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 5 for the fair value of our marketable investment securities and derivative financial instruments.

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 8 for the fair value of our long-term debt.

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 in-home service operations; broadband services; warranty services; and sales of digital receivers and related equipment to third-party pay-TV providers. See Note 10 for further information, including revenue disaggregated by major source.

Our residential video subscribers contract for individual services or combinations of services, as discussed above, the majority of which are generally capable of being 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.

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

For our residential video subscribers, we have concluded that the contract term under 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 11 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 three and nine months ended September 30, 2018, we capitalized \$51 million and \$141 million, respectively, under these programs. The amortization expense related to these programs was \$9 million and \$17 million, respectively, for the three and nine months ended September 30, 2018. As of September 30, 2018, we had a total of \$138 million capitalized on our Condensed Consolidated Balance Sheets. These amounts are capitalized in "Other current assets" and "Other noncurrent assets, net" on our Condensed Consolidated Balance Sheets, and then amortized in "Other subscriber acquisition costs" on our Condensed Consolidated Statements of Operations and Comprehensive Income (Loss).

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 has modified the standard thereafter. We adopted ASU 2014-09, as modified, and now codified as Accounting Standard Codification Topic 606 ("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.

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

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

Condensed Consolidated Statements of Operations	DISH Network (as would have been reported under previous standards)	Impact of adopting ASU 2014-09	DISH Network (as currently reported)
	(In thousands)		
For the Three Months Ended September 30, 2018			
Subscriber-related revenue	\$ 3,352,054	\$ (2,698)	\$ 3,349,356
Subscriber-related expenses	\$ 2,127,035	\$ (3,237)	\$ 2,123,798
Total subscriber acquisition costs	\$ 227,686	\$ (40,808)	\$ 186,878
Operating income (loss)	\$ 521,356	\$ 41,347	\$ 562,703
Income (loss) before income taxes	\$ 551,941	\$ 41,347	\$ 593,288
Income tax (provision) benefit, net	\$ (130,522)	\$ (10,168)	\$ (140,690)
Net income (loss) attributable to DISH Network	\$ 400,555	\$ 31,179	\$ 431,734
Diluted net income (loss) per share attributable to DISH Network	\$ 0.76	\$ 0.06	\$ 0.82

For the Nine Months Ended September 30, 2018			
Subscriber-related revenue	\$ 10,206,160	\$ (14,340)	\$ 10,191,820
Subscriber-related expenses	\$ 6,478,665	\$ (10,489)	\$ 6,468,176
Total subscriber acquisition costs	\$ 691,216	\$ (125,065)	\$ 566,151
Operating income (loss)	\$ 1,543,655	\$ 121,214	\$ 1,664,869
Income (loss) before income taxes	\$ 1,574,978	\$ 121,214	\$ 1,696,192
Income tax (provision) benefit, net	\$ (368,156)	\$ (29,831)	\$ (397,987)
Net income (loss) attributable to DISH Network	\$ 1,146,628	\$ 91,383	\$ 1,238,011
Diluted net income (loss) per share attributable to DISH Network	\$ 2.18	\$ 0.17	\$ 2.35

Condensed Consolidated Balance Sheets	DISH Network (as would have been reported under previous standards)	Impact of adopting ASU 2014-09	DISH Network (as currently reported)
	(In thousands)		
As of September 30, 2018			
Inventory	\$ 273,227	\$ 31,717	\$ 304,944
Other current assets	\$ 159,381	\$ 38,609	\$ 197,990
Other noncurrent assets, net	\$ 345,739	\$ 98,906	\$ 444,645
Total assets	\$ 29,968,178	\$ 169,232	\$ 30,137,410
Deferred revenue and other	\$ 643,205	\$ 42,478	\$ 685,683
Deferred tax liabilities	\$ 2,298,388	\$ 30,623	\$ 2,329,011
Long-term deferred revenue and other long-term liabilities	\$ 455,052	\$ 2,427	\$ 457,479
Total liabilities	\$ 21,378,673	\$ 75,528	\$ 21,454,201
Total stockholders' equity (deficit)	\$ 8,149,334	\$ 93,704	\$ 8,243,038
Total liabilities and stockholders' equity (deficit)	\$ 29,968,178	\$ 169,232	\$ 30,137,410

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

Research and Development

Research and development costs are expensed as incurred. Research and development costs totaled \$6 million and \$8 million for the three months ended September 30, 2018 and 2017, respectively. Research and development costs totaled \$18 million and \$24 million for the nine months ended September 30, 2018 and 2017, respectively.

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
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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 will be 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.

The effective date of this standard for us will be January 1, 2019, at which time we plan to adopt the standard using the modified retrospective approach with a cumulative-effect adjustment to opening retained earnings recorded at the beginning of the period of adoption. Therefore, upon adoption, we will recognize and measure leases without revising comparative period information or disclosure. The modified retrospective approach includes a number of optional practical expedients that entities may elect to apply. While our assessment of the effect of ASU 2016-02 is ongoing, we currently believe the most significant impact will be the recognition of right of use assets and lease liabilities on our Condensed Consolidated Balance Sheets. The multidisciplinary team we have established to implement this guidance is currently collecting and validating lease data and implementing our selected lease accounting system.

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 Condensed 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 Condensed Consolidated Financial Statements and related disclosures.

3. Basic and Diluted Net Income (Loss) Per Share

We present both basic earnings per share (“EPS”) and diluted EPS. Basic EPS excludes potential dilution and is computed by dividing “Net income (loss) attributable to DISH Network” by the weighted-average number of common shares outstanding for the period. Diluted EPS reflects the potential dilution that could occur if stock awards were exercised and if our Convertible Notes were converted. The potential dilution from stock awards is accounted for using the treasury stock method based on the average market value of our Class A common stock. The potential dilution from conversion of the Convertible Notes is accounted for using the if-converted method, which requires that all of the shares of our Class A common stock issuable upon conversion of the Convertible Notes will be included in the calculation of diluted EPS assuming conversion of the Convertible Notes at the beginning of the reporting period (or at time of issuance, if later).

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

The following table presents EPS amounts for all periods and the basic and diluted weighted-average shares outstanding used in the calculation.

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
	(In thousands, except per share amounts)			
Net income (loss)	\$ 452,598	\$ 315,265	\$ 1,298,205	\$ 764,102
Less: Net income (loss) attributable to noncontrolling interests, net of tax	20,864	17,890	60,194	50,896
Net income (loss) attributable to DISH Network - Basic	431,734	297,375	1,238,011	713,206
Interest on dilutive Convertible Notes, net of tax (1)	—	—	—	30,125
Net income (loss) attributable to DISH Network - Diluted	\$ 431,734	\$ 297,375	\$ 1,238,011	\$ 743,331
Weighted-average common shares outstanding - Class A and B common stock:				
Basic	467,570	466,240	467,216	465,893
Dilutive impact of Convertible Notes	58,192	58,192	58,192	54,850
Dilutive impact of stock awards outstanding	233	814	344	896
Diluted	<u>525,995</u>	<u>525,246</u>	<u>525,752</u>	<u>521,639</u>
Earnings per share - Class A and B common stock:				
Basic net income (loss) per share attributable to DISH Network	\$ 0.92	\$ 0.64	\$ 2.65	\$ 1.53
Diluted net income (loss) per share attributable to DISH Network	\$ 0.82	\$ 0.57	\$ 2.35	\$ 1.42

(1) For the three and nine months ended September 30, 2018, materially all of our interest expense was capitalized. See Note 2 for further information.

Certain stock awards to acquire our Class A common stock are not included in the weighted-average common shares outstanding above, as their effect is anti-dilutive. In addition, vesting of performance based options and rights to acquire shares of our Class A common stock granted pursuant to our performance based stock incentive plans (“Restricted Performance Units”) are both contingent upon meeting certain goals, some of which are not yet probable of being achieved. Furthermore, the warrants that we issued to certain option counterparties in connection with the Convertible Notes due 2026 are only exercisable at their expiration if the market price per share of our Class A common stock is greater than the strike price of the warrants, which is approximately \$86.08 per share, subject to adjustments. As a consequence, the following are not included in the diluted EPS calculation.

	As of September 30,	
	2018	2017
	(In thousands)	
Anti-dilutive stock awards	3,836	1,778
Performance based options	4,722	6,318
Restricted Performance Units/Awards	1,790	1,252
Common stock warrants	46,029	46,029
Total	<u>56,377</u>	<u>55,377</u>

2019 LTIP. On August 17, 2018, we adopted a long-term, performance-based stock incentive plan (the “2019 LTIP”). The 2019 LTIP provides stock options, which vest based on certain company-specific subscriber, operational and/or financial goals. Vesting of the stock awards is contingent on achieving these goals by December 31, 2023. On October 1, 2018, options to purchase approximately 4.4 million shares were initially granted under the 2019 LTIP, with an exercise price per share equal to the closing price of our Class A common stock on the date of grant.

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

4. Supplemental Data - Statements of Cash Flows

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

	For the Nine Months Ended	
	September 30,	
	2018	2017
	(In thousands)	
Cash paid for interest (including capitalized interest)	\$ 764,540	\$ 812,517
Cash received for interest	10,126	5,247
Cash paid for income taxes	27,280	33,181
Capitalized interest (1)	761,842	752,925
Initial equity component of the 2 3/8% Convertible Notes due 2024, net of deferred taxes of \$92,512	—	159,869
Employee benefits paid in Class A common stock	27,322	23,164
Assets financed under capital lease obligations	142	889

(1) See Note 2 for further information.

5. 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	
	September 30,	December 31,
	2018	2017
	(In thousands)	
Marketable investment securities:		
Current marketable investment securities:		
Strategic - available-for-sale	\$ 196	\$ 195
Strategic - trading/equity (Note 2)	11,236	93,367
Other	624,000	407,603
Total current marketable investment securities	635,432	501,165
Restricted marketable investment securities (1)	66,809	72,014
Total marketable investment securities	702,241	573,179
Restricted cash and cash equivalents (1)	390	393
Other investment securities:		
Other investment securities - equity method	109,546	113,460
Total other investment securities	109,546	113,460
Total marketable investment securities, restricted cash and cash equivalents, and other investment securities	\$ 812,177	\$ 687,032

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

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 Condensed Consolidated Statements of Operations and Comprehensive Income (Loss). See Note 2 for further information.

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

Current Marketable Investment Securities – Strategic

Our current strategic marketable investment securities portfolio includes and may include strategic and financial debt and equity investments in private and public companies that are highly speculative and have experienced and continue to experience volatility. As of September 30, 2018, this portfolio consisted of securities of a small number of issuers, and as a result the value of that portfolio depends, among other things, on the performance of those issuers. The fair value of certain of the debt and equity securities in this portfolio can be adversely impacted by, among other things, the issuers' respective performance and ability to obtain any necessary additional financing on acceptable terms, or at all.

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 September 30, 2018 and December 31, 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 Condensed 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.

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NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

Unrealized Gains (Losses) on Marketable Investment Securities

As of September 30, 2018 and December 31, 2017, we had accumulated net unrealized gains of less than \$1 million and accumulated net unrealized losses of less than \$1 million, respectively. These amounts, net of related tax effect, were accumulated net unrealized gains of less than \$1 million and accumulated net unrealized losses of less than \$1 million, respectively. All of these amounts are included in “Accumulated other comprehensive income (loss)” within “Total stockholders’ equity (deficit).” The components of our available-for-sale investments are summarized in the table below.

	As of September 30, 2018				As of December 31, 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	\$ 66,569	\$ —	\$ (49)	\$ (49)	\$ 84,286	\$ 22	\$ (141)	\$ (119)
Commercial paper	50,000	—	—	—	107,962	—	(10)	(10)
Corporate securities	571,480	299	(223)	76	282,256	—	(124)	(124)
Other	2,956	58	—	58	5,308	58	(1)	57
Total	\$ 691,005	\$ 357	\$ (272)	\$ 85	\$ 479,812	\$ 80	\$ (276)	\$ (196)

As of September 30, 2018, restricted and non-restricted marketable investment securities included debt securities of \$418 million with contractual maturities within one year and \$273 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.

Fair Value Measurements

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

	As of							
	September 30, 2018				December 31, 2017			
	Total	Level 1	Level 2	Level 3	Total	Level 1	Level 2	Level 3
	(In thousands)							
Cash equivalents (including restricted)	\$1,127,887	\$ 824	\$1,127,063	\$ —	\$1,425,798	\$ 655	\$1,425,143	\$ —
Debt securities (including restricted):								
U.S. Treasury and agency securities	\$ 66,569	\$ 66,569	\$ —	\$ —	\$ 84,286	\$ 84,286	\$ —	\$ —
Commercial Paper	50,000	—	50,000	—	107,962	—	107,962	—
Corporate securities	571,480	—	571,480	—	282,256	—	282,256	—
Other	2,956	—	2,760	196	5,308	—	5,113	195
Equity securities	11,236	11,236	—	—	93,367	93,367	—	—
Total	\$ 702,241	\$ 77,805	\$ 624,240	\$ 196	\$ 573,179	\$177,653	\$ 395,331	\$ 195

As of September 30, 2018 and December 31, 2017, our Level 3 investments were immaterial.

During the nine months ended September 30, 2018, we had no transfers in or out of Level 1 and Level 2 fair value measurements.

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

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

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

Other, net:	For the Three Months Ended		For the Nine Months Ended	
	September 30,		September 30,	
	2018	2017	2018	2017
	(In thousands)			
Marketable investment securities - realized and unrealized gains (losses) (1)	\$ 23,574	\$ 39,708	\$ 8,865	\$ 44,467
Costs related to early redemption of debt	—	—	(2,716)	—
Gain (loss) on sale of subsidiary	7,004	—	7,004	—
Equity in earnings of affiliates	(5,369)	501	(3,164)	895
Other	264	52	2,108	2,811
Total	\$ 25,473	\$ 40,261	\$ 12,097	\$ 48,173

(1) During the three and nine months ended September 30, 2018, we recorded unrealized gains of \$5 million and \$3 million, respectively, related to equity securities held as of September 30, 2018.

6. Inventory

Inventory consisted of the following:

	As of	
	September 30,	December 31,
	2018	2017
	(In thousands)	
Finished goods	\$ 231,379	\$ 248,233
Work-in-process and service repairs	55,911	54,455
Raw materials	17,654	18,320
Total inventory	\$ 304,944	\$ 321,008

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

7. Property and Equipment

Property and equipment consisted of the following:

	Depreciable Life (In Years)		As of	
			September 30, 2018	December 31, 2017
	(In thousands)			
Equipment leased to customers	2	- 5	\$ 2,105,679	\$ 2,323,100
EchoStar XV		15	277,658	277,658
EchoStar XVIII		15	411,255	411,255
D1		N/A	55,000	55,000
T1		14.25	100,000	100,000
Satellites acquired under capital lease agreements	10	- 15	499,819	499,819
Furniture, fixtures, equipment and other	2	- 10	1,838,437	1,779,109
Buildings and improvements	4	- 40	294,533	293,571
Land		—	14,057	14,057
Construction in progress		—	139,831	103,176
Total property and equipment			5,736,269	5,856,745
Accumulated depreciation			(3,746,235)	(3,673,084)
Property and equipment, net			\$ 1,990,034	\$ 2,183,661

Depreciation and amortization expense consisted of the following:

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
	(In thousands)			
Equipment leased to customers	\$ 114,606	\$ 144,016	\$ 337,004	\$ 425,753
Satellites	25,085	29,414	75,257	87,840
Buildings, furniture, fixtures, equipment and other	35,594	35,894	128,698	112,032
Total depreciation and amortization	\$ 175,285	\$ 209,324	\$ 540,959	\$ 625,625

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

Pay-TV Satellites. We currently utilize 11 satellites in geostationary orbit approximately 22,300 miles above the equator, two of which we own and depreciate over their estimated useful life. We currently utilize certain capacity on seven satellites that we lease from EchoStar, 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 NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

As of September 30, 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
EchoStar XVIII	June 2016	61.5	15
Leased from EchoStar (1):			
EchoStar IX	August 2003	121	Month to month
EchoStar X (2)	February 2006	110	February 2021
EchoStar XI (2)	July 2008	110	September 2021
EchoStar XIV (2)	March 2010	119	February 2023
EchoStar XVI (3)	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 (4)	December 2008	129	January 2019

- (1) See Note 12 for further information on our Related Party Transactions with EchoStar.
- (2) 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.
- (3) We have the option to renew this lease for an additional five-year period.
- (4) On July 30, 2018, we did not provide notice to renew our lease for the capacity of Ciel II. Accordingly, our lease for the capacity of Ciel II will expire in January 2019 at the conclusion of the initial term. There can be no assurance that the expiration of our lease for capacity of Ciel II will not have a material adverse effect on our business, results of operations and financial condition or otherwise disrupt our business.

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

8. 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 September 30, 2018 and December 31, 2017:

	As of			
	September 30, 2018		December 31, 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)	1,337,469	1,386,514	1,400,000	1,501,206
5 1/8% Senior Notes due 2020	1,100,000	1,112,320	1,100,000	1,127,588
6 3/4% Senior Notes due 2021	2,000,000	2,049,640	2,000,000	2,120,480
5 7/8% Senior Notes due 2022	2,000,000	1,958,480	2,000,000	2,014,140
5% Senior Notes due 2023	1,500,000	1,366,665	1,500,000	1,432,335
5 7/8% Senior Notes due 2024	2,000,000	1,802,400	2,000,000	1,952,220
2 3/8% Convertible Notes due 2024	1,000,000	888,020	1,000,000	962,860
7 3/4% Senior Notes due 2026	2,000,000	1,891,620	2,000,000	2,118,400
3 3/8% Convertible Notes due 2026	3,000,000	2,862,150	3,000,000	3,262,290
Other notes payable	40,467	40,467	44,928	44,928
Subtotal	15,977,936	\$ 15,358,276	17,070,789	\$ 17,568,043
Unamortized debt discount on the Convertible Notes	(857,374)		(925,360)	
Unamortized deferred financing costs and other debt discounts, net	(39,680)		(46,782)	
Capital lease obligations (3)	76,348		104,318	
Total long-term debt and capital lease obligations (including current portion)	\$ 15,157,230		\$ 16,202,965	

- (1) On April 2, 2018, we redeemed the principal balance of our 4 1/4% Senior Notes due 2018.
- (2) During the nine months ended September 30, 2018, we repurchased \$62 million of our 7 7/8% Senior Notes due 2019 in open market trades. The remaining balance of \$1.338 billion matures on September 1, 2019.
- (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).

9. Commitments and Contingencies

Commitments

Since 2008, we have 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.

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DISH Network Spectrum

We have directly invested over \$11 billion to acquire certain wireless spectrum licenses and related assets.

700 MHz Licenses. In 2008, we paid \$712 million to acquire certain 700 MHz E Block (“700 MHz”) wireless spectrum licenses, which were granted to us by the FCC in February 2009. These licenses are subject to certain build-out requirements. By March 2020, we must provide signal coverage and offer service to at least 70% of the population in each of our E Block license areas (the “700 MHz Build-Out Requirement”). If the 700 MHz Build-Out Requirement is not met with respect to any particular E Block license area, our authorization may terminate for the geographic portion of that license area in which we are not providing service. In addition to the 700 MHz Build-Out Requirement deadline in March 2020, these wireless spectrum licenses also expire in March 2020 unless they are renewed by the FCC. There can be no assurances that the FCC will renew these wireless spectrum licenses.

AWS-4 Licenses. On March 2, 2012, the FCC approved the transfer of 40 MHz of wireless spectrum licenses held by DBSD North America, Inc. (“DBSD North America”) and TerreStar Networks, Inc. (“TerreStar”) to us. On March 9, 2012, we completed the acquisition of 100% of the equity of reorganized DBSD North America (the “DBSD Transaction”) and substantially all of the assets of TerreStar (the “TerreStar Transaction”), pursuant to which we acquired, among other things, certain satellite assets and wireless spectrum licenses held by DBSD North America and TerreStar. The total consideration to acquire the DBSD North America and TerreStar assets was approximately \$2.860 billion.

On February 15, 2013, the FCC issued an order, which became effective on March 7, 2013, modifying our licenses to expand our terrestrial operating authority with AWS-4 authority (“AWS-4”). These licenses are subject to certain build-out requirements. By March 2020, we are required to provide terrestrial signal coverage and offer terrestrial service to at least 70% of the population in each area covered by an individual license (the “AWS-4 Build-Out Requirement”). If the AWS-4 Build-Out Requirement is not met with respect to any particular individual license, our terrestrial authorization for that license area may terminate. The FCC’s December 20, 2013 order also conditionally waived certain FCC rules for our AWS-4 licenses to allow us to repurpose all 20 MHz of our uplink spectrum (2000-2020 MHz) for terrestrial downlink operations. On June 1, 2016, we notified the FCC that we had elected to use our AWS-4 uplink spectrum for terrestrial downlink operations, and effective June 7, 2016, the FCC modified our AWS-4 licenses, resulting in all 40 MHz of our AWS-4 spectrum being designated for terrestrial downlink operations. These wireless spectrum licenses expire in March 2023 unless they are renewed by the FCC. There can be no assurances that the FCC will renew these wireless spectrum licenses.

H Block Licenses. On April 29, 2014, the FCC issued an order granting our application to acquire all 176 wireless spectrum licenses in the H Block auction. We paid approximately \$1.672 billion to acquire these H Block licenses, including clearance costs associated with the lower H Block spectrum. The H Block licenses are subject to certain build-out requirements. By April 2022, we must provide reliable signal coverage and offer service to at least 75% of the population in each area covered by an individual H Block license (the “H Block Build-Out Requirement”). If the H Block Build-Out Requirement is not met, our authorization for each H Block license area in which we do not meet the requirement may terminate. These wireless spectrum licenses expire in April 2024 unless they are renewed by the FCC. There can be no assurances that the FCC will renew these wireless spectrum licenses.

600 MHz Licenses. The broadcast incentive auction in the 600 MHz frequency range (“Auction 1000”) began on March 29, 2016 and concluded on March 30, 2017. On April 13, 2017, the FCC announced that ParkerB.com Wireless L.L.C. (“ParkerB.com”), a wholly-owned subsidiary of DISH Network, was the winning bidder for 486 wireless spectrum licenses (the “600 MHz Licenses”) with aggregate winning bids totaling approximately \$6.211 billion. On April 27, 2017, ParkerB.com filed an application with the FCC to acquire the 600 MHz Licenses. On July 1, 2016, we paid \$1.5 billion to the FCC as a deposit for Auction 1000. On May 11, 2017, we paid the remaining balance of our winning bids of approximately \$4.711 billion. On June 14, 2017, the FCC issued an order granting ParkerB.com’s application to acquire the 600 MHz Licenses.

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NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
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The 600 MHz Licenses are subject to certain interim and final build-out requirements. By June 2023, we must provide reliable signal coverage and offer wireless service to at least 40% of the population in each area covered by an individual 600 MHz License (the “600 MHz Interim Build-Out Requirement”). By June 2029, we must provide reliable signal coverage and offer wireless service to at least 75% of the population in each area covered by an individual 600 MHz License (the “600 MHz Final Build-Out Requirement”). If the 600 MHz Interim Build-Out Requirement is not met, the 600 MHz License term and the 600 MHz Final Build-Out Requirement may be accelerated by two years (from June 2029 to June 2027) for each 600 MHz License area in which we do not meet the requirement. If the 600 MHz Final Build-Out Requirement is not met, our authorization for each 600 MHz License area in which we do not meet the requirement may terminate. In addition, certain broadcasters will have up to 39 months (ending July 13, 2020) to relinquish their 600 MHz spectrum, which may impact the timing for our ability to commence operations using certain 600 MHz Licenses. The FCC has issued the 600 MHz Licenses prior to the clearance of the spectrum, and the build-out deadlines are based on the date that the 600 MHz Licenses were issued to us, not the date that the spectrum is cleared. These wireless spectrum licenses expire in June 2029 unless they are renewed by the FCC. There can be no assurances that the FCC will renew these wireless spectrum licenses.

MVDDS Licenses. We have multichannel video distribution and data service (“MVDDS”) licenses in 82 out of 214 geographical license areas, including Los Angeles, New York City, Chicago and several other major metropolitan areas. By August 2014, we were required to meet certain FCC build-out requirements related to our MVDDS licenses, and we are subject to certain FCC service rules applicable to these licenses. In January 2015, the FCC granted our application to extend the build-out requirements related to our MVDDS licenses. We now have until the second half of 2019 to provide “substantial service” on our MVDDS licenses. Our MVDDS licenses may be terminated if we do not provide substantial service in accordance with the new build-out requirements. These wireless spectrum licenses expire in August 2024 unless they are renewed by the FCC. There can be no assurances that the FCC will renew these wireless spectrum licenses.

In 2016, the MVDDS 5G Coalition, of which we are a member, filed a petition for rulemaking requesting the FCC to consider updating the rules to allow us to provide two-way 5G services using our MVDDS licenses. We cannot predict when or if the FCC will grant the petition and proceed with a rulemaking. If the FCC adopts rules that would allow us to provide two-way 5G services using our MVDDS licenses, the requests of OneWeb and others for authority to use the band for service from NGSO satellite systems may hinder our ability to provide 5G services using our MVDDS licenses.

LMDS Licenses. As a result of the completion of the Share Exchange on February 28, 2017, we acquired from EchoStar certain Local Multipoint Distribution Service (“LMDS”) licenses in four markets: Cheyenne, Kansas City, Phoenix, and San Diego. The “substantial service” milestone has been met with respect to each of the licenses. In addition, through the FCC’s Spectrum Frontiers proceeding, a portion of each of our LMDS licenses were reassigned to the Upper Microwave Flexible Use Service band (27.5-28.35 GHz), which will allow for a more flexible use of the licenses, including, among other things, 5G mobile operations. These wireless spectrum licenses have been renewed by the FCC through September 2028. There can be no assurances that the FCC will renew these wireless spectrum licenses.

Commercialization of Our Wireless Spectrum Licenses and Related Assets. In March 2017, we notified the FCC that we plan to deploy a next-generation 5G-capable network, focused on supporting narrowband IoT. The first phase of our network deployment will be completed by March 2020, with subsequent phases to be completed thereafter. As of September 30, 2018, we had entered into vendor contracts with multiple parties for, among other things, base stations, chipsets, modules, tower leases, the core network, RF design, and deployment services. Among other things, initial RF design in connection with the first phase of our network deployment is now complete, and we are in the process of identifying and securing tower sites. The core network has been installed and commissioned. Based on our vendors’ current forecast, we plan to install the first base stations on sites later this year, and to continue deployment until complete. We may also determine that additional wireless spectrum licenses may be required to commercialize our wireless business and to compete with other wireless service providers. We currently expect expenditures for our wireless projects to be between \$500 million and \$1.0 billion through 2020. We currently expect expenditures for the second phase of our network deployment to be approximately \$10 billion.

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We 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. 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 we consider our options for the commercialization of our wireless spectrum, we 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. We may also determine that additional wireless spectrum licenses may be required to commercialize our wireless business and to compete with other wireless service providers. For example, on September 18, 2018, we filed an application with the FCC to participate as a bidder in the FCC's auction of Upper Microwave Flexible Use Service licenses in the 27.5–28.35 GHz bands ("Auction 101") and 24.25–24.45 and 24.75–25.25 GHz bands ("Auction 102" and collectively with Auction 101, "Auctions 101 & 102"). On October 10, 2018, the FCC announced that a subsidiary of DISH Network and 25 other applicants were qualified to participate in Auction 101 and that a subsidiary of DISH Network and 33 other applicants were qualified to participate in Auction 102. Auction 101 is scheduled to commence on November 14, 2018, and Auction 102 will be scheduled to commence subsequent to the conclusion of bidding in Auction 101. The FCC determined that bidding in these auctions will be "anonymous," which means that prior to and during the course of the auctions, the FCC will not make public any information about a specific applicant's upfront deposit or its bids. In addition, FCC rules restrict information that bidders may disclose about their participation in the auctions.

On July 9, 2018, the FCC sent us a letter inquiring about our progress toward meeting certain buildout milestones by March 2020, which is publicly available on the FCC's website. On September 21, 2018, we filed a response letter with the FCC regarding our progress toward meeting certain buildout milestones. We will continue to update the FCC about our progress on the first phase of our network deployment. There is no assurance that the FCC will find our build-out, including the first phase of our network deployment, sufficient to meet the build-out requirements to which our wireless spectrum licenses are subject.

We may need to raise significant additional capital in the future to fund the efforts described above, which may not be available on acceptable terms or at all. There can be no assurance that we will be able to develop and implement a business model that will realize a return on these wireless spectrum licenses or that we will be able to profitably deploy the assets represented by these wireless spectrum licenses, which may affect the carrying amount of these assets and our future financial condition or results of operations.

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

Non-Controlling Investments

During 2015, through our wholly-owned subsidiaries American II and American III, we initially made over \$10 billion in certain non-controlling investments in Northstar Spectrum, the parent company of Northstar Wireless, and in SNR HoldCo, the parent company of SNR Wireless, respectively. Under the applicable accounting guidance in ASC 810, Northstar Spectrum and SNR HoldCo are considered variable interest entities and, based on the characteristics of the structure of these entities and in accordance with the applicable accounting guidance, we consolidate these entities into our financial statements. See Note 2 for further information.

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Northstar Investment. Through American II, we own a non-controlling interest in Northstar Spectrum, which is comprised of 85% of the Class B Common Interests and 100% of the Class A Preferred Interests of Northstar Spectrum. Northstar Manager is the sole manager of Northstar Spectrum and owns a controlling interest in Northstar Spectrum, which is comprised of 15% of the Class B Common Interests of Northstar Spectrum. As of March 31, 2018, the total equity contributions from American II and Northstar Manager to Northstar Spectrum were approximately \$7.621 billion and \$133 million, respectively. As of March 31, 2018, the total loans from American II to Northstar Wireless under the Northstar Credit Agreement (as defined below) for payments to the FCC related to the Northstar Licenses (as defined below) were approximately \$500 million.

SNR Investment. Through American III, we own a non-controlling interest in SNR HoldCo, which is comprised of 85% of the Class B Common Interests and 100% of the Class A Preferred Interests of SNR HoldCo. SNR Management is the sole manager of SNR HoldCo and owns a controlling interest in SNR HoldCo, which is comprised of 15% of the Class B Common Interests of SNR HoldCo. As of March 31, 2018, the total equity contributions from American III and SNR Management to SNR HoldCo were approximately \$5.590 billion and \$93 million, respectively. As of March 31, 2018, the total loans from American III to SNR Wireless under the SNR Credit Agreement (as defined below) for payments to the FCC related to the SNR Licenses (as defined below) were approximately \$500 million.

AWS-3 Auction

Northstar Wireless and SNR Wireless each filed applications with the FCC to participate in Auction 97 (the “AWS-3 Auction”) for the purpose of acquiring certain AWS-3 Licenses. Each of Northstar Wireless and SNR Wireless applied to receive bidding credits of 25% as designated entities under applicable FCC rules.

Northstar Wireless was the winning bidder for AWS-3 Licenses with gross winning bid amounts totaling approximately \$7.845 billion, which after taking into account a 25% bidding credit, was approximately \$5.884 billion. SNR Wireless was the winning bidder for AWS-3 Licenses with gross winning bid amounts totaling approximately \$5.482 billion, which after taking into account a 25% bidding credit, was approximately \$4.112 billion. In addition to the net winning bids, SNR Wireless made a bid withdrawal payment of approximately \$8 million.

FCC Order and October 2015 Arrangements. On August 18, 2015, the FCC released a *Memorandum Opinion and Order*, FCC 15-104 (the “Order”) in which the FCC determined, among other things, that DISH Network has a controlling interest in, and is an affiliate of, Northstar Wireless and SNR Wireless, and therefore DISH Network’s revenues should be attributed to them, which in turn makes Northstar Wireless and SNR Wireless ineligible to receive the 25% bidding credits (approximately \$1.961 billion for Northstar Wireless and \$1.370 billion for SNR Wireless).

Letters Exchanged between Northstar Wireless and the FCC Wireless Bureau. As outlined in letters exchanged between Northstar Wireless and the Wireless Telecommunications Bureau of the FCC (the “FCC Wireless Bureau”), Northstar Wireless paid the gross winning bid amounts for 261 AWS-3 Licenses (the “Northstar Licenses”) totaling approximately \$5.619 billion through the application of funds already on deposit with the FCC. Northstar Wireless also notified the FCC that it would not be paying the gross winning bid amounts for 84 AWS-3 Licenses totaling approximately \$2.226 billion.

As a result of the nonpayment of those gross winning bid amounts, the FCC retained those licenses and Northstar Wireless owed the FCC an additional interim payment of approximately \$334 million (the “Northstar Interim Payment”), which is equal to 15% of \$2.226 billion. The Northstar Interim Payment was recorded during the fourth quarter 2015 in “FCC auction expense” on our Consolidated Statements of Operations and Comprehensive Income (Loss) for the year ended December 31, 2015. Northstar Wireless immediately satisfied the Northstar Interim Payment through the application of funds already on deposit with the FCC and an additional loan from American II of approximately \$69 million. As a result, the FCC will not deem Northstar Wireless to be a “current defaulter” under applicable FCC rules.

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In addition, the FCC Wireless Bureau acknowledged that Northstar Wireless' nonpayment of those gross winning bid amounts does not constitute action involving gross misconduct, misrepresentation or bad faith. Therefore, the FCC concluded that such nonpayment will not affect the eligibility of Northstar Wireless, its investors (including DISH Network) or their respective affiliates to participate in future spectrum auctions (including Auction 1000 and any re-auction of the AWS-3 licenses retained by the FCC). At this time, DISH Network (through itself, a subsidiary or another entity in which it may hold a direct or indirect interest) expects to participate in any re-auction of those AWS-3 licenses.

If the winning bids from re-auction or other award of the AWS-3 licenses retained by the FCC are greater than or equal to the winning bids of Northstar Wireless, no additional amounts will be owed to the FCC. However, if those winning bids are less than the winning bids of Northstar Wireless, then Northstar Wireless will be responsible for the difference less any overpayment of the Northstar Interim Payment (which will be recalculated as 15% of the winning bids from re-auction or other award) (the "Northstar Re-Auction Payment"). For example, if the winning bids in a re-auction are \$1, the Northstar Re-Auction Payment would be approximately \$1.892 billion, which is calculated as the difference between \$2.226 billion (the Northstar winning bid amounts) and \$1 (the winning bids from re-auction) less the resulting \$334 million overpayment of the Northstar Interim Payment. As discussed above, at this time, DISH Network (through itself, a subsidiary or another entity in which it may hold a direct or indirect interest) expects to participate in any re-auction. We cannot predict with any degree of certainty the timing or outcome of any re-auction or the amount of any Northstar Re-Auction Payment.

DISH Network Guaranty in Favor of the FCC for Certain Northstar Wireless Obligations. On October 1, 2015, DISH Network entered into a guaranty in favor of the FCC (the "FCC Northstar Guaranty") with respect to the Northstar Interim Payment (which was satisfied on October 1, 2015) and any Northstar Re-Auction Payment. The FCC Northstar Guaranty provides, among other things, that during the period between the due date for the payments guaranteed under the FCC Northstar Guaranty and the date such guaranteed payments are paid: (i) Northstar Wireless' payment obligations to American II under the Northstar Credit Agreement will be subordinated to such guaranteed payments; and (ii) DISH Network or American II will withhold exercising certain rights as a creditor of Northstar Wireless.

Letters Exchanged between SNR Wireless and the FCC Wireless Bureau. As outlined in letters exchanged between SNR Wireless and the FCC Wireless Bureau, SNR Wireless paid the gross winning bid amounts for 244 AWS-3 Licenses (the "SNR Licenses") totaling approximately \$4.271 billion through the application of funds already on deposit with the FCC and a portion of an additional loan from American III in an aggregate amount of approximately \$344 million (which included an additional bid withdrawal payment of approximately \$3 million). SNR Wireless also notified the FCC that it would not be paying the gross winning bid amounts for 113 AWS-3 Licenses totaling approximately \$1.211 billion.

As a result of the nonpayment of those gross winning bid amounts, the FCC retained those licenses and SNR Wireless owed the FCC an additional interim payment of approximately \$182 million (the "SNR Interim Payment"), which is equal to 15% of \$1.211 billion. The SNR Interim Payment was recorded during the fourth quarter 2015 in "FCC auction expense" on our Consolidated Statements of Operations and Comprehensive Income (Loss) for the year ended December 31, 2015. SNR Wireless immediately satisfied the SNR Interim Payment through a portion of an additional loan from American III in an aggregate amount of approximately \$344 million. As a result, the FCC will not deem SNR Wireless to be a "current defaulter" under applicable FCC rules.

In addition, the FCC Wireless Bureau acknowledged that SNR Wireless' nonpayment of those gross winning bid amounts does not constitute action involving gross misconduct, misrepresentation or bad faith. Therefore, the FCC concluded that such nonpayment will not affect the eligibility of SNR Wireless, its investors (including DISH Network) or their respective affiliates to participate in future spectrum auctions (including Auction 1000 and any re-auction of the AWS-3 licenses retained by the FCC). At this time, DISH Network (through itself, a subsidiary or another entity in which it may hold a direct or indirect interest) expects to participate in any re-auction of those AWS-3 licenses.

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If the winning bids from re-auction or other award of the AWS-3 licenses retained by the FCC are greater than or equal to the winning bids of SNR Wireless, no additional amounts will be owed to the FCC. However, if those winning bids are less than the winning bids of SNR Wireless, then SNR Wireless will be responsible for the difference less any overpayment of the SNR Interim Payment (which will be recalculated as 15% of the winning bids from re-auction or other award) (the “SNR Re-Auction Payment”). For example, if the winning bids in a re-auction are \$1, the SNR Re-Auction Payment would be approximately \$1.029 billion, which is calculated as the difference between \$1.211 billion (the SNR winning bid amounts) and \$1 (the winning bids from re-auction) less the resulting \$182 million overpayment of the SNR Interim Payment. As discussed above, at this time, DISH Network (through itself, a subsidiary or another entity in which it may hold a direct or indirect interest) expects to participate in any re-auction. We cannot predict with any degree of certainty the timing or outcome of any re-auction or the amount of any SNR Re-Auction Payment.

DISH Network Guaranty in Favor of the FCC for Certain SNR Wireless Obligations. On October 1, 2015, DISH Network entered into a guaranty in favor of the FCC (the “FCC SNR Guaranty”) with respect to the SNR Interim Payment (which was satisfied on October 1, 2015) and any SNR Re-Auction Payment. The FCC SNR Guaranty provides, among other things, that during the period between the due date for the payments guaranteed under the FCC SNR Guaranty and the date such guaranteed payments are paid: (i) SNR Wireless’ payment obligations to American III under the SNR Credit Agreement will be subordinated to such guaranteed payments; and (ii) DISH Network or American III will withhold exercising certain rights as a creditor of SNR Wireless.

FCC Licenses. On October 27, 2015, the FCC granted the Northstar Licenses to Northstar Wireless and the SNR Licenses to SNR Wireless, respectively, which are recorded in “FCC authorizations” on our Condensed Consolidated Balance Sheets. The AWS-3 Licenses are subject to certain interim and final build-out requirements. By October 2021, Northstar Wireless and SNR Wireless must provide reliable signal coverage and offer service to at least 40% of the population in each area covered by an individual AWS-3 License (the “AWS-3 Interim Build-Out Requirement”). By October 2027, Northstar Wireless and SNR Wireless must provide reliable signal coverage and offer service to at least 75% of the population in each area covered by an individual AWS-3 License (the “AWS-3 Final Build-Out Requirement”). If the AWS-3 Interim Build-Out Requirement is not met, the AWS-3 License term and the AWS-3 Final Build-Out Requirement may be accelerated by two years (from October 2027 to October 2025) for each AWS-3 License area in which Northstar Wireless and SNR Wireless do not meet the requirement. If the AWS-3 Final Build-Out Requirement is not met, the authorization for each AWS-3 License area in which Northstar Wireless and SNR Wireless do not meet the requirement may terminate. These wireless spectrum licenses expire in October 2027 unless they are renewed by the FCC. There can be no assurances that the FCC will renew these wireless spectrum licenses.

Qui Tam. On September 23, 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 us; our 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; SNR Wireless; SNR HoldCo; SNR Management; and certain other parties. See “Contingencies – Litigation – Vermont National Telephone Company” for further information.

D.C. Circuit Court Opinion. On August 29, 2017, the United States Court of Appeals for the District of Columbia Circuit (the “D.C. Circuit”) in *SNR Wireless LicenseCo, LLC, et al. v. Federal Communications Commission*, 868 F.3d 1021 (D.C. Cir. 2017) (the “Appellate Decision”) affirmed the Order in part, and remanded the matter to the FCC to give Northstar Wireless and SNR Wireless an opportunity to seek to negotiate a cure of the issues identified by the FCC in the Order (a “Cure”). On January 26, 2018, SNR Wireless and Northstar Wireless filed a petition for a writ of certiorari, asking the United States Supreme Court to hear an appeal from the Appellate Decision, which the United States Supreme Court denied on June 25, 2018.

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Order on Remand. On January 24, 2018, the FCC released an Order on Remand, DA 18-70 (the “Order on Remand”) purporting to establish a procedure to afford Northstar Wireless and SNR Wireless the opportunity to implement a Cure pursuant to the Appellate Decision. The Order on Remand provided that Northstar Wireless and SNR Wireless each had until April 24, 2018 to file the necessary documentation to demonstrate that, in light of such changes, each of Northstar Wireless and SNR Wireless qualifies for the very small business bidding credit that it sought in the AWS-3 Auction. Additionally, the Order on Remand provides that if either Northstar Wireless or SNR Wireless needs additional time to negotiate new or amended agreements, it may request to extend the deadline for such negotiations for an additional 45 days (extending the deadline to June 8, 2018). On April 16, 2018, the FCC approved Northstar Wireless’ and SNR Wireless’ requests to extend the deadline for such negotiations for an additional 45 days to June 8, 2018. On June 8, 2018, Northstar Wireless and SNR Wireless each filed amended agreements to demonstrate that, in light of such changes, each of Northstar Wireless and SNR Wireless qualifies for the very small business bidding credit that it sought in the AWS-3 Auction. The Order on Remand also provided, among other things, until July 23, 2018 for certain third-parties to file comments about any changes to the agreements proposed by Northstar Wireless and SNR Wireless and several third-parties filed comments (with one opposition). On October 22, 2018, Northstar Wireless and SNR Wireless filed a response to the third-party comments.

Northstar Wireless and SNR Wireless have submitted eleven separate requests for meetings with the FCC regarding a Cure. To date, with the lone exception of the Office of former Commissioner Mignon Clyburn, the parties have been refused an audience with the Commissioners and staff of the FCC. Northstar Wireless and SNR Wireless have filed a Joint Application for Review of the Order on Remand requesting, among other things, an iterative negotiation process with the FCC regarding a Cure, which was denied on July 12, 2018. We cannot predict with any degree of certainty the timing or outcome of these proceedings.

Northstar Operative Agreements

Northstar LLC Agreement. Northstar Spectrum is governed by a limited liability company agreement by and between American II and Northstar Manager (the “Northstar Spectrum LLC Agreement”). Pursuant to the Northstar Spectrum LLC Agreement, American II and Northstar Manager made pro-rata equity contributions in Northstar Spectrum.

On March 31, 2018, American II, Northstar Spectrum, and Northstar Manager amended and restated the Northstar Spectrum LLC Agreement, to, among other things: (i) exchange \$6.870 billion of the amounts outstanding and owed by Northstar Wireless to American II pursuant to the Northstar Credit Agreement (as defined below) for 6,870,493 Class A Preferred Interests in Northstar Spectrum (the “Northstar Preferred Interests”); (ii) replace the existing investor protection provisions with the investor protections described by the FCC in Baker Creek Communications, LLC, Memorandum Opinion and Order, 13 FCC Rcd 18709, 18715 (1998); (iii) delete the obligation of Northstar Manager to consult with American II regarding budgets and business plans; and (iv) remove the requirement that Northstar Spectrum’s systems be interoperable with ours. The Northstar Preferred Interests: (a) are non-voting; (b) have a 12 percent mandatory quarterly distribution, which can be paid in cash or additional face amount of Northstar Preferred Interests at the sole discretion of Northstar Manager; and (c) have a liquidation preference equal to the then-current face amount of the Northstar Preferred Interests plus accrued and unpaid mandatory quarterly distributions in the event of certain liquidation events or deemed liquidation events (e.g., a merger or dissolution of Northstar Spectrum, or a sale of substantially all of Northstar Spectrum’s assets). As a result of the exchange noted in (i) above, a principal amount of \$500 million of debt remains under the Northstar Credit Agreement, as described below.

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On June 7, 2018, American II, Northstar Spectrum, and Northstar Manager amended and restated the Second Amended and Restated Limited Liability Company Agreement, dated March 31, 2018, by and among American II, Northstar Spectrum, and Northstar Manager, to, among other things: (i) reduce the mandatory quarterly distribution for the Northstar Preferred Interests from 12 percent to eight percent from and after June 7, 2018; (ii) increase the window for Northstar Manager to “put” its interest in Northstar Spectrum to Northstar Spectrum after October 27, 2020 from 30 days to 90 days; (iii) provide an additional 90-day window for Northstar Manager to put its interest in Northstar Spectrum to Northstar Spectrum commencing on October 27, 2021; (iv) provide a right for Northstar Manager to require an appraisal of the fair market value of its interest in Northstar Spectrum at any time from October 27, 2022 through October 27, 2024, coupled with American II having the right to accept the offer to sell from Northstar Manager; (v) allow Northstar Manager to sell its interest in Northstar Spectrum without American II’s consent any time after October 27, 2020 (previously October 27, 2025); (vi) allow Northstar Spectrum to conduct an initial public offering without American II’s consent any time after October 27, 2022 (previously October 27, 2029); (vii) remove American II’s rights of first refusal with respect to Northstar Manager’s sale of its interest in Northstar Spectrum or Northstar Spectrum’s sale of any AWS-3 Licenses; and (viii) remove American II’s tag along rights with respect to Northstar Manager’s sale of its interest in Northstar Spectrum.

Northstar Wireless Credit Agreement. On October 1, 2015, American II, Northstar Wireless and Northstar Spectrum amended the First Amended and Restated Credit Agreement dated October 13, 2014, by and among American II, as Lender, Northstar Wireless, as Borrower, and Northstar Spectrum, as Guarantor (as amended, the “Northstar Credit Agreement”), to provide, among other things, that: (i) the Northstar Interim Payment and any Northstar Re-Auction Payment will be made by American II directly to the FCC and will be deemed as loans under the Northstar Credit Agreement; (ii) the FCC is a third-party beneficiary with respect to American II’s obligation to pay the Northstar Interim Payment and any Northstar Re-Auction Payment; (iii) in the event that the winning bids from re-auction or other award of the AWS-3 licenses retained by the FCC are less than the winning bids of Northstar Wireless, the purchaser, assignee or transferee of any AWS-3 Licenses from Northstar Wireless is obligated to pay its pro-rata share of the difference (and Northstar Wireless remains jointly and severally liable for such pro-rata share); and (iv) during the period between the due date for the payments guaranteed under the FCC Northstar Guaranty (as discussed below) and the date such guaranteed payments are paid, Northstar Wireless’ payment obligations to American II under the Northstar Credit Agreement will be subordinated to such guaranteed payments.

On March 31, 2018, American II, Northstar Wireless, and Northstar Spectrum amended and restated the Northstar Credit Agreement, to, among other things: (i) lower the interest rate on the remaining \$500 million principal balance under the Northstar Credit Agreement from 12 percent per annum to six percent per annum; (ii) eliminate the higher interest rate that would apply in the case of an event of default; and (iii) modify and/or remove certain obligations of Northstar Wireless to prepay the outstanding loan amounts.

On June 7, 2018, American II, Northstar Wireless, and Northstar Spectrum amended and restated the Northstar Credit Agreement to, among other things: (i) extend the maturity date on the remaining loan balance from seven years to 10 years; and (ii) remove the obligation of Northstar Wireless to obtain American II’s consent for unsecured financing and equipment financing in excess of \$25 million.

SNR Operative Agreements

SNR LLC Agreement. SNR HoldCo is governed by a limited liability company agreement by and between American III and SNR Management (the “SNR HoldCo LLC Agreement”). Pursuant to the SNR HoldCo LLC Agreement, American III and SNR Management made pro-rata equity contributions in SNR HoldCo.

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On March 31, 2018, American III, SNR Holdco, SNR Wireless Management, and John Muleta amended and restated the SNR HoldCo LLC Agreement, to, among other things: (i) exchange \$5.065 billion of the amounts outstanding and owed by SNR Wireless to American III pursuant to the SNR Credit Agreement (as defined below) for 5,065,415 Class A Preferred Interests in SNR Holdco (the “SNR Preferred Interests”); (ii) replace the existing investor protection provisions with the investor protections described by the FCC in Baker Creek Communications, LLC, Memorandum Opinion and Order, 13 FCC Rcd 18709, 18715 (1998); (iii) delete the obligation of SNR Management to consult with American III regarding budgets and business plans; and (iv) remove the requirement that SNR Management’s systems be interoperable with ours. The SNR Preferred Interests: (a) are non-voting; (b) have a 12 percent mandatory quarterly distribution, which can be paid in cash or additional face amount of SNR Preferred Interests at the sole discretion of SNR Management; and (c) have a liquidation preference equal to the then-current face amount of the SNR Preferred Interests plus accrued and unpaid mandatory quarterly distributions in the event of certain liquidation events or deemed liquidation events (e.g., a merger or dissolution of SNR Holdco, or a sale of substantially all of SNR Holdco’s assets). As a result of the exchange noted in (i) above, a principal amount of \$500 million of debt remains under the SNR Credit Agreement, as described below.

On June 7, 2018, American III, SNR Holdco, SNR Management, and John Muleta amended and restated the Second Amended and Restated Limited Liability Company Agreement, dated March 31, 2018, by and among American III, SNR Holdco, SNR Management and John Muleta, to, among other things: (i) reduce the mandatory quarterly distribution for the SNR Preferred Interests from 12 percent to eight percent from and after June 7, 2018; (ii) increase the window for SNR Management to “put” its interest in SNR Holdco to SNR Holdco after October 27, 2020 from 30 days to 90 days; (iii) provide an additional 90-day window for SNR Management to put its interest in SNR Holdco to SNR Holdco commencing on October 27, 2021; (iv) provide a right for SNR Management to require an appraisal of the fair market value of its interest in SNR Holdco at any time from October 27, 2022 through October 27, 2024, coupled with American III having the right to accept the offer to sell from SNR Management; (v) allow SNR Management to sell its interest in SNR Holdco without American III’s consent any time after October 27, 2020 (previously October 27, 2025); (vi) allow SNR Holdco to conduct an initial public offering without American III’s consent any time after October 27, 2022 (previously October 27, 2029); (vii) remove American III’s rights of first refusal with respect to SNR Management’s sale of its interest in SNR Holdco or SNR Holdco’s sale of any AWS-3 Licenses; and (viii) remove American III’s tag along rights with respect to SNR Management’s sale of its interest in SNR Holdco.

SNR Credit Agreement. On October 1, 2015, American III, SNR Wireless and SNR HoldCo amended the First Amended and Restated Credit Agreement dated October 13, 2014, by and among American III, as Lender, SNR Wireless, as Borrower, and SNR HoldCo, as Guarantor (as amended, the “SNR Credit Agreement”), to provide, among other things, that: (i) the SNR Interim Payment and any SNR Re-Auction Payment will be made by American III directly to the FCC and will be deemed as loans under the SNR Credit Agreement; (ii) the FCC is a third-party beneficiary with respect to American III’s obligation to pay the SNR Interim Payment and any SNR Re-Auction Payment; (iii) in the event that the winning bids from re-auction or other award of the AWS-3 licenses retained by the FCC are less than the winning bids of SNR Wireless, the purchaser, assignee or transferee of any AWS-3 Licenses from SNR Wireless is obligated to pay its pro-rata share of the difference (and SNR Wireless remains jointly and severally liable for such pro-rata share); and (iv) during the period between the due date for the payments guaranteed under the FCC SNR Guaranty (as discussed below) and the date such guaranteed payments are paid, SNR Wireless’ payment obligations to American III under the SNR Credit Agreement will be subordinated to such guaranteed payments.

On March 31, 2018, American III, SNR Wireless, and SNR Holdco amended and restated the SNR Credit Agreement, to, among other things: (i) lower the interest rate on the remaining \$500 million principal balance under the SNR Credit Agreement from 12 percent per annum to six percent per annum; (ii) eliminate the higher interest rate that would apply in the case of an event of default; and (iii) modify and/or remove certain obligations of SNR Wireless to prepay the outstanding loan amounts.

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On June 7, 2018, American III, SNR Wireless, and SNR Holdco amended and restated the SNR Credit Agreement to, among other things: (i) extend the maturity date on the remaining loan balance from seven years to 10 years; and (ii) remove the obligation of SNR Wireless to obtain American III's consent for unsecured financing and equipment financing in excess of \$25 million.

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 us, so that the Northstar Entities and the SNR Entities may commercialize, build-out and integrate the Northstar Licenses and the SNR Licenses, comply with regulations applicable to the Northstar Licenses and the SNR Licenses, and make any potential payments related to the Northstar Re-Auction Payment and the SNR Re-Auction Payment for the AWS-3 licenses retained by the FCC. Depending upon the nature and scope of such commercialization, build-out, integration efforts, regulatory compliance, and potential Northstar Re-Auction Payment and SNR Re-Auction Payment, any loans, equity contributions or partnerships could vary significantly. There can be no assurance that we will be able to obtain a profitable return on our non-controlling investments in the Northstar Entities and the SNR Entities.

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 also guarantee a certain portion of EchoStar's obligation under its satellite transponder service agreement through 2019. As of September 30, 2018, the remaining obligation of our guarantee was \$69 million.

As of September 30, 2018, we have not recorded a liability on the balance sheet for this guarantee.

Contingencies

Separation Agreement

On January 1, 2008, we completed the distribution of our 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, we 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 we 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, we 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.

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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.

Blue Spike, LLC

On July 6, 2018, Blue Spike, LLC (“Blue Spike”) filed a complaint 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 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. Blue Spike is an entity that seeks to license a patent portfolio without itself practicing any of the claims recited therein. It has filed more than 170 patent infringement cases since 2011.

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.

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ClearPlay, Inc.

On March 13, 2014, ClearPlay, Inc. (“ClearPlay”) filed a complaint against us, 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.

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 us 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.

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

Customedia Technologies, L.L.C.

On February 10, 2016, Customedia Technologies, L.L.C. (“Customedia”) filed a complaint against us 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.

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. has cross-appealed to the extent that its petitions were not successful.

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.

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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.

We intend to vigorously defend this case. In the event that a court ultimately determines that we infringe the asserted patent, 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.

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.

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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.

We intend to vigorously defend this case. In the event that a court ultimately determines that we infringe the asserted patent, 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.

IPA Technologies Inc.

On December 9, 2016, IPA Technologies Inc. (“IPA”) filed suit against us 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.

LightSquared/Harbinger Capital Partners LLC (LightSquared Bankruptcy)

As previously disclosed in our public filings, L-Band Acquisition, LLC (“LBAC”), our 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.

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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 us, 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 us, 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 us, 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 us, 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 us 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.

We intend to vigorously defend any claims against us 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.

Multimedia Content Management LLC

On July 25, 2018, Multimedia Content Management LLC (“Multimedia”) filed a complaint against us in the United States District Court for the Western District of Texas. Multimedia alleges that we infringe 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.

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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.

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 us; 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 HNS; and Arris Group, Inc. Realtime’s initial complaint in the Original Texas Action, filed on February 14, 2017, had named only EchoStar and HNS 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 us, 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 us, 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 EchoStar 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.

On October 10, 2017, Realtime Adaptive Streaming LLC (“Realtime Adaptive Streaming”) filed suit against our wholly-owned subsidiaries DISH Network L.L.C. and EchoStar 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 EchoStar Technologies L.L.C., as well as Arris Group, Inc., as defendants.

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As a result, neither we nor any of our 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. The Court has set trial for December 16, 2019.

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.

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.

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.

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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.

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").

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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. On February 2, 2018, the plaintiffs filed a notice claiming that DISH Network L.L.C. failed to prove that it met the Demonstration Requirements, as required by the Injunction, and asking the Court to impose a two-year ban on telemarketing by us, and a two-year ban on accepting orders from our primary retailers. On April 10, 2018, the plaintiffs withdrew their February 2, 2018 notice, without prejudice, and the Court vacated the hearing that had been set on the matter.

During the second quarter 2017, we recorded \$255 million of “Litigation expense” related to the FTC Action on our Condensed 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 September 30, 2018 related to the FTC Action was \$280 million and is included in “Other accrued expenses” on our Condensed Consolidated Balance Sheets. Any eventual payments made with respect to the FTC Action may not be deductible for tax purposes. 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.

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. During the second quarter 2017, we recorded \$41 million of “Litigation expense” related to the Krakauer Action on our Condensed 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 September 30, 2018 was \$61 million and is included in “Other accrued expenses” on our Condensed 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 the Company, 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 the Company’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; Gary S. Howard; and Joseph P. Clayton (collectively, the “Director Defendants”). In its complaint, Plumbers Local 519 contends that, by virtue of their alleged failure to appropriately ensure the Company’s compliance with telemarketing laws, the Director Defendants exposed the Company to liability for telemarketing violations, including those in the Krakauer Action. It also contends that the Director Defendants caused the Company to pay improper compensation and benefits to themselves and others who allegedly breached their fiduciary duties to the Company. 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.

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On November 13, 2017, City of Sterling Heights Police and Fire Retirement System (“Sterling Heights”), a purported shareholder of the Company, 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. Our 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 is due November 27, 2018.

We 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 and our wholly-owned subsidiaries DISH DBS Corporation and 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.

DISH NETWORK CORPORATION
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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.

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.

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Vermont National Telephone Company

On September 23, 2016, the United States District Court for the District of Columbia unsealed a qui tam complaint that was filed by Vermont National against us; our 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; SNR Wireless; SNR HoldCo; SNR Management; 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 "*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.

We intend to vigorously defend this case. We 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.

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10. Segment Reporting

Operating segments are components of an enterprise for which separate financial information is available and regularly evaluated by the chief operating decision maker(s) of an enterprise. Operating income is the primary measure used by our chief operating decision maker to evaluate segment operating performance. We currently operate two primary business segments: (1) Pay-TV; and (2) Wireless. See Note 1 for further information.

All other and eliminations primarily include intersegment eliminations related to intercompany debt and the related interest income and interest expense, which are eliminated in consolidation.

The total assets, revenue and operating income by segment were as follows:

	As of	
	September 30, 2018	December 31, 2017
	(In thousands)	
Total assets:		
Pay-TV	\$ 28,570,048	\$ 28,353,581
Wireless	24,156,847	23,377,088
Eliminations	(22,589,485)	(21,956,903)
Total assets	\$ 30,137,410	\$ 29,773,766

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
	(In thousands)			
Revenue:				
Pay-TV	\$ 3,395,141	\$ 3,583,454	\$ 10,314,473	\$ 10,907,447
Wireless	—	—	—	—
Eliminations	—	—	—	—
Total revenue	\$ 3,395,141	\$ 3,583,454	\$ 10,314,473	\$ 10,907,447
Operating income (loss):				
Pay-TV	\$ 572,753	\$ 460,158	\$ 1,693,378	\$ 1,344,742
Wireless (1)	(10,050)	(11,107)	(28,509)	(36,268)
Eliminations	—	—	—	—
Total operating income (loss)	\$ 562,703	\$ 449,051	\$ 1,664,869	\$ 1,308,474

- (1) Operating income (loss) for the wireless segment was positively impacted for the three and nine months ended September 30, 2018 by a decrease in depreciation expense associated with the T1 satellite, which was impaired during the fourth quarter 2017.

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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 Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
	(In thousands)			
United States	\$ 3,380,412	\$ 3,571,686	\$ 10,280,237	\$ 10,874,653
Canada and Mexico	14,729	11,768	34,236	32,794
Total revenue	\$ 3,395,141	\$ 3,583,454	\$ 10,314,473	\$ 10,907,447

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

Category:	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
	(In thousands)			
Pay-TV video and related revenue	\$ 3,288,754	\$ 3,459,439	\$ 9,988,705	\$ 10,508,801
Broadband revenue	60,602	91,615	203,115	300,618
Equipment sales and other revenue	45,785	32,400	122,653	98,028
Total	\$ 3,395,141	\$ 3,583,454	\$ 10,314,473	\$ 10,907,447

All revenues during the three and nine months ended September 30, 2018 were derived from our Pay-TV segment.

11. Contract Balances

Our valuation and qualifying accounts activity as of September 30, 2018 were as follows:

Allowance for doubtful accounts	Balance at Beginning of Period	Charged to Costs and Expenses	Deductions	Balance at End of Period
	(In thousands)			
For the nine months ended September 30, 2018	\$ 15,511	\$ 73,695	\$ (76,275)	\$ 12,931

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

	Contract Liabilities
	(In thousands)
Balance as of December 31, 2017	\$ 699,597
Recognition of unearned revenue	(5,426,707)
Deferral of revenue	5,398,249
Balance as of September 30, 2018	\$ 671,139

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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.

12. Related Party Transactions

Related Party Transactions with EchoStar

Following the Spin-off, we 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, we and EchoStar and certain of its 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 Condensed 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 September 30, 2018 and December 31, 2017, trade accounts receivable from EchoStar was \$4 million and \$2 million, respectively. These amounts are recorded in “Trade accounts receivable” on our Condensed Consolidated Balance Sheets.

“Trade accounts payable”

As of September 30, 2018 and December 31, 2017, trade accounts payable to EchoStar was \$19 million and \$42 million, respectively. These amounts are recorded in “Trade accounts payable” on our Condensed Consolidated Balance Sheets.

“Equipment sales and other revenue”

During each of the three months ended September 30, 2018 and 2017, we received \$2 million and \$1 million, respectively, for services provided to EchoStar. During the nine months ended September 30, 2018 and 2017, we received \$7 million and \$2 million, respectively, for services provided to EchoStar. These amounts are recorded in “Equipment sales and other revenue” on our Condensed Consolidated Statements of Operations and Comprehensive Income (Loss). The agreements pertaining to these revenues are discussed below.

Real Estate Lease Agreements. We have entered into lease agreements pursuant to which we lease 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:

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- *El Paso Lease Agreement.* During 2012, we 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.

“Subscriber-related expenses”

During the three months ended September 30, 2018 and 2017, we incurred \$9 million and \$15 million, respectively, of subscriber-related expenses for services provided to us by EchoStar. During the nine months ended September 30, 2018 and 2017, we incurred \$33 million and \$56 million, respectively, of subscriber-related expenses for services provided to us by EchoStar. These amounts are recorded in “Subscriber-related expenses” on our Condensed Consolidated Statements of Operations and Comprehensive Income (Loss). The agreements pertaining to these expenses are discussed below.

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Hughes Broadband Distribution Agreement. Effective October 1, 2012, dishNET Satellite Broadband L.L.C. (“dishNET Satellite Broadband”), our indirect wholly-owned subsidiary, and HNS entered into a Distribution Agreement (the “Distribution Agreement”) pursuant to which dishNET Satellite Broadband has the right, but not the obligation, to market, sell and distribute the HNS satellite Internet service (the “Service”). dishNET Satellite Broadband pays HNS a monthly per subscriber wholesale service fee for the Service based upon the subscriber’s service level, and, beginning January 1, 2014, certain volume subscription thresholds. The Distribution Agreement also provides that dishNET Satellite Broadband has the right, but not the obligation, to purchase certain broadband equipment from HNS to support the sale of the Service. On February 20, 2014, dishNET Satellite Broadband and HNS amended the Distribution Agreement which, among other things, extended the initial term of the Distribution Agreement through March 1, 2024.

Thereafter, the Distribution Agreement automatically renews for successive one-year terms unless either party gives written notice of its intent not to renew to the other party at least 180 days before the expiration of the then-current term. Upon expiration or termination of the Distribution Agreement, the parties will continue to provide the Service to the then-current dishNET subscribers pursuant to the terms and conditions of the Distribution Agreement.

During the first quarter 2017, we transitioned our wholesale arrangement with Hughes under the Distribution Agreement to an authorized representative arrangement and entered into the MSA with HNS. See “*Hughes Broadband Master Services Agreement*” below for further information.

“Satellite and transmission expenses”

During the three months ended September 30, 2018 and 2017, we incurred expenses of \$73 million and \$89 million, respectively, for satellite capacity leased from EchoStar and telemetry, tracking and control and other professional services provided to us by EchoStar. During the nine months ended September 30, 2018 and 2017, we incurred expenses of \$242 million and \$267 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 Condensed 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 7 for further information. The term of each lease is set forth below:

- *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.

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- *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 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. We have also guaranteed certain obligations of EchoStar under the Telesat Transponder Agreement. See discussion under “*Guarantees*” in Note 9.

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.

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.

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

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.

DBSD North America Agreement. On March 9, 2012, we completed the DBSD Transaction. During the second quarter 2011, EchoStar acquired Hughes. Prior to our acquisition of DBSD North America and EchoStar’s acquisition of Hughes, DBSD North America and HNS entered into an agreement pursuant to which HNS provides, among other things, hosting, operations and maintenance services for DBSD North America’s satellite gateway and associated ground infrastructure. This agreement generally may be terminated by us at any time for convenience.

TerreStar Agreement. On March 9, 2012, we completed the TerreStar Transaction. Prior to our acquisition of substantially all the assets of TerreStar and EchoStar’s acquisition of Hughes, TerreStar and HNS entered into various agreements pursuant to which HNS provides, among other things, hosting, operations and maintenance services for TerreStar’s satellite gateway and associated ground infrastructure. These agreements generally may be terminated by us at any time for convenience.

“General and administrative expenses”

During the three months ended September 30, 2018 and 2017, we incurred \$5 million and \$8 million, respectively, of general and administrative expenses for services provided to us by EchoStar. During the nine months ended September 30, 2018 and 2017, we incurred \$16 million and \$23 million, respectively, of general and administrative expenses for services provided to us by EchoStar. These amounts are recorded in “General and administrative expenses” on our Condensed 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:

- *Meridian Lease Agreement.* The lease for all of 9601 S. Meridian Blvd. in Englewood, Colorado was for a period ending on December 31, 2017. In December 2017, we and EchoStar amended this lease to, among other things, extend the term thereof for one additional year until December 31, 2018.

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

- *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, 2017. In December 2017, we and EchoStar amended this lease to, among other things, extend the term thereof for one additional year until December 31, 2018.
- *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, we 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, we and EchoStar agreed that EchoStar shall continue to have the right, but not the obligation, to receive the following services from us, 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, we and EchoStar agreed that we shall continue to have the right, but not the obligation, to engage EchoStar to manage the process of procuring new satellite capacity for us (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 Condensed Consolidated Statements of Operations and Comprehensive Income (Loss).

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

Other Agreements - EchoStar

Tax Sharing Agreement. In connection with the Spin-off, we 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 us, and we will indemnify EchoStar for such taxes. However, we are 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 us 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.

In light of the Tax Sharing Agreement, among other things, and in connection with our consolidated federal income tax returns for certain tax years prior to and for the year of the Spin-off, during the third quarter 2013 we and EchoStar agreed upon a supplemental allocation of the tax benefits arising from certain tax items resolved in the course of the IRS’ examination of these consolidated tax returns. As a result, we agreed to pay EchoStar \$82 million of the tax benefit we received or will receive. This resulted in a reduction of our recorded unrecognized tax benefits and this amount was reclassified to a long-term payable to EchoStar within “Long-term deferred revenue and other long-term liabilities” on our Condensed Consolidated Balance Sheets during the third quarter 2013. Any payment to EchoStar, including accrued interest, will be made at such time as EchoStar would have otherwise been able to realize such tax benefit. In addition, during the third quarter 2013, we and EchoStar agreed upon a tax sharing arrangement for filing certain combined state income tax returns and a method of allocating the respective tax liabilities between us and EchoStar for such combined returns, through the taxable period ending on December 31, 2017 (the “State Tax Arrangement”). During the third quarter 2018, we and EchoStar amended the Tax Sharing Agreement and the 2013 agreements (the “Amendment”).

Under the Amendment, among other things, we are entitled to apply the benefit of EchoStar’s 2009 net operating losses to our federal tax return for the year ended December 31, 2008, in exchange for paying EchoStar over time the value of the net annual federal income taxes paid by EchoStar that would have been otherwise offset by their 2009 net operating loss. In addition, the Amendment extends the term of the State Tax Arrangement for filing certain combined state income tax returns to the earlier to occur of (1) termination of the Tax Sharing Agreement, (2) a change in control of either us or EchoStar or, (3) for any particular state, if we and EchoStar no longer file a combined tax return for such state.

We and EchoStar file combined income tax returns in certain states. In 2015 and 2014, EchoStar earned and recognized a tax benefit for certain state income tax credits that EchoStar estimates it would be unable to utilize in the future if it had filed separately from us. In addition, EchoStar earned and recognized tax benefits for certain federal income tax credits, a portion of which were allocated to us under IRS rules for affiliated companies. We expect to utilize these tax credits to reduce our federal and state income tax payable in the future. In accordance with accounting rules that apply to transfers of assets between entities under common control, we recorded a capital contribution of less than \$1 million in “Additional paid-in capital” on our Condensed Consolidated Balance Sheets for the year ended December 31, 2017 representing the amount that we estimate is more likely than not to be realized by us as a result of our utilization of these tax credits earned. Any payments made to EchoStar related to the utilization of these credits will be recorded as a reduction to “Additional paid-in capital” on our Condensed Consolidated Balance Sheets.

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

Tax Matters Agreement. In connection with the completion of the Share Exchange, we 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 we are responsible for all tax returns and tax liabilities for the Transferred Businesses from and after the Share Exchange. Both we and EchoStar have made certain tax-related representations and are subject to various tax-related covenants after the consummation of the Share Exchange. Both we 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, we have agreed to indemnify EchoStar if the Transferred Businesses are acquired, either directly or indirectly (e.g., via an acquisition of us), 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, we and EchoStar entered into a settlement agreement with TiVo Inc. (“TiVo”). The settlement resolved all pending litigation between us 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 us or EchoStar were dissolved. We 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 us, we 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 us and EchoStar based on historical sales of certain licensed products, with us being responsible for 95% of each annual payment. Pursuant to the Share Exchange Agreement, we were responsible for EchoStar’s allocation of the final payment to TiVo, which was paid July 31, 2017.

Patent Cross-License Agreements. In December 2011, we 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) we and such third-party licensed our 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, we and EchoStar independently exercised our 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 us and EchoStar, we and EchoStar agreed to allocate our respective payments to such third party based on our 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.

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.

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

Hughes Broadband Master Services Agreement. In March 2017, DISH Network L.L.C. (“DNLLC”) and HNS entered into 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 Condensed 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 three months ended September 30, 2018 and 2017, we purchased broadband equipment from HNS of \$1 million and \$7 million, respectively, under the MSA. For the nine months ended September 30, 2018 and 2017, we purchased broadband equipment from HNS of \$18 million and \$17 million, respectively, under the MSA.

Employee Matters Agreement. In connection with the completion of the Share Exchange, effective March 1, 2017, we and EchoStar entered into an Employee Matters Agreement that addresses the transfer of employees from EchoStar to us, 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. We 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 us in connection with the Share Exchange.

Intellectual Property and Technology License Agreement. In connection with the completion of the Share Exchange, effective March 1, 2017, we and EchoStar entered into an Intellectual Property and Technology License Agreement (“IPTLA”), pursuant to which we 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 us a license to its intellectual property and technology for use by us, among other things, in connection with our 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, we granted a license back to EchoStar, among other things, for the continued use of all intellectual property and technology transferred to us 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 Condensed 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 Condensed Consolidated Balance Sheets or expensed as “Subscriber acquisition costs” or “Subscriber-related expenses” on our Condensed 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 Condensed Consolidated Balance Sheets. Our investment in NagraStar is accounted for using the equity method.

DISH NETWORK CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS - Continued
(Unaudited)

The table below summarizes our transactions with NagraStar:

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
	(In thousands)			
Purchases (including fees):				
Purchases from NagraStar	\$ 15,007	\$ 17,897	\$ 57,632	\$ 54,328

	As of	
	September 30, 2018	December 31, 2017
	(In thousands)	
Amounts Payable and Commitments:		
Amounts payable to NagraStar	\$ 16,229	\$ 16,685
Commitments to NagraStar	\$ 879	\$ 4,927

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 Condensed Consolidated Statements of Operations and Comprehensive Income (Loss).

The table below summarizes our transactions with Dish Mexico:

	For the Three Months Ended September 30,		For the Nine Months Ended September 30,	
	2018	2017	2018	2017
	(In thousands)			
Sales:				
Digital receivers and related components	\$ 465	\$ 413	\$ 921	\$ 1,596
Uplink services	\$ 1,187	\$ 995	\$ 3,385	\$ 2,993

	As of	
	September 30, 2018	December 31, 2017
	(In thousands)	
Amounts Receivable:		
Amounts receivable from Dish Mexico	\$ 1,219	\$ 3,027

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following management's discussion and analysis of our financial condition and results of operations together with the condensed consolidated financial statements and notes to our financial statements included elsewhere in this Quarterly Report on Form 10-Q. This management's discussion and analysis is intended to help provide an understanding of our financial condition, changes in financial condition and results of our operations and contains forward-looking statements that involve risks and uncertainties. The forward-looking statements are not historical facts, but rather are based on current expectations, estimates, assumptions and projections about our industry, business and future financial results. Our actual results could differ materially from the results contemplated by these forward-looking statements due to a number of factors, including those discussed in our Annual Report on Form 10-K for the year ended December 31, 2017 and in Part II, Item 1A of our Quarterly Report on Form 10-Q for the quarter ended June 30, 2018 under the caption "Item 1A. Risk Factors." Furthermore, such forward-looking statements speak only as of the date of this Quarterly Report on Form 10-Q, and we expressly disclaim any obligation to update any forward-looking statements.

Overview

Our business strategy is to be the best provider of video services in the United States by providing products with the best technology, outstanding customer service, and great value. We promote our Pay-TV services as providing our subscribers with a better "price-to-value" relationship than those available from other subscription television service providers. In connection with the growth in OTT industry, we promote our Sling TV services primarily to consumers who do not subscribe to traditional satellite and cable pay-TV services.

As the pay-TV industry is mature, our DISH TV strategy has included an increased emphasis on acquiring and retaining higher quality subscribers, including subscribers in markets underserved by pay-TV services, even if it means that we will acquire and retain fewer overall subscribers. We evaluate the quality of subscribers based upon a number of factors, including, among others, profitability. Our DISH TV subscriber base has been declining due to, among other things, this strategy. There can be no assurance that our DISH TV subscriber base will not continue to decline and that the pace of such decline will not accelerate.

Our revenue and profit 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 in-home service operations; broadband services; warranty services; and sales of digital receivers and related equipment to third-party pay-TV providers. Our subscriber-related revenue has been declining due to, among other things, the continuing decline in our DISH TV subscriber base. We expect this trend to continue. Our most significant expenses are subscriber-related expenses, which are primarily related to programming, subscriber acquisition costs and depreciation and amortization.

Financial Highlights

2018 Third Quarter Consolidated Results of Operations and Key Operating Metrics

- Revenue of \$3.395 billion
- Net income attributable to DISH Network of \$432 million and basic and diluted earnings per share of common stock of \$0.92 and \$0.82, respectively
- Loss of approximately 341,000 net Pay-TV subscribers
- Loss of approximately 367,000 net DISH TV subscribers
- Addition of approximately 26,000 net Sling TV subscribers
- Pay-TV ARPU of \$86.29
- Gross new DISH TV subscriber activations of approximately 294,000
- DISH TV churn rate of 2.11%
- DISH TV SAC of \$721

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

Consolidated Financial Condition as of September 30, 2018

- Cash, cash equivalents and current marketable investment securities of \$1.865 billion
- Total assets of \$30.137 billion
- Total long-term debt and capital lease obligations of \$15.157 billion

Business Segments

We currently operate two primary business segments: (1) Pay-TV; and (2) Wireless.

Pay-TV

We are the nation's fourth largest pay-TV provider and 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"). 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 September 30, 2018, we had 12.656 million Pay-TV subscribers in the United States, including 10.286 million DISH TV subscribers and 2.370 million Sling TV subscribers.

Competition has intensified in recent years as the pay-TV industry has matured. To differentiate our DISH TV services from our competitors, we offer the Hopper whole-home DVR and have continued to add functionality and simplicity for a more intuitive user experience. Our Hopper and Joey® whole-home DVR promotes a suite of integrated features and functionality designed to maximize the convenience and ease of watching TV anytime and anywhere. It also has several innovative features that a consumer can use, at his or her option, to watch and record television programming, through their televisions, tablets, phones and computers. Our next generation Hopper, the Hopper 3, is available to customers nationwide. Among other things, the Hopper 3 features 16 tuners, delivers an enhanced 4K Ultra HD experience, and supports up to seven TVs simultaneously.

We market our Sling TV services primarily to consumers who do not subscribe to traditional satellite and cable pay-TV services. Our Sling TV services require an Internet connection and are available on multiple streaming-capable devices including streaming media devices, TVs, tablets, computers, game consoles and phones. We offer Sling International, Sling Latino and Sling domestic video programming services. Our domestic Sling TV services have a single-stream service branded Sling Orange and a multi-stream service branded Sling Blue, which includes, among other things, the ability to stream on up to three devices simultaneously. We face competition from providers of digital media, including, among others, Netflix, Hulu, Apple, Amazon, Alphabet, Verizon, DirecTV, Sony, YouTube, Fubo and Philo that offer online services distributing movies, television shows and other video programming as well as programmers, such as HBO, CBS, Univision, STARZ and SHOWTIME, that began selling content directly to consumers over the Internet. Some of these companies have larger customer bases, stronger brand recognition and greater financial, marketing and other resources than we do. In addition, traditional providers of video entertainment, including broadcasters, cable channels and MVPDs, are increasing their Internet-based video offerings. Some of these services charge nominal or no fees for access to their content, which could adversely affect demand for our Pay-TV services. Moreover, new technologies have been, and will likely continue to be, developed that further increase the number of competitors we face with respect to video services, including competition from piracy-based video offerings. This competition, among other things, has caused the rate of growth in subscribers to our Sling TV services to decrease. In June 2018, we launched additional Sling TV services which include offering consumers a la carte channel subscriptions, access to pay-per-view events and movies, and access to free content. There can be no assurance that these additional services will positively affect our results of operations or our net Sling TV subscribers.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

In addition, we have historically offered broadband services under the dishNET™ brand, which includes satellite broadband services that utilize advanced technology and high-powered satellites launched by Hughes Communications, Inc. (“Hughes”) and ViaSat, Inc. (“ViaSat”) and wireline broadband services. However, as of the first quarter 2018, we have transitioned our broadband business focus from wholesale to authorized representative arrangements, and we are no longer marketing dishNET broadband services. Our existing broadband subscribers will decline through customer attrition. Generally, under these authorized representative arrangements, we will receive certain payments for each broadband service activation generated and installation performed, and we will not incur subscriber acquisition costs for these activations.

As a result of the completion of the Share Exchange with EchoStar, described below, 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.

Share Exchange Agreement

On February 28, 2017, we and EchoStar and certain of our 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 HNS. In connection with the Share Exchange, we and EchoStar and certain of their subsidiaries entered into certain agreements covering, among other things, tax matters, employee matters, intellectual property matters and the provision of transitional services. See Note 12 in the Notes to our Condensed Consolidated Financial Statements for further information.

As the Share Exchange was a transaction between entities that are under common control, accounting rules require that our Condensed 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 Condensed 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. See Note 2 in the Notes to our Condensed Consolidated Financial Statements for further information.

Wireless

Since 2008, we have 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.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

DISH Network Spectrum

We have 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. In March 2017, we notified the FCC that we plan to deploy a next-generation 5G-capable network, focused on supporting narrowband IoT. The first phase of our network deployment will be completed by March 2020, with subsequent phases to be completed thereafter. As of September 30, 2018, we 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. Among other things, initial RF design in connection with the first phase of our network deployment is now complete, and we are in the process of identifying and securing tower sites. The core network has been installed and commissioned. Based on our vendors’ current forecast, we plan to install the first base stations on sites later this year, and to continue deployment until complete. We may also determine that additional wireless spectrum licenses may be required to commercialize our wireless business and to compete with other wireless service providers. We currently expect expenditures for our wireless projects to be between \$500 million and \$1.0 billion through 2020. We currently expect expenditures for the second phase of our network deployment to be approximately \$10 billion. We 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. 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 we consider our options for the commercialization of our wireless spectrum, we 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. We may also determine that additional wireless spectrum licenses may be required to commercialize our wireless business and to compete with other wireless service providers. See Note 9 “*Commitments and Contingencies – DISH Network Spectrum*” in the Notes to our Condensed Consolidated Financial Statements for further information.

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

During 2015, through our wholly-owned subsidiaries American AWS-3 Wireless II L.L.C. (“American II”) and American AWS-3 Wireless III L.L.C. (“American III”), we initially made over \$10 billion in certain non-controlling investments in Northstar Spectrum, LLC (“Northstar Spectrum”), the parent company of Northstar Wireless, L.L.C. (“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 and to SNR Wireless, respectively, which are recorded in “FCC authorizations” on our Condensed Consolidated Balance Sheets. Under the applicable accounting guidance in Accounting Standards Codification 810, *Consolidation* (“ASC 810”), Northstar Spectrum and SNR HoldCo are considered variable interest entities and, based on the characteristics of the structure of these entities and in accordance with the applicable accounting guidance, we consolidate these entities into our financial statements. See Note 2 in the Notes to our Condensed Consolidated Financial Statements for further information.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

The AWS-3 Licenses are subject to certain interim and final build-out requirements. 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 us, 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 Northstar Re-Auction Payment and the SNR Re-Auction Payment for the AWS-3 licenses retained by the FCC. Depending upon the nature and scope of such commercialization, build-out, integration efforts, regulatory compliance, and potential Northstar Re-Auction Payment and SNR Re-Auction Payment, any loans, equity contributions or partnerships could vary significantly. See Note 9 “*Commitments and Contingencies – DISH Network Non-Controlling Investments in the Northstar Entities and the SNR Entities Related to AWS-3 Wireless Spectrum Licenses*” in the Notes to our Condensed Consolidated Financial Statements for further information.

We may need to raise significant additional capital in the future to fund the efforts described above, which may not be available on acceptable terms or at all. There can be no assurance that we, the Northstar Entities and/or the SNR Entities will be able to develop and implement business models that will realize a return on these wireless spectrum licenses or that we, the Northstar Entities and/or the SNR Entities will be able to profitably deploy the assets represented by these wireless spectrum licenses, which may affect the carrying amount of these assets and our future financial condition or results of operations. See Note 9 “*Commitments and Contingencies*” in the Notes to our Condensed Consolidated Financial Statements for further information.

Recent Developments

Mergers and acquisitions, joint ventures and alliances among cable television providers, telecommunications companies and others may result in, among other things, greater scale and financial leverage and increase the availability of offerings from providers capable of bundling video, broadband and/or wireless services in competition with our services, and may exacerbate the risks described in our public filings. For example, in October 2016, AT&T announced its acquisition of Time Warner, which was completed in June 2018. In addition, in December 2017, Walt Disney Company announced its acquisition of certain assets of Twenty-First Century Fox, Inc. These transactions may affect us adversely by, among other things, making it more difficult for us to obtain access to certain programming networks on nondiscriminatory and fair terms, or at all.

Also, in April 2018, T-Mobile US, Inc. (“T-Mobile”) announced its acquisition of Sprint Corporation (“Sprint”). We filed a petition to deny the transaction with the FCC. We cannot predict the practical effect of the impact on us of T-Mobile’s acquisition of Sprint (if approved), including without limitation, the impact of any conditions on us (if any conditions are imposed). However, it is possible that the outcomes resulting from this acquisition (if approved, with or without conditions) could have a material adverse effect on our business, results of operations and financial condition or otherwise disrupt our business.

Trends in our Pay-TV Segment

Competition

Competition has intensified in recent years as the pay-TV industry has matured. With respect to our DISH TV services, we and our competitors increasingly must seek to attract a greater proportion of new subscribers from each other’s existing subscriber bases rather than from first-time purchasers of pay-TV services. We incur significant costs to retain our existing DISH TV subscribers, mostly as a result of upgrading their equipment to next generation receivers, primarily including our Hopper receivers, and by providing retention credits. Our DISH TV subscriber retention costs may vary significantly from period to period.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

Many of our competitors have been especially aggressive by offering discounted programming and services for both new and existing subscribers, including bundled offers combining broadband, video and/or wireless services and other promotional offers. Certain competitors have been able to subsidize the price of video services with the price of broadband and/or wireless services. In addition, our gross new DISH TV subscriber activations and net DISH TV subscriber additions continue to be negatively impacted by stricter customer acquisition and retention policies for our DISH TV subscribers, including an increased emphasis on acquiring and retaining higher quality subscribers.

Our Pay-TV services also face increased competition from programmers and other companies who distribute video directly to consumers over the Internet. Our Sling TV services face increased competition from content providers and other companies, as well as traditional satellite television providers, cable companies and large telecommunications companies, that are increasing their Internet-based video offerings. Competition from video content distributed over the Internet includes services with live linear television programming, single programmer offerings and offerings of large libraries of on-demand content, including in many cases original content. Furthermore, our DISH TV services face increased competition as programming offered over the Internet has become more prevalent and consumers are spending an increasing amount of time accessing video content via the Internet on their mobile devices. Significant changes in consumer behavior with regard to the means by which consumers obtain video entertainment and information in response to digital media competition could have a material adverse effect on our business, results of operations and financial condition or otherwise disrupt our business. In particular, consumers have shown increased interest in viewing certain video programming in any place, at any time and/or on any broadband-connected device they choose. Online content providers may cause our subscribers to disconnect our DISH TV services (“cord cutting”), downgrade to smaller, less expensive programming packages (“cord shaving”) or elect to purchase through these online content providers a certain portion of the services that they would have historically purchased from us, such as pay per view movies, resulting in less revenue to us.

We implement new marketing promotions from time to time that are intended to increase our Pay-TV subscriber activations. For our DISH TV services, we have launched various marketing promotions offering certain DISH TV programming packages without a price increase for a commitment period. We also launched our Flex Pack skinny bundle with a core package of programming consisting of more than 50 channels and the choice of one of nine themed add-on channel packs, which include, among others, local broadcast networks and kids and general entertainment programming. Subscribers can also add or remove additional channel packs to best suit their entertainment needs. During 2017, we launched “Tuned In To You” and the accompanying “Spokeslistener” campaign. While we plan to implement these and other new marketing efforts for our DISH TV services, there can be no assurance that we will ultimately be successful in increasing our gross new DISH TV subscriber activations. Additionally, in response to our efforts, we may face increased competitive pressures, including aggressive marketing and retention efforts, bundled discount offers combining broadband, video and/or wireless services and other discounted promotional offers.

For our Sling TV services, we offer a personalized TV experience with a customized channel line-up and two of the lowest priced multichannel live-linear online streaming services in the industry, our Sling Orange service and our Sling Blue service. During 2018, we launched our “We are Slingers” campaign. While we plan to implement these and other new marketing efforts for our Sling TV services, there can be no assurance that we will ultimately be successful in increasing our net Sling TV subscriber activations.

Our DISH TV subscriber base has been declining due to, among other things, the factors described above. There can be no assurance that our DISH TV subscriber base will not continue to decline and that the pace of such decline will not accelerate. As our DISH TV subscriber base continues to decline, it could have a material adverse long-term effect on our business, results of operations, financial condition and cash flow.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

Programming

Our ability to compete successfully will depend, among other things, on our ability to continue to obtain desirable programming and deliver it to our subscribers at competitive prices. Programming costs represent a large percentage of our “Subscriber-related expenses” and the largest component of our total expense. We expect these costs to continue to increase, and certain programming costs are rising at a much faster rate than wages or inflation, especially for local broadcast channels. The rates we are charged for retransmitting local broadcast channels have been increasing substantially and may exceed our ability to increase our prices to our customers. In addition, programming costs continue to increase due to contractual price increases and the renewal of long-term programming contracts on less favorable pricing terms. Going forward, our margins may face pressure if we are unable to renew our long-term programming contracts on acceptable pricing and other economic terms or if we are unable to pass these increased programming costs on to our customers.

Increases in programming costs have caused us to increase the rates that we charge to our subscribers, which could in turn cause our existing Pay-TV subscribers to disconnect our service or cause potential new Pay-TV subscribers to choose not to subscribe to our service. Additionally, even if our subscribers do not disconnect our services, they may purchase through new and existing online content providers a certain portion of the services that they would have historically purchased from us, such as pay-per-view movies, resulting in less revenue to us.

Furthermore, our net Pay-TV subscriber additions, gross new DISH TV subscriber activations, and DISH TV churn rate may be negatively impacted if we are unable to renew our long-term programming carriage contracts before they expire. In the past, our net Pay-TV subscriber additions, gross new DISH TV subscriber activations, and DISH TV churn rate have been negatively impacted as a result of programming interruptions and threatened programming interruptions in connection with the scheduled expiration of programming carriage contracts with content providers. On June 30, 2018, Univision Communications Inc. (“Univision”) removed certain of its channels from our DISH TV and Sling TV programming lineup, after we and Univision were unable to negotiate the terms and conditions of a new programming carriage contract. In light of, among other things, certain Univision programming being available to consumers through alternative methods including over the air antennas and directly from Univision over the Internet, the current state of our negotiations with Univision and the duration of the absence of these Univision channels from our programming lineups, this removal may be permanent. In particular, we experienced a higher DISH TV churn rate, higher net Pay-TV subscriber losses and lower gross new DISH TV subscriber activations beginning in the third quarter 2018 and continuing into the fourth quarter 2018, when Univision removed certain of its channels from our DISH TV and Sling TV programming lineup. As a result, there can be no assurance that Univision’s removal of these channels will not have a material adverse effect on our business, results of operations and financial condition or otherwise disrupt our business. Univision’s removal of certain of its channels from our programming lineup will continue to negatively impact our DISH TV churn rate, net DISH TV subscriber losses, gross new DISH TV subscriber activations and net Sling TV subscriber additions in the short-term. However, over the long term, we anticipate that we will be able to provide more compelling offers to our subscribers, particularly containing Latino programming because of, among other things, our ability to provide more flexible and lower cost programming and because certain Univision programming is also available through alternative methods including over the air antennas and directly from Univision over the Internet. In addition, on October 31, 2018, Home Box Office Inc. (“HBO”) removed its HBO and Cinemax channels from our DISH TV and Sling TV programming lineup, after we and HBO were unable to negotiate the terms and conditions of a new programming carriage contract. While we cannot predict with any certainty the impact to our DISH TV churn rate, net DISH TV subscriber losses, gross new DISH TV subscriber activations and net Sling TV subscriber additions resulting from these programming removals, we may experience lower net Pay-TV subscriber additions or higher net Pay-TV subscriber losses, among other things. As a result, there can be no assurance that the removal of these channels will not have a material adverse effect on our business, results of operations and financial condition or otherwise disrupt our business.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

Operations and Customer Service

While competitive factors have impacted the entire pay-TV industry, our relative performance has also been driven by issues specific to us. In the past, our subscriber growth has been adversely affected by signal theft and other forms of fraud and by our operational inefficiencies. For our DISH TV services, in order to combat signal theft and improve the security of our broadcast system, we use microchips embedded in credit card sized access cards, called “smart cards,” or security chips in our DBS receiver systems to control access to authorized programming content (“Security Access Devices”). We expect that future replacements of these devices may be necessary to keep our system secure. To combat other forms of fraud, among other things, we monitor our independent third-party distributors’ and independent third-party retailers’ adherence to our business rules. Furthermore, for our Sling TV services, we encrypt programming content and use digital rights management software to, among other things, prevent unauthorized access to our programming content.

While we have made improvements in responding to and dealing with customer service issues, we continue to focus on the prevention of these issues, which is critical to our business, financial condition and results of operations. To improve our operational performance, we continue to make investments in staffing, training, information systems, and other initiatives, primarily in our call center and in-home service operations. These investments are intended to help combat inefficiencies introduced by the increasing complexity of our business, improve customer satisfaction, reduce churn, increase productivity, and allow us to scale better over the long run. We cannot be certain, however, that our spending will ultimately be successful in improving our operational performance.

Changes in our Technology

We have been deploying DBS receivers for our DISH TV services that utilize 8PSK modulation technology with MPEG-4 compression technology for several years. These technologies, when fully deployed, will allow improved broadcast efficiency, and therefore allow increased programming capacity. Many of our customers today, however, do not have DBS receivers that use MPEG-4 compression technology. In addition, given that all of our HD content is broadcast in MPEG-4, any growth in HD penetration will naturally accelerate our transition to these newer technologies and may increase our retention costs. All new DBS receivers have MPEG-4 compression with 8PSK modulation technology.

In addition, from time to time, we change equipment for certain subscribers to make more efficient use of transponder capacity in support of HD and other initiatives. We believe that the benefit from the increase in available transponder capacity outweighs the short-term cost of these equipment changes.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

EXPLANATION OF KEY METRICS AND OTHER ITEMS

Subscriber-related revenue. “Subscriber-related revenue” consists principally of revenue from basic, local, premium movie, pay-per-view, Latino and international subscriptions; equipment rental fees and other hardware related fees, including DVRs and fees from subscribers with multiple receivers; advertising services; fees earned from our in-home service operations; broadband services; warranty services; and other subscriber revenue. Certain of the amounts included in “Subscriber-related revenue” are not recurring on a monthly basis.

Equipment sales and other revenue. “Equipment sales and other revenue” principally includes the non-subsidized sales of DBS accessories to independent third-party retailers and other independent third-party distributors of our equipment, sales of digital receivers and related components to third-party pay-TV providers and revenue from services and other agreements with EchoStar.

Subscriber-related expenses. “Subscriber-related expenses” principally include programming expenses, which represent a substantial majority of these expenses. “Subscriber-related expenses” also include costs for Pay-TV and broadband services incurred in connection with our subscriber retention, in-home service and call center operations, billing costs, refurbishment and repair costs related to DBS receiver systems, other variable subscriber expenses and monthly wholesale fees paid to broadband providers.

Satellite and transmission expenses. “Satellite and transmission expenses” includes the cost of leasing satellite and transponder capacity from EchoStar and the cost of telemetry, tracking and control and other professional services provided to us by EchoStar. “Satellite and transmission expenses” also includes the cost of digital broadcast operations, executory costs associated with capital leases and costs associated with transponder leases and other related services. In addition, “Satellite and transmission expenses” includes costs associated with our Sling TV services including, among other things, streaming delivery technology and infrastructure.

Cost of sales - equipment and other. “Cost of sales - equipment and other” primarily includes the cost of non-subsidized sales of DBS accessories to independent third-party retailers and other independent third-party distributors of our equipment, costs associated with sales of digital receivers and related components to third-party pay-TV providers and costs related to services and other agreements with EchoStar.

Subscriber acquisition costs. While we primarily lease DBS receiver systems, we also subsidize certain costs to attract new subscribers. Our “Subscriber acquisition costs” include the cost of subsidized sales of DBS receiver systems to independent third-party retailers and other independent third-party distributors of our equipment, the cost of subsidized sales of DBS receiver systems directly by us to subscribers, including net costs related to our promotional incentives, costs related to our direct sales efforts and costs related to installation and acquisition advertising. Our “Subscriber acquisition costs” also includes costs associated with acquiring Sling TV subscribers including, among other things, costs related to acquisition advertising and our direct sales efforts and commissions. Subsequent to the adoption of ASU 2014-09 on January 1, 2018, we capitalize payments made under certain sales incentive programs, including those with our independent third-party retailers and other independent third-party distributors, which were previously expensed as “Subscriber acquisition costs.” These amounts are now initially capitalized in “Other current assets” and “Other noncurrent assets, net” on our Condensed Consolidated Balance Sheets, and then amortized in “Other subscriber acquisition costs” on our Condensed Consolidated Statements of Operations and Comprehensive Income (Loss). See Note 2 in the Notes to our Condensed Consolidated Financial Statements for further information.

DISH TV SAC. Subscriber acquisition cost measures are commonly used by those evaluating traditional companies in the pay-TV industry. We are not aware of any uniform standards for calculating the “average subscriber acquisition costs per new DISH TV subscriber activation,” or DISH TV SAC, and we believe presentations of pay-TV SAC may not be calculated consistently by different companies in the same or similar businesses. Our DISH TV SAC has historically been calculated as “Subscriber acquisition costs,” excluding “Subscriber acquisition costs” associated with our broadband services and Sling TV services, plus the value of equipment capitalized under our lease program for new DISH TV subscribers, divided by gross new DISH TV subscriber activations.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

Subsequent to the adoption of ASU 2014-09 on January 1, 2018, we capitalize payments made under certain sales incentive programs, including those with our independent third-party retailers and other independent third-party distributors, which were previously expensed as “Subscriber acquisition costs.” These amounts are now initially capitalized in “Other current assets” and “Other noncurrent assets, net” on our Condensed Consolidated Balance Sheets, and then amortized in “Other subscriber acquisition costs” on our Condensed Consolidated Statements of Operations and Comprehensive Income (Loss). As such, as of January 1, 2018 our DISH TV SAC is calculated as “Subscriber acquisition costs,” excluding “Subscriber acquisition costs” associated with our broadband services and Sling TV services, plus capitalized payments made under certain sales incentive programs, excluding amortization related to these payments, plus the value of equipment capitalized under our lease program for new DISH TV subscribers, divided by gross new DISH TV subscriber activations. We include all the costs of acquiring DISH TV subscribers (e.g., subsidized and capitalized equipment) as we believe it is a more comprehensive measure of how much we are spending to acquire subscribers. We also include all new DISH TV subscribers in our calculation, including DISH TV subscribers added with little or no subscriber acquisition costs.

General and administrative expenses. “General and administrative expenses” consists primarily of employee-related costs associated with administrative services such as legal, information systems, and accounting and finance. It also includes outside professional fees (e.g., legal, information systems and accounting services) and other items associated with facilities and administration.

Interest expense, net of amounts capitalized. “Interest expense, net of amounts capitalized” primarily includes interest expense (net of capitalized interest), prepayment premiums, amortization of debt discounts and debt issuance costs associated with our long-term debt, and interest expense associated with our capital lease obligations. See Note 2 in the Notes to our Condensed Consolidated Financial Statements for further information regarding our capitalized interest policy.

Other, net. The main components of “Other, net” are gains and losses realized on the sale and/or conversion of marketable and non-marketable investment securities and derivative financial instruments, impairment of marketable and non-marketable investment securities, unrealized gains and losses from changes in fair value of certain marketable investment securities and derivative financial instruments, and equity in earnings and losses of our affiliates.

Earnings before interest, taxes, depreciation and amortization (“EBITDA”). EBITDA is defined as “Net income (loss) attributable to DISH Network” plus “Interest expense, net of amounts capitalized” net of “Interest income,” “Income tax (provision) benefit, net” and “Depreciation and amortization.” This “non-GAAP measure” is reconciled to “Net income (loss) attributable to DISH Network” in our discussion of “Results of Operations” below.

DISH TV subscribers. We include customers obtained through direct sales, independent third-party retailers and other independent third-party distribution relationships in our DISH TV subscriber count. We also provide DISH TV services to hotels, motels and other commercial accounts. For certain of these commercial accounts, we divide our total revenue for these commercial accounts by an amount approximately equal to the retail price of our Flex Pack programming package, and include the resulting number, which is substantially smaller than the actual number of commercial units served, in our DISH TV subscriber count.

Sling TV subscribers. We include customers obtained through direct sales and third-party marketing agreements in our Sling TV subscriber count. Sling TV subscribers are recorded net of disconnects. Sling TV customers receiving service for no charge, under certain new subscriber promotions, are excluded from our Sling TV subscriber count. For customers who subscribe to multiple Sling TV packages, including, among others, Sling TV Blue, Sling TV Orange and Sling Latino, each customer is only counted as one Sling TV subscriber.

Pay-TV subscribers. Our Pay-TV subscriber count includes all DISH TV and Sling TV subscribers discussed above. For customers who subscribe to both our DISH TV services and our Sling TV services, each subscription is counted as a separate Pay-TV subscriber.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

Pay-TV average monthly revenue per subscriber (“Pay-TV ARPU”). We are not aware of any uniform standards for calculating ARPU and believe presentations of ARPU may not be calculated consistently by other companies in the same or similar businesses. We calculate Pay-TV average monthly revenue per Pay-TV subscriber, or Pay-TV ARPU, by dividing average monthly “Subscriber-related revenue,” excluding revenue from broadband services, for the period by our average number of Pay-TV subscribers for the period. The average number of Pay-TV subscribers is calculated for the period by adding the average number of Pay-TV subscribers for each month and dividing by the number of months in the period. The average number of Pay-TV subscribers for each month is calculated by adding the beginning and ending Pay-TV subscribers for the month and dividing by two. Sling TV subscribers on average purchase lower priced programming services than DISH TV subscribers, and therefore, as Sling TV subscribers increase, it has had a negative impact on Pay-TV ARPU.

DISH TV average monthly subscriber churn rate (“DISH TV churn rate”). We are not aware of any uniform standards for calculating subscriber churn rate and believe presentations of subscriber churn rates may not be calculated consistently by different companies in the same or similar businesses. We calculate DISH TV churn rate for any period by dividing the number of DISH TV subscribers who terminated service during the period by the average number of DISH TV subscribers for the same period, and further dividing by the number of months in the period. The average number of DISH TV subscribers is calculated for the period by adding the average number of DISH TV subscribers for each month and dividing by the number of months in the period. The average number of DISH TV subscribers for each month is calculated by adding the beginning and ending DISH TV subscribers for the month and dividing by two.

Free cash flow. We define free cash flow as “Net cash flows from operating activities” less “Purchases of property and equipment” and “Capitalized interest related to FCC authorizations,” as shown on our Condensed Consolidated Statements of Cash Flows.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

RESULTS OF OPERATIONS

Three Months Ended September 30, 2018 Compared to the Three Months Ended September 30, 2017.

Statements of Operations Data	For the Three Months Ended September 30,		Variance	
	2018	2017	Amount	%
	(In thousands)			
Revenue:				
Subscriber-related revenue	\$ 3,349,356	\$ 3,551,054	\$ (201,698)	(5.7)
Equipment sales and other revenue	45,785	32,400	13,385	41.3
Total revenue	3,395,141	3,583,454	(188,313)	(5.3)
Costs and Expenses:				
Subscriber-related expenses	2,123,798	2,237,742	(113,944)	(5.1)
% of Subscriber-related revenue	63.4 %	63.0 %		
Satellite and transmission expenses	136,869	160,009	(23,140)	(14.5)
% of Subscriber-related revenue	4.1 %	4.5 %		
Cost of sales - equipment and other	40,309	21,563	18,746	86.9
Subscriber acquisition costs	186,878	318,811	(131,933)	(41.4)
General and administrative expenses	169,299	186,954	(17,655)	(9.4)
% of Total revenue	5.0 %	5.2 %		
Depreciation and amortization	175,285	209,324	(34,039)	(16.3)
Total costs and expenses	2,832,438	3,134,403	(301,965)	(9.6)
Operating income (loss)	562,703	449,051	113,652	25.3
Other Income (Expense):				
Interest income	10,525	7,240	3,285	45.4
Interest expense, net of amounts capitalized	(5,413)	(4,370)	(1,043)	(23.9)
Other, net	25,473	40,261	(14,788)	(36.7)
Total other income (expense)	30,585	43,131	(12,546)	(29.1)
Income (loss) before income taxes	593,288	492,182	101,106	20.5
Income tax (provision) benefit, net	(140,690)	(176,917)	36,227	20.5
Effective tax rate	23.7 %	35.9 %		
Net income (loss)	452,598	315,265	137,333	43.6
Less: Net income (loss) attributable to noncontrolling interests, net of tax	20,864	17,890	2,974	16.6
Net income (loss) attributable to DISH Network	\$ 431,734	\$ 297,375	\$ 134,359	45.2
Other Data:				
Pay-TV subscribers, as of period end (in millions)	12.656	13.203	(0.547)	(4.1)
DISH TV subscribers, as of period end (in millions)	10.286	11.151	(0.865)	(7.8)
Sling TV subscribers, as of period end (in millions)	2.370	2.052	0.318	15.5
Pay-TV subscriber additions (losses), net (in millions)	(0.341)	0.016	(0.357)	*
DISH TV subscriber additions (losses), net (in millions)	(0.367)	(0.220)	(0.147)	(66.8)
Sling TV subscriber additions (losses), net (in millions)	0.026	0.236	(0.210)	(89.0)
Pay-TV ARPU	\$ 86.29	\$ 87.23	\$ (0.94)	(1.1)
DISH TV subscriber additions, gross (in millions)	0.294	0.402	(0.108)	(26.9)
DISH TV churn rate	2.11 %	1.82 %	0.29 %	15.9
DISH TV SAC	\$ 721	\$ 750	\$ (29)	(3.9)
EBITDA	\$ 742,597	\$ 680,746	\$ 61,851	9.1

* Percentage is not meaningful.

Item 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

Pay-TV subscribers. We lost approximately 341,000 net Pay-TV subscribers during the three months ended September 30, 2018 compared to the addition of approximately 16,000 net Pay-TV subscribers during the same period in 2017. The net Pay-TV subscriber losses during the three months ended September 30, 2018 compared to the additions during the same period in 2017 resulted from higher net DISH TV subscriber losses and fewer net Sling TV subscriber additions. Our net Pay-TV subscriber losses during the three months ended September 30, 2018 were negatively impacted by Univision's removal of certain of its channels from our DISH TV and Sling TV programming lineup. As a result, we experienced higher net Pay-TV subscriber losses beginning in the third quarter 2018 and continuing into the fourth quarter 2018. In light of, among other things, certain Univision programming being available to consumers through alternative methods, including over the air antennas and directly from Univision over the Internet, the current state of our negotiations with Univision and the duration of the absence of these Univision channels from our programming lineups, this removal may be permanent. We lost approximately 367,000 net DISH TV subscribers during the three months ended September 30, 2018 compared to the loss of approximately 220,000 net DISH TV subscribers during the same period in 2017. This increase in net DISH TV subscriber losses primarily resulted from lower gross new DISH TV subscriber activations and a higher DISH TV churn rate, described below. We added approximately 26,000 net Sling TV subscribers during the three months ended September 30, 2018 compared to the addition of approximately 236,000 net Sling TV subscribers during the same period in 2017. This decrease in net Sling TV subscriber additions is primarily related to a higher number of customer disconnects on a larger Sling TV subscriber base, including the impact from Univision's removal of certain of its channels from our programming lineup, discussed above, and to increased competition, including competition from other OTT service providers.

Our DISH TV churn rate for the three months ended September 30, 2018 was 2.11% compared to 1.82% for the same period in 2017. Our DISH TV churn rate for the three months ended September 30, 2018 was negatively impacted by Univision's removal of certain of its channels from our programming lineup, discussed above, partially offset by the positive impact from our increased emphasis on acquiring and retaining higher quality subscribers. Our DISH TV churn rate continues to be adversely impacted by external factors, such as, among other things, increased competitive pressures, including aggressive marketing, bundled discount offers combining broadband, video and/or wireless services and other discounted promotional offers, as well as cord cutting. Our DISH TV churn rate is also impacted by internal factors, such as, among other things, our ability to consistently provide outstanding customer service, price increases, programming interruptions in connection with the scheduled expiration of certain programming carriage contracts, our ability to control piracy and other forms of fraud and the level of our retention efforts.

During the three months ended September 30, 2018, we activated approximately 294,000 gross new DISH TV subscribers compared to approximately 402,000 gross new DISH TV subscribers during the same period in 2017, a decrease of 26.9%. This decrease in our gross new DISH TV subscriber activations was primarily impacted by increased competitive pressures, including aggressive marketing and retention efforts, bundled discount offers combining broadband, video and/or wireless services and other discounted promotional offers, Univision's removal of certain of its channels from our programming lineup, discussed above, as well as stricter customer acquisition policies for our DISH TV subscribers, including an increased emphasis on acquiring higher quality subscribers.

We cannot predict with any certainty the impact to our net Pay-TV subscriber additions, gross new DISH TV subscriber activations, and DISH TV subscriber churn rate resulting from programming interruptions or threatened programming interruptions that may occur in the future. As a result, we may at times suffer from periods of lower net Pay-TV subscriber additions or higher net Pay-TV subscriber losses.

We have not always met our own standards for performing high-quality installations, effectively resolving subscriber issues when they arise, answering subscriber calls in an acceptable timeframe, effectively communicating with our subscriber base, reducing calls driven by the complexity of our business, improving the reliability of certain systems and subscriber equipment and aligning the interests of certain independent third-party retailers and installers to provide high-quality service. Most of these factors have affected both gross new DISH TV subscriber activations as well as DISH TV subscriber churn rate. Our future gross new DISH TV subscriber activations and our DISH TV subscriber churn rate may be negatively impacted by these factors, which could in turn adversely affect our revenue.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

Subscriber-related revenue. “Subscriber-related revenue” totaled \$3.349 billion for the three months ended September 30, 2018, a decrease of \$202 million or 5.7% compared to the same period in 2017. The decrease in “Subscriber-related revenue” from the same period in 2017 was primarily related to a lower average Pay-TV subscriber base and the decrease in Pay-TV ARPU discussed below. We expect these trends in “Subscriber-related revenue” to continue.

Pay-TV ARPU. Pay-TV ARPU was \$86.29 during the three months ended September 30, 2018 versus \$87.23 during the same period in 2017. The \$0.94 or 1.1% decrease in Pay-TV ARPU was primarily attributable to an increase in Sling TV subscribers as a percentage of our total Pay-TV subscriber base, a shift in DISH TV programming package mix to lower priced programming packages and a decrease in revenue related to pay-per-view boxing events. Sling TV subscribers on average purchase lower priced programming services than DISH TV subscribers, and therefore, the increase in Sling TV subscribers had a negative impact on Pay-TV ARPU. We expect this trend to continue. These decreases were partially offset by DISH TV programming package price increases in February 2018 and an increase in revenue per subscriber related to our Sling TV services.

Subscriber-related expenses. “Subscriber-related expenses” totaled \$2.124 billion during the three months ended September 30, 2018, a decrease of \$114 million or 5.1% compared to the same period in 2017. The decrease in “Subscriber-related expenses” was primarily attributable to a lower average Pay-TV subscriber base and a decrease in variable costs per subscriber. Programming costs per subscriber during the three months ended September 30, 2018 increased due to rate increases in certain of our programming contracts, including the renewal of certain contracts at higher rates, particularly for local broadcast channels. This increase was offset by the reduction in programming costs per subscriber related to Univision’s removal of certain of its channels from our programming lineup and lower costs related to pay-per-view boxing events. “Subscriber-related expenses” represented 63.4% and 63.0% of “Subscriber-related revenue” during the three months ended September 30, 2018 and 2017, respectively. The increase in this expense to revenue ratio primarily resulted from lower subscriber-related revenue discussed above.

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. Our “Subscriber-related expenses” have and will continue to face further upward pressure from price increases and the renewal of long-term programming contracts on less favorable pricing terms. In addition, our programming expenses will increase to the extent we are successful in growing our Pay-TV subscriber base.

Subscriber acquisition costs. “Subscriber acquisition costs” totaled \$187 million during the three months ended September 30, 2018, a decrease of \$132 million or 41.4% compared to the same period in 2017. This change was primarily attributable to fewer gross new DISH TV subscriber activations and a \$41 million positive impact related to the adoption of ASU 2014-09. Subsequent to the adoption of ASU 2014-09 on January 1, 2018, we capitalize payments made under certain sales incentive programs, including those with our independent third-party retailers and other independent third-party distributors. These amounts were previously expensed as “Subscriber acquisition costs.” See Note 2 in the Notes to our Condensed Consolidated Financial Statements for further information.

DISH TV SAC. DISH TV SAC was \$721 during the three months ended September 30, 2018 compared to \$750 during the same period in 2017, a decrease of \$29 or 3.9%. This change was primarily attributable to a decrease in advertising costs per activation partially offset by an increase in hardware costs per activation. The increase in hardware costs per activation primarily resulted from a lower percentage of remanufactured receivers being activated on new subscriber accounts.

During both the three months ended September 30, 2018 and 2017, the amount of equipment capitalized under our lease program for new DISH TV subscribers totaled \$37 million.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

To remain competitive, we upgrade or replace subscriber equipment periodically as technology changes, and the costs associated with these upgrades may be substantial. To the extent technological changes render a portion of our existing equipment obsolete, we would be unable to redeploy all returned equipment and consequently would realize less benefit from the DISH TV SAC reduction associated with redeployment of that returned lease equipment.

Our “Subscriber acquisition costs” and “DISH TV SAC” may materially increase in the future to the extent that we, among other things, transition to newer technologies, introduce more aggressive promotions, or provide greater equipment subsidies. See further information under “*Liquidity and Capital Resources – Subscriber Acquisition and Retention Costs.*”

Depreciation and amortization. “Depreciation and amortization” expense totaled \$175 million during the three months ended September 30, 2018, a \$34 million or 16.3% decrease compared to the same period in 2017. This change was primarily driven by a decrease in depreciation expense from equipment leased to new and existing DISH TV subscribers.

Earnings before interest, taxes, depreciation and amortization. EBITDA was \$743 million during the three months ended September 30, 2018, an increase of \$62 million or 9.1% compared to the same period in 2017. The increase in EBITDA was primarily attributable to the changes in operating income discussed above, excluding the change in “Depreciation and amortization.” These changes in operating income include a \$41 million positive impact related to the adoption of ASU 2014-09. The following table reconciles EBITDA to the accompanying financial statements.

	For the Three Months Ended	
	September 30,	
	2018	2017
	(In thousands)	
EBITDA	\$ 742,597	\$ 680,746
Interest, net	5,112	2,870
Income tax (provision) benefit, net	(140,690)	(176,917)
Depreciation and amortization	(175,285)	(209,324)
Net income (loss) attributable to DISH Network	\$ 431,734	\$ 297,375

EBITDA is not a measure determined in accordance with accounting principles generally accepted in the United States (“GAAP”) and should not be considered a substitute for operating income, net income or any other measure determined in accordance with GAAP. EBITDA is used as a measurement of operating efficiency and overall financial performance and we believe it to be a helpful measure for those evaluating companies in the pay-TV industry. Conceptually, EBITDA measures the amount of income generated each period that could be used to service debt, pay taxes and fund capital expenditures. EBITDA should not be considered in isolation or as a substitute for measures of performance prepared in accordance with GAAP.

Income tax (provision) benefit, net. Our income tax provision was \$141 million during the three months ended September 30, 2018, a decrease of \$36 million compared to the same period in 2017. The decrease in the provision was primarily related to a decrease in our effective tax rate as a result of the Tax Cuts and Jobs Act of 2017 (the “Tax Reform Act”), which, among other things, lowered the federal statutory corporate tax rate from 35% to 21%, partially offset by the increase in “Income (loss) before income taxes.”

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

Nine Months Ended September 30, 2018 Compared to the Nine Months Ended September 30, 2017.

Statements of Operations Data	For the Nine Months Ended September 30,		Variance	
	2018	2017	Amount	%
	(In thousands)			
Revenue:				
Subscriber-related revenue	\$ 10,191,820	\$ 10,809,419	\$ (617,599)	(5.7)
Equipment sales and other revenue	122,653	98,028	24,625	25.1
Total revenue	10,314,473	10,907,447	(592,974)	(5.4)
Costs and Expenses:				
Subscriber-related expenses	6,468,176	6,723,704	(255,528)	(3.8)
% of Subscriber-related revenue	63.5 %	62.2 %		
Satellite and transmission expenses	436,565	500,171	(63,606)	(12.7)
% of Subscriber-related revenue	4.3 %	4.6 %		
Cost of sales - equipment and other	108,052	71,672	36,380	50.8
Subscriber acquisition costs	566,151	884,305	(318,154)	(36.0)
General and administrative expenses	529,701	497,801	31,900	6.4
% of Total revenue	5.1 %	4.6 %		
Litigation expense	—	295,695	(295,695)	*
Depreciation and amortization	540,959	625,625	(84,666)	(13.5)
Total costs and expenses	8,649,604	9,598,973	(949,369)	(9.9)
Operating income (loss)	1,664,869	1,308,474	356,395	27.2
Other Income (Expense):				
Interest income	30,461	33,979	(3,518)	(10.4)
Interest expense, net of amounts capitalized	(11,235)	(59,809)	48,574	81.2
Other, net	12,097	48,173	(36,076)	(74.9)
Total other income (expense)	31,323	22,343	8,980	40.2
Income (loss) before income taxes	1,696,192	1,330,817	365,375	27.5
Income tax (provision) benefit, net	(397,987)	(566,715)	168,728	29.8
Effective tax rate	23.5 %	42.6 %		
Net income (loss)	1,298,205	764,102	534,103	69.9
Less: Net income (loss) attributable to noncontrolling interests, net of tax	60,194	50,896	9,298	18.3
Net income (loss) attributable to DISH Network	\$ 1,238,011	\$ 713,206	\$ 524,805	73.6
Other Data:				
Pay-TV subscribers, as of period end (in millions)	12.656	13.203	(0.547)	(4.1)
DISH TV subscribers, as of period end (in millions)	10.286	11.151	(0.865)	(7.8)
Sling TV subscribers, as of period end (in millions)	2.370	2.052	0.318	15.5
Pay-TV subscriber additions (losses), net (in millions)	(0.586)	(0.323)	(0.263)	(81.4)
DISH TV subscriber additions (losses), net (in millions)	(0.744)	(0.874)	0.130	14.9
Sling TV subscriber additions (losses), net (in millions)	0.158	0.551	(0.393)	(71.3)
Pay-TV ARPU	\$ 85.43	\$ 87.01	\$ (1.58)	(1.8)
DISH TV subscriber additions, gross (in millions)	0.869	1.078	(0.209)	(19.4)
DISH TV churn rate	1.68 %	1.85 %	(0.17)%	(9.2)
DISH TV SAC	\$ 730	\$ 772	\$ (42)	(5.4)
EBITDA	\$ 2,157,731	\$ 1,931,376	\$ 226,355	11.7

*Percentage is not meaningful.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

Pay-TV subscribers. We lost approximately 586,000 net Pay-TV subscribers during the nine months ended September 30, 2018 compared to the loss of approximately 323,000 net Pay-TV subscribers during the same period in 2017. The increase in net Pay-TV subscriber losses during the nine months ended September 30, 2018 resulted from fewer net Sling TV subscriber additions, partially offset by fewer net DISH TV subscriber losses. Our net Pay-TV subscriber additions during the nine months ended September 30, 2018 were negatively impacted by Univision’s removal of certain of its channels from our DISH TV and Sling TV programming lineup. We lost approximately 744,000 net DISH TV subscribers during the nine months ended September 30, 2018 compared to the loss of approximately 874,000 net DISH TV subscribers during the same period in 2017. This decrease in net DISH TV subscriber losses primarily resulted from a lower DISH TV chum rate, partially offset by lower gross new DISH TV subscriber activations. We added approximately 158,000 net Sling TV subscribers during the nine months ended September 30, 2018 compared to the addition of approximately 551,000 net Sling TV subscribers during the same period in 2017. This decrease in net Sling TV subscriber additions is primarily related to a higher number of customer disconnects on a larger Sling TV subscriber base, including the impact from Univision’s removal of certain of its channels from our programming lineup, discussed above, and to increased competition, including competition from other OTT service providers.

Our DISH TV chum rate for the nine months ended September 30, 2018 was 1.68% compared to 1.85% for the same period in 2017. This decrease primarily resulted from our increased emphasis on acquiring and retaining higher quality subscribers. While our Pay-TV chum rate improved during the nine months ended September 30, 2018, it was negatively impacted by Univision’s removal of certain of its channels from our programming lineup, discussed above. Our DISH TV chum rate is also impacted by external factors, such as, among other things, increased competitive pressures, including aggressive marketing, bundled discount offers combining broadband, video and/or wireless services and other discounted promotional offers, as well as cord cutting. Our DISH TV chum rate is also impacted by internal factors, such as, among other things, our ability to consistently provide outstanding customer service, price increases, programming interruptions in connection with the scheduled expiration of certain programming carriage contracts, our ability to control piracy and other forms of fraud and the level of our retention efforts.

During the nine months ended September 30, 2018, we activated approximately 869,000 gross new DISH TV subscribers compared to approximately 1.078 million gross new DISH TV subscribers during the same period in 2017, a decrease of 19.4%. This decrease in our gross new DISH TV subscriber activations was primarily impacted by increased competitive pressures, including aggressive marketing and retention efforts, bundled discount offers combining broadband, video and/or wireless services and other discounted promotional offers, as well as stricter customer acquisition policies for our DISH TV subscribers, including an increased emphasis on acquiring higher quality subscribers.

During September 2017, Hurricane Maria caused extraordinary damage in Puerto Rico and the U.S. Virgin Islands, resulting in a widespread loss of power and infrastructure. Given the devastation and loss of power, substantially all customers in those areas were unable to receive our service as of September 30, 2017. In an effort to ensure customers would not be charged for services they were unable to receive, we proactively paused service for those customers. Accordingly, we removed approximately 145,000 subscribers, representing all of our subscribers in Puerto Rico and the U.S. Virgin Islands, from our ending Pay-TV subscriber count as of September 30, 2017. During the fourth quarter 2017, 75,000 of these customers reactivated. During the nine months ended September 30, 2018, 30,000 of these customers reactivated. We incurred certain costs in connection with the re-activation of these returning subscribers, and accordingly, these returning customers were recorded as gross new DISH TV subscriber activations with the corresponding costs recorded in “Subscriber acquisition costs” on our Condensed Consolidated Statements of Operations and Comprehensive Income (Loss) and/or in “Purchases of property and equipment” on our Condensed Consolidated Statements of Cash Flows. We cannot predict when the remaining subscribers in Puerto Rico and the U.S. Virgin Islands discussed above will be able to receive service, how many will return or when they may return to active subscriber status, and there can be no assurance that they will return. Although we continue to assess the potential impact of Hurricane Maria on our subscriber base, the impact of the hurricane did not have a material effect on our overall financial position or results of operations.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

Subscriber-related revenue. “Subscriber-related revenue” totaled \$10.192 billion for the nine months ended September 30, 2018, a decrease of \$618 million or 5.7% compared to the same period in 2017. The decrease in “Subscriber-related revenue” from the same period in 2017 was primarily related to a lower average Pay-TV subscriber base and the decrease in Pay-TV ARPU discussed below. We expect these trends in “Subscriber-related revenue” to continue.

Pay-TV ARPU. Pay-TV ARPU was \$85.43 during the nine months ended September 30, 2018 versus \$87.01 during the same period in 2017. The \$1.58 or 1.8% decrease in Pay-TV ARPU was primarily attributable to an increase in Sling TV subscribers as a percentage of our total Pay-TV subscriber base, a shift in DISH TV programming package mix to lower priced programming packages and a decrease in revenue related to pay-per-view boxing events. Sling TV subscribers on average purchase lower priced programming services than DISH TV subscribers, and therefore, the increase in Sling TV subscribers had a negative impact on Pay-TV ARPU. We expect this trend to continue. These decreases were partially offset by DISH TV programming package price increases in February 2018 and 2017 and an increase in revenue per subscriber related to our Sling TV services.

Subscriber-related expenses. “Subscriber-related expenses” totaled \$6.468 billion during the nine months ended September 30, 2018, a decrease of \$256 million or 3.8% compared to the same period in 2017. The decrease in “Subscriber-related expenses” was primarily attributable to a lower average Pay-TV subscriber base and a decrease in variable costs per subscriber, partially offset by higher programming costs per subscriber. The increase in programming costs per subscriber was driven by rate increases in certain of our programming contracts, including the renewal of certain contracts at higher rates, particularly for local broadcast channels. “Subscriber-related expenses” represented 63.5% and 62.2% of “Subscriber-related revenue” during the nine months ended September 30, 2018 and 2017, respectively. The increase in this expense to revenue ratio primarily resulted from lower subscriber-related revenue and higher programming costs per subscriber, discussed above.

Subscriber acquisition costs. “Subscriber acquisition costs” totaled \$566 million during the nine months ended September 30, 2018, a decrease of \$318 million or 36.0% compared to the same period in 2017. This change was primarily attributable to fewer gross new DISH TV subscriber activations and a \$125 million positive impact related to the adoption of ASU 2014-09. Subsequent to the adoption of ASU 2014-09 on January 1, 2018, we capitalize payments made under certain sales incentive programs, including those with our independent third-party retailers and other independent third-party distributors. These amounts were previously expensed as “Subscriber acquisition costs.” See Note 2 in the Notes to our Condensed Consolidated Financial Statements for further information.

DISH TV SAC. DISH TV SAC was \$730 during the nine months ended September 30, 2018 compared to \$772 during the same period in 2017, a decrease of \$42 or 5.4%. This change was primarily attributable to a decrease in advertising costs per activation and the reactivation of subscribers in Puerto Rico during the nine months ended September 30, 2018. The expenses we incurred for the reactivation of subscribers in Puerto Rico were lower on a per subscriber basis than those incurred for the remaining gross new DISH TV subscriber activations during the nine months ended September 30, 2018.

During the nine months ended September 30, 2018 and 2017, the amount of equipment capitalized under our lease program for new DISH TV subscribers totaled \$92 million and \$114 million, respectively. This decrease in capital expenditures under our lease program for new DISH TV subscribers resulted primarily from fewer gross new DISH TV subscriber activations discussed above.

General and administrative expenses. “General and administrative expenses” totaled \$530 million during the nine months ended September 30, 2018, a \$32 million or 6.4% increase compared to the same period in 2017. This change was primarily related to the positive impact from the reimbursement of legal fees during 2017.

Litigation expense. “Litigation expense” related to certain significant legal settlements, judgments or accruals totaled \$296 million during the nine months ended September 30, 2017. See Note 9 in the Notes to the Condensed Consolidated Financial Statements for further discussion.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

Depreciation and amortization. “Depreciation and amortization” expense totaled \$541 million during the nine months ended September 30, 2018, a \$85 million or 13.5% decrease compared to the same period in 2017. This change was primarily driven by a decrease in depreciation expense from equipment leased to new and existing DISH TV subscribers.

Interest expense, net of amounts capitalized. “Interest expense, net of amounts capitalized” totaled \$11 million during the nine months ended September 30, 2018, a decrease of \$49 million compared to the same period in 2017. This decrease was primarily related to a reduction in interest expense resulting from debt redemptions during 2018 and 2017 and an increase of \$9 million in capitalized interest principally associated with the commercialization of our wireless spectrum. On June 14, 2017, the FCC issued an order granting our application to acquire the 600 MHz Licenses. The addition of the carrying amount of these licenses, together with the carrying amount of current wireless spectrum licenses, exceeded the amount of long-term debt and capital lease obligations on our Condensed Consolidated Balance Sheets since June 14, 2017. Therefore, beginning June 14, 2017, materially all of our interest expense is being capitalized. See Note 2 in the Notes to our Condensed Consolidated Financial Statements for further information.

Earnings before interest, taxes, depreciation and amortization. EBITDA was \$2.158 billion during the nine months ended September 30, 2018, an increase of \$226 million or 11.7% compared to the same period in 2017. The increase in EBITDA was primarily attributable to the changes in operating income discussed above, excluding the change in “Depreciation and amortization.” These changes in operating income include an \$121 million positive impact related to the adoption of ASU 2014-09. EBITDA for the nine months ended September 30, 2017 was negatively impacted by “Litigation expense” of \$296 million. The following table reconciles EBITDA to the accompanying financial statements.

	For the Nine Months Ended	
	September 30,	
	2018	2017
	(In thousands)	
EBITDA	\$ 2,157,731	\$ 1,931,376
Interest, net	19,226	(25,830)
Income tax (provision) benefit, net	(397,987)	(566,715)
Depreciation and amortization	(540,959)	(625,625)
Net income (loss) attributable to DISH Network	\$ 1,238,011	\$ 713,206

EBITDA is not a measure determined in accordance with GAAP and should not be considered a substitute for operating income, net income or any other measure determined in accordance with GAAP. EBITDA is used as a measurement of operating efficiency and overall financial performance and we believe it to be a helpful measure for those evaluating companies in the pay-TV industry. Conceptually, EBITDA measures the amount of income generated each period that could be used to service debt, pay taxes and fund capital expenditures. EBITDA should not be considered in isolation or as a substitute for measures of performance prepared in accordance with GAAP.

Income tax (provision) benefit, net. Our income tax provision was \$398 million during the nine months ended September 30, 2018, a decrease of \$169 million compared to the same period in 2017. The decrease in the provision was primarily related to a decrease in our effective tax rate as a result of the Tax Reform Act, which, among other things, lowered the federal statutory corporate tax rate from 35% to 21%, partially offset by the increase in “Income (loss) before income taxes.” In addition, our effective tax rate was negatively impacted by \$255 million of “Litigation expense” related to the FTC Action during the nine months ended September 30, 2017, as any eventual payments of this expense may not be deductible for income tax purposes. The tax deductibility of any eventual payments may change based upon, among other things, further developments in the FTC Action, including final adjudication of the FTC Action.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

LIQUIDITY AND CAPITAL RESOURCES

Cash, Cash Equivalents and Current Marketable Investment Securities

We consider all liquid investments purchased within 90 days of their maturity to be cash equivalents. See Note 5 in the Notes to our Condensed Consolidated Financial Statements for further information regarding our marketable investment securities. As of September 30, 2018, our cash, cash equivalents and current marketable investment securities totaled \$1.865 billion compared to \$1.981 billion as of December 31, 2017, a decrease of \$116 million. This decrease in cash, cash equivalents and current marketable investment securities primarily resulted from the redemption and repurchases of our 4 1/4% Senior Notes due 2018 with an aggregate principal balance of \$1.026 billion, \$62 million of repurchases of our 7 7/8% Senior Notes due 2019 in open market trades and capital expenditures of \$1.048 billion (including capitalized interest related to FCC authorizations), partially offset by cash generated from operating activities of \$2.016 billion.

Cash Flow

The following discussion highlights our cash flow activities during the nine months ended September 30, 2018.

Cash flows from operating activities

For the nine months ended September 30, 2018, we reported “Net cash flows from operating activities” of \$2.016 billion primarily attributable to \$2.135 billion of “Net income (loss)” adjusted to exclude the non-cash items for “Depreciation and amortization” expense, “Realized and unrealized losses (gains) on investments” and “Deferred tax expense (benefit).”

Cash flows from investing activities

For the nine months ended September 30, 2018, we reported outflows from “Net cash flows from investing activities” of \$1.158 billion primarily related to capital expenditures of \$1.048 billion (including capitalized interest related to FCC authorizations) and \$127 million in net purchases of marketable investment securities. The capital expenditures included \$765 million of capitalized interest related to FCC authorizations, \$174 million for new and existing DISH TV subscriber equipment and \$109 million of other corporate capital expenditures.

Cash flows from financing activities

For the nine months ended September 30, 2018, we reported outflows from “Net cash flows from financing activities” of \$1.108 billion primarily related to the redemption and repurchases of our 4 1/4% Senior Notes due 2018 with an aggregate principal balance of \$1.026 billion and \$62 million of repurchases of our 7 7/8% Senior Notes due 2019 in open market trades.

Free Cash Flow

We define free cash flow as “Net cash flows from operating activities” less “Purchases of property and equipment,” and “Capitalized interest related to FCC authorizations,” as shown on our Condensed Consolidated Statements of Cash Flows. We believe free cash flow is an important liquidity metric because it measures, during a given period, the amount of cash generated that is available to repay debt obligations, make investments (including strategic wireless investments), fund acquisitions and for certain other activities. Free cash flow is not a measure determined in accordance with GAAP and should not be considered a substitute for “Operating income,” “Net income,” “Net cash flows from operating activities” or any other measure determined in accordance with GAAP. Since free cash flow includes investments in operating assets, we believe this non-GAAP liquidity measure is useful in addition to the most directly comparable GAAP measure “Net cash flows from operating activities.”

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

Free cash flow can be significantly impacted from period to period by changes in “Net income (loss)” adjusted to exclude certain non-cash charges, operating assets and liabilities, “Purchases of property and equipment,” and “Capitalized interest related to FCC authorizations.” These items are shown in the “Net cash flows from operating activities” and “Net cash flows from investing activities” sections on our Condensed Consolidated Statements of Cash Flows included herein. Operating asset and liability balances can fluctuate significantly from period to period and there can be no assurance that free cash flow will not be negatively impacted by material changes in operating assets and liabilities in future periods, since these changes depend upon, among other things, management’s timing of payments and control of inventory levels, and cash receipts. In addition to fluctuations resulting from changes in operating assets and liabilities, free cash flow can vary significantly from period to period depending upon, among other things, net Pay-TV subscriber additions (losses), subscriber revenue, DISH TV subscriber churn, subscriber acquisition and retention costs including amounts capitalized under our equipment lease programs for DISH TV subscribers, operating efficiencies, increases or decreases in purchases of property and equipment, expenditures related to the commercialization of our wireless spectrum and other factors. In addition, certain changes resulting from the Tax Reform Act, including, among other things, limitations on the deductibility of interest, may increase cash paid for income taxes and decrease free cash flow in 2018.

The following table reconciles free cash flow to “Net cash flows from operating activities.”

	For the Nine Months Ended	
	September 30,	
	2018	2017
	(In thousands)	
Free cash flow	\$ 967,690	\$ 1,133,932
Add back:		
Purchases of property and equipment (including capitalized interest related to FCC authorizations)	1,048,044	1,093,151
Net cash flows from operating activities	<u>\$ 2,015,734</u>	<u>\$ 2,227,083</u>

Operational Liquidity

We make general investments in property such as satellites, set-top boxes, information technology and facilities that support our overall Pay-TV business. We also will need to make significant additional investments or partner with others to, among other things, commercialize, build-out, and integrate our wireless spectrum licenses and related assets. Moreover, since we are primarily a subscriber-based company, we also make subscriber-specific investments to acquire new subscribers and retain existing subscribers. While the general investments may be deferred without impacting the business in the short-term, the subscriber-specific investments are less discretionary. Our overall objective is to generate sufficient cash flow over the life of each subscriber to provide an adequate return against the upfront investment. Once the upfront investment has been made for each subscriber, the subsequent cash flow is generally positive, but there can be no assurances that over time we will recoup or earn a return on the upfront investment.

There are a number of factors that impact our future cash flow compared to the cash flow we generate at a given point in time. The first factor is our DISH TV churn rate and how successful we are at retaining our current Pay-TV subscribers. To the extent we lose Pay-TV subscribers from our existing base, the positive cash flow from that base is correspondingly reduced. The second factor is how successful we are at maintaining our subscriber-related margins. To the extent our “Subscriber-related expenses” grow faster than our “Subscriber-related revenue,” the amount of cash flow that is generated per existing subscriber is reduced. Recently, our subscriber-related margins have been reduced by, among other things, a shift to lower priced Pay-TV programming packages and higher programming costs. The third factor is the rate at which we acquire new subscribers. The faster we acquire new subscribers, the more our positive ongoing cash flow from existing subscribers is offset by the negative upfront cash flow associated with acquiring new subscribers. Conversely, the slower we acquire subscribers, the more our operating cash flow is enhanced in that period.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

Finally, our future cash flow is impacted by the rate at which we make general investments (including significant investments in wireless), incur expenditures related to the commercialization of our wireless licenses (including any expenditures associated with the deployment of our wireless networks), incur litigation expense, and any cash flow from financing activities. Recently, declines in our Pay-TV subscriber base and subscriber-related margins have negatively impacted our cash flow, which has been partially offset by the short-term benefit of less upfront cash outflows related to acquiring fewer new subscribers. There can be no assurance that the short-term benefit of less upfront cash outflows related to acquiring fewer new subscribers will continue in the future.

Subscriber Base

We lost approximately 586,000 net Pay-TV subscribers during the nine months ended September 30, 2018 compared to the loss of approximately 323,000 net Pay-TV subscribers during the same period in 2017. The increase in net Pay-TV subscriber losses during the nine months ended September 30, 2018 resulted from fewer net Sling TV subscriber additions, partially offset by fewer net DISH TV subscriber losses. Our net Pay-TV subscriber additions during the nine months ended September 30, 2018 were negatively impacted by Univision’s removal of certain of its channels from our DISH TV and Sling TV programming lineup. We lost approximately 744,000 net DISH TV subscribers during the nine months ended September 30, 2018 compared to the loss of approximately 874,000 net DISH TV subscribers during the same period in 2017. This decrease in net DISH TV subscriber losses primarily resulted from a lower DISH TV chum rate, partially offset by lower gross new DISH TV subscriber activations. We added approximately 158,000 net Sling TV subscribers during the nine months ended September 30, 2018 compared to the addition of approximately 551,000 net Sling TV subscribers during the same period in 2017. This decrease in net Sling TV subscriber additions is primarily related to a higher number of customer disconnects on a larger Sling TV subscriber base, including the impact from Univision’s removal of certain of its channels from our programming lineup, discussed above, and to increased competition, including competition from other OTT service providers. See “Results of Operations” above for further information.

Subscriber Acquisition and Retention Costs

We incur significant upfront costs to acquire subscribers, including advertising, independent third-party retailer incentives, payments made to third-parties, equipment subsidies, installation services, and/or new customer promotions. While we attempt to recoup these upfront costs over the lives of their subscription, there can be no assurance that we will be successful in achieving that objective. With respect to our DISH TV services, we employ business rules such as minimum credit requirements for prospective customers and contractual commitments to receive service for a minimum term. We strive to provide outstanding customer service to increase the likelihood of customers keeping their Pay-TV services over longer periods of time. Subscriber acquisition costs for Sling TV subscribers are significantly lower than those for DISH TV subscribers. Our subscriber acquisition costs may vary significantly from period to period.

We incur significant costs to retain our existing DISH TV subscribers, mostly as a result of upgrading their equipment to next generation receivers, primarily including our Hopper receivers, and by providing retention credits. As with our subscriber acquisition costs, our retention upgrade spending includes the cost of equipment and installation services. In certain circumstances, we also offer programming at no additional charge and/or promotional pricing for limited periods to existing customers in exchange for a contractual commitment to receive service for a minimum term. A component of our retention efforts includes the installation of equipment for customers who move. Our DISH TV subscriber retention costs may vary significantly from period to period.

Seasonality

Historically, the first half of the year generally produces fewer gross new DISH TV subscriber activations than the second half of the year, as is typical in the pay-TV industry. In addition, the first and fourth quarters generally produce a lower DISH TV chum rate than the second and third quarters. However, in recent years, as the pay-TV industry has matured we and our competitors increasingly must seek to attract a greater proportion of new subscribers from each other’s existing subscriber bases rather than from first-time purchasers of pay-TV services. As a result, seasonality has recently had a smaller impact on gross new DISH TV subscribers and the DISH TV chum rate.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

However, we cannot provide assurance that this will continue in the future. Our net Sling TV subscriber additions are impacted by, among other things, certain major sporting events and other major television events. We expect our new Sling TV subscriber additions to potentially demonstrate seasonality patterns as our Sling TV services become more established. We expect to be able to assess the seasonality patterns once we have a longer subscriber history.

Satellites

Operation of our DISH TV services requires that we have adequate satellite transmission capacity for the programming that we offer. Moreover, current competitive conditions require that we continue to expand our offering of new programming. 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 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 cause us to expend a significant portion of our cash to acquire or lease additional satellite capacity.

Security Systems

Increases in theft of our signal or our competitors’ signals could, in addition to reducing gross new subscriber activations, also cause subscriber chum to increase. We use Security Access Devices in our DBS receiver systems to control access to authorized programming content. Furthermore, for our Sling TV services, we encrypt programming content and use digital rights management software to, among other things, prevent unauthorized access to our programming content. Our signal encryption has been compromised in the past and may be compromised in the future even though we continue to respond with significant investment in security measures, such as Security Access Device replacement programs and updates in security software, that are intended to make signal theft more difficult. It has been our prior experience that security measures may only be effective for short periods of time or not at all and that we remain susceptible to additional signal theft. We expect that future replacements of Security Access Devices may be necessary to keep our system secure. We cannot ensure that we will be successful in reducing or controlling theft of our programming content and we may incur additional costs in the future if our system’s security is compromised.

Covenants and Restrictions Related to our Long-Term Debt

We are subject to the covenants and restrictions set forth in the indentures related to our long-term debt. In particular, the indentures related to our outstanding senior notes issued by DISH DBS Corporation (“DISH DBS”) contain restrictive covenants that, among other things, impose limitations on the ability of DISH DBS and its restricted subsidiaries to: (i) incur additional indebtedness; (ii) enter into sale and leaseback transactions; (iii) pay dividends or make distributions on DISH DBS’ capital stock or repurchase DISH DBS’ capital stock; (iv) make certain investments; (v) create liens; (vi) enter into certain transactions with affiliates; (vii) merge or consolidate with another company; and (viii) transfer or sell assets. Should we fail to comply with these covenants, all or a portion of the debt under the senior notes and our other long-term debt could become immediately payable. The senior notes also provide that the debt may be required to be prepaid if certain change-in-control events occur. In addition, the 3 3/8% Convertible Notes due 2026 (the “Convertible Notes due 2026”) and the 2 3/8% Convertible Notes due 2024 (the “Convertible Notes due 2024,” and collectively with the Convertible Notes due 2026, the “Convertible Notes”) provide that, if a “fundamental change” (as defined in the related indenture) occurs, holders may require us to repurchase for cash all or part of their Convertible Notes. As of the date of filing of this Quarterly Report on Form 10-Q, we and DISH DBS were in compliance with the covenants and restrictions related to our respective long-term debt.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

Other

We are also vulnerable to fraud, particularly in the acquisition of new subscribers. While we are addressing the impact of subscriber fraud through a number of actions, there can be no assurance that we will not continue to experience fraud, which could impact our subscriber growth and churn. Economic weakness may create greater incentive for signal theft, piracy and subscriber fraud, which could lead to higher subscriber churn and reduced revenue.

Obligations and Future Capital Requirements

We expect to fund our future working capital, capital expenditures and debt service requirements from cash generated from operations, existing cash, cash equivalents and marketable investment securities balances, and cash generated through raising additional capital. The amount of capital required to fund our future working capital and capital expenditure needs varies, depending on, among other things, the rate at which we acquire new subscribers and the cost of subscriber acquisition and retention, including capitalized costs associated with our new and existing subscriber equipment lease programs. The majority of our capital expenditures for 2018, with the exception of the commercialization of our existing wireless spectrum licenses, including capital expenditures associated with our wireless projects and potential purchase of additional wireless spectrum licenses discussed below, are expected to be driven by the costs associated with subscriber premises equipment. These expenditures are necessary to operate and maintain our DISH TV services. Consequently, we consider them to be non-discretionary. The amount of capital required will also depend on the levels of investment necessary to support potential strategic initiatives that may arise from time to time. Our capital expenditures vary depending on the number of satellites leased or under construction at any point in time, and could increase materially as a result of increased competition, significant satellite failures, or economic weakness and uncertainty. Our DISH TV subscriber base has been declining and there can be no assurance that our DISH TV subscriber base will not continue to decline and that the pace of such decline will not accelerate. In the event that our DISH TV subscriber base continues to decline, it will have a material adverse long-term effect on our cash flow. In addition, the rulings in the Telemarketing litigation requiring us to pay up to an aggregate amount of \$341 million and imposing certain injunctive relief against us, if upheld, would have a material adverse effect on our cash, cash equivalents and marketable investment securities balances and our business operations. These factors, including a reduction in our available future cash flows, could require that we raise additional capital in the future.

Volatility in the financial markets has made it more difficult at times for issuers of high-yield indebtedness, such as us, to access capital markets at acceptable terms. These developments may have a significant effect on our cost of financing and our liquidity position.

Wireless

Since 2008, we have 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 Spectrum

We have 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. In March 2017, we notified the FCC that we plan to deploy a next-generation 5G-capable network, focused on supporting narrowband IoT. The first phase of our network deployment will be completed by March 2020, with subsequent phases to be completed thereafter. As of September 30, 2018, we had entered into vendor contracts with multiple parties for, among other things, base stations, chipsets, modules, tower leases, the core network, RF design, and deployment services. Among other things, initial RF design in connection with the first phase of our network deployment is now complete, and we are in the process of identifying and securing tower sites. The core network has been installed and commissioned. Based on our vendors’ current forecast, we plan to install the first base stations on sites later this year, and to continue deployment until complete. We may also determine that additional wireless spectrum licenses may be required to commercialize our

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

wireless business and to compete with other wireless service providers. We currently expect expenditures for our wireless projects to be between \$500 million and \$1.0 billion through 2020. We currently expect expenditures for the second phase of our network deployment to be approximately \$10 billion. We 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. 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 we consider our options for the commercialization of our wireless spectrum, we 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. We may also determine that additional wireless spectrum licenses may be required to commercialize our wireless business and to compete with other wireless service providers. See Note 9 “*Commitments and Contingencies – DISH Network Spectrum*” in the Notes to our Condensed Consolidated Financial Statements for further information.

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

During 2015, through our wholly-owned subsidiaries American II and American III, we initially made over \$10 billion in certain non-controlling investments in Northstar Spectrum, the parent company of Northstar Wireless, and in SNR HoldCo, the parent company of SNR Wireless, respectively. On October 27, 2015, the FCC granted certain AWS-3 Licenses to Northstar Wireless and to SNR Wireless, respectively, which are recorded in “FCC authorizations” on our Condensed Consolidated Balance Sheets. Under the applicable accounting guidance in ASC 810, Northstar Spectrum and SNR HoldCo are considered variable interest entities and, based on the characteristics of the structure of these entities and in accordance with the applicable accounting guidance, we consolidate these entities into our financial statements. See Note 2 in the Notes to our Condensed Consolidated Financial Statements for further information.

The AWS-3 Licenses are subject to certain interim and final build-out requirements. 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 us, 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 Northstar Re-Auction Payment and the SNR Re-Auction Payment for the AWS-3 licenses retained by the FCC. Depending upon the nature and scope of such commercialization, build-out, integration efforts, regulatory compliance, and potential Northstar Re-Auction Payment and SNR Re-Auction Payment, any loans, equity contributions or partnerships could vary significantly. See Note 9 “*Commitments and Contingencies – DISH Network Non-Controlling Investments in the Northstar Entities and the SNR Entities Related to AWS-3 Wireless Spectrum Licenses*” in the Notes to our Condensed Consolidated Financial Statements for further information.

We may need to raise significant additional capital in the future to fund the efforts described above, which may not be available on acceptable terms or at all. There can be no assurance that we, the Northstar Entities and/or the SNR Entities will be able to develop and implement business models that will realize a return on these wireless spectrum licenses or that we, the Northstar Entities and/or the SNR Entities will be able to profitably deploy the assets represented by these wireless spectrum licenses, which may affect the carrying amount of these assets and our future financial condition or results of operations. See Note 9 “*Commitments and Contingencies*” in the Notes to our Condensed Consolidated Financial Statements for further information.

Availability of Credit and Effect on Liquidity

The ability to raise capital has generally existed for us despite economic weakness and uncertainty. While modest fluctuations in the cost of capital will not likely impact our current operational plans, significant fluctuations could have a material adverse effect on our business, results of operations and financial condition.

Item 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS – Continued

Debt Maturity

During the first quarter 2018, we repurchased \$57 million of our 4 1/4% Senior Notes due 2018 in open market trades. The remaining balance of \$969 million were redeemed on April 2, 2018.

During the nine months ended September 30, 2018, we repurchased \$62 million of our 7 7/8% Senior Notes due 2019 in open market trades. The remaining balance of \$1.338 billion matures on September 1, 2019. We expect to fund the remaining obligation from cash and marketable investment securities balances at that time. But, depending on market conditions, we may refinance the remaining obligation in whole or in part.

Off-Balance Sheet Arrangements

Other than the “Guarantees” disclosed in Note 9 in the Notes to our Condensed Consolidated Financial Statements, we generally do not engage in off-balance sheet financing activities.

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 will be 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.

The effective date of this standard for us will be January 1, 2019, at which time we plan to adopt the standard using the modified retrospective approach with a cumulative-effect adjustment to opening retained earnings recorded at the beginning of the period of adoption. Therefore, upon adoption, we will recognize and measure leases without revising comparative period information or disclosure. The modified retrospective approach includes a number of optional practical expedients that entities may elect to apply. While our assessment of the effect of ASU 2016-02 is ongoing, we currently believe the most significant impact will be the recognition of right of use assets and lease liabilities on our Condensed Consolidated Balance Sheets. The multidisciplinary team we have established to implement this guidance is currently collecting and validating lease data and implementing our selected lease accounting system.

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 Condensed 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 Condensed Consolidated Financial Statements and related disclosure

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Item 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

There have been no material changes in our market risk during the nine months ended September 30, 2018. For additional information, see Item 7A. Quantitative and Qualitative Disclosures About Market Risk in Part II of our Annual Report on Form 10-K for the year ended December 31, 2017.

Item 4. CONTROLS AND PROCEDURES

Conclusion regarding disclosure controls and procedures

Under the supervision and with the participation of our management, including our Chief Executive Officer and Principal Financial Officer, we evaluated the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934) as of the end of the period covered by this report. Based upon that evaluation, our Chief Executive Officer and Principal Financial Officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this report.

Changes in internal control over financial reporting

There has been no change in our internal control over financial reporting (as defined in Rule 13a-15(f) under the Securities Exchange Act of 1934) during our most recent fiscal quarter that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

Item 1. LEGAL PROCEEDINGS

See Note 9 “*Commitments and Contingencies – Litigation*” in the Notes to our Condensed Consolidated Financial Statements for information regarding certain legal proceedings in which we are involved.

Item 1A. RISK FACTORS

Item 1A, “Risk Factors,” of our Annual Report on Form 10-K for the year ended December 31, 2017 and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2018 include a detailed discussion of our risk factors.

Item 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

Issuer Purchases of Equity Securities

The following table provides information regarding repurchases of our Class A common stock from July 1, 2018 through September 30, 2018:

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Programs	Maximum Approximate Dollar Value of Shares that May Yet be Purchased Under the Programs (1)
				(In thousands, except share data)
July 1, 2018 - July 31, 2018	—	\$ —	—	\$ 1,000,000
August 1, 2018 - August 31, 2018	—	\$ —	—	\$ 1,000,000
September 1, 2018 - September 30, 2018	—	\$ —	—	\$ 1,000,000
Total	—	\$ —	—	\$ 1,000,000

- (1) Our Board of Directors previously authorized stock repurchases of up to \$1.0 billion of our outstanding Class A common stock through and including December 31, 2018. On October 29, 2018, our Board of Directors extended this authorization such that we are currently authorized to repurchase up to \$1.0 billion of our outstanding Class A common stock through and including December 31, 2019. Purchases under our repurchase program may be made through open market purchases, privately negotiated transactions, or Rule 10b5-1 trading plans, subject to market

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conditions and other factors. We may elect not to purchase the maximum amount of shares allowable under this program and we may also enter into additional share repurchase programs authorized by our Board of Directors.

Item 6. EXHIBITS

(a) *Exhibits.*

- 10.1 [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 Quarterly Report on Form 10-Q of DISH Network for the quarter ended September 30, 2018 filed on November 7, 2018, formatted in eXtensible Business Reporting Language ("XBRL"): (i) Condensed Consolidated Balance Sheets, (ii) Condensed Consolidated Statements of Operations and Comprehensive Income (Loss), (iii) Condensed Consolidated Statements of Cash Flows and (iv) related notes to these financial statements.

Incorporated by reference.

* Filed herewith.

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

SIGNATURES

Pursuant to the requirements 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 NETWORK CORPORATION

By: /s/ W. Erik Carlson

W. Erik Carlson

President and Chief Executive Officer

(Duly Authorized Officer)

By: /s/ Paul W. Orban

Paul W. Orban

Senior Vice President and Chief Accounting Officer

(Principal Financial Officer)

Date: November 7, 2018

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
Section 302 Certification

I, W. Erik Carlson, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of DISH Network 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: November 7, 2018

/s/ W. Erik Carlson

President and Chief Executive Officer

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER
Section 302 Certification

I, Paul W. Orban, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of DISH Network 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: November 7, 2018

/s/ Paul W. Orban
Principal Financial Officer

CERTIFICATION OF CHIEF EXECUTIVE OFFICER
Section 906 Certification

Pursuant to 18 U.S.C. § 1350, the undersigned officer of DISH Network Corporation (the "Company") hereby certifies that to the best of his knowledge the Company's Quarterly Report on Form 10-Q for the three months ended September 30, 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: November 7, 2018

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 PRINCIPAL FINANCIAL OFFICER
Section 906 Certification

Pursuant to 18 U.S.C. § 1350, the undersigned officer of DISH Network Corporation (the "Company") hereby certifies that to the best of his knowledge the Company's Quarterly Report on Form 10-Q for the three months ended September 30, 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: November 7, 2018

Name: /s/ Paul W. Orban

Title: Principal 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.
