

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 8-K/A
(Amendment No. 1)

CURRENT REPORT
Pursuant to Section 13 OR 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported) **April 4, 2019**

COMMSCOPE HOLDING COMPANY, INC.
(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of incorporation)

001-36146
(Commission File Number)

27-4332098
(IRS Employer Identification No.)

1100 CommScope Place, SE, Hickory, North Carolina
(Address of principal executive offices)

28602
(Zip Code)

Registrant's telephone number, including area code **(828) 324-2200**

Not Applicable
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
- Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
- Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
- Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.12b-2 of this chapter).

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.

Explanatory Note

On April 4, 2019, CommScope Holding Company, Inc. (the “Company”) filed a Current Report on Form 8-K (the “Initial Form 8-K”) to report the completion of its acquisition of ARRIS International plc (“ARRIS”), a public limited company organized under the laws of England and Wales (the “Acquisition”), pursuant to the terms of the previously announced bid conduct agreement, dated as of November 8, 2018, by and between CommScope and ARRIS (as amended by the First Amendment thereto, the “Bid Conduct Agreement”). The Company is filing this Amendment No. 1 to amend the Initial Form 8-K to include the historical financial statements of ARRIS and pro forma condensed combined financial information required to be filed under Item 9.01 of Form 8-K. The disclosure included in the Initial Form 8-K otherwise remains unchanged.

Item 9.01 Financial Statements and Exhibits

(a) Financial statements of business acquired.

The audited consolidated balance sheets of ARRIS as of December 31, 2018 and 2017, the related consolidated statements of income, consolidated statements of comprehensive income, consolidated statements of cash flows, and consolidated statements of stockholders’ equity, for each of the years in the three year period ended December 31, 2018, and the related notes are included as Exhibit 99.1 to this Form 8-K/A and are incorporated herein by reference. The consent of ARRIS’ independent accountant is filed as Exhibit 23.1 to this Form 8-K/A and is incorporated herein by reference.

(b) Pro forma financial information.

The unaudited pro forma condensed combined statement of operations for the year ended December 31, 2018, giving effect to the Acquisition as if it occurred on January 1, 2018, the unaudited pro forma condensed combined balance sheet as of December 31, 2018, giving effect to the Acquisition as if it occurred on December 31, 2018, and the related notes are included as Exhibit 99.2 to this Form 8-K/A and are incorporated herein by reference.

(d) Exhibits.

Exhibit Number:	Description
23.1	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm for ARRIS.
99.1	ARRIS’s audited consolidated financial statements as of December 31, 2018 and 2017, for the years ended December 31, 2018, 2017 and 2016 and related notes.
99.2	The unaudited pro forma condensed combined statement of operations for the year ended December 31, 2018, giving effect to the Acquisition as if it occurred on January 1, 2018, the unaudited pro forma condensed combined balance sheet as of December 31, 2018, giving effect to the Acquisition as if it occurred on December 31, 2018, and the related notes.

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 hereunto duly authorized.

Date: April 9, 2019

CommScope Holding Company, Inc.

By: /s/ Alexander W. Pease

Name: Alexander W. Pease

Title: Executive Vice President and Chief Financial Officer

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the Registration Statement Form S-8 No. 333-230720 pertaining to the ARRIS International plc 2016 Stock Incentive Plan and Form S-8 No. 333-191959 pertaining to the CommScope Holding Company, Inc. 2013 Long-Term Incentive Plan, Amended and Restated CommScope Holding Company, Inc. 2011 Incentive Plan, Amended and Restated CommScope, Inc. 2006 Long-Term Incentive Plan, Amended and Restated CommScope, Inc. 1997 Long-Term Incentive Plan, Andrew Corporation Management Incentive Program, and the Options Granted to Non-Employee Directors Outside of a Plan of our report dated March 1, 2019, with respect to the consolidated financial statements of ARRIS International plc included in this Current Report on Form 8-K/A.

/s/ Ernst & Young LLP

Atlanta, Georgia

April 9, 2019

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Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of ARRIS International plc

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of ARRIS International plc as of December 31, 2018 and 2017, and the related consolidated statements of income, comprehensive income, cash flows and stockholders' equity for each of the three years in the period ended December 31, 2018, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2018 and 2017, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2018, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2018, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated March 1, 2019 expressed an unqualified opinion thereon.

Basis for opinion

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

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ Ernst & Young LLP

We have served as the Company's auditor since 1992.

Atlanta, Georgia
March 1, 2019

ARRIS INTERNATIONAL PLC
CONSOLIDATED BALANCE SHEETS

	December 31,	
	2018	2017
	(in thousands, except share and per share data)	
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 729,933	\$ 487,573
Short-term investments, at fair value	5,538	23,874
Total cash, cash equivalents and short-term investments	735,471	511,447
Accounts receivable (net of allowances for doubtful accounts of \$7,442 in 2018 and \$10,230 in 2017)	1,225,975	1,218,089
Other receivables	222,368	157,845
Inventories (net of reserves of \$63,581 in 2018 and \$69,459 in 2017)	740,205	825,211
Prepaid income taxes	17,391	28,351
Prepays	26,978	26,644
Other current assets	144,251	145,953
Total current assets	3,112,639	2,913,540
Property, plant and equipment (net of accumulated depreciation of \$391,177 in 2018 and \$367,954 in 2017)	287,671	372,467
Goodwill	2,240,642	2,278,512
Intangible assets (net of accumulated amortization of \$1,988,963 in 2018 and \$1,599,573 in 2017)	1,403,659	1,771,362
Investments	45,295	71,082
Deferred income taxes	175,405	115,436
Other assets	62,558	101,858
Total assets	\$ 7,327,869	\$ 7,624,257
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 1,288,827	\$ 1,206,656
Accrued compensation, benefits and related taxes	141,565	155,966
Accrued warranty	36,988	44,507
Deferred revenue	111,254	115,224
Current portion of long-term debt and financing lease obligation	83,862	83,559
Income taxes payable	2,964	6,244
Other accrued liabilities	302,307	321,113
Total current liabilities	1,967,767	1,933,269
Long-term debt and financing lease obligation, net of current portion	2,032,382	2,116,244
Accrued pension	25,303	42,637
Noncurrent deferred revenue	58,744	54,090
Noncurrent income taxes	119,047	144,665
Deferred income taxes	46,784	68,888
Other noncurrent liabilities	71,994	80,430
Total liabilities	4,322,021	4,440,223
Stockholders' equity:		
Ordinary shares, nominal value £0.01 per share, 174.0 million and 185.2 million shares issued and outstanding in 2018 and 2017, respectively	2,623	2,768
Capital in excess of par value	3,468,728	3,387,128
Accumulated deficit	(466,165)	(225,881)
Accumulated other comprehensive (loss) income	(13,345)	4,552
Total ARRIS International plc stockholders' equity	2,991,841	3,168,567
Stockholders' equity attributable to noncontrolling interest	14,007	15,467
Total stockholders' equity	3,005,848	3,184,034
Total liabilities and stockholders' equity	\$ 7,327,869	\$ 7,624,257

See accompanying notes to the consolidated financial statements.

ARRIS INTERNATIONAL PLC
CONSOLIDATED STATEMENTS OF INCOME

For the Years Ended December 31,

	2018	2017	2016
	(in thousands, except per share data)		
Net sales	\$ 6,742,640	\$ 6,614,392	\$ 6,829,118
Cost of sales	4,823,781	4,948,153	5,121,501
Gross margin	1,918,859	1,666,239	1,707,617
Operating expenses:			
Selling, general, and administrative expenses	667,053	475,369	454,190
Research and development expenses	644,038	539,094	584,909
Amortization of intangible assets	383,561	375,407	397,464
Impairment of goodwill and intangible assets	3,400	55,000	2,200
Integration, acquisition, restructuring and other costs, net	41,922	98,357	158,137
Total operating expenses	1,739,974	1,543,227	1,596,900
Operating income	178,885	123,012	110,717
Other expense (income):			
Interest expense	95,086	87,088	79,817
Loss on investments	308	11,066	21,194
Loss (gain) on foreign currency	3,834	9,757	(13,982)
Interest income	(8,341)	(7,975)	(4,395)
Other (income) expense, net	5,056	1,873	3,991
Income before income taxes	82,942	21,203	24,092
Income tax (benefit) expense	(24,344)	(44,921)	15,131
Consolidated net income	107,286	66,124	8,961
Net loss attributable to noncontrolling interest	(6,454)	(25,903)	(9,139)
Net income attributable to ARRIS International plc.	\$ 113,740	\$ 92,027	\$ 18,100
Net income per ordinary share ⁽¹⁾ :			
Basic	\$ 0.63	\$ 0.49	\$ 0.09
Diluted	\$ 0.62	\$ 0.49	\$ 0.09
Weighted average ordinary shares:			
Basic	180,147	187,133	190,701
Diluted	182,041	189,616	192,185

(1) Calculated based on net income attributable to shareowners of ARRIS International plc.

See accompanying notes to the consolidated financial statements.

ARRIS INTERNATIONAL PLC
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	For the Years Ended December 31,		
	2018	2017	2016
	(in thousands)		
Consolidated net income	\$ 107,286	\$ 66,124	\$ 8,961
Available-for-sale securities:			
Unrealized gain (loss) on available-for-sale securities, net of tax of \$0, \$(288) and \$6 in 2018, 2017 and 2016, respectively	-	471	(11)
Reclassification adjustments recognized in net income, net of tax of \$(2), \$(33) and \$(9) in 2018, 2017 and 2016, respectively	6	54	15
Net change in available-for-sale	<u>6</u>	<u>525</u>	<u>4</u>
Derivative instruments:			
Unrealized gain on derivative instruments, net of tax of \$(30), \$(1,797) and \$(472) in 2018, 2017 and 2016, respectively	1,091	3,790	1,631
Reclassification adjustments recognized in net income, net of tax of \$77, \$(535) and \$(1,691) in 2018, 2017 and 2016, respectively	(2,774)	1,128	5,821
Net change in derivative instruments	<u>(1,683)</u>	<u>4,918</u>	<u>7,452</u>
Pension obligations:			
Unrealized gain (loss) on pension obligations, net of tax of \$(825), \$1,391 and \$1,425 in 2018, 2017 and 2016, respectively	2,338	(2,487)	(2,934)
Reclassification adjustments recognized in net income, net of tax of \$(2,209), \$(170) and \$(155) in 2018, 2017 and 2016, respectively	6,263	304	319
Net change in pension obligations	<u>8,601</u>	<u>(2,183)</u>	<u>(2,615)</u>
Cumulative translation adjustments	<u>(24,110)</u>	<u>(2,050)</u>	<u>11,096</u>
Other comprehensive (loss) income, net of tax	<u>(17,186)</u>	<u>1,210</u>	<u>15,937</u>
Comprehensive income	<u>90,100</u>	<u>67,334</u>	<u>24,898</u>
Comprehensive loss attributable to noncontrolling interest	<u>(6,411)</u>	<u>(25,954)</u>	<u>(9,127)</u>
Comprehensive income attributable to ARRIS International plc	<u>\$ 96,511</u>	<u>\$ 93,288</u>	<u>\$ 34,025</u>

See accompanying notes to the consolidated financial statements.

ARRIS INTERNATIONAL PLC
CONSOLIDATED STATEMENTS OF CASH FLOWS

	Years Ended December 31,		
	2018	2017	2016
	(in thousands)		
Operating activities:			
Consolidated net income	\$ 107,286	\$ 66,124	\$ 8,961
Depreciation	83,686	88,195	90,577
Amortization of acquired intangible assets	391,074	382,416	404,475
Amortization of deferred financing fees and debt discount	4,811	7,960	7,705
Deferred income taxes	(68,812)	(74,465)	(148,418)
Foreign currency remeasurement of deferred taxes	(477)	9,360	(16,356)
Stock-based compensation expense	85,233	81,557	60,049
Impairment of goodwill and intangible assets	3,400	55,000	2,200
Provision for non-cash warrants	-	-	30,159
Provision (recovery) for doubtful accounts	(462)	(566)	1,386
(Gain) loss on disposal of property, plant & equipment and other	(10,774)	7,063	8,706
Loss on investments and other	517	11,066	21,194
Excess income tax benefits from stock-based compensation plans	-	-	(20,085)
Changes in operating assets and liabilities, net of effect of acquisitions and dispositions:			
Accounts receivable	(22,138)	175,930	(258,677)
Other receivables	(64,523)	(84,652)	(31,517)
Inventories	81,815	(224,582)	282,644
Accounts payable and accrued liabilities	24,948	49,988	(178,086)
Prepays and other, net	33,418	(16,583)	98,263
Net cash provided by operating activities	<u>649,002</u>	<u>533,811</u>	<u>363,180</u>
Investing activities:			
Purchases of investments	(64,454)	(68,493)	(141,543)
Sales of investments	79,473	165,301	25,931
Proceeds from dividends on equity investments	9,966	826	2,903
Purchases of property, plant and equipment	(63,616)	(78,072)	(66,760)
Proceeds from sale of property, plant and equipment	74,425	-	29
Purchases of intangible assets	(423)	(6,422)	(5,526)
Acquisition, net of cash acquired	(1,152)	(760,802)	(340,118)
Other, net	9,352	-	575
Net cash provided by (used in) investing activities	<u>43,571</u>	<u>(747,662)</u>	<u>(524,509)</u>

See accompanying notes to the consolidated financial statements.

ARRIS INTERNATIONAL PLC
CONSOLIDATED STATEMENTS OF CASH FLOWS (Continued)

	Years Ended December 31,		
	2018	2017	2016
	(in thousands)		
Financing activities:			
Proceeds from issuance of shares, net	\$ 20,186	\$ 17,469	\$ 12,885
Repurchase of shares	(353,079)	(196,965)	(178,035)
Excess income tax benefits from stock-based compensation plans	-	-	20,085
Repurchase of shares to satisfy employee minimum tax withholdings	(23,781)	(26,573)	(17,925)
Proceeds from issuance of debt	-	175,847	800,000
Payment of debt obligations	(87,500)	(244,009)	(319,750)
Payment of financing lease obligation	(870)	(777)	(758)
Payment for account receivable financing facility	-	-	(23,546)
Payment for deferred financing fees and debt discount	-	(5,961)	(2,304)
Contribution from noncontrolling interest	2,257	3,500	-
Net cash (used in) provided by financing activities	(442,787)	(277,469)	290,652
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(7,520)	(1,256)	(12,097)
Net (decrease) increase in cash, cash equivalents and restricted cash	242,266	(492,576)	117,226
Cash, cash equivalents and restricted cash at beginning of year	489,116	981,692	864,466
Cash, cash equivalents and restricted cash at end of year	<u>\$ 731,382</u>	<u>\$ 489,116</u>	<u>\$ 981,692</u>
Supplemental cash flow information:			
Interest paid during the year	<u>\$ 90,140</u>	<u>\$ 80,791</u>	<u>\$ 71,127</u>
Income taxes paid during the year	<u>\$ 34,325</u>	<u>\$ 34,053</u>	<u>\$ 111,524</u>
Non-cash investing and financing activities: debt assumed in acquisition	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 263,795</u>

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the Consolidated Balance Sheets to the total of the same such amounts show above (in thousands). Amounts included in restricted cash represent those required to be set aside by contractual agreements, such as rent deposits with landlords, deposits with certain government agencies and cash collateral with certain financial institutions.

	December 31, 2018	December 31, 2017	December 31, 2016
Cash and cash equivalents	\$ 729,933	\$ 487,573	\$ 980,123
Restricted cash included in other current assets	776	23	149
Restricted cash included in other assets	673	1,520	1,420
Total	<u>\$ 731,382</u>	<u>\$ 489,116</u>	<u>\$ 981,692</u>

See accompanying notes to the consolidated financial statements.

ARRIS INTERNATIONAL PLC
CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(in thousands)

	Common Stock	Ordinary Shares	Capital in Excess of Par Value	Treasury Stock	Retained Earnings (Deficit)	Accumulated Other Comprehensive Income (Loss)	Total ARRIS International plc stockholders' equity	Non- controlling Interest	Total stockholders' equity
Balance, January 1, 2016	\$ 1,790	\$ -	\$ 1,777,276	\$ (331,329)	\$ 358,823	\$ (12,646)	\$ 1,793,914	\$ 47,047	\$ 1,840,961
Net income (loss)	-	-	-	-	18,100	-	18,100	(9,139)	8,961
Other comprehensive income (loss), net of tax	-	-	-	-	-	15,937	15,937	13	15,950
Compensation under stock award plans	-	-	60,049	-	-	-	60,049	-	60,049
Effect of combination on ARRIS Group	(1,439)	2,173	(734)	-	-	-	-	-	-
Cancellation of treasury stock	(351)	-	-	331,329	(330,978)	-	-	-	-
Issuance of ordinary shares for Pace combination	-	703	1,433,987	-	-	-	1,434,690	-	1,434,690
Issuance of ordinary shares and other, net	-	32	(2,242)	-	-	-	(2,210)	-	(2,210)
Provision for warrants	-	-	30,159	-	-	-	30,159	-	30,159
Repurchase of ordinary shares, net	-	(77)	-	-	(177,958)	-	(178,035)	-	(178,035)
Income tax benefit related to vesting of restricted share units	-	-	18,929	-	-	-	18,929	-	18,929
Other	-	-	(2,717)	-	-	-	(2,717)	-	(2,717)
Balance, December 31, 2016	\$ -	\$ 2,831	\$ 3,314,707	\$ -	\$ (132,013)	\$ 3,291	\$ 3,188,816	\$ 37,921	\$ 3,226,737
Net income (loss)	-	-	-	-	92,027	-	92,027	(25,903)	66,124
Other comprehensive income, net of tax	-	-	-	-	-	1,261	1,261	(51)	1,210
Compensation under stock award plans	-	-	81,557	-	-	-	81,557	-	81,557
Contribution from noncontrolling interest	-	-	-	-	-	-	-	3,500	3,500
Issuance of ordinary shares and other, net	-	33	(9,136)	-	-	-	(9,103)	-	(9,103)
Repurchase of ordinary shares, net	-	(96)	-	-	(196,869)	-	(196,965)	-	(196,965)
Cumulative effect adjustment to opening balance ⁽¹⁾	-	-	-	-	10,974	-	10,974	-	10,974
Balance, December 31, 2017	\$ -	\$ 2,768	\$ 3,387,128	\$ -	\$ (225,881)	\$ 4,552	\$ 3,168,567	\$ 15,467	\$ 3,184,034
Net income (loss)	-	-	-	-	113,740	-	113,740	(6,454)	107,286
Other comprehensive income, net of tax	-	-	-	-	-	(17,229)	(17,229)	43	(17,186)
Compensation under stock award plans	-	-	85,233	-	-	-	85,233	-	85,233
Contribution from noncontrolling interest	-	-	-	-	-	-	-	2,257	2,257
Issuance of ordinary shares and other, net	-	38	(3,633)	-	-	-	(3,595)	-	(3,595)
Repurchase of ordinary shares, net	-	(183)	-	-	(352,896)	-	(353,079)	-	(353,079)
Cumulative effect adjustment to opening balance ⁽¹⁾	-	-	-	-	(1,128)	(668)	(1,796)	2,694	898
Balance, December 31, 2018	\$ -	\$ 2,623	\$ 3,468,728	\$ -	\$ (466,165)	\$ (13,345)	\$ 2,991,841	\$ 14,007	\$ 3,005,848

(1) Cumulative adjustment related to the adoption of accounting standards.

See accompanying notes to the consolidated financial statements.

Note 1. Organization and Basis of Presentation

ARRIS International plc (together with its consolidated subsidiaries and consolidated venture, except as the context otherwise indicates, “ARRIS” or the “Company”) is a global entertainment, communications, and networking technology and solutions provider, headquartered in Suwanee, Georgia. The Company operates in three business segments, Customer Premises Equipment, Network & Cloud, and Enterprise Networks (See Note 11 *Segment Information* of Notes to the Consolidated Financial Statements for additional details), specializing in enabling service providers including cable, telephone, and digital broadcast satellite operators and media programmers to deliver media, voice, IP data services, and Wi-Fi to their subscribers and enabling enterprises to experience constant, wireless and wired connectivity across complex and varied networking environments. ARRIS is a leader in set-tops, digital video and Internet Protocol Television distribution systems, broadband access infrastructure platforms, associated data and voice Customer Premises Equipment, and wired and wireless enterprise networking. The Company’s solutions are complemented by a broad array of services including technical support, repair and refurbishment, and systems design and integration.

Note 2. Summary of Significant Accounting Policies

(a) *Consolidation*

The accompanying consolidated financial statements include the accounts of the Company and its wholly owned subsidiaries and consolidated venture in which the Company owns more than 50% of the outstanding voting shares of the entity. Intercompany accounts and transactions have been eliminated in consolidation. The consolidated financial statements are prepared in accordance with accounting principles generally accepted in the United States (U.S. GAAP), and our reporting currency is the United States Dollar (USD).

(b) *Use of Estimates*

The preparation of the consolidated financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the amounts reported in the consolidated financial statements and accompanying notes. Actual results could differ from those estimates.

(c) *Reclassifications*

Certain prior year amounts in the financial statements and notes have been reclassified to conform to the fiscal year 2018 presentation.

(d) *Cash, Cash Equivalents, and Investments*

Cash and cash equivalents

ARRIS’s cash and excess cash are primarily held in demand deposit accounts and money market accounts.

The Company classifies all investments that are readily convertible to known amounts of cash and have stated maturities of three months or less from the date of purchase as cash equivalents and those with stated maturities of greater than three months as marketable securities.

Marketable securities

The Company determines the appropriate classification of our investments in marketable securities at the time of purchase and reevaluates such designation at each balance sheet date. The Company has classified and accounted for its marketable debt securities as available-for-sale. These securities are carried at fair value, and the unrealized gains and losses, net of taxes, are reported as a component of stockholders’ equity, except for unrealized losses determined to be other-than-temporary, which are recorded within loss on investments in the Consolidated Statements of Income. The Company determines any realized gains or losses on the sale of marketable debt securities on a specific identification method and records such gains and losses as a gain or loss on investment in the Consolidated Statements of Income.

Non-marketable investments

The Company accounts for non-marketable equity investments through which the Company exercises significant influence but does not have control over the investee under the equity method. Beginning on January 1, 2018, non-marketable equity securities not accounted for under the equity method are either carried at fair value or under the measurement alternative upon the adoption of accounting standard *Recognition and Measurement of Financial Assets and Financial Liabilities*. Under the measurement alternative, the carrying value is measured at cost, less any impairment, plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments of the same issuer. Adjustments are determined primarily based on a market approach as of the transaction date. The Company classifies its non-marketable investments as long-term investments on the Consolidated Balance Sheets as those investments do not have stated contractual maturity dates.

Impairment of investments

The Company periodically reviews its debt and equity investments for impairment. For debt securities the Company considers the duration, severity and the reason for the decline in security value; whether it is more likely than not that the Company will be required to sell the security before recovery of its amortized cost basis; or if the amortized cost basis cannot be recovered as a result of credit losses. If any impairment is considered other-than-temporary, the Company will write down the security to its fair value and record the corresponding charge as a loss on investments. For equity securities the Company considers impairment indicators such as negative changes in industry and market conditions, financial performance, business prospects, and other relevant events and factors. If indicators exist and the fair value of the security is below the carrying amount, the Company writes down the security to fair value.

(e) Accounts Receivable and Allowance for Doubtful Accounts and Sales Returns

Accounts receivable are stated at amounts owed by the customers, net of allowance for doubtful accounts, sales returns and allowances. ARRIS establishes a reserve for doubtful accounts based upon the historical experience and leading market indicators in collecting accounts receivable. A majority of the accounts receivable are from a few large cable system operators and telecommunication companies, either with investment rated debt outstanding or with substantial financial resources and have favorable payment histories. If ARRIS was to have a collection problem with one of its major customers, it is possible the reserve will not be sufficient. ARRIS calculates the reserve for uncollectible accounts using a model that considers customer payment history, recent customer press releases, bankruptcy filings, if any, Dun & Bradstreet reports, and financial statement reviews. The calculation is reviewed by management to assess whether there needs to be an adjustment to the reserve for uncollectible accounts. The reserve is established through a charge to the provision and represents amounts of current and past due customer receivable balances of which management deems a loss to be both probable and estimable. Accounts receivable are charged to the allowance when determined to be no longer collectible.

ARRIS also establishes a reserve for sales returns and allowances. The reserve is an estimate of the impact of potential returns based upon historic trends.

The following table represents a summary of the changes in the reserve for allowance for doubtful accounts, and sales returns and allowances for fiscal 2018, 2017 and 2016 (in thousands):

	<u>2018</u>	<u>2017</u>	<u>2016</u>
Balance at beginning of fiscal year	\$ 10,230	\$ 15,253	\$ 9,975
(Credit) charges to expenses	(462)	(566)	1,386
(Write-offs) recoveries, net	(2,326)	(4,457)	3,892
Balance at end of fiscal year	<u>\$ 7,442</u>	<u>\$ 10,230</u>	<u>\$ 15,253</u>

(f) Inventories

Inventories are stated at the lower of cost or net realizable value. Inventory cost is determined on a first-in, first-out basis. The cost of work-in-process and finished goods is comprised of material, labor, and overhead.

(g) Revenue recognition

On January 1, 2018, the Company adopted the new accounting standard Revenue from Contracts with Customers using the modified retrospective transition method. The Company has elected to apply the new standard to contracts that were considered "open" as of January 1, 2018. Results for reporting periods beginning after January 1, 2018 are presented under the new accounting standard, while prior period amounts are not adjusted and continue to be reported in accordance with our historic accounting under previous guidance.

ARRIS generates revenue from of varying activities, including the delivery of stand-alone equipment, custom design and installation services, and bundled sales arrangements inclusive of equipment, software and services. Revenue is recognized when performance obligations in a contract are satisfied through the transfer of control of the good or service at the amount of consideration expected to be received. The following are required before revenue is recognized:

- Identify the contract with the customer. A variety of arrangements are considered contracts; however, these are usually the Master Purchase Agreement and amendments or customer purchase orders.
- Identify the performance obligations in the contract. Performance obligations are identified as promised goods or services in an arrangement that are distinct.
- Determine the transaction price. Transaction price is the amount of consideration the Company expects in exchange for transferring the promised goods or services. The consideration may include fixed or variable amounts or both.
- Allocate the transaction price to the performance obligations. The transaction price is allocated to the performance obligations on a relative standalone selling price basis.
- Recognize revenue as the performance obligations are satisfied. Revenue is recognized when transfer of control of the promised goods or services has occurred. This is either at a point in time or over time.

Revenue is deferred for any performance obligations in which payment is received or due prior to the transfer of control of the good or service.

Equipment - For the N&C and CPE segments, the Company provides customers with equipment that can be placed within various stages of a broadband system that enable delivery of telephony, video and high-speed data as well as outside plant construction and maintenance equipment. For the Enterprise segment, equipment sales include products for wireless and wired connections to data networks. For equipment sales, revenue is recognized when control of the product has transferred to the customer. This is generally at a point in time when products have been shipped, right to payment has normally been obtained, and risk of loss has been transferred. Additionally, based on historical experience, ARRIS has established reliable estimates related to sales returns and other allowances for discounts. These estimates are recorded as a reduction to revenue at the time the revenue is recognized.

The Company's equipment performance obligations typically include proprietary operating system software, which isn't considered separately identifiable. Therefore, ARRIS's equipment and their related software are considered one performance obligation.

Multiple Performance Obligation Arrangements - Certain customer transactions may include multiple performance obligations based on the bundling of equipment, software and services. When a multiple performance obligation arrangement exists, the transaction price is allocated to the performance obligations, and revenue is recognized on a relative standalone selling price basis upon transfer of control.

To determine the standalone selling price ("SSP"), the Company first looks to establish SSP through an observable price when the good or service is sold separately in similar circumstances. If SSP cannot be established through an observable price, the Company will estimate the SSP considering market conditions, customer specific factors, and customer class. The Company typically uses a combination of approaches to estimate SSP.

Software Sold Without Tangible Equipment - ARRIS sells functional intellectual property ("IP") licenses that typically do not meet the criteria to be recognized over time. Revenue from a functional IP license is most commonly recognized upon delivery of the license/software to the customer.

Standalone Services - Standalone service revenues result from a variety of offerings including:

- Maintenance and support services provided under annual service-level agreements with the Company's customers. These services represent stand-ready obligations that are recognized over time (on a straight-line basis over the contract period) because the customer simultaneously receives and consumes the benefits of the services as the services are performed.
- Professional services and other similar services consist primarily of "Day 2" services to help customers maximize their utilization of deployed ARRIS systems. The services are recognized over time because the customer simultaneously receives and consumes the benefits of the service as the services are performed.

- Installation services relate to the routine installation of equipment ordered by the customer at the customer's site and are distinct performance obligations from delivery of the related hardware. The associated revenues are recognized over time as the services are provided, which is generally a very short period (less than a couple of days).

Incentives - Customer incentive programs that include consideration, primarily rebates/credits to be used against future product purchases and certain volume discounts, are classified as variable consideration and reduce the overall transaction price.

Value Added Resellers (VAR), Distribution Channels and Retail - ARRIS recognizes revenue upon transfer of control of the goods or services to the VAR, Distributors and Retail customers. Sales through retail and distribution channels are made primarily under agreements or commitments allowing for limited rights of return, primarily for stock rotation purposes, and include various sales incentive programs, such as rebates, discounts, marketing development funds, price protection, and volume incentives.

Enterprise sales distributors are granted rights of stock rotation that are limited to contractually specified percentage of the distributors aggregate purchase volume. These stock rotation rights are subject to expiration 270 days from the time of product shipment by us to the distributor. Upon shipment of the product, ARRIS reduces revenue for an estimate of potential future stock rotation returns related to the current period product revenue. ARRIS analyzes historical returns, channel inventory levels, current economic trends and changes in customer demand for our products when evaluating the adequacy of the allowance for sales returns, namely stock rotation returns.

Regarding the various sales incentive programs, the Company can reasonably estimate its rebates, discounts and similar incentives due to an established sales history with its customers and records the estimated reserves and allowances at the time the related revenue is recognized. The Company recognizes marketing development funds at the later of when the related revenue is recognized, or the program is offered to the channel partner. ARRIS's sales incentives to its channel partners are recorded as a reduction to revenue.

ARRIS's estimated allowances for returns due to stock rotation and various sales incentive programs can vary from actual results that could materially impact our financial position and results of operations. Based on the relevant facts and circumstances, the Company believes the methodologies applied to calculate these reserves fairly represents our expected results at the point in time in which they are made.

(h) Shipping and Handling Fees

Shipping and handling costs for the years ended December 31, 2018, 2017, and 2016 were approximately \$13.2 million, \$12.6 million and \$4.3 million, respectively, and are classified in cost of sales.

(i) Taxes Collected from Customers and Remitted to Governmental Authorities

Taxes assessed by a government authority that are both imposed on and concurrent with specific revenue transactions between us and our customers are presented on a net basis in our Consolidated Statements of Income.

(j) Depreciation of Property, Plant and Equipment

The Company provides for depreciation of property, plant and equipment on the straight-line basis over estimated useful lives of 10 to 40 years for buildings and improvements, 2 to 10 years for machinery and equipment, and the shorter of the term of the lease or useful life for leasehold improvements. Included in depreciation expense is the amortization of landlord funded tenant improvements which amounted to \$14.0 million in 2018, \$12.1 million in 2017 and \$6.6 million in 2016. Depreciation expense, including amortization of capital leases, for the years ended December 31, 2018, 2017, and 2016 was approximately \$83.7 million, \$88.2 million, and \$90.6 million, respectively.

See Note 13 *Property, Plant and Equipment* of Notes to the Consolidated Financial Statements for further information on property, plant and equipment.

(k) Goodwill and Purchased Intangible Assets

Goodwill is tested for impairment annually as of October 1st, or when an indicator of impairment exists. As of October 1, 2017, we early adopted Accounting Standards Update ("ASU") 2017-04, Intangibles - Goodwill and Other (Topic 350) - Simplifying the Test for Goodwill Impairment ("ASU 2017-04"). ASU 2017-04 eliminated Step 2 of the goodwill impairment test in which an entity had to perform procedures to determine the fair value at the impairment testing date of its assets and liabilities. The standard does not change the guidance on completing Step 1 of the goodwill impairment test. In accordance with the new standard, we compare the fair value of our reporting units with the carrying amount, including goodwill. The Company recognizes an impairment charge for the amount by which the carrying amount exceeds a reporting unit's fair value, as applicable.

Purchased intangible assets with finite lives are carried at cost, less accumulated amortization. Amortization is computed over the estimated useful lives of the respective assets. Useful lives of identifiable intangible assets are determined after considering the specific facts and circumstances related to each intangible asset. Intangible assets that are deemed to have definite lives are amortized, primarily on a straight-line basis, over their useful lives, generally ranging from 1 to 13 years. Certain intangible assets are being amortized using an accelerated method, as an accelerated method best approximates the distribution of cash flows generated by the intangible assets. See “Long-Lived Assets” for the Company’s policy regarding impairment testing of purchased intangible assets with finite lives. Purchased intangible assets with indefinite lives are assessed for potential impairment annually or when events or circumstances indicate that their carrying amounts might be impaired.

See Note 6 *Goodwill and Other Intangible Assets* of Notes to the Consolidated Financial Statements for further information on goodwill and other intangible assets.

Long-Lived Assets

Long-lived assets, including property, plant and equipment and intangible assets with finite lives, that are held and used are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Determination of recoverability of long-lived assets is based on an estimate of the undiscounted future cash flows resulting from the use of the asset and its eventual disposition. To test for recovery, the Company groups assets (an “asset group”) in a manner that represents the lowest level for which identifiable cash flows are largely independent of the cash flows of other groups of assets and liabilities. If the sum of the expected future cash flows (undiscounted and pre-tax based upon policy decision) is less than the carrying amount, the Company recognizes an impairment loss. The impairment loss recognized is the amount by which the carrying amount of the asset or asset group exceeds the fair value. A variety of methodologies are used to determine the fair value of these assets, including discounted cash flow models, which are consistent with the assumptions the Company believes hypothetical marketplace participants would use. Measurement of an impairment loss for long-lived assets that management expects to hold and use is based on the difference between the fair value of the asset and its carrying value. Long-lived assets to be disposed of are reported at the lower of carrying amount or fair value less costs to sell.

(l) Advertising and Sales Promotion

Advertising and sales promotion costs are expensed as incurred. Advertising and sales promotion expense was approximately \$23.5 million, \$17.5 million, and \$19.6 million for the years ended December 31, 2018, 2017 and 2016, respectively.

(m) Research and Development

Research and development (“R&D”) costs are expensed as incurred. The expenditures include compensation costs, materials, other direct expenses, and an allocation of information technology, telecommunications, and facilities costs.

(n) Warranty

ARRIS provides warranties of various lengths to customers based on the specific product and the terms of individual agreements. For further discussion, see Note 10 *Guarantees* of the Notes to the Consolidated Financial Statements for further discussion.

(o) Income Taxes

ARRIS uses the liability method of accounting for income taxes, which requires recognition of temporary differences between financial statement and income tax bases of assets and liabilities, measured by enacted tax rates.

If necessary, the measurement of deferred tax assets is reduced by a valuation allowance to an amount that is more likely than not to be realized based on available evidence. ARRIS reports a liability for unrecognized tax benefits resulting from uncertain tax positions taken or expected to be taken in a tax return. The Company elects to account for Global Intangible Low-Taxed Income (“GILTI”) in the period the tax is incurred. The Company recognizes interest and penalties, if any, related to unrecognized tax benefits in Income tax (benefit) expense in the Consolidated Statements of Income. See Note 19 *Income Taxes* of Notes to the Consolidated Financial Statements for further discussion.

(p) Foreign Currency

A significant portion of the Company’s products are manufactured or assembled in Brazil, China, Mexico and Taiwan, and we have research and development centers in Canada, China, France, India, Ireland, Israel, Singapore, Sweden, Taiwan and United Kingdom. Sales into international markets have been and are expected in the future to be an important part of the Company’s business.

These foreign operations are subject to the usual risks inherent in conducting business abroad, including risks with respect to currency exchange rates, economic and political destabilization, restrictive actions and taxation by foreign governments, nationalization, the laws and policies of the United States affecting trade, foreign investment and loans, and foreign tax laws.

The financial position and results of operations of certain of the Company's international subsidiaries are measured using the local currency as the functional currency. Revenues and expenses of these subsidiaries are translated into U.S. dollars at average exchange rates prevailing during the period. Assets and liabilities of these subsidiaries are translated at the exchange rates as of the balance sheet date. Translation gains and losses are recorded in Accumulated other comprehensive (loss) income.

ARRIS has certain international customers who are billed in their local currency and certain international operations that procure in U.S. dollars. ARRIS also has certain predictable expenditures for international operations in local currency. Additionally, certain intercompany transactions are denominated in foreign currencies and subject to revaluation. The Company enters into forward or currency option contracts based on a percentage of expected foreign currency exposures. The percentage can vary, based on the predictability of the exposures denominated in the foreign currency. See Note 9 *Derivative Instruments and Hedging Activities* of Notes to the Consolidated Financial Statements for further discussion. Foreign currency transaction gains and losses are recognized in earnings when incurred.

(q) *Stock-Based Compensation*

See Note 20 *Stock-Based Compensation* of Notes to the Consolidated Financial Statements for further discussion of the Company's significant accounting policies related to stock-based compensation.

(r) *Concentrations of Credit Risk*

Financial instruments that potentially subject ARRIS to concentrations of credit risk consist principally of cash, cash equivalents and short-term investments, accounts receivable and derivatives. ARRIS places its temporary cash investments with high credit quality financial institutions. Concentrations with respect to accounts receivable occur as the Company sells primarily to large, well-established companies, including companies outside of the United States. The Company's credit policy generally does not require collateral from its customers. ARRIS closely monitors extensions of credit to other parties and, where necessary, utilizes common financial instruments to mitigate risk or requires cash on delivery terms. Overall financial strategies and the effect of using a hedge are reviewed periodically. As of December 31, 2018, two customers represented 13% and 12% of total accounts receivable. As of December 31, 2017, two customers represented 19% and 14% of total accounts receivable.

(s) *Fair Value*

Fair value is based on the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. U.S. GAAP establishes a fair value hierarchy that is based on the extent and level of judgment used to estimate the fair value of assets and liabilities. In order to increase consistency and comparability in fair value measurements, the FASB has established a fair value hierarchy that prioritizes observable and unobservable inputs used to measure fair value into three broad levels. An asset or liability's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the measurement of its fair value. The three levels of input defined by U.S. GAAP are as follows:

Level 1: Quoted prices (unadjusted) in active markets that are accessible at the measurement date for assets or liabilities.

Level 2: Observable prices that are based on inputs not quoted on active markets but corroborated by market data.

Level 3: Unobservable inputs are used when little or no market data is available.

The following methods and assumptions were used by the Company in estimating its fair value disclosures for financial instruments:

- Cash, cash equivalents, and short-term investments: The carrying amounts reported in the Consolidated Balance Sheets for cash, cash equivalents, and short-term investments approximate their fair values.
- Accounts receivable and accounts payable: The carrying amounts reported in the balance sheet for accounts receivable and accounts payable approximate their fair values.
- Marketable securities: The fair values for available-for-sale equity securities are based on quoted market prices or observable prices based on inputs not in active markets but corroborated by market data.

- **Non-marketable securities:** Non-marketable equity securities are subject to a periodic impairment review; however, there are no open-market valuations, and the impairment analysis requires significant judgment. This analysis includes assessment of the investee's financial condition, the business outlook for its products and technology, its projected results and cash flow, recent rounds of financing, and the likelihood of obtaining subsequent rounds of financing.
- **Senior secured credit facilities:** Comprised of term loans and a revolving credit facility of which the outstanding principal amount approximates fair value because of interest-bearing rates that are adjusted periodically, analysis of recent market conditions, prevailing interest rates and other Company specific factors.
- **Derivative instruments:** The carrying amounts reported in the balance sheet for derivative financial instruments reflect their estimated fair values, as the valuation inputs are based on quoted prices and market observable data of similar instruments.

(t) *Computer Software*

Internal-use software

The Company capitalizes costs associated with internally developed and/or purchased software systems for internal use that have reached the application development stage and meet recoverability tests. Capitalized costs include external direct costs of materials and services utilized in developing or obtaining internal-use software and payroll and payroll-related expenses for employees who are directly associated with and devote time to the internal-use software project. Capitalization of such costs begins when the preliminary project stage is complete and ceases no later than the point at which the project is substantially complete and ready for its intended purpose. These capitalized costs are amortized on a straight-line basis over periods of two to seven years, beginning when the asset is ready for its intended use. Capitalized costs are included in property, plant, and equipment on the Consolidated Balance Sheets.

External-use software

Research and development costs are charged to expense as incurred. ARRIS generally has not capitalized any such development costs because the costs incurred between the attainment of technological feasibility for the related software product through the date when the product is available for general release to customers has been insignificant.

Cloud Computing Arrangements

Implementation costs incurred in a cloud computing arrangement that is a service contract are capitalized similar to implementation costs incurred to develop or obtain internal-use software. Amortization is computed over the term of the hosting arrangement. As of December 31, 2018, implementation costs of \$11.9 million associated with cloud computing arrangements has been capitalized and is included in Other Assets in the Consolidated Balance Sheets.

(u) *Comprehensive (Loss) Income*

The components of comprehensive (loss) income include net income (loss), unrealized gains (losses) on available-for-sale debt securities, unrealized gains (losses) on certain derivative instruments, change in pension liabilities, net of tax, if applicable and foreign currency translation adjustments.

(v) *Warrants*

The Company has outstanding warrants with certain customers to purchase ARRIS's ordinary shares. Vesting of the warrants is subject to certain purchase volume commitments by the customers. Under applicable accounting guidance, if the vesting of a tranche of the warrants is probable, the Company is required to mark-to-market the fair value of the warrant until it vests, and any increase in the fair value is treated as a reduction in revenues from sales to the customers. See Note 18 *Warrants* of Notes to the Consolidated Financial Statements for further discussion.

Note 3. Impact of Recently Issued Accounting Standards

Adoption of new accounting standards - In May 2014, the FASB issued an accounting standard update, Revenue from Contracts with Customers. The standard requires an entity to recognize revenue to depict the transfer of control of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. In addition, the standard requires disclosure of the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers. The FASB issued several amendments to the standard since its initial issuance, including delaying its effective date to reporting periods beginning after December 15, 2017, but permitting companies the option to adopt the standard one year earlier, as well as clarifications on identifying performance obligations and accounting for licenses of intellectual property, among others.

There are two permitted transition methods under the new standard, the full retrospective method or the modified retrospective method. Under the full retrospective method, the standard would be applied to each prior reporting period presented and the cumulative effect of applying the standard would be recognized at the earliest period shown on the face of the financial statements being presented. Under the modified retrospective method, the cumulative effect of applying the standard would be recognized at the date of the initial application of the standard and the effect of the prior periods would be calculated and shown through a cumulative effect change in retained earnings. ARRIS adopted the standard using the modified retrospective method on January 1, 2018. (See Note 4 *Revenue from Contracts with Customers* for additional details).

In January 2016, the FASB issued an update to amend certain aspects of recognition, measurement, presentation and disclosure of financial instruments. Under this standard, certain equity investments are measured at fair value with changes recognized in current period earnings as opposed to other comprehensive (loss) income. This guidance is effective for interim and annual reporting periods in fiscal years beginning after December 15, 2017. ARRIS adopted the standard on January 1, 2018 by recording a cumulative-effect adjustment as of the beginning of the year. The adoption of this guidance did not have a material impact on the Company's consolidated financial position and results of operations.

In August 2016, the FASB issued amended guidance on the classification of certain cash receipts and payments in the statement of cash flows. The primary purpose of the amended guidance is to reduce the diversity in practice that has resulted from the lack of consistent principles on this topic. The amended guidance adds or clarifies guidance on eight cash flow issues, including debt prepayment or debt extinguishment costs, settlement of zero-coupon debt instruments or certain other debt instruments, contingent consideration payments made after a business combination, proceeds from the settlement of insurance claims, proceeds from the settlement of corporate-owned life insurance policies, distributions received from equity method investees, beneficial interests in securitization transactions and separately identifiable cash flows and application of the predominance principle. The guidance is effective for the Company beginning January 1, 2018 for both interim and annual reporting periods, with early adoption permitted. Entities must apply the guidance retrospectively to all periods presented but may apply it prospectively from the earliest date practicable if retrospective application would be impracticable. ARRIS adopted this update as of January 1, 2018. The adoption of this guidance did not have a material impact on the Company's consolidated financial position and results of operations.

In November 2016, the FASB issued new guidance that requires that a statement of cash flows explain the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. Therefore, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. The new guidance is effective for interim and annual periods beginning after December 15, 2017. ARRIS adopted this update retrospectively as of January 1, 2018. The adoption of this guidance did not have a material impact on the Company's consolidated financial position and results of operations.

In January 2017, the FASB issued an accounting standard update that clarifies the definition of a business to help companies evaluate whether acquisition or disposal transactions should be accounted for as asset groups or as businesses. The accounting standard update is effective for the Company for annual periods beginning after December 15, 2017. The adoption of this guidance did not have a material impact on the Company's consolidated financial position and results of operations. The future impact of this accounting standard update will be facts and circumstances dependent, but the Company expects, that in some situations, transactions that were previously accounted for as business combinations or disposal transactions will be accounted for as asset purchases or asset sales under the accounting standard update.

In March 2017, the FASB issued an accounting standard update that requires entities to disaggregate the service cost component from the other components of net periodic benefit costs and present it with other current compensation costs for related employees in the income statement and present the other components elsewhere in the income statement and outside of income from operations if that subtotal is presented. The amendments in this update also allow only the service cost component to be eligible for capitalization when applicable. The accounting standard update is effective for the Company in the first quarter of fiscal 2018. ARRIS adopted this update as of January 1, 2018. The adoption of this guidance did not have a material impact on the Company's consolidated financial position and results of operations.

In May 2017, the FASB issued an accounting standard which amends the scope of modification accounting for share-based payment arrangements. The standard provides guidance on the types of changes to the terms or conditions of share-based payment awards to which an entity would be required to apply modification accounting. The accounting standard will be applied prospectively to awards modified on or after the effective date. It is effective for interim and annual periods beginning after December 15, 2017 (January 1, 2018 for the Company). ARRIS adopted this update as of January 1, 2018. The adoption of this guidance did not have a material impact on the Company's consolidated financial position and results of operations.

In August 2018, the FASB issued an accounting standard update related to customer's accounting for implementation costs incurred in a cloud computing arrangement that is a service contract. The standards update aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The capitalized implementation costs of a hosting arrangement that is a service contract will be expensed over the term of the hosting arrangement. The accounting standard is effective for annual and interim periods beginning after December 15, 2019. Early adoption is permitted, including adoption in any interim period. The amendments can be applied either retrospectively or prospectively to all implementation costs incurred after the adoption date. The Company early adopted this standard in the third quarter of 2018 using the prospective method. The adoption of this guidance did not have a material impact on the Company's consolidated financial position and results of operations.

Accounting standards issued but not yet effective - In February 2016, the FASB issued new guidance that will require lessees to recognize most leases on their balance sheets as a right-of-use asset with a corresponding lease liability, and lessors to recognize a net lease investment. Additional qualitative and quantitative disclosures will also be required. This standard is effective for interim and annual reporting periods beginning after December 15, 2018, although early adoption is permitted. The new standard requires a modified retrospective transition through a cumulative-effect adjustment as of the beginning of the earliest period presented in the financial statements, although the FASB recently approved an option for transition relief to not restate or make required disclosures under the new standard in comparative periods in the period of adoption. Along with that transition relief, the FASB also recently approved a practical expedient for lessors to allow for the combined presentation of lease and non-lease revenues when certain conditions are met.

Many factors will impact the ultimate measurement of the lease liability and corresponding right of use asset to be recognized upon adoption. The Company continues to evaluate the impact this guidance will have on its consolidated financial statements. The Company expects to take advantage of the transition relief provided by the amendment to the new guidance which allows us to elect not to restate 2017 and 2018 comparative periods upon adoption and continue to apply existing guidance to such periods. With respect to the other practical expedients, the Company expects to elect the package of three expedients, which allows us not to reassess the existence, the classification or the amount and treatment of initial direct costs for existing leases. The Company does not expect to apply hindsight for the evaluation of lease options (e.g., renewal). The Company expects to elect not to record on the balance sheet a lease with a term (including reasonably certain renewal or purchase options, or reasonably certain not to terminate) of less than 12 months. Finally, the Company expects to elect the practical expedient which allows us not to separate lease and non-lease components. This guidance becomes effective January 1, 2019 with early adoption permitted.

The Company has established a project management team to analyze the impact of this standard, including its current accounting policies and practices to identify potential impacts that would result from the application of this standard. The Company's adoption process of the new standard is ongoing, including evaluating and quantifying the impact on its consolidated financial statements, identifying the population of leases (and embedded leases), implementing a selected technology solution and collecting and validating lease data. The Company expects its lease obligations designated as operating leases (as disclosed in Note 24) will be reported on the Consolidated Balance Sheets upon adoption.

In August 2017, the FASB issued an accounting standard which eliminates the requirement to separately measure and report hedge ineffectiveness and requires companies to recognize all elements of hedge accounting that impact earnings in the same income statement line item where the hedged item resides. The standard includes new alternatives for measuring the hedged item for fair value hedges of interest rate risk and eases the requirements for effectiveness testing, hedge documentation and applying the critical terms match method. Finally, the standard introduces new alternatives that permit companies to reduce the risk of material error if the shortcut method is misapplied. The accounting standard is effective beginning January 1, 2019 and is required to be applied prospectively. The Company is currently assessing the potential impact of the adoption of this standard on its Consolidated Financial Statements.

In February 2018, the FASB issued an accounting standard which allows companies to reclassify stranded tax effects resulting from the U.S. 2017 Tax Cuts and Jobs Act, from Accumulated other comprehensive (loss) income to Accumulated deficit. The guidance also requires certain new disclosures regardless of the election. The accounting standard is effective in the first quarter of fiscal 2020, and earlier adoption is permitted. The Company is currently assessing the potential impact of the adoption of this standard on its Consolidated Financial Statements.

In August 2018, the FASB issued an accounting standard update which amends fair value measurement disclosure requirements aiming to improve the overall usefulness of disclosures to financial statement users and reduce unnecessary costs to companies when preparing the disclosures. This guidance will be effective for interim and annual periods beginning after December 15, 2019 and early adoption is permitted. Adoption of this guidance is not expected to have a material impact on the Company's consolidated financial statements.

In August 2018, the FASB issued an accounting standard update that eliminated certain disclosures about defined benefit plans, added new disclosures, and clarified other requirements. This guidance will be effective for interim and annual periods beginning after December 15, 2020 and early adoption is permitted. There were no changes to interim disclosure requirements. Adoption of this guidance is not expected to have a material effect on the Company's annual financial statement statements.

Note 4. Revenue from Contracts with Customers

On January 1, 2018, the Company adopted the new accounting standard Revenue from Contracts with Customers using the modified retrospective transition method. The Company has elected to apply the new standard to contracts that were considered “open” as of January 1, 2018. Results for reporting periods beginning after January 1, 2018 are presented under the new accounting standard, while prior period amounts are not adjusted and continue to be reported in accordance with our historic accounting under previous guidance. Upon adoption, an initial cumulative effect adjustment of \$1.8 million increase was recorded to opening accumulated deficit and a \$2.7 million increase in shareholder’s equity attributable to noncontrolling interest.

Disaggregation of Revenue

The following table summarizes the revenues from contracts with customers by major product line (in thousands):

	<u>December 31, 2018</u>
<i>CPE:</i>	
Broadband CPE	\$ 1,643,152
Video CPE	2,280,742
Sub-total	<u>3,923,894</u>
<i>Network & Cloud:</i>	
Networks	1,850,416
Software and services	306,161
Sub-total	<u>2,156,577</u>
<i>Enterprise Networks:</i>	
Enterprise Networks	675,352
<i>Other:</i>	
Other	(13,183)
Total net sales	<u>\$ 6,742,640</u>

Customer Premises Equipment - The CPE segment’s product solutions include Broadband products, such as DSL and DOCSIS gateways and modems, and Video products, such as video gateways, clients and set-tops, that enable service providers to offer voice, video and high-speed data services to residential and business subscribers.

Network & Cloud - The N&C segment’s product solutions include cable modem termination system, video infrastructure, distribution and transmission equipment and cloud solutions that enable facility-based service providers to construct a state-of-the-art residential and metro distribution network. The portfolio also includes a full suite of global services that offer technical support, professional services and system integration offerings to enable solution sales of ARRIS’s end-to-end product portfolio.

Enterprise Networks - The Enterprise Networks segment focuses on enabling constant, wireless and wired connectivity across complex and varied networking environments through its array of access points, controllers and switches along with technical support, analytical tools and professional services needed to support those networks. It offers dedicated engineering, sales and marketing resources to serve customers across a spectrum of enterprises-including hospitality, education, smart cities, government, venues, service providers and more.

Other - Other includes adjustments related to acquisition accounting impacts related to deferred revenue

The following table summarizes the revenues from contracts with customers by geographic areas (in thousands):

	December 31, 2018				
	CPE	N&C	Enterprise	Other ⁽¹⁾	Total
Domestic - U.S.	\$ 2,201,912	\$ 1,369,695	\$ 408,971	\$ (7,331)	\$ 3,973,247
Americas, excluding U.S.	793,203	378,223	10,910	(47)	1,182,289
Asia Pacific	133,480	186,982	110,622	(39)	431,045
EMEA	795,299	221,677	144,849	(5,766)	1,156,059
Total international	1,721,982	786,882	266,381	(5,852)	2,769,393
Total net revenues	<u>\$ 3,923,894</u>	<u>\$ 2,156,577</u>	<u>\$ 675,352</u>	<u>\$ (13,183)</u>	<u>\$ 6,742,640</u>

(1) Adjustments include acquisition accounting impacts related to deferred revenue

Impact of New Revenue Guidance on Financial Statement Line Items

The following table compares the reported Consolidated Balance Sheets and Consolidated Statements of Income, as of and for the year ended December 31, 2018, to the pro-forma amounts had the previous guidance been in effect (in thousands):

	As Reported December 31, 2018	Pro forma - as if previous accounting guidance was in effect
Assets		
Accounts receivable	\$ 1,225,975	\$ 1,210,288
Other current assets	144,251	144,187
Deferred incomes taxes	175,405	172,967
Liabilities		
Deferred revenue (current and non-current)	\$ 169,998	\$ 169,426
	As Reported December 31, 2018	Pro forma - as if previous accounting guidance was in effect
Revenues		
Net sales	\$ 6,742,640	\$ 6,727,525
Costs and expenses		
Cost of sales	4,823,781	4,823,845
Income tax benefit	(24,344)	(21,905)
Consolidated net income	107,286	89,668
Net loss attributable to non-controlling interest	(6,454)	(7,282)
Net income attributable to ARRIS International plc	113,740	96,950
Net income per ordinary share:		
Basic	\$ 0.63	\$ 0.54
Diluted	\$ 0.62	\$ 0.53

Pro-forma net sales were \$15.1 million lower than reported net sales in the Consolidated Statements of Income for the year ended December 31, 2018 largely due to the timing of license revenue that is currently being recognized upon transfer of control of the license as opposed to recognizing ratably over the license term.

Other

Contract Assets and Liabilities - When payments from customers are received in advance of performance, the Company records a contract liability (deferred revenue). When the Company fulfills performance obligations prior to being able to invoice the customer, a contract asset (unbilled receivables) is recorded. Additionally, the balances for these are calculated at the contract level on a net basis.

The unbilled receivables are included in Accounts Receivable on the Consolidated Balance Sheets. As of December 31, 2018, the Company has unbilled receivables of \$29.7 million.

The following table summarizes the changes in deferred revenue for the year ended of December 31, 2018 (in thousands):

Opening balance at January 1, 2018	\$	168,757
Deferral of revenue		166,756
Recognition of unearned revenue		(164,545)
Other		(970)
Balance at December 31, 2018	\$	<u>169,998</u>

As of the end of the current reporting period, the aggregate amount of the transaction price allocated to performance obligations that are unsatisfied that have a duration of one year or more was \$64.1 million. The majority of ARRIS's contracts that have performance obligations that are unsatisfied are part of contracts have a duration of one year or less.

Practical Expedients

Sales commissions are incremental contract acquisition costs which are expected to be recovered. The Company has elected to recognize these expenses as incurred due to the amortization period of these costs being one year or less.

Costs to obtain or fulfill a contract are incremental costs that are expected to be recovered. The Company has elected to recognize these expenses as incurred due to the amortization period of these costs being one year or less. Costs to obtain a contract that would have been incurred regardless of whether the contract was obtained are recognized in expense when incurred.

The Company has elected not to adjust the promised amount of consideration for the effects of a significant financing component when it expects, at contract inception, that the period between when ARRIS transfers a promised good or service to a customer, and when the customer pays will be one year or less.

The Company has elected the expedient that states an entity does not need to evaluate whether shipping and handling activities are promised services to its customers. If revenue is recognized for the related good before the shipping and handling activities occur, the related costs of those shipping and handling activities are accrued.

The Company has also elected to exclude from the transaction price certain types of taxes collected from a customer and remitted to a third-party (e.g., governmental agency), including sales, use and value-added taxes. As a result, revenue is presented net of these taxes.

Additionally, the Company has elected for contracts that were modified before the beginning of the earliest reporting period to reflect the aggregate effect of all modifications when identifying the satisfied and unsatisfied performance obligations, determining the transaction price, and allocating the transaction price.

Note 5. Business Acquisitions

Acquisition of Ruckus Wireless and ICX Switch business

On December 1, 2017, ARRIS completed the acquisition of Ruckus Wireless and ICX Switch business ("Ruckus Networks"). The total consideration transferred was approximately \$762.2 million (net of estimated adjustments for working capital and noncash settlement of pre-existing payables and receivables) The purchase agreement provides for customary final adjustments and potential cash payments or receipts.

With this acquisition, ARRIS expanded its leadership in converged wired and wireless networking technologies beyond the home into the education, public venue, enterprise, hospitality, and multi-dwelling unit markets.

The goodwill of \$289.0 million arising from the acquisition is attributable to the strategic opportunities and synergies that are expected to arise from the acquisition of Ruckus Networks and the workforce of the acquired business. The Company finalized the accounting for business combination in the fourth quarter of 2018 and goodwill has been assigned to our new Enterprise Networks reporting unit. Goodwill of \$5.8 million is expected to be deductible for income tax purposes.

The following table summarizes the fair value of consideration transferred for Ruckus Networks (in thousands):

Cash consideration	\$	779,743
Working capital adjustments		(15,219)
Non-cash consideration ⁽¹⁾		<u>(2,359)</u>
Total consideration transferred	\$	<u><u>762,165</u></u>

(1) Non-cash consideration represents \$2.4 million settlement of preexisting payables and receivables between Ruckus Networks and ARRIS.

Total consideration excludes \$61.5 million paid to Broadcom for the cash settlement of stock-based awards for which vesting was accelerated as contemplated in the purchase agreement. This was expensed in the fourth quarter of 2017.

The following is a summary of the estimated fair values of the net assets acquired (in thousands):

	Amounts Recognized as of Acquisition Date
Total consideration transferred	<u>\$ 762,165</u>
Cash and cash equivalents	18,958
Accounts receivable	26,022
Inventories	48,436
Prepays and other	3,792
Property, plant & equipment	31,863
Intangible assets	500,700
Other assets	6,852
Accounts payable and accrued liabilities	(15,693)
Other current liabilities	(11,654)
Deferred revenue	(46,748)
Noncurrent deferred income tax liabilities, net	(81,928)
Other noncurrent liabilities	<u>(7,408)</u>
Net assets acquired	<u>473,192</u>
Goodwill	<u><u>\$ 288,973</u></u>

The acquisition was accounted for using the acquisition method of accounting, which requires, among other things, that the assets acquired, and liabilities assumed be recognized at their acquisition date fair values, with any excess of the consideration transferred over the estimated fair values of the identifiable net assets acquired recorded as goodwill. During the fourth quarter of 2018, the Company completed the accounting for the aforementioned business combination.

The \$500.7 million of acquired intangible assets are as follows (in thousands):

	<u>Estimated Fair value</u>	<u>Estimated Weighted Average Life (years)</u>
Technology and patents	\$ 220,900	5.4
Customer contracts and relationships	197,100	10.0
Tradenames	55,400	indefinite
Trademarks and tradenames	10,800	10.0
Backlog	16,500	0.4
Total estimated fair value of intangible assets	<u>\$ 500,700</u>	

The fair value of trade accounts receivable is \$26.0 million with the gross contractual amount being \$26.9 million. The Company expects \$0.9 million to be uncollectible.

The Company incurred acquisition related costs of \$1.3 million during 2018. This amount was expensed by the Company as incurred and is included in the Consolidated Statements of Income in the line item titled "Integration, acquisition, restructuring and other costs, net".

The Ruckus Networks business contributed revenues of approximately \$721.1 million to our consolidated results from the date of acquisition through December 31, 2018.

Proposed Transaction with CommScope

On November 8, 2018, ARRIS and CommScope Holding Company, Inc. entered into a Bid Conduct Agreement whereby CommScope agreed to acquire ARRIS in an all-cash transaction for \$31.75 per share or a total purchase price of approximately \$7.4 billion, including repayment of debt. In addition, The Carlyle Group, a global alternative asset manager, plans to participate in the acquisition and reestablishes an ownership position in CommScope through a \$1 billion minority equity investment as part of CommScope's financing of the transaction. The combined company is expected to drive profitable growth in new markets, shape the future of wired and wireless communications, and position the new company to benefit from key industry trends, including network convergence, fiber and mobility everywhere, 5G, Internet of Things and rapidly changing network and technology architectures.

The consummation of the Acquisition is subject to various closing conditions, including, among other things, (i) the receipt of certain approvals of our shareholders, (ii) the sanction of the Scheme by the High Court of Justice of England and Wales, (iii) the receipt of certain required regulatory approvals or lapse of certain review periods with respect thereto, including those in the U.S. and European Union, Chile, Mexico, Russia and South Africa, (iv) the absence of a Company Material Adverse Effect (as defined in the Acquisition Agreement), (v) the accuracy of representations and warranties (subject, in certain cases, to certain materiality or Company Material Adverse Effect qualifiers, as applicable) and (vi) the absence of legal restraints prohibiting or restraining the Acquisition. ARRIS's shareholders approved the Acquisition on February 1, 2019 and regulatory approvals have been received, or the review period has lapsed, in the European Union, United States, Russia and South Africa. The parties expect to complete the Acquisition in the first half of 2019.

Acquisition related costs of \$8.4 million have been incurred during 2018. This amount was expensed by the Company as incurred and is included in the Consolidated Statements of Income in the line item titled "Integration, acquisition, restructuring and other costs, net".

Note 6. Goodwill and Intangible Assets

The changes in the carrying amount of goodwill for the three years ended December 31, 2018 are as follows (in thousands):

	<u>CPE</u>	<u>N & C</u>	<u>Enterprise</u>	<u>Total</u>
Goodwill	1,391,171	1,003,654	-	2,394,825
Accumulated impairment losses	-	(378,656)	-	(378,656)
Balance as of December 31, 2016	<u>\$ 1,391,171</u>	<u>\$ 624,998</u>	<u>\$ -</u>	<u>\$ 2,016,169</u>
<i>Changes in year 2017:</i>				
Goodwill acquired, net	-	-	318,034	318,034
Impairment	-	(51,200)	-	(51,200)
Other	(4,491)	-	-	(4,491)
Balance as of December 31, 2017	<u>\$ 1,386,680</u>	<u>\$ 573,798</u>	<u>\$ 318,034</u>	<u>\$ 2,278,512</u>
Goodwill	1,386,680	1,003,654	318,034	2,708,368
Accumulated impairment losses	-	(429,856)	-	(429,856)
Balance as of December 31, 2017	<u>\$ 1,386,680</u>	<u>\$ 573,798</u>	<u>\$ 318,034</u>	<u>\$ 2,278,512</u>
<i>Changes in year 2018:</i>				
Acquisition accounting adjustments	-	-	(29,061)	(29,061)
Impairment	-	(3,400)	-	(3,400)
Other	(5,863)	454	-	(5,409)
Balance as of December 31, 2018	<u>\$ 1,380,817</u>	<u>\$ 570,852</u>	<u>\$ 288,973</u>	<u>\$ 2,240,642</u>
Goodwill	1,380,817	1,004,108	288,973	2,673,898
Accumulated impairment losses	-	(433,256)	-	(433,256)
Balance as of December 31, 2018	<u>\$ 1,380,817</u>	<u>\$ 570,852</u>	<u>\$ 288,973</u>	<u>\$ 2,240,642</u>

During 2018, the Company recorded an adjustment of \$29.1 million to goodwill related to the Ruckus Network acquisition. The Company also recorded a partial impairment of goodwill of \$3.4 million related to its Cloud TV reporting unit, respectively, of which \$1.2 million is attributable to the noncontrolling interest. This impairment was a result of the indirect effect of a change in accounting principle related to the adoption of new accounting standard *Revenue from Contracts with Customers*, resulting in changes in the composition and carrying amount of the net assets of our Cloud TV reporting unit. The partial impairment was included in impairment of goodwill on the Consolidated Statements of Income. Fair value was determined using a discounted cash flow model.

As of December 31, 2018, Cloud and Services reporting unit, which is included in the N&C segment, had a negative carrying amount of net assets of \$(15.5) million. As of December 31, 2018, remaining goodwill allocated to this reporting unit was \$49.9 million.

During 2017, as a result of a change in strategy for our Cloud TV reporting unit associated with the ActiveVideo acquisition, the Company expected lower future projected cash flows for the business, and as such, the Company recorded a partial impairment of \$51.2 million for the amount by which the Cloud TV reporting unit carrying amount exceeded its fair value of which \$17.9 million is attributable to noncontrolling interest. The partial impairment was included in impairment of goodwill and intangible assets on the Consolidated Statements of Income.

Intangible Assets

The gross carrying amount and accumulated amortization of the Company's intangible assets as of December 31, 2018 and December 31, 2017 are as follows (in thousands):

	December 31, 2018			December 31, 2017		
	Gross Amount	Accumulated Amortization	Net Book Value	Gross Amount	Accumulated Amortization	Net Book Value
Definite-lived intangible assets:						
Customer relationships	\$ 1,762,750	\$ 952,308	\$ 810,442	\$ 1,672,470	\$ 780,655	\$ 891,815
Developed technology, patents & licenses	1,482,200	956,012	526,188	1,521,893	771,200	750,693
Trademarks, trade and domain names	75,772	64,257	11,515	87,472	41,885	45,587
Backlog	16,500	16,386	114	35,000	5,833	29,167
Sub-total	<u>\$ 3,337,222</u>	<u>\$ 1,988,963</u>	<u>\$ 1,348,259</u>	<u>\$ 3,316,835</u>	<u>\$ 1,599,573</u>	<u>\$ 1,717,262</u>
Indefinite-lived intangible assets:						
Trademarks and trade names	55,400	-	55,400	-	-	-
In-process research and development	-	-	-	54,100	-	54,100
Sub-total	<u>55,400</u>	<u>-</u>	<u>55,400</u>	<u>54,100</u>	<u>-</u>	<u>54,100</u>
Total	<u>\$ 3,392,622</u>	<u>\$ 1,988,963</u>	<u>\$ 1,403,659</u>	<u>\$ 3,370,935</u>	<u>\$ 1,599,573</u>	<u>\$ 1,771,362</u>

During 2018, the Company recorded additional intangible assets (other than goodwill) of \$28.2 million during the measurement period related to Ruckus Networks, for a total of \$500.7 million, see Note 5 *Business Acquisitions* of Notes to the Consolidated Financial Statements for further discussion. In addition, an in-process research and development project of \$4.1 million was reclassified to become a definite-lived asset upon completion of the associated research and development efforts during 2018.

During 2017, due to lower projected cashflows of its Cloud TV reporting unit, the Company recorded a \$3.8 million partial impairment of indefinite-lived trademarks and tradenames, determined using a "relief from royalty income" approach. The partial impairment was included in impairment of goodwill and intangible assets on the Consolidated Statements of Income. The remaining carrying amount was reclassified as a definite-lived intangible asset.

Amortization expense is reported in the Consolidated Statements of Income within cost of sales and operating expenses. The following table presents the amortization of intangible assets (in thousands):

	Years Ended December 31,		
	2018	2017	2016
Cost of sales	\$ 3,558	\$ 3,174	\$ 2,963
Selling, general & administrative expense	3,955	3,835	4,048
Amortization of acquired intangible assets	383,561	375,407	397,464
Total	<u>\$ 391,074</u>	<u>\$ 382,416</u>	<u>\$ 404,475</u>

The estimated total amortization expense for finite-lived intangibles for each of the next five fiscal years is as follows (in thousands):

2019	\$	333,882
2020		322,037
2021		187,250
2022		149,949
2023		106,749
Thereafter		248,392

Note 7. Financial Instruments

Short-Term Investments:

Debt securities

The following tables summarize the Company's debt securities by significant investment categories as of December 31, 2018 and December 31, 2017 (in thousands):

	December 31, 2018				December 31, 2017			
	Amortized Costs	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value	Amortized Costs	Gross Unrealized Gains	Gross Unrealized Losses	Fair Value
Certificates of deposit (non-U.S.)	\$ 5,538	\$ -	\$ -	\$ 5,538	\$ 12,809	\$ -	\$ -	\$ 12,809
Corporate bonds	-	-	-	-	11,003	86	(24)	11,065
Total	<u>\$ 5,538</u>	<u>\$ -</u>	<u>\$ -</u>	<u>\$ 5,538</u>	<u>\$ 23,812</u>	<u>\$ 86</u>	<u>\$ (24)</u>	<u>\$ 23,874</u>

The Company classifies the investments listed in the above table as available-for-sale debt securities. These investments are stated at fair value as required by the applicable accounting guidance. Unrealized gains and losses on available-for-sale debt securities are included in the Consolidated Balance Sheets as a component of Accumulated other comprehensive (loss) income. As of December 31, 2017, the available-for-sale debt securities have been in an unrealized loss position for less than 12 months. As of December 31, 2018, the contractual maturity of our available for sale debt securities was within 1 year.

Investments in the above table are included in short-term investments on the Consolidated Balance Sheets. Realized gains and losses on investments are included in earnings and are derived using the specific identification method for determining the cost of securities sold.

Long-Term Investments:

The following table summarizes the Company's long-term investments by significant categories as of December 31, 2018 and December 31, 2017 (in thousands):

	As of December 31, 2018	As of December 31, 2017
Equity investments:		
Marketable equity securities	\$ 5,562	\$ 5,718
Non-marketable equity securities	9,987	10,092
Equity method investments	12,507	22,021
Other investments	17,239	33,251
Total	<u>\$ 45,295</u>	<u>\$ 71,082</u>

Equity investments

The following discusses the Company's marketable equity securities, non-marketable equity securities, realized and unrealized gains and losses on marketable and non-marketable equity securities, as well as its equity method investments.

Marketable equity securities

Marketable equity securities are deferred compensation plan assets related to non-qualified deferred compensation plans for certain executives, including money market funds and mutual funds with readily determinable values which are accounted for at fair value.

Prior to January 1, 2018, the Company accounted for its marketable equity securities at fair value with unrealized gains and losses recognized in Accumulated other comprehensive (loss) income on the Consolidated Balance Sheets. As of December 31, 2017, investments had an amortized cost of \$5.1 million and unrealized gains (loss) of \$0.8 million and \$(0.1) million, respectively. Realized gains and losses on marketable equity securities sold or impaired were recognized in Loss on investments in the Consolidated Statements of Income.

On January 1, 2018, the Company adopted the accounting standard *Recognition and Measurement of Financial Assets and Financial Liabilities*. Marketable equity securities are measured at fair value. Upon adoption, the Company reclassified \$ 0.7 million net unrealized gain related to its marketable equity securities from Accumulated other comprehensive (loss) income to opening Accumulated deficit. Starting January 1, 2018, unrealized gains and losses are recognized in the Consolidated Statements of Income. As of December 31, 2018, investments had an amortized cost of \$5.9 million and unrealized gain (loss) of \$0.6 million and \$(1.0) million, respectively.

As of December 31, 2018, and December 31, 2017, the Company's marketable equity securities have been in an unrealized loss position for less than 12 months.

The classification of marketable equity securities as current or non-current is dependent upon management's intended holding period, the security's maturity date and liquidity consideration based on market conditions. If management intends to hold the securities for longer than one year as of the balance sheet date, they are classified as non-current.

The sale and/or maturity of marketable equity securities resulted in the following activity (in thousands):

	Years Ended December 31,		
	2018	2017	2016
Proceeds from sales	\$ 79,473	\$ 165,301	\$ 25,931
Gross gains	5	16	33
Gross losses	-	-	-

Non-marketable equity securities

Non-marketable equity securities are investments in privately held companies without readily determinable market values. Prior to January 1, 2018, the Company accounted for its non-marketable equity securities at cost less impairment. Realized gains and losses on non-marketable securities sold or impaired were included in loss on investments, included in the Consolidated Statements of Income.

On January 1, 2018, Company adopted the accounting standard *Recognition and Measurement of Financial Assets and Financial Liabilities* which changed the accounting for non-marketable securities. The Company elected the measurement alternative for these investments without readily determinable fair values and for which the Company does not have the ability to exercise significant influence. Under the measurement alternative, these investments are carried at cost less any impairment, plus or minus adjustments resulting from observable price changes in orderly transactions for the identical or a similar investment of the same issuer. Resulting adjustments are recorded within the Consolidated Statements of Income as loss on investments.

There have been no adjustments to the carrying value of investments resulting from impairments or observable price changes in 2018. For the year ended December 31, 2017, the Company concluded that one private company had indicators of impairment, as the cost basis exceeded the fair value of the investment, resulting in an other-than-temporary impairment charge of \$2.8 million. These charges are reflected in "Loss on investments" in the Consolidated Statements of Income.

Equity Method Investments

The Company owns certain investments in limited liability companies and partnerships that are accounted for under the equity method, as the Company has significant influence over operating and financial policies of the investee companies. Our share of gains and losses in equity method investments including impairment are included in loss on investments in the Consolidated Statements of Income. Due to the timing of receiving financial information from these limited liability companies and partnerships, the results are reported on a one quarter lag.

The following table summarizes the ownership structure and ownership percentage of the non-consolidated investments as of December 31, 2018, accounted for using the equity method.

<u>Name of Investee</u>	<u>Ownership Structure</u>	<u>% Ownership</u>
MPEG LA	Limited Liability Company	8.4%
Music Choice	Limited Liability Partnership	18.2%
Conditional Access Licensing (“CAL”)	Limited Liability Company	49.0%

Other Investments

The Company holds investments in certain life insurance contracts. The Company determined the fair value to be the amount that could be realized under the insurance contract as of each reporting period. The changes in the fair value of these contracts are reflected in “Loss on investments” in the Consolidated Statements of Income.

Note 8. Fair Value Measurements

The following table presents the Company’s investment assets (excluding non-marketable equity investments) and derivatives measured at fair value on a recurring basis as of December 31, 2018 and 2017 (in thousands):

	December 31, 2018			
	Level 1	Level 2	Level 3	Total
Certificates of deposit (foreign)	\$ -	\$ 5,538	\$ -	\$ 5,538
Marketable equity securities	62	5,500	-	5,562
Interest rate derivatives - asset derivatives	-	10,976	-	10,976
Interest rate derivatives - liability derivatives	-	(6,088)	-	(6,088)
Foreign currency contracts - asset position	-	4,442	-	4,442
Foreign currency contracts - liability position	-	(405)	-	(405)
	December 31, 2017			
	Level 1	Level 2	Level 3	Total
Certificates of deposit (foreign)	\$ -	\$ 12,809	\$ -	\$ 12,809
Corporate bonds	-	11,065	-	11,065
Marketable equity securities	117	5,601	-	5,718
Interest rate derivatives - asset derivatives	-	10,156	-	10,156
Interest rate derivatives - liability derivatives	-	(4,024)	-	(4,024)
Foreign currency contracts - asset position	-	405	-	405
Foreign currency contracts - liability position	-	(8,802)	-	(8,802)

All of the Company’s short-term and long-term investments (excluding non-marketable equity investments) at December 31, 2018 are classified within Level 1 or Level 2 of the fair value hierarchy as they are valued using quoted market prices, market prices for similar securities, or alternative pricing sources with reasonable levels of price transparency. The types of instruments valued based on quoted market prices in active markets include the Company’s investment in money market funds, mutual funds and municipal bonds. Such instruments are generally classified within Level 1 of the fair value hierarchy. The types of instruments valued based on other observable inputs include corporate obligations and bonds, commercial paper and certificates of deposit. Such instruments are classified within Level 2 of the fair value hierarchy.

In addition to the financial instruments included in the above table, certain nonfinancial assets and liabilities are to be measured at fair value on a nonrecurring basis in accordance with applicable authoritative guidance. This includes items such as nonfinancial assets and liabilities initially measured at fair value in a business combination (but not measured at fair value in subsequent periods) and nonfinancial long-lived asset groups measured at fair value for an impairment assessment. In general, nonfinancial assets including goodwill, other intangible assets and property and equipment are measured at fair value when there is an indication of impairment and are recorded at fair value only when any impairment is recognized.

During the year ended December 31, 2018, the Company recorded partial impairment of goodwill of \$3.4 million related to its Cloud TV reporting unit, of which \$1.2 million is attributable to the noncontrolling interest, respectively. During the fourth quarter of 2017, the Company recorded partial impairments of goodwill and indefinite-lived tradenames of \$51.2 million and \$3.8 million, respectively, acquired in the ActiveVideo acquisition and included as part of the Cloud TV reporting unit, of which \$19.3 million is attributable to the noncontrolling interest. See Note 6 *Goodwill and Intangible Assets* of Notes to the Consolidated Financial Statements for further discussion.

The Company believes the principal amount of the debt as of December 31, 2018 approximated the fair value because of interest-bearing rates that are adjusted periodically, analysis of recent market conditions, prevailing interest rates, and other Company specific factors. The Company has classified the debt as a Level 2 item within the fair value hierarchy.

Note 9. Derivative Instruments and Hedging Activities

Overview

ARRIS is exposed to financial market risk, primarily related to foreign currency and interest rates. These exposures are actively monitored by management. To manage the volatility relating to certain of these exposures, the Company enters into a variety of derivative financial instruments. Management's objective is to reduce, where it is deemed appropriate to do so, fluctuations in earnings and cash flows associated with changes in foreign currency and interest rates. ARRIS's policies and practices are to use derivative financial instruments only to the extent necessary to manage exposures. ARRIS does not hold or issue derivative financial instruments for trading or speculative purposes.

The Company records all derivatives on the balance sheet at fair value. The accounting for changes in the fair value of derivatives depends on the intended use of the derivative, whether the Company has elected to designate a derivative in a hedging relationship and apply hedge accounting and whether the hedging relationship has satisfied the criteria necessary to apply hedge accounting. Derivatives designated and qualifying as a hedge of the exposure to changes in the fair value of an asset, liability, or firm commitment attributable to a particular risk, such as interest rate risk, are considered fair value hedges. Derivatives designated and qualifying as a hedge of the exposure to variability in expected future cash flows, or other types of forecasted transactions, are considered cash flow hedges. Derivatives also may be designated as hedges of the foreign currency exposure of a net investment in a foreign operation. Hedge accounting generally provides for the matching of the timing of gain or loss recognition on the hedging instrument with the recognition of the changes in the fair value of the hedged asset or liability that are attributable to the hedged risk in a fair value hedge or the earnings effect of the hedged forecasted transactions in a cash flow hedge. The Company may enter into derivative contracts that are intended to economically hedge certain of its risk, even though hedge accounting does not apply or the Company elects not to apply hedge accounting. In accordance with the FASB's fair value measurement guidance, the Company made an accounting policy election to measure the credit risk of its derivative financial instruments that are subject to master netting agreements on a net basis by counterparty portfolio.

Cash flow hedges of interest rate risk

The Company's senior secured credit facilities, which are comprised of (i) a "Term Loan A Facility", (ii) a "Term Loan A-1 Facility", (iii) a "Term Loan B-3 Facility", and (iv) a "Revolving Credit Facility", have variable interest rates based on LIBOR. (See Note 16 *Indebtedness* for additional details.) As a result of exposure to interest rate movements, during 2015, the Company entered into various interest rate swap arrangements, which effectively converted \$625.0 million of its variable-rate debt based on one-month LIBOR to an aggregate fixed rate of 2.25% plus a leverage-based margin. During 2016, due to additional exposure from the Term Loan A-1 Facility, the Company added additional interest rate swap arrangements which effectively converted \$450.0 million of the Company's variable-rate debt based on one-month LIBOR to an aggregate fixed rate of 0.98% plus a leverage-based margin. Total notional amount of the swaps as of December 31, 2018 was \$1,075.0 million and each swap matures on March 31, 2020. During the year ended December 31, 2018, the Company entered into new forward-starting interest rate swap arrangements which effectively will convert \$1,075.0 million of the Company's variable-rate debt based on one-month LIBOR to an aggregate fixed rate of 2.63% plus a leverage-based margin for the period beginning March 31, 2020 and ending June 30, 2022. ARRIS has designated these swaps as cash flow hedges, and the objective of these hedges is to manage the variability of cash flows in the interest payments related to the portion of the variable-rate debt designated as being hedged.

The Company's objectives in using interest rate derivatives are to add stability to interest expense and to manage its exposure to interest rate movements. To accomplish this objective, the Company uses interest rate swaps as part of its interest rate risk management strategy. Interest rate swaps designated as cash flow hedges involve the receipt of variable amounts from a counterparty in exchange for the Company making fixed-rate payments over the life of the agreements without exchange of the underlying notional amount.

The effective portion of changes in the fair value of derivatives designated and that qualify as cash flow hedges is recorded in Accumulated other comprehensive (loss) income and is subsequently reclassified into earnings in the period that the hedged forecasted transaction affects earnings. During 2018, such derivatives were used to hedge the variable cash flows associated with debt. The ineffective portion of the change in fair value of the derivatives is recognized directly in earnings. During the year ended December 31, 2018, approximately \$0.5 million in income has been recorded related to hedge ineffectiveness by the Company. During the years ended December 31, 2017 and 2016, no expense has been recorded related to hedge ineffectiveness by the Company.

Amounts reported in Accumulated other comprehensive (loss) income related to derivatives will be reclassified to interest expense as interest payments are made on the Company's variable-rate debt. Over the next 12 months, the Company estimates that an additional \$8.8 million may be reclassified as a decrease to interest expense.

The table below presents the impact of the Company's derivative financial instruments had on Consolidated Statements of Income (in thousands):

	Location of Gain(Loss) Reclassified from AOCI into Income	Years Ended December 31,		
		2018	2017	2016
Gain Recognized in OCI on Derivatives (Effective Portion)	Interest expense	\$ 1,121	\$ 5,587	\$ 2,103
Amounts Reclassified from Accumulated OCI into Income (Effective Portion)	Interest expense	(2,851)	1,663	7,512

The following table indicates the location on the Consolidated Balance Sheets in which the Company's derivative assets and liabilities designated as hedging instruments have been recognized and the related fair values of those derivatives (in thousands):

	Balance Sheet Location	December 31, 2018	December 31, 2017
Interest rate derivatives - asset derivatives	Other current assets	8,788	3,590
Interest rate derivatives - asset derivatives	Other assets	2,188	6,566
Interest rate derivatives - liability derivatives	Other accrued liabilities	-	(3,053)
Interest rate derivatives - liability derivatives	Other noncurrent liabilities	(6,088)	(971)

Credit-risk-related contingent features

Each of ARRIS's agreements with its derivative counterparties contain a provision where the Company could be declared in default on its derivative obligations if repayment of the underlying indebtedness is accelerated by the lender due to the Company's default on the indebtedness. As of December 31, 2018 and 2017, the fair value of derivatives, which includes accrued interest but excludes any adjustment for nonperformance risk, related to these agreements was a net asset position of \$4.6 million and \$6.1 million, respectively. As of December 31, 2018, the Company has not posted any collateral related to these agreements nor has it required any of its counterparties to post collateral related to these or any other agreements.

Non-designated hedges of foreign currency risk

The Company has U.S. dollar functional currency subsidiaries that bill certain international customers in their local currency and foreign functional currency entities that procure in U.S. dollars. ARRIS also has certain predictable expenditures for international operations in local currency. Additionally, certain intercompany transactions are denominated in foreign currencies and subject to revaluation. To mitigate the volatility related to fluctuations in the foreign exchange rates for certain exposures, ARRIS has entered into various foreign currency contracts. As of December 31, 2018, the Company had forward contracts with notional amounts totaling 60 million euros which mature throughout 2019, forward contracts with a total notional amount of 10 million Australian dollars which mature throughout 2019, forward contracts with notional amounts totaling 31 million Canadian dollars which mature throughout 2019, forward contracts with notional amounts totaling 30.0 million British pounds which mature throughout 2019, forward contracts with notional amounts totaling 747.5 million South African rand which mature throughout 2019 and 2020.

The Company's objectives in using foreign currency derivatives are to add stability to foreign currency gains and losses recorded as other expense (income) and to manage its exposure to foreign currency movements. To accomplish this objective, the Company uses foreign currency option and foreign currency forward contracts as part of its foreign currency risk management strategy. The Company's foreign currency derivative instruments economically hedge certain risk but are not designated as hedges, and accordingly, all changes in the fair value of the instruments are recognized as a loss (gain) on foreign currency in the Consolidated Statements of Income. The maximum time frame for ARRIS's derivatives is currently twenty months.

The following table indicates the location on the Consolidated Balance Sheets in which the Company's derivative assets and liabilities not designated as hedging instruments have been recognized and the related fair values of those derivatives (in thousands):

	<u>Balance Sheet Location</u>	<u>December 31, 2018</u>		<u>December 31, 2017</u>	
Foreign exchange contracts - asset derivatives	Other current assets	\$	3,964	\$	405
Foreign exchange contracts - asset derivatives	Other assets		478		-
Foreign exchange contracts - liability derivatives	Other accrued liabilities		(405)		(8,202)
Foreign exchange contracts - liability derivatives	Other noncurrent liabilities		-		(600)

The change in the fair values of ARRIS's derivatives not designated as hedging instruments recorded in the Consolidated Statements of Income were as follows (in thousands):

	<u>Statements of Income Location</u>	<u>2018</u>		<u>2017</u>		<u>2016</u>	
Foreign exchange contracts	(Gain) loss on foreign currency	\$	(15,969)	\$	25,339	\$	5,909

Note 10. Guarantees

Warranty

ARRIS provides warranties of various lengths to customers based on the specific product and the terms of individual agreements. The Company provides for the estimated cost of product warranties based on historical trends, the embedded base of product in the field, failure rates, and repair costs at the time revenue is recognized. Expenses related to product defects and unusual product warranty problems are recorded in the period that the problem is identified. While the Company engages in extensive product quality programs and processes, including actively monitoring and evaluating the quality of its suppliers, the estimated warranty obligation could be affected by changes in ongoing product failure rates, material usage and service delivery costs incurred in correcting a product failure, as well as specific product failures outside of ARRIS's baseline experience. If actual product failure rates, material usage or service delivery costs differ from estimates, revisions (which could be material) would be recorded against the warranty liability.

The Company offers extended warranties and support service agreements on certain products. Revenue from these agreements is deferred at the time of the sale and recognized on a straight-line basis over the contract period. Costs of services performed under these types of contracts are charged to expense as incurred, which approximates the timing of the revenue stream.

Information regarding the changes in ARRIS’s aggregate product warranty liabilities for the years ending December 31, 2018 and 2017 were as follows (in thousands):

	<u>2018</u>	<u>2017</u>
Beginning balance	\$ 76,089	\$ 88,187
Warranty reserve at acquisition	827	1,700
Accruals related to warranties (including changes in assumptions)	31,020	36,379
Settlements made (in cash or in kind)	(44,460)	(50,177)
Ending balance	<u>\$ 63,476</u>	<u>\$ 76,089</u>

Note 11. Segment Information

The “management approach” has been used to present the following segment information. This approach is based upon the way the management of the Company organizes segments for making operating decisions and assessing performance. Financial information is reported on the basis that it is used internally by the chief operating decision maker (“CODM”) for evaluating segment performance and deciding how to allocate resources to segments. The Company’s chief executive officer has been identified as the CODM.

As of January 1, 2018, the Company changed the composition of its measurement of segment profit and loss (direct contribution) used by the Company’s chief operating decision maker. Beginning in 2018, the Company charges bonus, equity compensation and certain other costs which are now directly aligned with each of its segments within its measurement of segment profit and loss (direct contribution). These costs historically were included as part of “Corporate and Unallocated Costs”. Consequently, the Company’s segment information for the 2016 and 2017 period has been restated to reflect such change.

The CODM manages the Company under three segments:

- **Customer Premises Equipment (“CPE”)** - The CPE segment’s product solutions include set-tops, gateways, and subscriber premises equipment that enable service providers to offer voice, video and high-speed data services to residential and business subscribers.
- **Network & Cloud (“N&C”)** - The N&C segment’s product solutions include cable modem termination system, video infrastructure, distribution and transmission equipment and cloud solutions that enable facility-based service providers to construct a state-of-the-art residential and metro distribution network. The portfolio also includes a full suite of global services that offer technical support, professional services and system integration offerings to enable solutions sales of ARRIS’s end-to-end product portfolio.
- **Enterprise Networks (“Enterprise”)** - The Enterprise Networks segment focuses on enabling constant, wireless and wired connectivity across complex and varied networking environments. It offers dedicated engineering, sales and marketing resources to serve customers across a spectrum of verticals-including hospitality, education, smart cities, government, venues, service providers and more.

These operating segments are determined based on the nature of the products and services offered. The measures that are used to assess the reportable segment’s operating performance are sales and direct contribution. Direct contribution is defined as gross margin less direct operating expense. The “Corporate and Unallocated Costs” category of expenses include corporate sales and marketing (excluding Enterprise segment), home office general and administrative expenses. Marketing and sales expenses related to the Enterprise segment are considered a direct operating expense for that segment and are not included in the “Corporate and Unallocated Costs.” These expenses are not included in the measure of segment direct contribution and as such are reported as “Corporate and Unallocated Costs” and are included in the reconciliation to income (loss) before income taxes. A measure of assets is not applicable, as segment assets are not regularly reviewed by the CODM for evaluating performance or allocating resources.

The tables below present information about the Company's reportable segments (in thousands):

	<u>2018</u>	<u>2017</u>	<u>2016</u>
<i>Net sales to external customers:</i>			
CPE	\$ 3,923,894	\$ 4,475,670	\$ 4,747,445
N&C	2,156,577	2,094,113	2,111,708
Enterprise	675,352	45,749	-
Other	(13,183)	(1,140)	(30,035)
Total	<u>6,742,640</u>	<u>6,614,392</u>	<u>6,829,118</u>
<i>Direct contribution:</i>			
CPE	270,510	456,562	647,117
N&C	848,938	724,597	595,866
Enterprise	64,667	1,389	-
Segment total	<u>1,184,115</u>	<u>1,182,548</u>	<u>1,242,983</u>
Corporate and unallocated costs	(576,347)	(530,772)	(581,991)
Amortization of intangible assets	(383,561)	(375,407)	(397,464)
Impairment of goodwill and intangible assets	(3,400)	(55,000)	(2,200)
Integration, acquisition, restructuring and other costs, net	(41,922)	(98,357)	(150,611)
Operating income	<u>178,885</u>	<u>123,012</u>	<u>110,717</u>
Interest expense	95,086	87,088	79,817
Loss on investments	308	11,066	21,194
Loss (gain) on foreign currency	3,834	9,757	(13,982)
Interest income	(8,341)	(7,975)	(4,395)
Other expense (income), net	5,056	1,873	3,991
Income before income taxes	<u>\$ 82,942</u>	<u>\$ 21,203</u>	<u>\$ 24,092</u>

For the years ended December 31, 2018, 2017 and 2016, the composition of our corporate and unallocated costs that are reflected in the Consolidated Statements of Income were as follows (in thousands):

	<u>2018</u>	<u>2017</u>	<u>2016</u>
<i>Corporate and unallocated costs:</i>			
Cost of sales	\$ 85,838	\$ 56,952	\$ 118,001
Selling, general and administrative expenses	385,273	374,933	367,225
Research and development expenses	<u>105,236</u>	<u>98,887</u>	<u>96,765</u>
Total	<u>\$ 576,347</u>	<u>\$ 530,772</u>	<u>\$ 581,991</u>

The following table summarizes the Company's net intangible assets and goodwill by reportable segment as of December 31, 2018 and 2017 (in thousands):

	<u>CPE</u>	<u>N&C</u>	<u>Enterprise</u>	<u>Total</u>
December 31, 2018				
Goodwill	\$ 1,380,817	\$ 570,852	\$ 288,973	\$ 2,240,642
Intangible assets, net	587,728	398,856	417,075	1,403,659
December 31, 2017				
Goodwill	\$ 1,386,680	\$ 573,798	\$ 318,034	\$ 2,278,512
Intangible assets, net	807,314	501,998	462,050	1,771,362

The following table summarizes the Company's revenues by products and services as of December 31, 2018, 2017 and 2016 (in thousands):

	<u>2018</u>	<u>2017</u>	<u>2016</u>
<i>CPE:</i>			
Broadband CPE	\$ 1,643,152	\$ 1,808,600	\$ 1,683,491
Video CPE	2,280,742	2,667,070	3,063,954
Sub-total	<u>3,923,894</u>	<u>4,475,670</u>	<u>4,747,445</u>
<i>Network & Cloud:</i>			
Networks	1,850,416	1,747,936	1,789,097
Software and services	306,161	346,177	322,611
Sub-total	<u>2,156,577</u>	<u>2,094,113</u>	<u>2,111,708</u>
<i>Enterprise Networks:</i>			
Enterprise Networks	675,352	45,749	-
<i>Other:</i>			
Other ⁽¹⁾	(13,183)	(1,140)	(30,035)
Total net sales	<u>\$ 6,742,640</u>	<u>\$ 6,614,392</u>	<u>\$ 6,829,118</u>

- (1) Includes adjustments related to acquisition accounting impacts on deferred revenues in 2018 and 2017 and reduction in revenue related to warrants in 2016.

The Company's two largest customers (including their affiliates, as applicable) are Charter and Comcast. Over the past year, certain customers' beneficial ownership may have changed as a result of mergers and acquisitions. Therefore, the revenue for ARRIS's customers for prior periods has been adjusted to include the affiliates under common control. A summary of sales to these customers for 2018, 2017 and 2016 is set forth below (in thousands, except percentages):

	<u>Years ended December 31,</u>		
	<u>2018</u>	<u>2017</u>	<u>2016</u>
Charter and affiliates	\$ 928,403	\$ 985,237	\$ 1,064,408 ⁽¹⁾
% of sales	13.8%	14.9%	15.6%
Comcast and affiliates	\$ 1,114,238	\$ 1,479,415	\$ 1,637,519 ⁽¹⁾
% of sales	16.5%	22.4%	24.0%

- (1) Revenues were reduced \$30.2 million in 2016, as a result of warrants held by Charter and Comcast. (see Note 18 *Warrants* for additional information).

ARRIS sells its products primarily in the United States. The Company's international revenue is generated from Asia Pacific, Canada, Europe and Latin America. Sales to customers outside of United States were approximately 41.1%, 34.2% and 28.1% of total sales for the years ended December 31, 2018, 2017 and 2016, respectively. Sales for the years ended December 31, 2018, 2017 and 2016 were as follows (in thousands):

	<u>For the Years Ended December 31,</u>		
	<u>2018</u>	<u>2017</u>	<u>2016</u>
Domestic - U.S.	\$ 3,973,247	\$ 4,351,843	\$ 4,909,698
International			
Americas, excluding U.S.	1,182,289	1,080,456	982,769
Asia Pacific	431,045	374,772	291,504
EMEA	1,156,059	807,321	645,147
Total international	<u>\$ 2,769,393</u>	<u>\$ 2,262,549</u>	<u>\$ 1,919,420</u>
Total sales	<u>\$ 6,742,640</u>	<u>\$ 6,614,392</u>	<u>\$ 6,829,118</u>

The following table summarizes net property, plant and equipment by geographic region as of December 31, 2018 and 2017 (in thousands):

	December 31,	
	2018	2017
Domestic - U.S.	\$ 236,003	\$ 250,866
International		
Americas, excluding U.S.	12,185	12,746
Asia Pacific	23,994	85,236
EMEA	15,489	23,619
Total international	\$ 51,668	\$ 121,601
Net property, plant and equipment	\$ 287,671	\$ 372,467

Note 12. Inventories

The components of inventory are as follows, net of reserves (in thousands):

	December 31,	
	2018	2017
Raw material	\$ 94,978	\$ 149,328
Work in process	4,275	5,416
Finished goods	640,952	670,467
Total inventories, net	\$ 740,205	\$ 825,211

Note 13. Property, Plant and Equipment

Property, plant and equipment, at cost, consisted of the following (in thousands):

	December 31,	
	2018	2017
Land	\$ 26,652	\$ 68,562
Buildings and leasehold improvements	203,920	205,534
Machinery and equipment	448,276	466,325
	678,848	740,421
Less: Accumulated depreciation	(391,177)	(367,954)
Total property, plant and equipment, net	\$ 287,671	\$ 372,467

In the fourth quarter of 2018, the Company completed the sale of land, building and certain manufacturing equipment related to its factory in Taiwan, for an aggregate consideration of \$75.9 million. The Company recorded a (\$13.3) million gain which is reported in the Consolidated Statement of Operations under the caption "Integration, acquisition, restructuring and other costs, net".

Note 14. Restructuring, Acquisition and Integration**Restructuring**

The following table represents a summary of and changes to the restructuring accrual, which is primarily composed of accrued severance and other employee costs and contractual obligations that related to excess leased facilities (in thousands):

	Employee severance & termination benefits	Contractual obligations and other	Write-off of property, plant and equipment	Total
Balance at December 31, 2016	\$ 27,886	\$ 2,243	\$ -	\$ 30,129
Restructuring charges	13,346	5,742	1,842	20,930
Cash payments / adjustments	(35,955)	(4,683)	-	(40,638)
Non-cash expense	(898)	-	(1,842)	(2,740)
Balance at December 31, 2017	<u>\$ 4,379</u>	<u>\$ 3,302</u>	<u>\$ -</u>	<u>\$ 7,681</u>
Restructuring charges	38,512	1,607	911	41,030
Cash payments / adjustments	(38,056)	(1,149)	-	(39,205)
Non-cash expense	-	-	(911)	(911)
Balance at December 31, 2018	<u>\$ 4,835</u>	<u>\$ 3,760</u>	<u>\$ -</u>	<u>\$ 8,595</u>

Employee severance and termination benefits - In 2018, ARRIS recorded restructuring charges of \$38.5 million related to severance and employee termination benefits for 1,084 employees. These restructuring initiatives affected all segments, except Enterprise Networks. The liability for these initiatives is expected to be settled in first half of 2019.

In 2017, ARRIS recorded restructuring charges of \$13.3 million related to severance and employee termination benefits for 195 employees. This initiative affected all segments. The liability for the plan has been materially settled in 2018.

In first quarter of 2016, ARRIS completed its acquisition of Pace. ARRIS initiated restructuring plans as a result of the acquisition that focused on the rationalization of personnel, facilities and systems across the ARRIS organization. The cost recorded during 2016 was approximately \$96.3 million. The 2016 restructuring plan affected 1,545 positions across the Company. The liability for the plan were settled in 2018.

These amounts are included in the Consolidated Statements of Income in the line item titled "Integration, acquisition, restructuring and other costs, net".

Contractual obligations -Contractual obligations that relate to excess leased facilities are recognized and measured initially at fair value on the cease-use date based on remaining lease rentals, adjusted for the effects of any prepaid or deferred items recognized, reduced by the estimated sublease rentals that could be reasonably obtained even if it is not the intent to sublease. The fair value of these liabilities is based on a net present value model using a credit-adjusted risk-free rate. The liability will be paid out over the remainder of the leased properties' terms, which continue through 2021. Actual sublease terms may differ from the estimates originally made by the Company. Any future changes in the estimates or in the actual sublease income could require future adjustments to the liabilities, which would impact net income in the period the adjustment is recorded. During 2018 and 2017, the Company recorded lease exist costs of \$1.6 million and \$5.7 million, respectively.

Write-off of property, plant and equipment - As a result of restructuring activities in 2018 effecting certain leased facilities, the Company recorded a restructuring charge of \$0.9 million to write-off certain leasehold improvements associated with the facilities. As part of the restructuring plan initiated as a result of the Pace combination, the Company recorded a restructuring charge of \$1.8 million in 2017 related to the write-off of property, plant and equipment associated with a closure of a facility. This restructuring plan was related to the Corporate segment.

Acquisition

Acquisition expenses were approximately \$9.7 million, \$74.5 million and \$29.0 million for the years ended December 31, 2018, 2017 and 2016, respectively. In 2018, acquisition costs include banker fees related to the proposed CommScope transaction. In 2017, acquisition expenses included \$61.5 million relates to the cash settlement of stock-based awards held by transferring employees for the Ruckus Networks acquisition. These expenses primarily related to the acquisition of Ruckus Networks and consisted of banker and other fees.

Integration

Integration expenses were approximately \$4.6 million, \$2.9 million and \$24.2 million for the years ended December 31, 2018, 2017 and 2016, respectively. The expense was related to outside services and other integration related activities following the Ruckus Networks and Pace acquisitions.

Note 15. Lease Financing Obligation

Sale-leaseback of San Diego Office Complex:

In 2015, the Company sold its San Diego office complex consisting of land and buildings with a net book value of \$71.0 million, for total consideration of \$85.5 million. The Company concurrently entered into a leaseback arrangement for two buildings on the San Diego campus ("Building 1" and "Building 2") with an initial leaseback term of ten years for Building 1 and a maximum term of one year for Building 2. The Company determined that the sale-leaseback of Building 1 did not qualify for sale-leaseback accounting due to continuing involvement that will exist for the 10-year lease term. Accordingly, the carrying amount of Building 1 will remain on the Company's balance sheet and will be depreciated over its remaining useful life with the proceeds reflected as a financing obligation. The Company concluded that Building 2 qualified for sale-leaseback accounting with the subsequent leaseback classified as an operating lease.

At December 31, 2018, the minimum lease payments required on the financing obligation were as follows (in thousands):

2019	\$	4,388
2020		4,520
2021		4,655
2022		4,795
2023		4,939
Thereafter through 2025		<u>6,368</u>
Total minimum lease payments	\$	<u>29,665</u>

Note 16. Indebtedness

The following is a summary of indebtedness and lease financing obligations (in thousands):

	<u>As of December 31, 2018</u>	<u>As of December 31, 2017</u>
Current liabilities:		
Term A loan	\$ 19,550	\$ 19,550
Term A-1 loan	62,500	62,500
Term B-3 loan	5,450	5,450
Lease finance obligation	<u>1,050</u>	<u>870</u>
Current obligations	88,550	88,370
Current deferred financing fees and debt discount	<u>(4,688)</u>	<u>(4,811)</u>
	83,862	83,559
Noncurrent liabilities:		
Term A loan	347,013	366,562
Term A-1 loan	1,109,375	1,171,875
Term B-3 loan	530,012	535,463
Revolver	-	-
Lease finance obligation	<u>59,982</u>	<u>61,032</u>
Noncurrent obligations	2,046,382	2,134,932
Noncurrent deferred financing fees and debt discount	<u>(14,000)</u>	<u>(18,688)</u>
	2,032,382	2,116,244
Total	<u>\$ 2,116,244</u>	<u>\$ 2,199,803</u>

Senior Secured Credit Facilities

On December 20, 2017, the Company entered into a Fourth Amendment (the “Fourth Amendment”) to its Amended and Restated Credit Facility dated June 18, 2015, as previously amended on December 14, 2015, April 26, 2017, and October 17, 2017 (the “Credit Agreement”). The Fourth Amendment provided for a new Term B Loan facility in the principal amount of \$542.3 million, the proceeds of which (along with cash on hand) were used to repay in full the existing Term B Loan facility. Under the terms of the Fourth Amendment, the maturity date of the new Term B Loan facility remains April 26, 2024, but the new Term B Loan facility has an interest rate of LIBOR (as defined in the Credit Agreement) plus a percentage ranging from 2.00% to 2.25% for Eurocurrency Loans (as defined in the Credit Agreement) or the prime rate (as determined in accordance with the Credit Agreement) plus a percentage ranging from 1.00% to 1.25% for Base Rate Loans (as defined in the Credit Agreement), in either case depending on ARRIS’s consolidated net leverage ratio. The Fourth Amendment also increased to \$500 million the amount of cash that can be used to offset indebtedness in the calculation of the consolidated net leverage ratio for purposes of determining the applicable interest rate. All other material terms of the Credit Agreement remained unchanged.

On October 17, 2017, the Company entered into the Third Amendment and Consent (the “Third Amendment”) to the Credit Agreement. Pursuant to the Third Amendment, ARRIS (i) incurred “Refinancing Term A Loans” of \$391 million, (ii) incurred “Refinancing Term A-1 Loans” of \$1,250 million, and (iii) obtained a “Refinancing Revolving Credit Facility” of \$500 million, the proceeds of which were used to refinance in full the existing Term A Loans, the existing Term A-1 Loans and the existing Revolving Credit Loans outstanding under the Credit Agreement immediately prior to the effectiveness of the Third Amendment. The existing Term B Loans were not refinanced and remain outstanding.

The Third Amendment extended the maturity date of the Term A Loans and the Revolving Credit Facility to October 17, 2022. Pursuant to the Third Amendment, the Company is subject to a minimum consolidated interest coverage ratio test, which is unchanged from the Credit Agreement. In addition, the Company is subject to a maximum consolidated net leverage ratio test of not more than 4.0:1.0, subject to a step-down to 3.75:1.00 commencing with the fiscal quarter ending March 31, 2019. The amount of unrestricted cash used to offset indebtedness in the calculation of the consolidated net leverage ratio was also increased from \$200 million to \$500 million. The interest rates under the Third Amendment were not changed.

On April 26, 2017, ARRIS entered into a Second Amendment (the “Second Amendment”) to the Credit Agreement. The Second Amendment provided for a new Term B Loan facility in the principal amount of \$545 million, the proceeds of which (along with cash on hand) were used to repay the existing Term B Loan facility. Under the terms of the Second Amendment, the new Term B-2 Loan has a maturity date of April 2024 and an interest rate of LIBOR plus a percentage ranging from 2.25% to 2.50% for Eurocurrency Rate Loans (as defined in the Credit Agreement), or the prime rate plus a percentage ranging from 1.25% to 1.50% for Base Rate Loans (as defined in the Credit Agreement), in either case depending on the Company’s consolidated net leverage ratio.

In connection with the Amendments in 2017, the Company paid and capitalized approximately \$1.4 million of financing fees and \$4.5 million of original issuance discount. In addition, the Company expensed approximately \$4.5 million of debt issuance costs and wrote off approximately \$1.3 million of existing debt issuance costs associated with certain lenders who were not party to the credit facility, which were included as interest expense in the Consolidated Statements of Income for the year ended December 31, 2017.

Interest rates on borrowings under the senior secured credit facilities are set forth in the table below.

	<u>Rate</u>	<u>As of December 31, 2018</u>
Term Loan A	LIBOR + 1.75 %	4.27%
Term Loan A-1	LIBOR + 1.75 %	4.27%
Term Loan B-3	LIBOR + 2.25 %	4.77%
Revolving Credit Facility ⁽¹⁾	LIBOR + 1.75 %	Not Applicable

(1) Includes unused commitment fee of 0.30% and letter of credit fee of 1.75% not reflected in interest rate above.

The Credit Agreement provides for adjustments to the interest rates paid on the Term Loan A, Term Loan A-1, Term Loan B-3 and Revolving Credit Facility based upon the achievement of certain leverage ratios.

Borrowings under the senior secured credit facilities are secured by first priority liens on substantially all of the assets of ARRIS and certain of its present and future subsidiaries who are or become parties to, or guarantors under, the Credit Agreement governing the senior secured credit facilities. The Credit Agreement provides terms for mandatory prepayments and optional prepayments and commitment reductions. The Credit Agreement also includes events of default, which are customary for facilities of this type (with customary grace periods, as applicable), including provisions under which, upon the occurrence of an event of default, all amounts

outstanding under the credit facilities may be accelerated. The Credit Agreement contains usual and customary limitations on indebtedness, liens, restricted payments, acquisitions and asset sales in the form of affirmative, negative and financial covenants, which are customary for financings of this type, including the maintenance of a minimum interest coverage ratio and a maximum leverage ratio. As of December 31, 2018, ARRIS was in compliance with all covenants under the Credit Agreement.

During 2018 and 2017, the Company made mandatory payments of approximately \$87.5 million and \$91.7 million, respectively, related to the senior secured credit facilities.

Other

As of December 31, 2018, the scheduled maturities of the contractual debt obligations are as follows (in thousands):

2019	\$	87,500
2020		87,500
2021		87,500
2022		1,297,738
2023		5,450
Thereafter		508,212

Note 17. Earnings Per Share

The following is a reconciliation of the numerators and denominators of the basic and diluted earnings per share computations for the periods indicated (in thousands, except per share data):

	For the Years Ended December 31,		
	2018	2017	2016
Basic:			
Net income attributable to ARRIS International plc	\$ 113,740	\$ 92,027	\$ 18,100
Weighted average shares outstanding	180,147	187,133	190,701
Basic earnings per share	\$ 0.63	\$ 0.49	\$ 0.09
Diluted:			
Net income attributable to ARRIS International plc	\$ 113,740	\$ 92,027	\$ 18,100
Weighted average shares outstanding	180,147	187,133	190,701
Net effect of dilutive shares	1,894	2,483	1,484
Total	182,041	189,616	192,185
Diluted earnings per share	\$ 0.62	\$ 0.49	\$ 0.09

Potential dilutive shares include unvested restricted and performance awards and warrants.

For the year ended December 31, 2018, 2017 and 2016, approximately 1.5 million, 1.1 million and 0.9 million of the equity-based awards, respectively, were excluded from the computation of diluted earnings per share because their effect would have been anti-dilutive. These exclusions are made if the exercise price of these equity-based awards is in excess of the average market price of the shares for the period, or if the Company has net losses, both of which have an anti-dilutive effect.

During the twelve months ended December 31, 2018, the Company issued 2.7 million shares of its ordinary shares related to the vesting of restricted stock units, as compared to 2.6 million shares for the twelve months ended December 31, 2017.

Warrants have a dilutive effect in those periods in which the average market price of the shares exceeds the current effective exercise price (under the treasury stock method) and are not subject to performance conditions. There was no incremental vesting in the 2018 and 2017. During the fourth quarter of 2016, approximately 2.2 million warrants vested based on the amount of purchases of products and services by the customer from the Company. The dilutive effect of these vested shares was immaterial.

The Company has not paid cash dividends on its stock since its inception. Any future determination to pay dividends will be at the discretion of the Board of Directors and will be dependent on then-existing conditions, including the Company's financial condition, results of operations, capital requirements, contractual and legal restrictions, business prospects and other factors that the Board considers relevant. The Credit Agreement contains restrictions on the Company's ability to pay dividends on its ordinary shares.

Note 18. Warrants

During 2016, the Company entered into two separate Warrant and Registration Rights Agreements (the “Warrants”) with certain customers pursuant to which those customers may purchase up to 14.0 million of ARRIS’s ordinary shares, (subject to adjustment in accordance with the terms of the Warrants, the “Shares”).

The Warrants will vest in tranches based on the amount of purchases of products and services by the customer from the Company. At December 31, 2018 and December 31, 2017, approximately 2.2 million Warrants were vested and outstanding, with a weighted average exercise price of \$24.64, which vested based on the amount of purchases of products and services by the customers from the Company in 2016.

For the year ended December 31, 2018 and 2017, there were no adjustments related to the Warrants. For the year ended December 31, 2016, ARRIS recorded \$30.2 million as a reduction to net sales in connection with Warrants. This transaction is considered an equity contract and is classified as such.

Note 19. Income Taxes

Income before income taxes (in thousands):

	Years Ended December 31,		
	2018	2017	2016
U.K.	\$ (82,790)	\$ (64,177)	\$ (36,300)
U.S.	(97,137)	(159,951)	(149,605)
Other Foreign	262,869	245,331	209,997
	<u>\$ 82,942</u>	<u>\$ 21,203</u>	<u>\$ 24,092</u>

Income tax (benefit) expense consisted of the following (in thousands):

	Years Ended December 31,		
	2018	2017	2016
Current - U.K.	\$ 8,167	\$ 667	\$ 81,822
U.S.	21,611	3,530	47,025
Other Foreign	14,690	25,347	31,552
	<u>44,468</u>	<u>29,544</u>	<u>160,399</u>
Deferred - U.K.	(20,280)	(22,254)	(23,177)
U.S.	(53,160)	(49,671)	(105,735)
Other Foreign	4,628	(2,540)	(16,356)
	<u>(68,812)</u>	<u>(74,465)</u>	<u>(145,268)</u>
Income tax (benefit) expense	<u>\$ (24,344)</u>	<u>\$ (44,921)</u>	<u>\$ 15,131</u>

A reconciliation of the U.K. statutory income tax rate of 19.00% for 2018, 19.25% for 2017 and 20.00% for 2016 and the effective income tax rates is as follows:

	Years Ended December 31,		
	2018	2017	2016
Statutory income tax rate	19.00%	19.25%	20.00%
Effects of:			
State income taxes, net of federal benefit	(5.3)	11.0	(16.6)
U.S. domestic manufacturing deduction	-	(0.9)	(12.0)
Facilitative transaction costs	-	54.2	22.0
Research and development tax credits	(35.2)	(119.7)	(90.6)
Withholding taxes (U.K. entities)	4.2	12.4	245.5
U.K. stamp duty	0.5	-	9.4
Subpart F income	3.2	-	4.0
Changes in valuation allowance	-	35.1	6.0
Foreign tax credits	9.8	29.5	(14.0)
Non-deductible officer compensation	5.5	4.9	-
Non-U.K. tax rate differential	4.4	26.1	(50.9)
Benefit of other foreign tax regimes	(42.8)	(170.6)	(135.4)
Accrual of outside basis differences	7.9	(0.3)	0.9
Impacts of internal restructuring	(4.6)	-	-
Gain on sale of Taiwan factory	(5.2)	-	-
Change in tax rate	1.8	(105.0)	-
Uncertain tax positions	5.3	(13.1)	88.9
Other, net	2.2	5.3	(14.4)
	<u>(29.4)%</u>	<u>(211.85)%</u>	<u>62.8%</u>

On December 22, 2017, the Tax Cuts and Jobs Act of 2017 (the "Act") was signed into law making significant changes to the Internal Revenue Code. Changes include, but are not limited to, a corporate tax rate decrease from 35% to 21% effective for tax years beginning after December 31, 2017, a one-time transition tax on the mandatory deemed repatriation of cumulative foreign earnings as of December 31, 2017, a new alternative U.S. tax on certain Base Erosion Anti-Avoidance (BEAT) payments from a U.S. company to any foreign related party, a new U.S. tax on certain off-shore earnings referred to as Global Intangible Low-Taxed Income (GILTI), additional limitations on certain executive compensation, and limitations on interest deductions. The Company has recorded current tax on its global intangible low-taxed income ("GILTI") relative to the 2018 operations and has elected to account for GILTI as period costs when incurred.

The Company was required to recognize the effect of the tax law changes in the period of enactment, such as determining the transition tax, remeasuring its U.S. deferred tax assets and liabilities as well as reassessing the realizability of its deferred tax assets. Due to the timing of the enactment and the complexity in applying the provisions of the Act, the Company made reasonable estimates of the impact of the Act in its December 31, 2017 year end income tax provision in accordance with Staff Accounting Bulletin No. 118, its understanding of the Act and other relevant guidance available. As the Company collected and prepared necessary data, and interpreted the additional guidance issued by the U.S. Treasury Department, the Internal Revenue Service, and other standard-setting bodies, we made certain adjustments, over the course of the year ended December 31, 2018, to the provisional amounts including refinement to deferred taxes and the one-time transition tax. The accounting for the effects of the Act has been completed as of December 31, 2018.

The Act required us to pay U.S. income taxes on accumulated foreign subsidiary earnings not previously subject to U.S. income tax. The provisional amount for one-time transition tax liability was not material as of December 31, 2017. During 2018, this amount was finalized and as of December 31, 2018 our one-time transition tax liability and income tax expense is zero.

Due to the change in the U.S. federal statutory rate from the Act, the Company remeasured the deferred taxes at December 31, 2017 to reflect the reduced rate. The Company recognized a provisional income tax benefit amount of (\$22.3) million related to this remeasurement of certain deferred tax assets and liabilities based on the rates at which they are expected to reverse in the future. Due to the finalization of the effects of the Tax Act the company recorded \$1.5 million of income tax expense in the period ended December 31, 2018 related to the remeasurement of these deferred tax amounts.

Deferred income taxes reflect the net tax effects of temporary differences between carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of ARRIS's net deferred income tax assets (liabilities) were as follows (in thousands):

	December 31,	
	2018	2017
Deferred income tax assets		
Inventory costs	\$ 21,471	\$ 29,453
Property, plant and equipment	12,333	-
Accrued employee benefits	22,595	34,472
Accrued operating expenses	42,290	24,904
Reserves	13,144	16,434
Investments	-	8,796
Loss carryforwards	68,518	91,832
Research and development and other credits	181,851	164,841
Capitalized research and development	97,975	83,224
Other	26,157	17,379
Total deferred income tax assets	<u>486,334</u>	<u>471,335</u>
Deferred income tax liabilities:		
Property, plant and equipment	-	(571)
Investments	(1,970)	-
Other liabilities	(3,026)	(7,190)
Goodwill and intangible assets	(262,660)	(325,283)
Total deferred income tax liabilities	<u>(267,656)</u>	<u>(333,044)</u>
Net deferred income tax assets	218,678	138,291
Valuation allowance	(90,057)	(91,743)
Net deferred income tax assets	<u>\$ 128,621</u>	<u>\$ 46,548</u>

Significant attributes of ARRIS's deferred tax assets related to loss carryforwards and tax credits were as follows: (in thousands):

	2018	2017	Expiration
Net operating loss carryforwards ("NOL"):			
U.S. federal ⁽¹⁾	\$ 7,117	\$ 27,405	2019 - 2029
Georgia	15,211	15,948	2019 - 2038
Pennsylvania	17,400	17,687	2019 - 2038
Other U.S. states	10,944	12,236	2019 - 2038
Non-U.S.	17,846	18,556	Varies ⁽²⁾
Total tax effected loss carryforward	<u>\$ 68,518</u>	<u>\$ 91,832</u>	
Tax credit carryforwards:			
U.S. federal R&D	\$ 119,257	\$ 103,581	2019 - 2038
Other U.S. federal	-	5,742	
California R&D	40,335	34,208	Indefinite
Other U.S. states R&D	22,259	21,310	2019 - 2038
Total credit carryforward	<u>\$ 181,851</u>	<u>\$ 164,841</u>	

(1) Gross of tax effect U.S. Federal operating loss carryforwards are \$33.9 million for the year ended December 31, 2018 and \$130.5 million for the year ended December 31, 2017.

(2) \$2.9 million of this amount is located in Mexico and Israel, both of which have an expiration of ten years, Canadian NOLs expire within 16 years and all other foreign NOLs have an indefinite carryforward life.

ARRIS' ability to use U.S. federal, state, and other foreign net operating loss carryforwards to reduce future taxable income, or to use U.S. federal and state research and development tax credits and other carryforwards to reduce future income tax liabilities, is subject to the ability to generate sufficient taxable income of an appropriate characterization in the appropriate taxing jurisdictions. In some instances, the utilization is also subject to restrictions attributable to change of ownership during prior tax years, as defined by appropriate law in the relevant taxing jurisdiction. These limitations, as noted above, prevent the Company from utilizing certain deferred tax assets and were considered in establishing our valuation allowances.

Components of ARRIS's valuation allowance were as follows (in thousands):

	<u>2018</u>	<u>2017</u>
U.S. federal R&D	\$ (5,239)	\$ (8,578)
Other U.S. federal	(1,585)	(4,241)
Georgia NOL	(14,478)	(15,008)
Pennsylvania NOL	(9,887)	(10,068)
Other state NOL	(9,111)	(8,988)
California R&D	(25,994)	(18,773)
Other state R&D	(15,635)	(15,606)
Non-U.S. NOL	(8,128)	(10,481)
Ending balance	<u>\$ (90,057)</u>	<u>\$ (91,743)</u>

A roll-forward analysis of our deferred tax asset valuation allowances is as follows (in thousands):

	<u>For the Period ended December 31,</u>		
	<u>2018</u>	<u>2017</u>	<u>2016</u>
Beginning balance	\$ 91,743	\$ 57,772	\$ 87,788
Additions	13,082	52,680	17,973
Reductions	(14,768)	(18,709)	(47,989)
Ending balance	<u>\$ 90,057</u>	<u>\$ 91,743</u>	<u>\$ 57,772</u>

During 2018 the Company changed its indefinite reinvestment assertion and therefore recorded deferred income taxes on a portion of the unremitted earnings of certain subsidiaries. As of December 31, 2018, no deferred taxes have been provided for the portion of the unremitted earnings of certain of the Company's subsidiaries. The earnings amount to approximately \$20.9 million which if distributed may result in additional taxes. Determination of the amount of additional taxes is not practicable because of the complexities associated with this hypothetical calculation. The remaining unremitted earnings of foreign subsidiaries for which the Company does not assert indefinite reinvestment have a deferred tax liability recorded of \$8.7 million.

Tabular Reconciliation of Unrecognized Tax Benefits (in thousands):

	<u>For the Period ended December 31,</u>		
	<u>2018</u>	<u>2017</u>	<u>2016</u>
Beginning balance	\$ 174,225	\$ 128,053	\$ 49,919
Gross increases - tax positions in prior period	7,055	6,783	8,068
Gross decreases - tax positions in prior period	(6,368)	(21,409)	(5,700)
Gross increases - current-period tax positions	24,767	24,551	27,774
Changes from acquired businesses	(34,199)	39,420	60,796
Changes related to foreign currency translation and remeasurement	(2,284)	1,545	(1,087)
Decreases relating to settlements with taxing authorities and other	(202)	(686)	(3,933)
Decreases due to lapse of statute of limitations	(13,122)	(4,032)	(7,784)
Ending balance	<u>\$ 149,872</u>	<u>\$ 174,225</u>	<u>\$ 128,053</u>

The Company and its subsidiaries file income tax returns in the U.S. and U.K. jurisdictions, and various state and other foreign jurisdictions. As of December 31, 2018, the Company and its subsidiaries were under income tax audit in various jurisdictions including the United Kingdom (2013 onwards), the United States (2015 onwards), Hong Kong (2014 onwards), Brazil (2010, 2012 and 2014 onwards) and various states and other foreign countries. ARRIS does not anticipate audit adjustments in excess of its current accrual for uncertain tax positions.

Liabilities related to uncertain tax positions inclusive of interest and penalties were \$153.6 million and \$178.2 million at December 31, 2018 and 2017, respectively. These liabilities at December 31, 2018 and 2017 were reduced by \$34.6 million and \$29.6 million, respectively, for offsetting benefits from the corresponding effects of potential transfer pricing adjustments, state income taxes and other unrecognized tax benefits. These offsetting benefits are recorded in other non-current assets and noncurrent deferred income taxes. The net result of \$119.0 million and \$148.6 million at December 31, 2018 and 2017, respectively, if recognized and released, would favorably affect tax expense.

Included in the net result of \$119.0 million as of December 31, 2018, is \$5.2 million of net acquired uncertain tax positions related to Ruckus Networks. This amount is fully indemnified and offset by a corresponding indemnification asset recorded in other non-current assets.

The Company reported approximately \$3.7 million and \$4.0 million, respectively, of interest and penalty accrual related to the anticipated payment of these potential tax liabilities as of December 31, 2018 and 2017. The Company classifies interest and penalties recognized on the liability for uncertain tax positions as income tax expense.

Based on information currently available, the Company anticipates that over the next twelve-month period, statutes of limitations may close and audit settlements will occur relating to existing unrecognized tax benefits of approximately \$12.1 million primarily arising from U.K. and U.S. federal and state tax related items.

Note 20. Stock-Based Compensation

ARRIS grants stock awards under its 2016 Stock Incentive Plan (“SIP”). Upon approval of the 2016 SIP, all shares available for grant under the Company’s other existing stock incentive plans were no longer available. The Board of Directors approved the SIP and the prior plans to facilitate the retention and continued motivation of key employees, consultants and directors, and to align more closely their interests with those of the Company and its stockholders.

Awards under the SIP may be in the form of stock options, stock grants, stock units, restricted stock, stock appreciation rights, performance shares and units, and dividend equivalent rights. A total of 31,215,000 shares of the Company’s shares may be issued pursuant to the SIP. The SIP has been designed to allow for flexibility in the form of awards; however, awards denominated in ordinary shares other than stock options and stock appreciation rights will be counted against the SIP limit as 1.87 shares for every one share covered by such an award. The vesting requirements for issuance under the SIP may vary; however, awards generally are required to have a minimum three-year vesting period or term.

Restricted Stock (Non-Performance) Units

ARRIS grants restricted stock units to certain employees and its non-employee directors. The Company records a fixed compensation expense equal to the fair market value of the underlying shares of restricted stock unit granted on a straight-line basis over the requisite services period for the restricted shares. The Company applies an estimated forfeiture rate based upon historical rates. The fair value is the market price of the underlying ordinary shares on the date of grant.

In connection with the Pace combination, ARRIS accelerated the vesting of the time-based restricted shares that otherwise were scheduled to vest in 2016 for all of its executive officers and additional acceleration of time-based restricted shares for two executives that reached retirement age eligibility that otherwise would vest in 2017, 2018 and 2019.

The following table summarizes ARRIS’s unvested restricted stock unit (excluding performance-related) transactions during the year ending December 31, 2018:

	<u>Ordinary Shares</u>	<u>Weighted Average Grant Date Fair Value</u>
Unvested at December 31, 2017	7,360,344	\$ 26.18
Granted	3,930,880	26.50
Vested	(2,730,727)	26.38
Forfeited	(854,110)	26.79
Unvested at December 31, 2018	<u>7,706,387</u>	26.20

Restricted Shares Units - Subject to Comparative Market Performance

ARRIS grants to certain employees restricted shares units, in which the number of shares to be issued is dependent upon the Company's total shareholder return as compared to the shareholder return of the NASDAQ composite over a three-year period. The number of shares which could potentially be issued ranges from zero to 200% of the target award. For the awards granted in 2016, the three-year measurement period ended on December 31, 2018. The Company's total shareholder return underperformed the NASDAQ composite over the three-year period. This resulted in zero achievement of the target award, subject to separate treatment under terms of the Acquisition Agreement with CommScope. The remaining grants outstanding that are subject to market performance are 532,385 shares at target; at 200% performance 1,064,770 would be issued. Compensation expense is recognized on a straight-line basis over the three-year measurement period and is based upon the fair market value of the shares expected to vest. The fair value of the restricted share units is estimated on the date of grant using a Monte Carlo Simulation model.

	<u>Market Performance</u> <u>Shares</u>	<u>Weighted Average Grant</u> <u>Date Fair Value</u>
Unvested at December 31, 2017	1,345,060	\$ 22.73
Granted	596,540	27.29
Vested	-	-
Performance adjustment	(820,920)	22.14
Unvested at December 31, 2018	<u>1,120,680</u>	25.58

The total fair value of restricted share units, including both non-performance and performance-related shares, that vested during 2018, 2017 and 2016 was \$73.8 million, \$76.1 million and \$52.3 million, respectively.

Employee Stock Purchase Plan ("ESPP")

ARRIS offers an ESPP to certain employees. The plan complies with Section 423 of the U.S. Internal Revenue Code, which provides that employees will not be immediately taxed on the difference between the market price of the stock and a discounted purchase price if it meets certain requirements. Participants can request that up to 10% of their base compensation be applied toward the purchase of ARRIS ordinary shares under ARRIS's ESPP. Purchases by any one participant are limited to \$25,000 (based upon the fair market value) in any one year. The exercise price is the lower of 85% of the fair market value of the ARRIS ordinary shares on either the first day of the purchase period or the last day of the purchase period. A plan provision which allows for the more favorable of two exercise prices is commonly referred to as a "look-back" feature. Any discount offered in excess of five percent generally will be considered compensatory and appropriately is recognized as compensation expense. Additionally, any ESPP offering a look-back feature is considered compensatory. ARRIS uses the Black-Scholes option valuation model to value shares issued under the ESPP. The valuation is comprised of two components; the 15% discount of a share of ordinary shares and 85% of a six-month option held (related to the look-back feature). The weighted average assumptions used to estimate the fair value of purchase rights granted under the ESPP for 2018, 2017 and 2016, were as follows: risk-free interest rates of 2.3%, 1.2% and 0.5%, respectively; a dividend yield of 0%; volatility factor of the expected market price of ARRIS's stock of 0.27, 0.28, and 0.37, respectively; and a weighted average expected life of 0.5 year for each. The Company recorded stock compensation expense related to the ESPP of approximately \$5.7 million, \$4.8 million and \$4.6 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Unrecognized Compensation Cost

As of December 31, 2018, there was approximately \$161.9 million of total unrecognized compensation cost related to unvested share-based awards granted under the Company's incentive plans. This compensation cost is expected to be recognized over a weighted-average period of 2.8 years.

Note 21. Employee Benefit Plans

The Company sponsors a qualified and a non-qualified non-contributory defined benefit pension plan that covers certain U.S. and non-U.S. employees. As of January 1, 2000, the Company froze the U.S. qualified defined pension plan benefits for its participants. These participants elected to enroll in ARRIS's enhanced 401(k) plan.

The U.S. pension plan benefit formulas generally provide for payments to retired employees based upon their length of service and compensation as defined in the plans. ARRIS's investment policy is to fund the qualified plan as required by the Employee Retirement Income Security Act of 1974 ("ERISA") and to the extent that such contributions are tax deductible.

No minimum funding contributions was required in 2018 under the Company's U.S. defined benefit, however the Company made a contribution of \$1.8 million for the year ended December 31, 2018 to fully fund the plan termination. For the year ended December 31, 2017, the Company made a voluntary minimum funding contribution of \$1.4 million to its U.S defined benefit plan. The Company also made funding contributions of \$1.8 million and \$1.2 million related to our non-U.S. pension plan in 2018 and 2017, respectively.

The Company established a rabbi trust to fund the pension obligations of the Executive Chairman under his SERP including the benefit under the Company's non-qualified defined benefit plan. In October 2018, the full SERP obligation was distributed to the Executive Chairman and no further obligation exists. In addition, the Company has established a rabbi trust for certain executive officers to fund the Company's pension liability to those officers under the non-qualified plan.

In late 2017, the Company commenced the process of terminating its U.S. defined benefit pension plan. The plan's termination was approved and the Company proceeded with effecting termination, settlement of the plan obligations was completed by December 31, 2018. The plan's deferred actuarial losses of \$9.2 million remaining in Accumulated other comprehensive (loss) income were recognized as expense.

ARRIS also provides a non-contributory defined benefit plan which cover employees in Taiwan. Any other benefit plans outside of the U.S. are not material to ARRIS either individually or in the aggregate. As a result of restructuring activities in conjunction with the sale of the Taiwan manufacturing facility, the Company recorded a partial curtailment of the plan and recognized a deferral actuarial gain of \$3.5 million as income from Accumulated other comprehensive (loss) income.

The following table summarizes the change in projected benefit obligations, fair value of plan assets and the funded status of pension plan for the years ended December 31, 2018 and 2017 (in thousands):

	U.S. Pension Plans		Non-U.S. Pension Plans	
	2018	2017	2018	2017
Change in Projected Benefit Obligation:				
Projected benefit obligation at beginning of year	\$ 49,220	\$ 45,270	\$ 38,136	\$ 35,706
Service cost	-	-	615	664
Interest cost	1,382	1,733	393	486
Actuarial (gain) loss	(2,571)	3,868	(139)	121
Benefit payments	(1,766)	(1,651)	-	-
Settlements	(36,585)	-	(31,544)	(1,596)
Foreign currency	-	-	(1,058)	2,755
Projected benefit obligation at end of year	<u>\$ 9,680</u>	<u>\$ 49,220</u>	<u>\$ 6,403</u>	<u>\$ 38,136</u>
Change in Plan Assets:				
Fair value of plan assets at beginning of year	\$ 19,664	\$ 18,510	\$ 20,324	\$ 19,011
Actual return on plan assets	76	949	689	183
Company contributions	18,611	1,856	1,722	1,259
Expenses and benefits paid from plan assets	(1,766)	(1,651)	-	-
Settlements	(36,585)	-	(19,217)	(1,596)
Foreign currency	-	-	(564)	1,467
Fair value of plan assets at end of year (1)	<u>\$ -</u>	<u>\$ 19,664</u>	<u>\$ 2,954</u>	<u>\$ 20,324</u>
Funded Status:				
Funded status of plan	\$ (9,680)	\$ (29,557)	\$ (3,449)	\$ (17,812)
Unrecognized actuarial loss (gain)	1,334	13,981	(592)	(1,857)
Net amount recognized	<u>\$ (8,346)</u>	<u>\$ (15,576)</u>	<u>\$ (4,041)</u>	<u>\$ (19,669)</u>

(1) In addition to the U.S. pension plan assets, ARRIS has established two rabbi trusts to further fund the pension obligations of the Executive Chairman and certain executive officers. The obligation for the Executive Chairman was distributed in the fourth quarter of 2018. The balance in the trusts as of December 31, 2018 and 2017 are \$9.7 million and \$25.4 million, respectively, and are included in Investments on the Consolidated Balance Sheets.

Amounts recognized in the statement of financial position consist of (in thousands):

	U.S. Pension Plans		Non-U.S. Pension Plans	
	2018	2017	2018	2017
Current liabilities	\$ (520)	\$ (17,670)	\$ -	\$ -
Noncurrent liabilities	(9,160)	(11,887)	(3,449)	(17,812)
Accumulated other comprehensive loss (income) (1)	1,334	13,981	(592)	(1,857)
Total	<u>\$ (8,346)</u>	<u>\$ (15,576)</u>	<u>\$ (4,041)</u>	<u>\$ (19,669)</u>

(1) The Accumulated other comprehensive (loss) income on the Consolidated Balance Sheets as of December 31, 2018 and 2017 is presented net of income tax.

Other changes in plan assets and benefit obligations recognized in other comprehensive income (loss) are as follows (in thousands):

	U.S. Pension Plans			Non-U.S. Pension Plans		
	2018	2017	2016	2018	2017	2016
Net (gain) loss	\$ (2,399)	\$ 3,814	\$ 2,068	\$ (562)	\$ 261	\$ 225
Amortization of net gain (loss)	(1,012)	(552)	(544)	-	78	248
Adjustments	-	-	-	-	-	1,849
Settlements	(9,236)	-	-	1,776	-	-
Foreign currency	-	-	-	-	-	31
Total recognized in other comprehensive (loss) income	<u>\$ (12,647)</u>	<u>\$ 3,262</u>	<u>\$ 1,524</u>	<u>\$ 1,214</u>	<u>\$ 339</u>	<u>\$ 2,353</u>

Information for defined benefit plans with accumulated benefit obligations or projected benefit obligation in excess of plan assets as of December 31, 2018 and 2017 is as follows (in thousands):

	U.S. Pension Plans		Non-U.S. Pension Plans	
	2018	2017	2018	2017
Accumulated benefit obligation in excess of plan assets:				
Accumulated benefit obligation	\$ 9,680	\$ 49,220	\$ 4,374	\$ 29,741
Fair value of plan assets	-	19,664	2,954	20,324
Projected benefit obligation in excess of plan assets:				
Projected benefit obligation	9,680	49,220	6,403	38,136
Fair value of plan assets	-	19,664	2,954	20,324

Net periodic pension cost for 2018, 2017 and 2016 for pension and supplemental benefit plans includes the following components (in thousands):

	U.S. Pension Plans			Non-U.S. Pension Plans		
	2018	2017	2016	2018	2017	2016
Service cost	\$ -	\$ -	\$ -	\$ 615	\$ 664	\$ 703
Interest cost	1,382	1,733	1,751	393	486	614
Return on assets (expected)	(248)	(895)	(795)	(266)	(323)	(275)
Amortization of net actuarial loss(gain) ⁽¹⁾	1,012	552	544	-	(78)	(70)
Settlement charge (benefit)	9,236	-	-	(3,571)	-	(178)
Adjustments	-	-	-	-	-	(1,849)
Foreign currency	-	-	-	-	-	(31)
Net periodic pension cost	<u>\$ 11,382</u>	<u>\$ 1,390</u>	<u>\$ 1,500</u>	<u>\$ (2,829)</u>	<u>\$ 749</u>	<u>\$ (1,086)</u>

- (1) ARRIS uses the allowable 10% corridor approach to determine the amount of gains/losses subject to amortization in pension cost. Gains/losses are amortized on a straight-line basis over the average future service of members expected to receive benefits

Estimated amounts to be amortized from accumulated other comprehensive (loss) income into net periodic benefit costs in the year ending December 31, 2019 based on December 31, 2018 plan measurements are \$0.1 million, consisting primarily of amortization of the net actuarial loss in the U.S. pension plans.

The assumptions used to determine the benefit obligations as of December 31, 2018, 2017 and 2016 are as set forth below (in percentage):

	U.S. Pension Plans			Non-U.S. Pension Plans		
	2018	2017	2016	2018	2017	2016
<i>Weighted-average assumptions used to determine benefit obligations:</i>						
Discount rate	4.05%	3.45%	3.90%	1.00%	1.10%	1.30%
Rate of compensation increase	N/A	N/A	N/A	N/A	N/A	N/A
<i>Weighted-average assumptions used to determine net periodic benefit costs:</i>						
Discount rate	3.50%	3.90%	4.15%	1.10%	1.30%	1.70%
Expected long-term rate of return on plan assets	N/A	5.00%	6.00%	1.40%	1.40%	1.60%
Rate of compensation increase ⁽¹⁾	N/A	N/A	N/A	4.00%	3.00%	3.00%

- (1) Represent an average rate for the non-U.S. pension plans. Rate of compensation increase is 4.00% for indirect labor for 2018, 2017 and 2016, and 2.00% for direct labor for 2017 and 2016.

The expected long-term rate of return on assets is derived using the building block approach which includes assumptions for the long-term inflation rate, real return, and equity risk premiums.

No minimum funding contributions are required for 2019 for the U.S. Pension plan, however the Company may make a voluntary contribution. The Company estimates it will make funding contributions \$0.3 million in 2019 for the non-U.S. plan.

As of December 31, 2018, the expected benefit payments related to the Company's defined benefit pension plans during the next ten years are as follows (in thousands):

	<u>U.S. Pension Plans</u>	<u>Non-U.S. Pension Plans</u>
2019	\$ 520	\$ 158
2020	520	154
2021	530	553
2022	530	246
2023	640	309
2024- 2028	3,320	2,309

The investment strategies of the plans place a high priority on benefit security. The plans invest conservatively so as not to expose assets to depreciation in adverse markets. The plans' strategy also places a high priority on earning a rate of return greater than the annual inflation rate along with maintaining average market results. The plan has targeted asset diversification across different asset classes and markets to take advantage of economic environments and to also act as a risk minimizer by dampening the portfolio's volatility. The following table summarizes the weighted average pension asset allocations as December 31, 2018 and 2017:

	<u>U.S. Pension Plans</u>			
	<u>Target</u>		<u>Actual</u>	
	<u>2018</u>	<u>2017</u>	<u>2018</u>	<u>2017</u>
Equity securities	-	-	-	-
Debt securities	-	-	-	-
Cash and cash equivalents	-	80% - 100%	-	100%

Asset allocation for the non-U.S. pension assets is 100% in money market investments.

The following table summarizes the Company's U.S. pension plan assets by category and by level (as described in Note 8 *Fair Value Measurements* of the Notes to the Consolidated Financial Statements) as of December 31, 2017 (in thousands):

	<u>December 31, 2017</u>			
	<u>Level 1</u>	<u>Level 2</u>	<u>Level 3</u>	<u>Total</u>
Cash and cash equivalents ⁽¹⁾	\$ 19,662	\$ 2	\$ -	\$ 19,664
Total	<u>\$ 19,662</u>	<u>\$ 2</u>	<u>\$ -</u>	<u>\$ 19,664</u>

- (1) Cash and cash equivalents, which are used to pay benefits and administrative expenses, are held in money market and stable value fund.
- (2) Equity securities consist of mutual funds and the underlying investments are indexes. Investments in mutual funds are valued at the net asset value per share multiplied by the number of shares held.
- (3) Fixed income securities consist of bonds securities in mutual funds and are valued at the net asset value per share multiplied by the number of shares held.

Other Benefit Plans

ARRIS has established defined contribution plans pursuant to the Internal Revenue Code Section 401(k) that cover all eligible U.S. employees. ARRIS contributes to these plans based upon the dollar amount of each participant's contribution. ARRIS made matching contributions to these plans of approximately \$22.8 million, \$16.5 million and \$16.4 million in 2018, 2017 and 2016, respectively.

The Company has a deferred compensation plan that does not qualify under Section 401(k) of the Internal Revenue Code and is available to key executives of the Company and certain other employees. Employee compensation deferrals and matching contributions are held in a rabbi trust. The total of net employee deferrals and matching contributions, which is reflected in other long-term liabilities, was \$5.4 million and \$5.7 million at December 31, 2018 and 2017, respectively. Total expenses included in continuing operations for the matching contributions were approximately \$0.1 million and \$0.3 million in 2018 and 2017, respectively.

The Company previously offered a deferred compensation arrangement, which allowed certain employees to defer a portion of their earnings and defer the related income taxes. As of December 31, 2004, the plan was frozen and no further contributions are allowed. The deferred earnings are invested in a rabbi trust. The total of net employee deferral and matching contributions, which is reflected in other long-term liabilities, was \$2.0 million and \$3.1 million at December 31, 2018 and 2017, respectively.

The Company also has a deferred retirement salary plan, which was limited to certain current or former officers. The present value of the estimated future retirement benefit payments is being accrued over the estimated service period from the date of signed agreements with the employees. The accrued balance of this plan, the majority of which is included in other long-term liabilities, were \$1.9 million and \$1.5 million at December 31, 2018 and 2017, respectively. Total expenses (income) included in continuing operations for the deferred retirement salary plan were approximately \$0.4 million and \$0.2 million for 2018 and 2017, respectively.

Note 22. Accumulated Other Comprehensive (Loss) Income

The following table summarizes the changes in accumulated other comprehensive (loss) income by component, net of taxes, for the year ended December 31, 2018 and 2017 (in thousands):

	Available-for sale securities	Derivative instruments	Pension obligations	Cumulative translation adjustments	Total Accumulated Other Comprehensive Income (Loss)	Less AOCI attributable to Non- controlling Interest	Total ARRIS International plc AOCI
Balance, December 31, 2016	\$ 137	\$ 671	\$ (6,810)	\$ 9,281	\$ 3,279	\$ 12	\$ 3,291
Other comprehensive (loss) income before reclassifications	471	3,790	(2,487)	(2,050)	(276)	51	(225)
Amounts reclassified from accumulated other comprehensive (loss) income	54	1,128	304	-	1,486	-	1,486
Net current-period other comprehensive (loss) income	525	4,918	(2,183)	(2,050)	1,210	51	1,261
Balance as of December 31, 2017	<u>\$ 662</u>	<u>\$ 5,589</u>	<u>\$ (8,993)</u>	<u>\$ 7,231</u>	<u>\$ 4,489</u>	<u>\$ 63</u>	<u>\$ 4,552</u>

	Available-for sale securities	Derivative instruments	Pension obligations	Cumulative translation adjustments	Total Accumulated Other Comprehensive Income (Loss)	Less AOCI attributable to Non- controlling Interest	Total ARRIS International plc AOCI
Balance, December 31, 2017	\$ 662	\$ 5,589	\$ (8,993)	\$ 7,231	\$ 4,489	\$ 63	\$ 4,552
Other comprehensive (loss) income before reclassifications (1)	(668)	1,091	2,338	(24,110)	(21,349)	(43)	(21,392)
Amounts reclassified from accumulated other comprehensive (loss) income	6	(2,774)	6,263	-	3,495	-	3,495
Net current-period other comprehensive (loss) income	(662)	(1,683)	8,601	(24,110)	(17,854)	(43)	(17,897)
Balance as of December 31, 2018	<u>\$ -</u>	<u>\$ 3,906</u>	<u>\$ (392)</u>	<u>\$ (16,879)</u>	<u>\$ (13,365)</u>	<u>\$ 20</u>	<u>\$ (13,345)</u>

- (1) The change in unrealized gains (losses) on available-for-sale securities included a \$0.7 million adjustment of net unrealized gain related to marketable equity securities from Accumulated other comprehensive (loss) income to opening Accumulated deficit as a result of the adoption of accounting standard *Recognition and Measurement of Financial Assets and Financial Liabilities* on January 1, 2018.

Note 23. Repurchases of Stock

Upon completing the Pace combination, ARRIS International plc conducted a court-approved process in accordance with section 641(1)(b) of the U.K. Companies Act 2006, pursuant to which the Company reduced its stated share capital and thereby increased its distributable reserves or excess capital out of which ARRIS may legally pay dividends or repurchase shares. Distributable reserves are not linked to a U.S. GAAP reported amount.

In 2016, the Company's Board of Directors approved a \$300 million share repurchase authorization replacing all prior programs. In early 2017, the Board authorized an additional \$300 million for share repurchases. In March 2018, the Board authorized an additional \$300 million for repurchases and an additional \$375 million again in August 2018.

During 2018, the Company repurchased 13.9 million of its ordinary shares for \$353.1 million at an average stock price of \$25.38. The remaining authorized amount for share repurchases was \$546.9 million as of December 31, 2018.

During 2017, ARRIS repurchased 7.5 million shares of its ordinary shares at an average price of \$26.12 per share, for an aggregate consideration of approximately \$197.0 million.

Unless terminated earlier by a Board resolution, this new plan will expire when ARRIS has used all authorized funds for repurchase. However, U.K. law also generally prohibits a company from repurchasing its own shares through "off market purchases" without prior approval of shareholders because we are not traded on a recognized investment exchange in the U.K. This shareholder approval lasts for a maximum period of five years. Prior to and in connection with the Pace combination, we obtained approval to purchase our own shares. This authority to repurchase shares terminates in January 2021, unless otherwise reapproved by our shareholders. Under the terms of the Acquisition Agreement, the Company has agreed not to purchase additional shares prior to the closing of the Acquisition without the consent of CommScope.

Note 24. Commitments and Contingencies

General Matters

ARRIS leases office, distribution, and warehouse facilities as well as equipment under long-term leases expiring at various dates through 2027. Included in these operating leases are certain amounts related to restructuring activities; these lease payments and related sublease income are included in restructuring accruals on the Consolidated Balance Sheets. Future minimum operating lease payments under non-cancelable leases at December 31, 2018 were as follows (in thousands):

	<u>Operating Leases</u>
2019	\$ 34,495
2020	29,824
2021	27,092
2022	22,207
2023	18,623
Thereafter	27,605
Less sublease income	(3,637)
Total minimum lease payments	<u>\$ 156,209</u>

Total rental expense for all operating leases amounted to approximately \$32.1 million, \$26.4 million and \$34.0 million for the years ended December 31, 2018, 2017 and 2016, respectively.

Additionally, the Company had contractual obligations of approximately \$595.4 million under agreements with non-cancelable terms to purchase goods or services over the next year. All contractual obligations outstanding at the end of prior years were satisfied within a 12-month period, and the obligations outstanding as of December 31, 2018 are expected to be satisfied by the end of 2019.

Legal Proceedings

The Company accrues a liability for legal contingencies when it believes that it is both probable that a liability has been incurred and that it can reasonably estimate the amount of the loss. The Company reviews these accruals and adjusts them to reflect ongoing negotiations, settlements, rulings, advice of legal counsel and other relevant information. To the extent new information is obtained and the Company's views on the probable outcomes of claims, suits, assessments, investigations or legal proceedings change, changes in the Company's accrued liabilities would be recorded in the period in which such determinations are made. Unless noted otherwise, the amount of liability is not probable or the amount cannot be reasonably estimated; and therefore, accruals have not been made.

Due to the nature of the Company's business, it is subject to patent infringement claims, including current suits against it or one or more of its wholly-owned subsidiaries, or one or more of our customers who may seek indemnification from us, alleging infringement by various Company products and services. The Company believes that it has meritorious defenses to the allegations made in its pending cases and intends to vigorously defend these lawsuits; however, it is currently unable to determine the ultimate outcome of these or similar matters. Accordingly, the Company is currently unable to reasonably estimate the possible loss or range of possible loss for any of the matters identified in Part I, Item 3 "Legal Proceedings". The results in litigation are unpredictable and an adverse resolution of one or more of such matters not included in the estimate provided, or if losses are higher than what is currently estimated, it could have a material adverse effect on our business, financial position, results of operations or cash flows. In addition, the Company is a defendant in various litigation matters generally arising out of the normal course of business. (See Part I, Item 3 "Legal Proceedings" for additional details).

Note 25. Summary Quarterly Consolidated Financial Information (unaudited)

The following table summarizes ARRIS's quarterly consolidated financial information (in thousands, except per share data):

	Quarters in 2018 Ended,			
	March 31,	June 30,	September 30,	December 31, (1)(2)
Net sales	\$ 1,577,710	\$ 1,726,540	\$ 1,651,248	\$ 1,787,142
Gross margin	475,683	498,755	465,189	479,232
Operating income (loss)	12,919	44,873	53,021	68,072
Net (loss) income attributable to ARRIS				
International plc.	\$ (13,600)	\$ 35,754	\$ 47,079	\$ 44,507
Net (loss) income per basic share	\$ (0.07)	\$ 0.19	\$ 0.26	\$ 0.26
Net (loss) income per diluted share	\$ (0.07)	\$ 0.19	\$ 0.26	\$ 0.25

	Quarters in 2017 Ended			
	March 31,	June 30,	September 30,	December 31,(3)(4)(5)(6)
Net sales	\$ 1,483,105	\$ 1,664,170	\$ 1,728,524	\$ 1,738,593
Gross margin	337,257	403,357	431,155	494,470
Operating (loss) income	(4,084)	55,636	84,157	(12,698)
Net (loss) income attributable to ARRIS				
International plc.	\$ (39,098)	\$ 30,336	\$ 88,320	\$ 12,469
Net (loss) income per basic share	\$ (0.21)	\$ 0.16	\$ 0.47	\$ 0.07
Net (loss) income per diluted share	\$ (0.21)	\$ 0.16	\$ 0.47	\$ 0.07

Year 2018

- (1) For the quarter ended December 31, 2018, the Company recorded a gain on the sale of its Taiwan factory and certain equipment of \$13.3 million.
- (2) In the fourth quarter, the Company recorded losses of \$5.7 million associated with the settlement and partial curtailment of its U.S. and Taiwan pension plans.

Year 2017

- (3) For the quarter ended December 31, 2017, the Company recorded an increase to net sales of \$8.1 million, to reverse previous quarters reduction in net sales in connection with Warrants.
- (4) In the fourth quarter of 2017, the Company recorded partial impairments of goodwill and indefinite-lived tradenames of \$51.2 million and \$3.8 million, respectively, acquired in our ActiveVideo acquisition and included as part of our Cloud TV reporting unit, of which \$19.3 million is attributable to noncontrolling interest.
- (5) In the fourth quarter of 2017, the Company recorded acquisition costs of \$61.5 million related to the cash settlement of stock-based awards held by transferring employees.
- (6) During 2017, the Company recorded a foreign currency remeasurement loss of \$10.5 million related primarily to a deferred income tax liability, in the United Kingdom. This deferred income tax liability is denominated in GBP. The foreign currency remeasurement gain derives from the remeasurement of the GBP deferred income tax liability to the USD, since the date of the acquisition.

UNAUDITED PRO FORMA CONDENSED COMBINED FINANCIAL INFORMATION

On April 4, 2019, CommScope Holding Company, Inc. (CommScope) acquired ARRIS International plc (ARRIS) in an all cash transaction valued at \$7.7 billion including debt assumed (the Acquisition).

The unaudited pro forma condensed combined financial information has been prepared to give effect to the following: (i) the Acquisition and (ii) the incurrence of \$6.95 billion of indebtedness for new borrowings under a new term loan facility and a new issuance of notes; the repayment of \$0.5 billion of the remaining balance on CommScope's existing term loan due 2022; and the issuance of \$1.0 billion of Series A Convertible Preferred Stock (collectively, the Financing and with the Acquisition, the Transactions) as discussed further below. The unaudited pro forma condensed combined financial information is based on the audited consolidated financial statements of CommScope as of and for the year ended December 31, 2018 and the audited consolidated financial statements of ARRIS as of and for the year ended December 31, 2018.

The unaudited pro forma condensed combined statement of operations has been adjusted to give effect to the Transactions as if they occurred on January 1, 2018. The unaudited pro forma condensed combined balance sheet has been adjusted to give effect to the Transactions as if they occurred on December 31, 2018.

The unaudited pro forma condensed combined financial information should be read in conjunction with:

- CommScope's audited consolidated financial statements and related notes thereto contained in CommScope's Annual Report on Form 10-K for the year ended December 31, 2018 and
- ARRIS' audited consolidated financial statements and related notes thereto for the year ended December 31, 2018 included in Exhibit 99.1 to this Current Report on Form 8-K/A.

The pro forma adjustments are based on the information available and certain assumptions that management believes are reasonable under the circumstances. The assumptions underlying the pro forma adjustments are described in the accompanying notes, which should be read in conjunction with the unaudited pro forma condensed combined financial statements.

The Acquisition has been accounted for under the acquisition method of accounting with CommScope being treated as the acquirer. Under the acquisition method of accounting, the acquisition date fair value will be allocated to the underlying tangible and intangible assets acquired and liabilities assumed based on their respective fair value, with any excess of the consideration allocated to goodwill. The allocation of the fair value of consideration transferred reflected herein is based on estimates of the fair value of the tangible and intangible assets and liabilities of ARRIS as described in the accompanying notes to the unaudited pro forma condensed combined financial information. As of the date of this filing, the valuations and other work necessary to determine the fair value of the assets acquired and liabilities assumed and the related allocation are preliminary. The final allocation will be based, in part, on third-party appraisals and may be different from that reflected in the allocation used herein and any differences may be material.

The historical audited financial statements described above have been adjusted in the unaudited pro forma condensed combined financial statements to give effect to events that are (1) directly attributable to the Transactions, (2) factually supportable and (3) with respect to the unaudited pro forma condensed combined statement of operations, expected to have a continuing impact on CommScope. The unaudited pro forma condensed combined financial statements should be read in conjunction with the accompanying notes.

The unaudited pro forma condensed combined financial information does not include the realization of any future cost savings or synergies or the incurrence of restructuring, integration or certain one-time charges that are expected to result from the Acquisition.

The unaudited pro forma condensed combined financial information is presented for illustrative and informative purposes only and is not intended to represent or be indicative of what our results of operations and financial position would have been had the Transactions actually occurred on the dates indicated, and it is neither representative of nor projects our results of operations for any future period or our financial condition at any future date.

Unaudited Pro Forma Condensed Combined Statement of Operations
For the Year Ended December 31, 2018
(In thousands, except per share amounts)

	Historical CommScope	Historical ARRIS	Pro Forma Adjustments	Pro Forma Condensed Combined
Net sales	\$ 4,568,507	\$ 6,742,640	\$ —	\$ 11,311,147
Operating costs and expenses:				
Cost of sales	2,880,223	4,823,781	(4,352) A	7,709,969
			10,317 B	
Selling, general and administrative	729,032	667,053	(4,358) A	1,442,908
			51,181 B	
Research and development	185,696	644,038	(3,311) A	826,423
Amortization of purchased intangible assets	264,563	383,561	(383,561) C	712,352
			447,789 D	
Restructuring costs, net	44,025	41,922	—	85,947
Asset impairments	15,000	3,400	—	18,400
Total operating costs and expenses	<u>4,118,539</u>	<u>6,563,755</u>	<u>113,705</u>	<u>10,795,999</u>
Operating income	449,968	178,885	(113,705)	515,148
Other expense	(44,256)	(9,198)	—	(53,454)
Interest expense	(242,017)	(95,086)	(440,214) E	(661,271)
			116,046 F	
Interest income	7,017	8,341	(8,762) G	6,596
Income (loss) before income taxes	170,712	82,942	(446,635)	(192,981)
Income tax benefit (expense)	(30,495)	24,344	131,757 H	125,606
Net income (loss)	<u>\$ 140,217</u>	<u>\$ 107,286</u>	<u>\$ (314,878)</u>	<u>\$ (67,375)</u>
Net loss attributable to noncontrolling interests	—	6,454	—	6,454
Net income (loss) attributable to CommScope Holding Company, Inc.	<u>\$ 140,217</u>	<u>\$ 113,740</u>	<u>\$ (314,878)</u>	<u>\$ (60,921)</u>
Series A convertible preferred stock dividends	—	—	(55,000) I	(55,000)
Deemed dividend on series A convertible preferred stock	—	—	(5,000) J	(5,000)
Net income (loss) attributable to CommScope Holding Company, Inc. common stockholders	<u>\$ 140,217</u>	<u>\$ 113,740</u>	<u>\$ (374,878)</u>	<u>\$ (120,921)</u>
Earnings per common share				
Basic	\$ 0.73			\$ (0.63)
Diluted	\$ 0.72			\$ (0.63)
Weighted average common shares outstanding:				
Basic	192,022		—	192,022
Diluted	195,332		487 K	195,819

See accompanying notes to unaudited pro forma condensed combined financial statements.

Unaudited Pro Forma Condensed Combined Balance Sheet
As of December 31, 2018
(In thousands, except share amounts)

	Historical	Historical	Pro Forma	Pro Forma Condensed

	CommScope	ARRIS	Adjustments	Combined
Assets				
Cash and cash equivalents	\$ 458,195	\$ 729,933	\$ (614,312) L	\$ 573,816
Short-term Investments	—	5,538	—	5,538
Accounts receivable, less allowance for doubtful accounts	810,359	1,448,343	(75,508) M	2,183,194
Inventories, net	473,327	740,205	173,000 N	1,397,610
			11,078 M	
Prepaid expenses and other current assets	135,944	188,620	(11,078) M	313,486
Total current assets	1,877,825	3,112,639	(516,820)	4,473,644
Property, plant and equipment, net	450,861	287,671	71,329 O	809,861
Goodwill	2,852,309	2,240,642	(2,240,642) P	5,254,800
			2,402,491 Q	
Other intangible assets, net	1,351,990	1,403,659	(1,403,659) P	5,682,590
			4,330,600 R	
Other noncurrent assets	97,555	283,258	—	380,813
Total assets	\$ 6,630,540	\$ 7,327,869	\$ 2,643,299	\$ 16,601,708
Liabilities and Stockholders' Equity				
Accounts payable	\$ 399,237	\$ 1,288,827	\$ —	\$ 1,688,064
Other accrued liabilities	291,385	595,078	(60,000) S	750,955
			(75,508) M	
Current portion of long-term debt	—	83,862	(83,862) T	32,000
			32,000 U	
Total current liabilities	690,622	1,967,767	(187,370)	2,471,019
Long-term debt	3,985,904	2,032,382	(1,971,350) T	10,349,361
			6,780,125 U	
			(477,700) V	
Deferred income taxes	83,341	46,784	757,024 W	837,254
			(49,895) X	
Pension and other postretirement benefit liabilities	16,843	25,303	—	42,146
Other noncurrent liabilities	97,062	249,785	—	346,847
Total liabilities	4,873,772	4,322,021	4,850,834	14,046,627
Commitments and contingencies				
Series A convertible preferred stock	—	—	1,000,000 Y	1,000,000
Stockholders' equity:				
Preferred stock, \$.01 par value: Authorized shares 200,000,000; Issued and outstanding shares: 1,000,000	—	—	—	—
Common and ordinary shares	1,991	2,623	(2,623) Z	1,991
Additional paid-in capital	2,385,082	3,468,728	(3,468,728) Z	2,385,082
Retained earnings (accumulated deficit)	(249,777)	(466,165)	466,165 Z	(465,471)
			(215,694) AA	
Accumulated other comprehensive loss	(159,205)	(13,345)	13,345 Z	(159,205)
Treasury stock	(221,323)	—	—	(221,323)
Total CommScope Holding Company, Inc. stockholders' equity	1,756,768	2,991,841	(3,207,535)	1,541,074
Stockholders' equity attributable to noncontrolling interest	—	14,007	—	14,007
Total stockholders' equity	1,756,768	3,005,848	(3,207,535)	1,555,081
Total liabilities and stockholders' equity	\$ 6,630,540	\$ 7,327,869	\$ 2,643,299	\$ 16,601,708

See accompanying notes to unaudited pro forma condensed combined financial statements.

Notes to Unaudited Pro Forma Condensed Combined Financial Statements
(in thousands, unless otherwise noted)

Note 1: Business Combination

CommScope will account for the Acquisition using the acquisition method of accounting. The pro forma adjustments reflect preliminary estimates of the fair value of the assets acquired and liabilities assumed, which are expected to change upon finalization of appraisals and other valuation studies. The final estimates will be based on the acquisition date fair value of the consideration transferred (purchase price) and the assets and liabilities that existed as of the Acquisition closing date. The final adjustments could be materially different from the unaudited pro forma adjustments presented herein.

The unaudited pro forma condensed combined financial statements presented herein reflect the fair value of consideration transferred of \$7.0 billion (net of cash acquired), including repayment of debt. See Note 2 for further discussion of the purchase price.

The unaudited pro forma condensed combined statement of operations also include certain accounting adjustments related to the Acquisition that are expected to have a continuing impact on the combined results, such as changes in depreciation and amortization of the acquired tangible and intangible assets, increased interest expense on the debt incurred to complete the Acquisition, decreased interest income related to the use of cash and cash equivalents to complete the Acquisition, amortization of debt issuance costs and accretion of original issue discount (OID) incurred in connection with the Financing and the tax impact of these pro forma adjustments.

The unaudited pro forma condensed combined statement of operations do not reflect certain adjustments that are expected to result from the Acquisition because they are considered to be of a non-recurring nature. These include fair value adjustments related to acquisition date inventory that is expected to increase cost of sales, as well as impacts to sales and cost of sales associated with fair value adjustments to deferred revenue and deferred cost.

We expect to realize synergies following the Acquisition that are not reflected in the pro forma adjustments. No assurance can be given with respect to the ultimate level of such synergies and the timing of their realization. We expect to incur transaction, integration and restructuring costs in conjunction with the integration of ARRIS. No adjustment for such costs has been reflected in the pro forma adjustments. Integration and restructuring costs recognized after the Acquisition could be material to our financial position and results of operations.

Note 2: Purchase Price and Financing

For purposes of preparing the unaudited pro forma condensed combined financial statements, the estimated purchase price has been allocated based on the estimated fair value of assets acquired and liabilities assumed. The final allocation of the value of the consideration transferred will be based on the estimated fair values of the assets acquired and liabilities assumed at the completion of the Acquisition and could vary significantly from the pro forma amounts due to various factors, including, but not limited to, changes in the composition of ARRIS' assets and liabilities, revisions to the estimated fair value of identified intangible assets acquired and changes in interest rates. Accordingly, the preliminary estimated fair values of these assets and liabilities are subject to change pending additional information that may be developed by CommScope and ARRIS. Allocation of an increased portion of the purchase price to inventory, property, plant and equipment and any identifiable intangible asset with a finite life will reduce the amount of purchase price allocated to goodwill in the unaudited pro forma condensed combined financial statements and may result in increased depreciation and/or amortization expense, which could be material.

CommScope paid \$31.75 per share for 180.6 million shares of ARRIS, which included all outstanding shares and warrants and a portion of equity awards for ARRIS directors and employees that were vested at the close of the transaction and settled in cash, for an approximate purchase price of \$5.6 billion and \$0.1 billion recorded as expense. CommScope also repaid ARRIS' outstanding debt of \$2.1 billion at the close of the Acquisition.

To finance the Acquisition, CommScope incurred \$6.95 billion of indebtedness, including the following debt issued on February 19, 2019, which was held in escrow until the Acquisition closing date: \$1.25 billion of 5.50% senior secured notes due 2024, \$1.5 billion of 6.00% senior secured notes due 2026 and \$1.0 billion of 8.25% senior unsecured notes due 2027 (collectively the New Notes). At the close of the Acquisition, CommScope also borrowed \$3.2 billion (net of OID of \$32.0 million) under a new senior secured term loan due 2026 with an interest rate of LIBOR plus 3.25% (New Term Loan). In addition, CommScope entered into a new asset-based revolving credit facility in an amount of up to \$1.0 billion, subject to borrowing base capacity. For purposes of the unaudited pro forma condensed combined financial statements, the borrowings under the New Term Loan and the New Notes are assumed to have a weighted average interest rate of 6.03% (excluding the amortization of debt issuance costs and OID).

CommScope also financed the Acquisition by issuing a \$1.0 billion aggregate principal amount of Series A Convertible Preferred Stock (Convertible Preferred Stock) to Carlyle Partners VII S1 Holdings, L.P. (Carlyle). The Convertible Preferred Stock will pay dividends at an annual rate of 5.50%, with such dividends to be paid quarterly, and will be convertible at the option of the holders at any time into shares of CommScope's common stock at a price of \$27.50 per share.

The table below summarizes the expected sources and uses of funds related to the Acquisition:

Sources of funds		Uses of funds(1)	
Incremental secured term loan facility	\$ 3,200,000	Purchase outstanding equity	\$ 5,576,203
Secured notes due 2024	1,250,000	Settlement of equity awards in cash(2)	158,989
Secured notes due 2026	1,500,000	Settlement of equity awards in RSUs(2)	81,997
Senior notes due 2027	1,000,000	Repay acquired debt	2,073,900
Convertible preferred equity	1,000,000	Repay existing term loan(3)	486,300
Value of RSUs issued(2)	81,997	Estimated fees and expenses (4)	268,919
Cash on hand	614,312		
Total sources	\$ 8,646,309	Total uses	\$ 8,646,309

- (1) The use of funds does not include any restructuring costs that may be incurred to achieve the target of \$150 million of annual synergies and cost savings by the end of the third year following the Acquisition closing date. CommScope currently expects to incur \$150 million of costs in order to achieve these synergies and cost savings, with \$75 million of these costs incurred in each of the first two years following the Acquisition closing date.
- (2) Represents the settlement of outstanding RSUs of ARRIS for ARRIS directors and employees. CommScope settled \$159.0 million in cash and issued \$82.0 million of unvested time-based vesting RSUs of CommScope at closing with a weighted average vesting of approximately 1.5 years.
- (3) CommScope used a portion of the net proceeds from the New Term Loan to repay in full its existing term loan due 2022 (Existing Term Loan).
- (4) Consists of estimated fees and expenses associated with the Transactions, including debt issuance costs, OID on the New Term Loan and other transaction costs for advisory and professional fees. CommScope expects to capitalize approximately \$142.8 million of these fees and expenses, with the remaining \$126.1 million expensed when incurred.

The estimated allocation of the purchase price as of December 31, 2018 consists of the following:

Book value of ARRIS net assets	\$ 3,005,848
Less: Value of non-controlling interest	(14,007)
Less: Existing goodwill and intangibles, net of deferred taxes	(3,381,641)
Adjusted book value of net assets acquired	(389,800)
Allocation of purchase price over adjusted book value:	
Increase inventory to estimated fair value	173,000
Increase property, plant and equipment to estimated fair value	71,329
Increase intangible assets at estimated fair value	4,330,600
Increase debt to estimated fair (redemption) value	(18,688)
Decrease deferred revenue to estimated fair value	60,000
Increase net deferred tax liabilities	(1,019,684)
Goodwill	2,402,491
Total purchase price	<u>\$ 5,609,248</u>

Note 3: Pro Forma Adjustments

- A. Reflects the estimated change to depreciation as a result of increasing the value of ARRIS' property, plant and equipment to estimated fair value (Note 3(O)) and estimated useful lives. The adjustment assumes an estimated ten-year life for building and leasehold improvements and a four-year weighted average life for machinery and equipment. The allocation among income statement line items is based on an estimate of asset utilization.
- B. Reflects the estimated incremental equity-based compensation expense for replacement awards expected to be granted to ARRIS employees as of the Acquisition closing date.
- C. Reflects the reversal of the amortization of identifiable intangible assets previously recorded by ARRIS that are eliminated in Note 3(P) below.
- D. Reflects the amortization expense of identifiable intangible assets, based on the preliminary valuation and estimated useful lives per Note 3(R).
- E. Reflects estimated interest expense (including amortization of debt issuance costs and OID) associated with the debt expected to be incurred to fund the Acquisition using an estimated weighted average interest rate of 6.03% (excluding amortization of debt issuance costs and OID for the New Term Loan and the New Notes).
- F. Reflects the reversal of interest expense related to the ARRIS debt that is repaid at closing, as discussed in Note 3(T), and the reversal of interest on the balance of the Existing Term Loan repaid at closing, as discussed in Note 3(V).
- G. Reflects the reversal of interest income recognized by CommScope and ARRIS related to the cash assumed to be used to fund the Acquisition per Note 3(L).
- H. Represents the income tax impact of the pro forma adjustments, with consideration of the company-specific blended worldwide tax rates for CommScope and ARRIS. As a result, the combined tax rate used to tax effect the pro forma adjustments was 29.5% for both periods. These tax rates do not represent the combined company's effective tax rate, which will include other tax charges and benefits, and does not take into account any historical or possible future tax events that may impact the combined company following the consummation of the Acquisition.
- I. Reflects the dividends on the Convertible Preferred Stock accrued at a rate of 5.50% annually and paid quarterly.
- J. Reflects the deemed dividends from the initial discount on the issuance of the Convertible Preferred Stock. The deemed dividends were assumed to have occurred on January 1, 2018, the date on which the Acquisition was assumed to occur for these unaudited pro forma condensed combined statements of operations.
- K. Represents the dilutive effect of the replacement RSUs issued to ARRIS employees as of the Acquisition closing date. The shares presented do not include approximately 36.4 million shares of common stock calculated based on the if-converted method related to the Convertible Preferred Stock (Note 3(Y)) because they would have been antidilutive.
- L. Reflects the use of cash and cash equivalents of the combined entity to fund a portion of the Acquisition.
- M. Reflects the reclassification of certain ARRIS accounts to conform with CommScope's presentation.

- N. Reflects an adjustment to record ARRIS' inventory at estimated fair value. For purposes of the unaudited pro forma condensed combined balance sheet, at December 31, 2018, CommScope estimated the fair value of the ARRIS inventory based on ARRIS' gross margin percentages and costs associated with selling activities. The final adjustment recorded to reflect the estimated fair value of the ARRIS inventory as of the acquisition date may differ materially from the pro forma adjustment.
- O. Reflects the adjustment of ARRIS' property, plant and equipment to its estimated fair value at December 31, 2018. Our adjustment is based on historical experience with similar acquisitions. The final adjustment of ARRIS' property, plant and equipment as of the acquisition date will be developed based on a more detailed analysis and the assistance of independent third-party appraisers.
- P. Reflects the adjustment to eliminate the identified intangible assets (net of accumulated amortization) and goodwill from ARRIS' balance sheet as of December 31, 2018.
- Q. Reflects the recognition of goodwill for the excess of purchase price over the estimated fair value of the identifiable net assets to be acquired. See Note 2.
- R. Reflects the estimated fair value of intangible assets at December 31, 2018. The estimated fair value is based on estimates and assumptions, including variations of the income approach and the market approach.

The identifiable intangible assets and their related useful lives are estimated as follows:

Identifiable Intangible Assets	Estimated Value (in millions)	Estimated Useful Life (in years)
Customer contracts and relationships	\$ 2,055	10
Patents and technology	1,787	9
Trademarks and tradenames	446	15
Backlog	14	0.5
In-process research and development	29	n/a

The final identifiable intangible assets determined as of the acquisition date, their values and their useful lives are expected to differ from these pro forma estimates and such differences may be material.

- S. Reflects the adjustment to record ARRIS' deferred revenue at estimated fair value. For purposes of the unaudited pro forma condensed combined balance sheet at December 31, 2018, CommScope estimated the fair value based on ARRIS' gross margin percentages and estimated costs to fulfil the required obligations associated with the deferred revenue. The actual adjustment recorded to reflect the estimated fair value of the ARRIS deferred revenue as of the acquisition date may differ materially from the pro forma adjustment.
- T. Reflects the settlement of ARRIS' current and long-term debt under its senior secured credit facilities at the closing of the Acquisition. See Note 2.
- U. Reflects the current and long-term portion of debt incurred to finance the Acquisition. The debt reflected in the pro forma adjustments consists of \$3.2 billion aggregate principal amount under the New Term Loan and \$3.75 billion aggregate principal amount of the New Notes. The current portion of debt represents the 1.00% required annual repayment of the New Term Loan.
- V. Reflects the settlement of the Existing Term Loan, net of the unamortized debt issuance costs and OID assumed to be expensed upon settlement.
- W. Reflects the deferred tax impacts of the pro forma adjustments related to the acquired assets and liabilities.
- X. Reflects the estimated tax benefit of the acquisition-related costs and the unamortized debt issuance costs and OID associated with the repayment of our Existing Term Loan, charged to expense at the close of the Acquisition.

- Y. Reflects \$1.0 billion aggregate principal amount of the Convertible Preferred Stock issued to Carlyle. The Convertible Preferred Stock will pay dividends at an annual rate of 5.50% and be convertible at the option of the holders at any time into shares of CommScope's common stock at a price of \$27.50 per share. At any time after the third anniversary of the issuance of the Convertible Preferred Stock, if the volume-weighted average price of CommScope's common stock exceeds \$49.50, CommScope has the option to convert the Convertible Preferred Stock into CommScope's common stock. During the three months following the eight and one-half year anniversary of the acquisition date and the three months following each anniversary thereafter, holders will have the right to require CommScope to repurchase all or any portion of the Convertible Preferred Stock at 100.0% of the liquidation preference, plus all accrued and unpaid dividends.
- Z. Reflects the elimination of the separate components of ARRIS' equity.
- AA. Reflects estimated acquisition-related costs of \$126.1 million, including fees associated with the bridge loan component of our committed financing and other expenses, equity-based compensation expense of \$125.9 million associated with the portion of ARRIS equity awards paid in cash at closing and unamortized debt issuance costs and OID of \$8.6 million related to our Existing Term Loan that was expensed upon settlement, net of the estimated tax benefits.