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

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2018

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

For the transition period from to

Commission File Number 001-38267

RIBBON COMMUNICATIONS INC.

(Exact name of Registrant as specified in its charter)

DELAWARE	**82-1669692**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

4 Technology Park Drive, Westford, Massachusetts 01886
(Address of principal executive offices) (Zip code)

(978) 614-8100
(Registrant's telephone number, including area code)

N/A
(Former name, former address and former fiscal year, if changed since last report)

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

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

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

Large accelerated filer ☐ Accelerated filer ☒ Non-accelerated filer ☐

Smaller reporting company ☐ Emerging growth company ☐

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

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

As of October 23, 2018, there were 106,519,406 shares of the registrant's common stock, $0.0001 par value per share, outstanding.

RIBBON COMMUNICATIONS INC.
FORM 10-Q
QUARTERLY PERIOD ENDED SEPTEMBER 30, 2018
TABLE OF CONTENTS

Cautionary Note Regarding Forward-Looking Statements

This Quarterly Report on Form 10-Q contains "forward-looking statements" within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, which are subject to a number of risks and uncertainties. All statements other than statements of historical facts contained in this Quarterly Report on Form 10-Q, including statements regarding our future expenses, results of operations and financial position, integration activities, beliefs about our market capitalization, anticipated effects of the new revenue recognition standard on our financial results, business strategy, statements about the potential timing and impact of the merger and acquisition transactions described herein, plans and objectives of management for future operations, plans for future cost reductions, restructuring activities and plans for future product development and manufacturing are forward-looking statements. Without limiting the foregoing, the words "anticipates", "believes", "could", "estimates", "expects", "intends", "may", "plans", "seeks" and other similar language, whether in the negative or affirmative, are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words. Forward-looking statements are based on our current expectations and assumptions regarding our business, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict. These statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, performance or achievements to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements including, but not limited to, our successful integration activities with respect to recently completed acquisitions; our ability to realize the benefits from mergers and acquisitions; the effects of disruption from mergers and acquisitions, making it more difficult to maintain relationships with employees, customers, business partners or government entities; the timing of customer purchasing decisions and our recognition of revenues; economic conditions; our ability to recruit and retain key personnel; difficulties supporting our strategic focus on channel sales; difficulties retaining and expanding our customer base; difficulties leveraging market opportunities; the impact of restructuring and cost-containment activities; litigation; acceptance of our products and services; rapid technological and market change; our ability to protect our intellectual property rights; our ability to maintain partner, reseller, distribution and vendor support and supply relationships; higher risks in international operations and markets; the impact of increased competition; currency fluctuations; changes in the market price of our common stock; and/or failure or circumvention of our controls and procedures. We therefore caution you against relying on any of these forward-looking statements.

Important factors that could cause actual results to differ materially from those in these forward-looking statements are also discussed in Part I, Item 2, "Management's Discussion and Analysis of Financial Condition and Results of Operations" of this Quarterly Report on Form 10-Q and Part I, Item 1A and Part II, Item 7A, "Risk Factors" and "Quantitative and Qualitative Disclosures About Market Risk," respectively, of our Annual Report on Form 10-K for the fiscal year ended December 31, 2017. Also, any forward-looking statement made by us in this Quarterly Report on Form 10-Q speaks only as of the date on which this Quarterly Report on Form 10-Q was first filed. We undertake no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise.

Presentation of Information

Effective October 27, 2017, we completed the merger (the "Merger") of Sonus Networks, Inc. ("Sonus"), GENBAND Holdings Company, GENBAND, Inc. and GENBAND II, Inc. (collectively, "GENBAND").

Unless the context otherwise requires, references in this Quarterly Report on Form 10-Q to "Ribbon," "Ribbon Communications," "Company," "we," "us" and "our" and "the Company" refer to (i) Sonus Networks, Inc. and its subsidiaries prior to the Merger and (ii) Ribbon Communications Inc. and its subsidiaries upon completion of the Merger, as applicable.

PART I FINANCIAL INFORMATION

Item 1. Financial Statements

RIBBON COMMUNICATIONS INC.
Condensed Consolidated Balance Sheets
(in thousands, except share and per share data)
(unaudited)

	September 30, 2018	December 31, 2017
Assets		
Current assets:		
Cash and cash equivalents	$ 35,984	$ 57,073
Marketable securities	7,284	17,224
Accounts receivable, net	150,677	165,156
Inventory	21,724	21,303
Other current assets	19,830	21,463
Total current assets	235,499	282,219
Property and equipment, net	25,960	24,780
Intangible assets, net	263,393	244,414
Goodwill	382,493	335,716
Investments	—	9,031
Deferred income taxes	8,212	8,434
Other assets	8,496	6,289
	$ 924,053	$ 910,883
Liabilities and Stockholders' Equity		
Current liabilities:		
Revolving credit facility	$ 58,000	$ 20,000
Accounts payable	43,215	45,851
Accrued expenses and other	74,610	76,380
Deferred revenue	82,489	100,571
Total current liabilities	258,314	242,802
Long-term debt, related party	23,500	22,500
Deferred revenue, net of current	15,985	14,184
Deferred income taxes	3,869	2,787
Other long-term liabilities	32,023	13,189
Total liabilities	333,691	295,462
Commitments and contingencies (Note 15)		
Stockholders' equity:		
Preferred stock, $0.01 par value per share; 10,000,000 shares authorized, none issued and outstanding	—	—
Common stock, $0.0001 par value per share; 240,000,000 shares authorized; 106,512,530 shares issued and outstanding at September 30, 2018; 101,752,856 shares issued and outstanding at December 31, 2017	11	10
Additional paid-in capital	1,722,116	1,684,768
Accumulated deficit	(1,134,957)	(1,072,426)
Accumulated other comprehensive income	3,192	3,069
Total stockholders' equity	590,362	615,421
	$ 924,053	$ 910,883

See notes to the unaudited condensed consolidated financial statements.

RIBBON COMMUNICATIONS INC.
Condensed Consolidated Statements of Operations
(in thousands, except per share data)
(unaudited)

	Three months ended		Nine months ended	
	September 30, 2018	September 30, 2017	September 30, 2018	September 30, 2017
Revenue:				
Product	$ 77,283	$ 44,120	$ 191,937	$ 98,305
Service	75,185	30,509	219,072	85,425
Total revenue	152,468	74,629	411,009	183,730
Cost of revenue:				
Product	38,891	9,708	102,183	28,748
Service	31,343	10,374	96,208	30,285
Total cost of revenue	70,234	20,082	198,391	59,033
Gross profit	82,234	54,547	212,618	124,697
Operating expenses:				
Research and development	34,403	20,798	109,056	61,071
Sales and marketing	31,488	17,454	94,152	47,850
General and administrative	15,942	10,833	46,571	27,993
Acquisition- and integration-related	5,570	1,543	14,262	6,278
Restructuring	2,397	—	15,162	1,071
Total operating expenses	89,800	50,628	279,203	144,263
(Loss) income from operations	(7,566)	3,919	(66,585)	(19,566)
Interest (expense) income, net	(1,420)	260	(2,754)	772
Other (expense) income, net	(1,254)	1	(3,058)	577
(Loss) income before income taxes	(10,240)	4,180	(72,397)	(18,217)
Income tax benefit (provision)	82	(727)	(2,587)	(1,321)
Net (loss) income	$ (10,158)	$ 3,453	$ (74,984)	$ (19,538)
(Loss) earnings per share				
Basic	$ (0.10)	$ 0.07	$ (0.73)	$ (0.39)
Diluted	$ (0.10)	$ 0.07	$ (0.73)	$ (0.39)
Shares used to compute (loss) earnings per share:				
Basic	104,918	49,753	103,009	49,472
Diluted	104,918	50,131	103,009	49,472

See notes to the unaudited condensed consolidated financial statements.

RIBBON COMMUNICATIONS INC.
Condensed Consolidated Statements of Comprehensive Income (Loss)
(in thousands)
(unaudited)

	Three months ended		Nine months ended	
	September 30, 2018	September 30, 2017	September 30, 2018	September 30, 2017
Net (loss) income	$ (10,158)	$ 3,453	$ (74,984)	$ (19,538)
Other comprehensive income (loss), net of tax:				
Foreign currency translation adjustments	(80)	(13)	(43)	102
Unrealized gain (loss) on available-for sale marketable securities, net of reclassification adjustments for realized amounts	23	43	(10)	12
Employee retirement benefits	156	—	156	—
Other comprehensive income, net of tax	99	30	103	114
Comprehensive (loss) income	$ (10,059)	$ 3,483	$ (74,881)	$ (19,424)

See notes to the unaudited condensed consolidated financial statements.

RIBBON COMMUNICATIONS INC.
Condensed Consolidated Statements of Cash Flows
(in thousands)
(unaudited)

	Nine months ended	
	September 30, 2018	September 30, 2017
Cash flows from operating activities:		
Net loss	$ (74,984)	$ (19,538)
Adjustments to reconcile net loss to cash flows (used in) provided by operating activities:		
Depreciation and amortization of property and equipment	8,270	5,255
Amortization of intangible assets	37,721	6,845
Stock-based compensation	7,421	11,387
Deferred income taxes	(39)	687
Foreign exchange losses	3,066	15
Other	—	(566)
Changes in operating assets and liabilities:		
Accounts receivable	24,550	2,360
Inventory	2,783	1,806
Other operating assets	2,796	(560)
Accounts payable	(7,679)	384
Accrued expenses and other long-term liabilities	(20,033)	(3,028)
Deferred revenue	(7,413)	4,000
Net cash (used in) provided by operating activities	(23,541)	9,047
Cash flows from investing activities:		
Purchases of property and equipment	(5,950)	(3,265)
Business acquisitions, net of cash acquired	(46,389)	—
Purchases of marketable securities	—	(28,731)
Sale/maturities of marketable securities	18,919	41,964
Proceeds from the sale of intangible assets	—	576
Net cash (used in) provided by investing activities	(33,420)	10,544
Cash flows from financing activities:		
Borrowings under revolving line of credit	142,500	—
Principal payments on revolving line of credit	(104,500)	—
Principal payments of capital lease obligations	(436)	(30)
Payment of debt issuance costs	(624)	—
Proceeds from the sale of common stock in connection with employee stock purchase plan and exercise of stock options	43	1,401
Payment of tax withholding obligations related to net share settlements of restricted stock awards	(830)	(1,904)
Net cash provided by (used in) financing activities	36,153	(533)
Effect of exchange rate changes on cash and cash equivalents	(281)	299
Net (decrease) increase in cash and cash equivalents	(21,089)	19,357
Cash and cash equivalents, beginning of year	57,073	31,923
Cash and cash equivalents, end of period	$ 35,984	$ 51,280

RIBBON COMMUNICATIONS INC.
Condensed Consolidated Statements of Cash Flows (continued)
(in thousands)
(unaudited)

	Nine months ended	
	September 30, 2018	September 30, 2017
Supplemental disclosure of cash flow information:		
Interest paid	$ 1,568	$ 84
Income taxes paid	$ 4,047	$ 1,198
Income tax refunds received	$ 426	$ 91
Supplemental disclosure of non-cash investing activities:		
Capital expenditures incurred, but not yet paid	$ 344	$ 301
Property and equipment acquired under capital lease	$ 1,218	$ —
Acquisition purchase consideration - deferred payments	$ 30,000	$ —
Shares of common stock issued as purchase consideration	$ 30,000	$ —
Acquisition purchase consideration - assumed equity awards	$ 747	$ —
Supplemental disclosure of non-cash financing activities:		
Total fair value of restricted stock awards, restricted stock units and performance-based stock units on date vested	$ 5,462	$ 6,225

See notes to the unaudited condensed consolidated financial statements.

RIBBON COMMUNICATIONS INC.
Notes to Condensed Consolidated Financial Statements
(unaudited)

(1) BASIS OF PRESENTATION

Business

Ribbon is a leading provider of network communications solutions to telecommunications, wireless and cable service providers and enterprises of all sizes across industry verticals. With over 1,000 customers around the globe, including some of the largest telecommunications service providers and enterprises in the world, Ribbon enables service providers and enterprises to modernize their communications networks and provide secure real-time communications ("RTC") solutions to their customers and employees. By securing and enabling reliable and scalable Internet Protocol ("IP") networks, Ribbon helps service providers and enterprises adopt the next generation of software-based virtualized and cloud communications technologies to drive new, incremental revenue while protecting their existing revenue streams. Ribbon's solutions provide a secure way for its customers to connect and leverage multivendor, multiprotocol communications systems and applications across their networks and the cloud, around the world and in a rapidly changing ecosystem of IP-enabled devices such as smartphones and tablets. In addition, Ribbon's solutions secure the evolution to cloud-based delivery of unified communications ("UC") solutions - both for service providers transforming to a cloud-based network and for enterprises using cloud-based UC. Ribbon goes to market through both direct sales and indirect channels globally, leveraging the assistance of resellers, and provides ongoing support to its customers through a global services team with experience in design, deployment and maintenance of some of the world's largest IP networks.

The Merger with GENBAND (see Note 2) was completed in October 2017. As a result of the Merger, Ribbon believes it is better positioned to enable network transformations to IP and to cloud-based networks for service providers and enterprise customers worldwide, with a broader and deeper sales footprint, increased ability to invest in growth, more efficient and effective research and development, and a comprehensive RTC product offering.

Basis of Presentation

In the opinion of management, the accompanying unaudited condensed consolidated financial statements include all adjustments, consisting only of normal recurring items, necessary for their fair presentation with accounting principles generally accepted in the United States of America ("GAAP") and with the rules and regulations of the U.S. Securities and Exchange Commission ("SEC").

On October 27, 2017 (the "Merger Date"), Sonus Networks, Inc. ("Sonus") consummated an acquisition as specified in an Agreement and Plan of Merger (the "Merger Agreement") with Solstice Sapphire Investments, Inc. ("NewCo") and certain of its wholly-owned subsidiaries, GENBAND Holdings Company, GENBAND Inc. and GENBAND II, Inc. (collectively, "GENBAND") pursuant to which, following a series of merger transactions (collectively, the "Merger"), Sonus and GENBAND each became a wholly-owned subsidiary of NewCo, with Sonus deemed the acquirer in the transaction for accounting purposes. Subsequently, on November 28, 2017, the Company changed its name to "Ribbon Communications Inc."

The condensed consolidated financial statements of the Company represent the consolidated financial statements of Sonus, prior to the Merger Date, and the condensed consolidated financial statements of Ribbon, on and after the Merger Date. The financial results of GENBAND are included in Ribbon's condensed consolidated financial statements beginning on the Merger Date.

On August 3, 2018 (the "Edgewater Acquisition Date"), the Company completed the acquisition of Edgewater Networks, Inc. (“Edgewater”). The financial results of Edgewater are included in the Company's condensed consolidated financial statements for the period subsequent to the Edgewater Acquisition Date.

Interim results are not necessarily indicative of results for a full year or any future interim period. The information included in this Quarterly Report on Form 10-Q should be read in conjunction with the Company's Annual Report on Form 10-K for the year ended December 31, 2017 (the "Annual Report"), which was filed with the SEC on March 8, 2018.

Significant Accounting Policies

The Company's significant accounting policies are disclosed in Note 2 to the Consolidated Financial Statements included in the Annual Report. There were no material changes to the significant accounting policies during the nine months ended September 30, 2018, apart from the Company's accounting policy related to revenue recognition, as discussed below.

Effective January 1, 2018, the Company adopted Accounting Standards Codification ("ASC") 606, *Revenue from Contracts with Customers* ("ASC 606" or the "New Revenue Standard"), the new standard on revenue from contracts with customers, which codified Accounting Standards Update ("ASU") 2014-09, *Revenue from Contracts with Customers* ("ASU 2014-09"). As a result, the Company changed its accounting policy for revenue recognition to ensure compliance with ASC 606, which is described below and in Note 10.

Revenue Recognition Policy

The Company derives revenues from two primary sources: products and services. Product revenue includes the Company's hardware and software that function together to deliver the products' essential functionality. Software and hardware are also sold on a standalone basis. Services include customer support (software updates, upgrades and technical support), consulting, design services, installation services and training. Generally, contracts with customers contain multiple performance obligations, consisting of products and services. For these contracts, the Company accounts for individual performance obligations separately if they are considered distinct.

When an arrangement contains more than one performance obligation, the Company will generally allocate the transaction price to each performance obligation on a relative standalone selling price basis. The best evidence of a standalone selling price is the observable price of a good or service when the entity sells that good or service separately in similar circumstances and to similar customers. If the good or service is not sold separately, an entity must estimate the standalone selling price by using an approach that maximizes the use of observable inputs. Acceptable estimation methods include but are not limited to: (1) adjusted market assessment; (2) expected cost plus a margin; and (3) a residual approach (when the standalone selling price is not directly observable and is either highly variable or uncertain).

The Company's software licenses typically provide a perpetual right to use the Company's software. The Company also sells term-based software licenses that expire and Software-as-a-Service ("SaaS")-based software which are referred to as subscription arrangements. The Company does not customize its software nor are installation services required, as the customer has a right to utilize internal resources or a third-party service company. The software and hardware are delivered before related services are provided and are functional without professional services or customer support. The Company has concluded that its software licenses are functional intellectual property that are distinct, as the user can benefit from the software on its own. The product revenue is typically recognized upon transfer of control or when the software is made available for download, as this is the point that the user of the software can direct the use of, and obtain substantially all of the remaining benefits from, the functional intellectual property. The Company does not recognize software revenue related to the renewal of subscription software licenses earlier than the beginning of the subscription period. Hardware product is generally sold with software to provide the customer solution.

Services revenue includes revenue from customer support and other professional services. The Company offers warranties on its products. Certain of the Company's warranties are considered to be assurance-type in nature and do not cover anything beyond ensuring that the product is functioning as intended. Based on the guidance in Accounting Standards Codification ("ASC") 606, assurance-type warranties do not represent separate performance obligations. The Company also sells separately-priced maintenance service contracts which qualify as service-type warranties and represent separate performance obligations. The Company does not allow and has no history of accepting product returns.

Customer support includes software updates on a when-and-if-available basis, telephone support, integrated web-based support and bug fixes or patches. The Company sells its customer support contracts at a percentage of list or net product price related to the support. Customer support revenue is recognized ratably over the term of the customer support agreement, which is typically one year.

The Company's professional services include consulting, technical support, resident engineer services, design services and installation services. Because control transfers over time, revenue is recognized based on progress toward completion of the performance obligation. The method to measure progress toward completion requires judgment and is based on the nature of the products or services to be provided. The Company generally uses the input method to measure progress for its contracts because it believes such method best depicts the transfer of assets to the customer, which occurs as the Company incurs costs for the contracts. Under the cost-to-cost measure of progress, the progress toward completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligation. When the measure of progress is based upon expended labor, progress toward completion is measured as the ratio of labor time expended to date vs the total estimated labor time required to complete the performance obligation. Revenue is recorded proportionally as costs are incurred or labor is expended. Costs to fulfill these obligations include internal labor as well as subcontractor costs.

Customer training includes courses offered by the Company. The related revenue is typically recognized as the training services are performed.

Principles of Consolidation

The condensed consolidated financial statements include the accounts of Ribbon and its wholly-owned subsidiaries. Intercompany transactions and balances have been eliminated in consolidation.

Use of Estimates and Judgments

The preparation of financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting periods. Significant estimates and judgments relied upon in preparing these consolidated financial statements include accounting for business combinations; revenue recognition for multiple element arrangements, including determining the standalone selling prices of performance obligations; inventory valuations; assumptions used to determine the fair value of stock-based compensation; intangible assets and goodwill valuations, including impairments; legal contingencies; and recoverability of Ribbon's net deferred tax assets and the related valuation allowances. Ribbon regularly assesses these estimates and records changes in estimates in the period in which they become known. Ribbon bases its estimates on historical experience and various other assumptions that it believes to be reasonable under the circumstances. Actual results could differ from those estimates.

Reclassifications

Certain reclassifications have been made to the previously issued financial statements to conform to the current period presentation, none of which affected net loss as previously reported.

Fair Value of Financial Instruments

The carrying amounts of the Company's financial instruments, which include cash equivalents; marketable securities; investments; accounts receivable; revolving credit facility; accounts payable; long-term debt, related party; and other long-term liabilities; approximate their fair values.

Operating Segments

The Company operates in a single segment, as the chief operating decision maker makes decisions and assesses performance at the company level. Operating segments are identified as components of an enterprise about which separate discrete financial information is utilized for evaluation by the chief operating decision maker in making decisions regarding resource allocation and assessing performance. To date, the chief operating decision maker has made such decisions and assessed performance at the company level, as one segment. The Company's chief operating decision maker is its President and Chief Executive Officer.

Foreign Currency Translation

As part of ongoing merger integration activities, the Company conducted an assessment of the functional currencies of its foreign subsidiaries. The Company concluded that the U.S. dollar is the appropriate functional currency for the majority of the former GENBAND foreign subsidiaries, based on its assessment of underlying factors. As such, the functional currency was changed to the U.S. dollar effective January 1, 2018.

Recent Accounting Pronouncements

In February 2018, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2018-02, *Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income* ("ASU 2018-02"), which amends ASC 220, *Income Statement - Reporting Comprehensive Income*, to allow a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act and requires entities to provide certain disclosures regarding stranded tax effects. ASU 2018-02 is effective for the Company beginning January 1, 2019, with early adoption permitted. The Company is currently assessing the potential impact of the adoption of ASU 2018-02 on its consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, *Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* ("ASU 2018-15"), which provides guidance on implementation costs incurred in a cloud computing arrangement ("CCA") that is a service contract. ASU 2018-15 amends ASC 350, *Intangibles - Goodwill and Other* ("ASC 350") to include in its scope implementation costs of a CCA that is a service contract and clarifies that a customer should apply the guidance in ASC 350-40 to determine which implementation costs should be capitalized in such a CCA. ASU 2018-15 is effective for the Company beginning January 1, 2020. The Company is currently assessing the potential impact of the adoption of ASU 2018-15 on our consolidated financial statements.

In May 2017, the FASB issued ASU 2017-09, *Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting* ("ASU 2017-09"), which amends the scope of modification accounting for share-based payment arrangements such that an entity would not apply modification accounting if the fair value, vesting conditions and classification of the awards are the same immediately before and after the modification. ASU 2017-09 became effective for the Company beginning January 1, 2018 for both interim and annual reporting periods. The adoption of ASU 2017-09 did not have a material impact on the Company's condensed consolidated financial statements.

In March 2017, the FASB issued ASU 2017-07, *Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Post Retirement Benefit Cost* ("ASU 2017-07"). ASU 2017-07 amends the requirements in ASC 715 to require entities to disaggregate the current-service-cost component from the other components of net benefit cost (the "other components") and include it with other current compensation costs for related employees, present the other components elsewhere in the income statement and outside of income from operations if such a subtotal is presented and disclose the income statement lines that contain the other components if they are not presented on appropriately described separate lines. ASU 2017-07 became effective for the Company beginning January 1, 2018 for both interim and annual reporting periods. The adoption of ASU 2017-07 did not have a material impact on the Company's condensed consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* ("ASU 2016-15"), which 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. ASU 2016-15 became effective for the Company beginning January 1, 2018 for both interim and annual reporting periods. 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. The adoption of ASU 2016-15 did not have a material impact on the Company's condensed consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842) Section A - Leases: Amendments to the FASB Accounting Standards Codification* ("ASU 2016-02"), its new standard on accounting for leases. ASU 2016-02 introduces a lessee model that brings most leases onto the balance sheet. ASU 2016-02 eliminates the current GAAP requirement for an entity to use bright-line tests in determining lease classification. ASU 2016-02 is effective for the Company for both interim and annual periods beginning January 1, 2019. Upon adoption of ASU 2016-02, the Company will recognize lease obligations for the right to use these assets in connection with its existing lease agreements. In July 2018, the FASB issued ASU 2018-11, *Leases (Topic 842): Targeted Improvements* ("ASU 2018-11") and ASU 2018-10, *Codification Improvements to Topic 842, Leases*, both of which provided improvements to certain aspects of the guidance in ASC 842, *Lease*s. In January 2018, the FASB issued ASU 2018-01, *Leases (Topic 842): Land Easement Practical Expedient for Transition to Topic 842*, which provided additional clarification and implementation guidance. The Company has elected to use the alternative transition method as described in ASU 2018-11, which allows entities to initially apply ASU 2016-02 at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings, with no subsequent adjustments to prior period lease costs for comparability. The Company has essentially completed the lease assessment phase of implementation and is currently reviewing the contracts within its lease portfolio in order to quantify the impact of adoption on its consolidated balance sheet as of January 1, 2019. The Company expects to quantify such amounts to be recognized on the balance sheet by the end of the fourth quarter of 2018.

In addition, the FASB has issued the following accounting pronouncements, none of which the Company believes will have a material impact on its consolidated financial statements:

In August 2018, the FASB issued ASU 2018-14, *Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20): Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans* (“ASU 2018-14”), which amends ASC 715, *Compensation - Retirement Benefits* (“ASC 715”) to add, remove and clarify disclosure requirements related to defined benefit pension and other postretirement plans. ASU 2018-14 is effective for the Company beginning January 1, 2020.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement* (“ASU 2018-13”), which changes the fair value measurement requirements of ASC 820, *Fair Value Measurement* (“ASC 820”). ASU 2018-13 is effective for the Company beginning January 1, 2020 for both interim and annual reporting.

In July 2018, the FASB issued ASU 2018-09, *Codification Improvements* (“ASU 2018-09”), which contains amendments to clarify, correct errors in or make minor improvements to the Codification. ASU 2018-09 makes improvements to multiple topics, including but not limited to comprehensive income, debt, income taxes related to both stock-based compensation and business combinations, fair value measurement and defined contribution benefit plans. ASU 2018-09 is effective for the Company beginning January 1, 2019.

In June 2018, the FASB issued ASU 2018-07, *Compensation - Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting* ("ASU 2018-07"), which expands the scope of ASC 718, *Compensation - Stock Compensation* ("ASC 718"), to include all share-based payment arrangements related to the acquisition of goods and services from both nonemployees and employees. As a result, most of the guidance in ASC 718 associated with employee share-based payments, including most of its requirements related to classification and measurement, applies to nonemployee share-based payment arrangements. ASU 2018-07 is effective for the Company beginning January 1, 2019, although early adoption is permitted.

In October 2016, the FASB issued ASU 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory* ("ASU 2016-16"), which removes the prohibition in ASC 740, *Income Taxes,* against the immediate recognition of the current and deferred income tax effects of intra-entity transfers of assets other than inventory. ASU 2016-16 is effective for the Company beginning January 1, 2019 for both interim and annual reporting periods.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instrument*s ("ASU 2016-13"), which adds an impairment model that is based on expected losses rather than incurred losses. Under ASU 2016-13, an entity recognizes as an allowance its estimate of expected credit losses, which the FASB believes will result in more timely recognition of such losses. ASU 2016-13 is effective for the Company beginning January 1, 2020 for both interim and annual reporting periods, with early adoption permitted.

(2) BUSINESS ACQUISITIONS

Edgewater Networks, Inc.

On the Edgewater Acquisition Date, the Company completed its acquisition of Edgewater, a private company headquartered in San Jose, California (the "Edgewater Acquisition"). The Edgewater Acquisition was completed in accordance with the terms and conditions of the Agreement and Plan of Merger, dated as of June 24, 2018, by and among Ribbon, Merger Sub, Edgewater and Shareholder Representative Services LLC, a Colorado limited liability company, solely in its capacity as the initial holder representative (the "Edgewater Merger Agreement").

Edgewater is a market leader in Network Edge Orchestration for the small and medium enterprise ("SME") and UC market. The Company believes that the acquisition of Edgewater will allow it to offer its global customer base a complete core-to-edge product portfolio, end-to-end service assurance and analytics solutions, and a fully integrated software-defined wide-area network ("SD-WAN") service.

As consideration for the Edgewater Acquisition, Ribbon paid, in the aggregate, $46.4 million of cash, net of cash acquired, and issued 4.2 million shares of Ribbon common stock to Edgewater's selling shareholders and holders of vested in-the-money options and warrants to acquire common stock of Edgewater (the "Edgewater Selling Stakeholders") on the Edgewater Acquisition Date. Pursuant to the Edgewater Merger Agreement and subject to the terms and conditions contained therein, Ribbon has agreed to pay the Edgewater Selling Stakeholders an additional $30 million of cash, $15 million of which is to be paid 6 months from the closing date and the other $15 million of which is to be paid as early as 9 months from the closing date and no later than 18 months from the closing date (the exact timing of which will depend on the amount of revenue generated from the sales of Edgewater products in 2018). The current portion of this deferred purchase consideration is included as a component of Accrued expenses and other, and the noncurrent portion is included as a component of Other long-term liabilities in the Company's condensed consolidated balance sheet as of September 30, 2018.

The Edgewater Acquisition has been accounted for as a business combination and the financial results of Edgewater have been included in the Company's consolidated financial statements for the period subsequent to its acquisition.

As of September 30, 2018, the valuation of acquired assets, identifiable intangible assets and certain assumed liabilities was preliminary. The Company is still in the process of investigating the facts and circumstances existing as of the Edgewater Acquisition Date in order to finalize its valuation. The Company expects to finalize the valuation of the assets acquired and liabilities assumed by the second quarter of 2019.

A summary of the preliminary allocation of the purchase consideration for Edgewater is as follows (in thousands):

Fair value of consideration transferred:	
Cash consideration:	
Cash paid to Edgewater Selling Stakeholders	$ 51,162
Less cash acquired	(4,773)
Net cash consideration	46,389
Unpaid cash consideration	30,000
Fair value of Ribbon stock issued	30,000
Fair value of equity awards assumed (see Note 11)	747
Fair value of total consideration	$ 107,136

Fair value of assets acquired and liabilities assumed:	
Current assets, net of cash acquired	$ 16,837
Property and equipment	380
Intangible assets:	
Developed technology	29,500
Customer relationships	26,100
Trade names	1,100
Goodwill	46,777
Other noncurrent assets	103
Deferred revenue	(2,749)
Other current liabilities	(9,402)
Deferred revenue, net of current	(669)
Other long-term liabilities	(841)
	$ 107,136

The valuation of the acquired intangible assets is inherently subjective and relies on significant unobservable inputs. The Company used an income approach to value the acquired developed technology, customer relationships and trade name intangible assets. The valuation for each of these intangible assets was based on estimated projections of expected cash flows to be generated by the assets, discounted to the present value at discount rates commensurate with perceived risk. The valuation assumptions take into consideration the Company's estimates of customer attrition, technology obsolescence and revenue growth projections. The Company is amortizing the identifiable intangible assets in relation to the expected cash flows from the individual intangible assets over their respective useful lives, which have a weighted average life of 8.3 years (see Note 6). Goodwill resulting from the transaction is primarily due to expected synergies between the combined companies and is not deductible for tax purposes.

The Company's revenue for both the three and nine months ended September 30, 2018 included approximately $10 million of revenue attributable to Edgewater since the Edgewater Acquisition Date. The Company has not provided pro forma financial information, as the historical amounts are not significant to the Company's consolidated financial statements.

GENBAND Merger

On October 27, 2017, Sonus consummated an acquisition as specified in the Merger Agreement with NewCo and GENBAND such that, following the Merger, Sonus and GENBAND each became a wholly-owned subsidiary of NewCo, with Sonus deemed the acquirer in the transaction for accounting purposes. On November 28, 2017, the Company changed its name to "Ribbon Communications Inc."

Prior to the Merger, GENBAND was a Cayman Islands exempted company limited by shares that was formed on April 7, 2010. Through its wholly owned operating subsidiaries, GENBAND created rapid communications and applications for service providers, enterprises, independent software vendors, system integrators and developers globally. A majority of GENBAND's shares were held by JPMorgan Chase & Co. and managed by One Equity Partners ("OEP"). GENBAND shares were not listed on an exchange or quoted on any automated services, and there was no established trading market for GENBAND shares.

The Company believes that Sonus' and GENBAND's complementary products, solutions and strategies position the combined company to deliver comprehensive solutions to service providers and enterprises migrating to a virtualized all-IP environment in an expanded customer and global footprint.

Pursuant to the Merger Agreement, NewCo issued 50.9 million shares of Sonus common stock to the GENBAND equity holders, with the number of shares issued in the aggregate to the GENBAND equity holders equal to the number of shares of Sonus common stock outstanding immediately prior to the closing date of the Merger, such that former stockholders of Sonus would own approximately 50%, and former shareholders of GENBAND would own approximately 50%, of the shares of NewCo common stock issued and outstanding immediately following the consummation of the Merger.

In addition, NewCo repaid GENBAND’s long-term debt, including both principal and unpaid interest, to a related party of GENBAND totaling $48 million and repaid GENBAND’s management fees due to an affiliate of OEP totaling $10.3 million. NewCo also issued a promissory note for $22.5 million to certain GENBAND equity holders (the "Promissory Note").

NewCo assumed the liability under GENBAND's revolving credit facility with Silicon Valley Bank, which had outstanding borrowings and letters of credit totaling $17.9 million and $2.9 million, respectively, at October 27, 2017. At October 27, 2017, the outstanding borrowings had an average interest rate of 4.67%.

The Merger has been accounted for as a business combination and the financial results of GENBAND have been included in the Company's consolidated financial statements for the period subsequent to its acquisition.

As of September 30, 2018, the valuation of acquired assets, identifiable intangible assets and certain assumed liabilities was final. A summary of the final allocation of the purchase consideration for GENBAND is as follows (in thousands):

Fair value of consideration transferred:		
Cash consideration:		
Repayment of GENBAND long-term debt and accrued interest, related party	$	47,973
Payment of GENBAND management fees due to majority shareholder		10,302
Less cash acquired		(15,324)
Net cash consideration		42,951
Fair value of Sonus stock issued		413,982
Promissory note issued to GENBAND equity holders		22,500
Fair value of total consideration	$	479,433
Fair value of assets acquired and liabilities assumed:		
Current assets, net of cash acquired	$	99,126
Property and equipment		16,770
Intangible assets:		
In-process research and development		5,600
Developed technology		129,000
Customer relationships		101,300
Trade names		900
Goodwill		285,825
Other noncurrent assets		6,732
Revolving credit facility		(17,930)
Deferred revenue		(32,390)
Other current liabilities		(80,023)
Deferred revenue, net of current		(6,804)
Other long-term liabilities		(28,673)
	$	479,433

The valuation of the acquired intangible assets is inherently subjective and relies on significant unobservable inputs. The Company used an income approach to value the acquired developed technology, customer relationships and trade name intangible assets. The valuation for each of these intangible assets was based on estimated projections of expected cash flows to be generated by the assets, discounted to the present value at discount rates commensurate with perceived risk. The valuation assumptions take into consideration the Company's estimates of customer attrition, technology obsolescence and revenue growth projections. The Company will reclassify its in-process research and development intangible asset to developed technology intangible asset in the period that the related product becomes generally available and begin to record amortization expense for the developed technology intangible asset at that time. The Company is amortizing the identifiable intangible assets in relation to the expected cash flows from the individual intangible assets over their respective useful lives, which have a weighted average life of 8.3 years (see Note 6). Goodwill resulting from the transaction is primarily due to expected synergies between the combined companies and is not deductible for tax purposes.

Pro Forma Results

The following unaudited pro forma information presents the condensed combined results of operations of Sonus and GENBAND for the three and nine months ended September 30, 2017 as if the Merger had been completed on January 1, 2017, with adjustments to give effect to pro forma events that are directly attributable to the Merger. These pro forma adjustments include a reduction of historical GENBAND revenue for the fair value adjustment related to acquired deferred revenue, an increase in amortization expense for the acquired identifiable intangible assets, a decrease in historical GENBAND interest expense reflecting the extinguishment of certain of GENBAND's debt as a result of the Merger, net of the interest expense recorded in connection with the Promissory Note issued to certain GENBAND equity holders as part of the purchase consideration and the elimination of revenue and costs related to sales transactions between Sonus and GENBAND.

The unaudited pro forma results do not reflect any operating efficiencies or potential cost savings that may result from the consolidation of the operations of Sonus and GENBAND. Accordingly, these unaudited pro forma results are presented for illustrative purposes and are not intended to represent or be indicative of the actual results of operations of the combined company that would have been achieved had the Merger occurred at the beginning of the period presented, nor are they intended to represent or be indicative of future results of operations (in thousands, except per share amounts):

	Three months ended September 30, 2017	Nine months ended September 30, 2017
Revenue	$ 147,608	$ 419,749
Net loss	$ (22,148)	$ (105,666)
Loss per share	$ (0.22)	$ (1.04)

Acquisition- and Integration-Related Expenses

Acquisition- and integration-related expenses include those expenses related to acquisitions that would otherwise not have been incurred by the Company. The acquisition-related expenses include professional and services fees such as legal, audit, consulting, paying agent and other fees, and expenses related to cash payments to certain former executives of the acquired businesses in connection with their employment agreements. These amounts include costs related to the Merger and the Edgewater Acquisition, as well as nominal amounts related to acquisitive activities. The integration-related expenses recorded in both the three and nine months ended September 30, 2018 represent incremental costs related to combining Sonus and GENBAND, such as third-party consulting and other services related to merging the two separate companies' systems and processes.

The acquisition-related amounts recorded in both the three and nine months ended September 30, 2017 relate to professional fees incurred in connection with the Company's September 2016 acquisition of Taqua, LLC. The Company's acquisition- and integration-related expenses for the three and nine months ended September 30, 2018 and 2017 were as follows (in thousands):

	Three months ended		Nine months ended	
	September 30, 2018	September 30, 2017	September 30, 2018	September 30, 2017
Professional and services fees (acquisition-related)	$ 2,905	$ 1,543	$ 5,314	$ 6,278
Management bonuses (acquisition-related)	—	—	1,972	—
Integration-related expenses	2,665	—	6,976	—
	$ 5,570	$ 1,543	$ 14,262	$ 6,278

(3) EARNINGS (LOSS) PER SHARE

Basic earnings (loss) per share is computed by dividing net income (loss) by the weighted average number of shares outstanding during the period. For periods in which the Company reports net income, diluted net earnings per share is determined by using the weighted average number of common and dilutive common equivalent shares outstanding during the period unless the effect is antidilutive.

The calculations of shares used to compute loss per share were as follows (in thousands):

	Three months ended		Nine months ended	
	September 30, 2018	September 30, 2017	September 30, 2018	September 30, 2017
Weighted average shares outstanding—basic	104,918	49,753	103,009	49,472
Potential dilutive common shares	—	378	—	—
Weighted average shares outstanding—diluted	104,918	50,131	103,009	49,472

Options to purchase the Company's common stock and unvested shares of restricted and performance-based stock and stock units aggregating 3.5 million have not been included in the computation of diluted loss per share for the three and nine months ended September 30, 2018 because their effect would have been antidilutive. The Company has excluded 5.2 million weighted shares underlying options to purchase shares of the Company's common stock from the computation of diluted earnings per share for the three months ended September 30, 2017, because the options' exercise prices were greater than the average market price for the common stock and their effect would have been antidilutive. Options to purchase the Company's common stock and unvested shares of restricted and performance-based stock and stock units totaling 7.4 million shares for the nine months ended September 30, 2017 have not been included in the computation of diluted loss per share because their effect would have been antidilutive.

(4) CASH EQUIVALENTS, MARKETABLE SECURITIES AND INVESTMENTS

The Company invests in debt instruments, primarily U.S. government-backed, municipal and corporate obligations, which management believes to be high quality (investment grade) credit instruments.

The Company sold $12.5 million of its available-for sale securities in both the three and nine months ended September 30, 2018, primarily to provide cash for acquisition-related payments in connection with the Edgewater Acquisition and to support integration-related and restructuring activities in connection with the Merger. The Company recognized nominal gross gains and approximately $20,000 of gross losses from the sales of these securities. The Company did not sell any of its available-for-sale securities during the three or nine months ended September 30, 2017. At September 30, 2018, the Company did not hold any investments that matured beyond one year.

On a quarterly basis, the Company reviews its marketable securities and investments to determine if there have been any events that could create a credit impairment. Based on its reviews, the Company does not believe that any impairment existed with its current holdings at September 30, 2018.

The amortized cost, gross unrealized gains and losses and fair value of the Company's marketable debt securities and investments at September 30, 2018 and December 31, 2017 were comprised of the following (in thousands):

	September 30, 2018			
	Amortized cost	Unrealized gains	Unrealized losses	Fair value
Cash equivalents	$ 427	$ —	$ —	$ 427
Marketable securities				
U.S. government agency notes	$ 3,997	$ —	$ (17)	$ 3,980
Corporate debt securities	3,317	—	(13)	3,304
	$ 7,314	$ —	$ (30)	$ 7,284

	December 31, 2017			
	Amortized cost	Unrealized gains	Unrealized losses	Fair value
Cash equivalents	$ 1,254	$ —	$ —	$ 1,254
Marketable securities				
U.S. government agency notes	$ 4,091	$ —	$ (19)	$ 4,072
Corporate debt securities	8,048	—	(31)	8,017
Certificates of deposit	5,135	—	—	5,135
	$ 17,274	$ —	$ (50)	$ 17,224
Investments				
U.S. government agency notes	$ 3,992	$ —	$ (28)	$ 3,964
Corporate debt securities	3,908	—	(24)	3,884
Certificates of deposit	1,183	—	—	1,183
	$ 9,083	$ —	$ (52)	$ 9,031

The Company's available-for-sale debt securities classified as Investments in the condensed consolidated balance sheet at December 31, 2017 mature after one year but within two years or less from the balance sheet date. The Company did not have any available-for-sale debt securities classified as Investments at September 30, 2018.

Fair Value Hierarchy

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or a liability. The three-tier fair value hierarchy is based on the level of independent, objective evidence surrounding the inputs used to measure fair value. A financial instrument's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. The fair value hierarchy is as follows:

Level 1. Level 1 applies to assets or liabilities for which there are quoted prices in active markets for identical assets or liabilities.

Level 2. Level 2 applies to assets or liabilities for which there are inputs that are directly or indirectly observable in the marketplace, such as quoted prices for similar assets or liabilities in active markets or quoted prices for identical assets or liabilities in markets with insufficient volume or infrequent transactions (less active markets).

Level 3. Level 3 applies to assets or liabilities for which there are unobservable inputs to the valuation methodology that are significant to the measurement of the fair value of the assets or liabilities.

The following table shows the fair value of the Company's financial assets at September 30, 2018 and December 31, 2017. These financial assets are comprised of the Company's available-for-sale debt securities and reported under the captions Cash and cash equivalents, Marketable securities and Investments in the condensed consolidated balance sheets (in thousands):

		Fair value measurements at September 30, 2018 using:		
	Total carrying value at September 30, 2018	**Quoted prices in active markets (Level 1)**	**Significant other observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**
Cash equivalents	$ 427	$ 427	$ —	$ —
Marketable securities				
U.S. government agency notes	$ 3,980	$ —	$ 3,980	$ —
Corporate debt securities	3,304	—	3,304	—
	$ 7,284	$ —	$ 7,284	$ —

		Fair value measurements at December 31, 2017 using:		
	Total carrying value at December 31, 2017	**Quoted prices in active markets (Level 1)**	**Significant other observable inputs (Level 2)**	**Significant unobservable inputs (Level 3)**
Cash equivalents	$ 1,254	$ 1,254	$ —	$ —
Marketable securities				
U.S. government agency notes	$ 4,072	$ —	$ 4,072	$ —
Corporate debt securities	8,017	—	8,017	—
Certificates of deposit	5,135	—	5,135	—
	$ 17,224	$ —	$ 17,224	$ —
Investments				
U.S. government agency notes	$ 3,964	$ —	$ 3,964	$ —
Corporate debt securities	3,884	—	3,884	—
Certificates of deposit	1,183	—	1,183	—
	$ 9,031	$ —	$ 9,031	$ —

The Company's marketable securities and investments have been valued with the assistance of valuations provided by third-party pricing services, as derived from such services' pricing models. Inputs to the models may include, but are not limited to, reported trades, executable bid and asked prices, broker/dealer quotations, prices or yields of securities with similar characteristics, benchmark curves or information pertaining to the issuer, as well as industry and economic events. The pricing services may use a matrix approach, which considers information regarding securities with similar characteristics to determine the valuation for a security. The Company is ultimately responsible for the condensed consolidated financial statements and underlying estimates. Accordingly, the Company assesses the reasonableness of the valuations provided by the third-party pricing services by reviewing actual trade data, broker/dealer quotes and other similar data, which are obtained from quoted market prices or other sources.

(5) INVENTORY

Inventory at September 30, 2018 and December 31, 2017 consisted of the following (in thousands):

	September 30, 2018	December 31, 2017
On-hand final assemblies and finished goods inventories	$ 19,371	$ 18,374
Deferred cost of goods sold	3,707	4,569
	23,078	22,943
Less noncurrent portion (included in other assets)	(1,354)	(1,640)
Current portion	$ 21,724	$ 21,303

(6) INTANGIBLE ASSETS AND GOODWILL

The Company's intangible assets at September 30, 2018 and December 31, 2017 consisted of the following (in thousands):

September 30, 2018	Weighted average amortization period (years)	Cost	Accumulated amortization	Net carrying value
In-process research and development	*	$ 5,600	$ —	$ 5,600
Developed technology	6.91	182,880	53,666	129,214
Customer relationships	9.44	146,940	19,896	127,044
Trade names	3.00	2,000	465	1,535
Internal use software	3.00	730	730	—
	7.86	$ 338,150	$ 74,757	$ 263,393

December 31, 2017	Weighted average amortization period (years)	Cost	Accumulated amortization	Net carrying value
In-process research and development	*	$ 5,600	$ —	$ 5,600
Developed technology	6.90	153,380	24,211	129,169
Customer relationships	9.32	120,840	12,015	108,825
Trade names	3.00	900	80	820
Internal use software	3.00	730	730	—
	7.77	$ 281,450	$ 37,036	$ 244,414

* An in-process research and development intangible asset has an indefinite life until the product is generally available, at which time such asset is typically reclassified to developed technology.

Amortization expense for intangible assets for the three and nine months ended September 30, 2018 and 2017 was as follows (in thousands):

	Three months ended		Nine months ended		
	September 30, 2018	September 30, 2017	September 30, 2018	September 30, 2017	Statement of operations classification
Developed technology	$ 10,593	$ 1,602	$ 29,455	$ 4,769	Cost of revenue - product
Customer relationships	2,695	691	7,881	2,076	Sales and marketing
Trade names	160	—	385	—	Sales and marketing
	$ 13,448	$ 2,293	$ 37,721	$ 6,845	

Estimated future amortization expense for the Company's intangible assets at September 30, 2018 was as follows (in thousands):

Years ending December 31,	
Remainder of 2018	$ 12,003
2019	47,411
2020	46,552
2021	40,571
2022	34,156
Thereafter	82,700
	$ 263,393

The changes in the carrying value of the Company's goodwill in the nine months ended September 30, 2018 and 2017 were as follows (in thousands):

Balance at January 1	2018	2017
Goodwill	$ 338,822	$ 52,499
Accumulated impairment losses	(3,106)	(3,106)
	335,716	49,393
Acquisition of Edgewater	46,777	—
Purchase accounting adjustments - acquisition of Taqua, LLC	—	498
Balance at September 30	$ 382,493	$ 49,891

Balance at September 30		
Goodwill	$ 385,599	$ 52,997
Accumulated impairment losses	(3,106)	(3,106)
	$ 382,493	$ 49,891

(7) ACCRUED EXPENSES

Accrued expenses at September 30, 2018 and December 31, 2017 consisted of the following (in thousands):

	September 30, 2018	December 31, 2017
Employee compensation and related costs	$ 33,174	$ 37,782
Professional fees	8,997	13,743
Deferred purchase consideration - Edgewater	15,000	—
Other	17,439	24,855
	$ 74,610	$ 76,380

(8) RESTRUCTURING ACCRUALS

The Company recorded restructuring expense aggregating $2.4 million in the three months ended September 30, 2018 and did not record restructuring expense in the three months ended September 30, 2017. The Company recorded restructuring expense aggregating $15.2 million in the nine months ended September 30, 2018 and $1.1 million in the nine months ended September 30, 2017.

Merger Restructuring Initiative

In connection with the Merger, the Company's management approved a restructuring plan in the fourth quarter of 2017 to eliminate certain redundant positions and facilities within the combined companies (the "Merger Restructuring Initiative"). In connection with this initiative, the Company recorded $8.5 million of restructuring expense in the fourth quarter of 2017 for severance and related costs for approximately 120 employees. The Company recorded $14.3 million in the nine months ended September 30, 2018, comprised of $2.5 million in the three months ended September 30, 2018, $5.3 million in the three months ended June 30, 2018 and $6.5 million in the three months ended March 31, 2018. The amount recorded in the three months ended September 30, 2018 related to severance and related costs for approximately 30 employees. The amounts recorded in the three months ended June 30, 2018 included $5.1 million for severance and related costs for approximately 140 employees and $0.2 million related to a U.S. facility. The amount recorded in the three months ended March 31, 2018 represented severance and related costs for approximately 115 employees. The Company anticipates it will record additional future expense in connection with this initiative for headcount and redundant facilities aggregating approximately $1 million as it continues to combine the two businesses and benefit from operational synergies. The Company expects that the amount accrued at September 30, 2018 for severance will be paid by the end of the end of the first half of 2019 and that the payments related to the expected additional future expense will be completed in 2019.

A summary of the Merger Restructuring Initiative accrual activity for the nine months ended September 30, 2018 is as follows (in thousands):

	Balance at January 1, 2018	Initiatives charged to expense	Adjustments for changes in estimate	Cash payments	Balance at September 30, 2018
Severance	$ 7,595	$ 14,121	$ (5)	$ (18,928)	$ 2,783
Facilities	—	193	—	(70)	123
	$ 7,595	$ 14,314	$ (5)	$ (18,998)	$ 2,906

Assumed Restructuring Initiative

The Company assumed GENBAND's previously recorded restructuring liability, totaling $4.1 million, on the Merger Date (the "GENBAND Restructuring Initiative"). Of this amount, $3.7 million related to severance and related costs and $0.4 million related to facilities. The Company reversed $0.1 million of facilities accrual in the three months ended September 30, 2018 and net adjustments aggregating $0.9 million of expense in the nine months ended September 30, 2018 for changes in estimated costs previously accrued. The additional expense for severance relates to higher-than-previously-anticipated amounts due to certain international employees. The net additional expense for facilities relates to changes in sub-lease income assumptions for a facility previously restructured under this plan. The Company does not expect to record additional expense in connection with this initiative except for any additional adjustments for changes in estimated costs. The Company expects that the payments related to this assumed liability will be completed in 2018. A summary of the GENBAND Restructuring Initiative accrual activity for the nine months ended September 30, 2018 is as follows (in thousands):

	Balance at January 1, 2018	Initiatives charged to expense	Adjustments for changes in estimate	Cash payments	Balance at September 30, 2018
Severance	$ 1,916	$ —	$ 487	$ (2,358)	$ 45
Facilities	205	—	366	(401)	170
	$ 2,121	$ —	$ 853	$ (2,759)	$ 215

2016 Restructuring Initiative

In July 2016, the Company announced a program (the "2016 Restructuring Initiative") to further accelerate its investment in new technologies, as the communications industry migrates to a cloud-based architecture and as the Company pursues new strategic initiatives, such as new products and an expanded go-to-market footprint in selected geographies and discrete vertical markets. The Company recorded $2.0 million of restructuring expense in the aggregate in connection with this initiative, comprised of $1.9 million for severance and related costs and $0.1 million to abandon its facility in Rochester, New York (the "Rochester Facility").

In connection with the 2016 Restructuring Initiative, the Company recorded $0.5 million of restructuring expense in the nine months ended September 30, 2017, comprised of $0.4 million for severance and related costs and $0.1 million related to the Rochester Facility. The actions under the 2016 Restructuring Initiative have been implemented and accordingly, the Company does not expect to record additional expense in connection with this initiative. The amounts accrued for severance and related costs had been fully paid by the end of the third quarter of 2017. The Company expects that the amounts accrued for facilities will be paid by the end of October 2019, when the lease on the Rochester Facility expires.

A summary of the 2016 Restructuring Initiative accrual activity for the nine months ended September 30, 2018 is as follows (in thousands):

	Balance at January 1, 2018	Initiatives charged to expense	Adjustments for changes in estimate	Cash payments	Balance at September 30, 2018
Facilities	$ 95	$ —	$ —	$ (25)	$ 70

Taqua Restructuring Initiative

In connection with the acquisition of Taqua, the Company's management approved a restructuring plan in the third quarter of 2016 to eliminate certain redundant positions within the combined companies. On October 24, 2016, the Audit Committee of the Company's Board of Directors approved a broader Taqua restructuring plan related to headcount and redundant facilities (both restructuring plans, the "Taqua Restructuring Initiative"). The Company recorded $1.8 million of restructuring expense in the aggregate in connection with this initiative, comprised of $1.2 million for severance and related costs and $0.6 million related to the elimination of redundant facilities. The actions under the Taqua Restructuring Initiative have been implemented and accordingly, the Company does not expect to record additional expense in connection with this initiative. The amounts accrued for severance and related costs had been fully paid by the end of the third quarter of 2017. The Company expects that the amounts accrued for facilities will be paid by the end of 2018.

In connection with the Taqua Restructuring Initiative, the Company recorded $0.6 million of restructuring expense in the nine months ended September 30, 2017, comprised of $0.2 million for severance and related costs and $0.4 million for redundant facilities. A summary of the Taqua Restructuring Initiative accrual activity for the nine months ended September 30, 2018 is as follows (in thousands):

	Balance at January 1, 2018	Initiatives charged to expense	Adjustments for changes in estimate	Cash payments	Balance at September 30, 2018
Facilities	$ 365	$ —	$ —	$ (255)	$ 110

Balance Sheet Classification

The current portions of accrued restructuring are included as a component of Accrued expenses and the long-term portions of accrued restructuring are included as a component of Other long-term liabilities in the condensed consolidated balance sheets. The current portions of accrued restructuring totaled $3.2 million at September 30, 2018 and $10.0 million at December

31, 2017. The long-term portions of accrued restructuring totaled $0.1 million at September 30, 2018 and $0.2 million at December 31, 2017. The long-term amounts represent future lease payments on restructured facilities.

(9) DEBT

Assumed Senior Secured Credit Agreement

On the Merger Date and in connection with the Merger, the Company assumed GENBAND's Senior Secured Credit Agreement with Silicon Valley Bank ("SVB") (the "Prior Credit Agreement"), which had outstanding borrowings and letters of credit totaling $17.9 million and $2.9 million, respectively, and an average interest rate of 4.67%. GENBAND had entered into the Prior Credit Agreement with SVB effective July 1, 2016, with two of its operating subsidiaries as borrowers and GENBAND as the guarantor. The Prior Credit Agreement had a maturity date of July 1, 2019 and provided for revolving loans, including letters of credit and swingline loans, not to exceed $50 million in total, with potential further increases of $75 million available for a total revolving line of credit of up to $125 million. The Prior Credit Agreement was superseded by a Senior Secured Credit Facilities Credit Agreement, as amended, which was entered into on December 21, 2017 and is discussed below.

Senior Secured Credit Facility

On December 21, 2017, the Company entered into a Senior Secured Credit Facilities Credit Agreement (as amended, the “Credit Facility”), by and among the Company, as a guarantor, Sonus Networks, Inc., as the borrower (“Borrower”), SVB, as administrative agent (in such capacity, the “Administrative Agent”), issuing lender, swingline lender and lead arranger and the lenders party thereto (each referred to individually as a “Lender”, and collectively, the “Lenders”), which refinanced the Prior Credit Agreement. The Credit Facility includes $100 million of commitments, the full amount of which is available for revolving loans, a $15 million sublimit that is available for letters of credit and a $15 million sublimit that is available for swingline loans. The Credit Facility is scheduled to mature in December 2021, subject to a springing maturity if, on or before July 14, 2020, the existing Promissory Note issued to certain shareholders is not converted or extended to March 2022 or later. The Credit Facility includes procedures for additional financial institutions to become lenders or for any existing lender to increase its commitment under the facility, subject to an available increase of $50 million for all incremental commitments under the Credit Facility. On June 24, 2018, the Company amended the Credit Facility to, among other things, permit the Edgewater Acquisition and related transactions.

The indebtedness and other obligations under the Credit Facility are unconditionally guaranteed on a senior secured basis by the Company and GENBAND US LLC, a wholly-owned domestic subsidiary of the Company (collectively, the “Guarantors”) and each other material US domestic subsidiary of the Company. The Credit Facility is secured by first-priority liens on substantially all of the assets of the Borrower and the Guarantors, including the Company.

The Credit Facility requires periodic interest payments on any outstanding borrowings under the facility. The Borrower may prepay all revolving loans under the Credit Facility at any time without premium or penalty (other than customary LIBOR breakage costs), subject to certain notice requirements.

Revolving loans under the Credit Facility bear interest at the Borrower’s option at either the Eurodollar (LIBOR) rate plus a margin ranging from 2.50% to 3.00% per year or the base rate (the highest of the Federal Funds rate plus 0.50%, or the prime rate announced from time to time in The Wall Street Journal) plus a margin ranging from 1.50% to 2.00% per year (such margins being referred to as the “Applicable Margin”). The Applicable Margin varies depending on the Company’s consolidated leverage ratio (as defined in the Credit Facility). The base rate and the LIBOR rate are each subject to a zero percent floor.

The Borrower is charged a commitment fee ranging from 0.25% to 0.40% per year on the daily amount of the unused portions of the commitments under the Credit Facility. Additionally, with respect to all letters of credit outstanding under the Credit Facility, the Borrower is charged a fronting fee of 0.125% per year and an outstanding letter of credit fee equal to the Applicable Margin for base rate loans ranging from 1.50% to 2.00% times the amount of the outstanding letters of credit.

The Credit Facility requires compliance with financial covenants of a minimum consolidated quick ratio, minimum consolidated interest coverage ratio and maximum consolidated leverage ratio, all of which are defined in the Credit Facility and tested on a quarterly basis. In addition, the Credit Facility contains various covenants that, among other restrictions, limit the Company's and its subsidiaries' ability to enter into certain types of transactions, including, but not limited to: incurring or assuming indebtedness, making acquisitions or engaging in mergers, making investments, repurchasing equity and paying dividends, selling or otherwise transferring assets, changing the nature of its business and amending or making prepayments on certain junior debt. The Company was in compliance with all covenants of the Credit Facility as of September 30, 2018 and December 31, 2017.

The Credit Facility contains events of default that are customary for a secured credit facility. If an event of default relating to bankruptcy or other insolvency events with respect to a borrower occurs, all obligations under the Credit Facility will immediately become due and payable. If any other event of default exists under the Credit Facility, the lenders may accelerate the maturity of the obligations outstanding under the Credit Facility and exercise other rights and remedies, including charging a default rate of interest equal to 2.00% per year above the rate that would otherwise be applicable. In addition, if any event of default exists under the Credit Facility, the lenders may commence foreclosure or other actions against the collateral.

If any default exists under the Credit Facility, or if the Borrower is unable to make any of the representations and warranties as stated in the Credit Facility at the applicable time, the Borrower will be unable to borrow funds or have letters of credit issued under the Credit Facility, which, depending on the circumstances prevailing at that time, could have a material adverse effect on the Borrower's liquidity and working capital.

At September 30, 2018, the Company had an outstanding debt balance of $58.0 million at an average interest rate of 5.26% and $2.6 million of outstanding letters of credit at an average interest rate of 1.75% under the Credit Facility. At December 31, 2017, the Company had an outstanding debt balance of $20.0 million at an interest rate of 4.51% and $2.9 million of outstanding letters of credit at an average interest rate of 2.00% under the Credit Facility.

Promissory Note

In connection with the Merger, on October 27, 2017, the Company issued the Promissory Note for $22.5 million to certain of GENBAND's equity holders. The Promissory Note does not amortize, and the principal thereon is payable in full on the third anniversary of its execution. Interest on the Promissory Note is payable quarterly in arrears and accrued at a rate of 7.5% per year for the first six months after issuance, and thereafter at a rate of 10% per year. The failure to make any payment under the Promissory Note when due and, with respect to payment of any interest, the continuation of such failure for a period of thirty days thereafter, constitutes an event of default under the Promissory Note. If an event of default occurs under the Promissory Note, the payees may declare the entire balance of the Promissory Note due and payable (including principal and accrued and unpaid interest) within five business days of the payees' notification to the Company of such acceleration. Interest that is not paid on the interest payment date will increase the principal amount of the Promissory Note. At September 30, 2018, the Promissory Note balance was $23.5 million, comprised of $22.5 million of principal plus $1.0 million of interest converted to principal.

(10) REVENUE RECOGNITION

In May 2014, the FASB issued ASU 2014-09, which, among other things, clarified the implementation of the new revenue guidance and delayed the adoption by one year, to January 1, 2018. The New Revenue Standard outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The core principle of the revenue model is that an entity recognizes revenue to depict the transfer 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 applying the revenue model to contracts within its scope, an entity identifies the contract(s) with a customer, identifies the performance obligations in the contract, determines the transaction price, allocates the transaction price to the performance obligations in the contract and recognizes revenue when (or as) the entity satisfies a performance obligation. Effective January 1, 2018, the Company adopted the New Revenue Standard using the modified retrospective option and identified the necessary changes to its policies, processes, systems and controls. Under the modified retrospective method, the Company is applying the New Revenue Standard to all contracts not yet completed as of January 1, 2018, recognizing in beginning Accumulated deficit an adjustment for the cumulative effect of the change and providing additional disclosures comparing results to those as if the Company was still following the previous accounting standards. Under ASC 605, the Company concluded it did not have vendor-specific objective evidence ("VSOE") for certain elements in software bundled arrangements, which resulted in revenue being recognized ratably over the longest performance period. The majority of the transition adjustment related to these arrangements. In connection with the adoption of ASC 606, as of January 1, 2018, the Company recorded an adjustment to decrease Accumulated deficit by approximately $12 million and capitalized certain commission costs resulting directly from securing contracts which were previously expensed.

Significant Judgments

The Company's contracts with customers often include promises to transfer multiple products and services to the customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment.

Judgment is required to determine the standalone selling price for each distinct performance obligation. In instances where SSP is not directly observable, such as when the Company does not sell the product or service separately, the Company determines the SSP using information that may include market conditions and other observable inputs. The Company typically has more than one SSP for individual products and services due to the stratification of those products and services by customers and circumstances. In these instances, the Company may use information such as the size of the customer and geographic region in determining the SSP.

Deferred Revenue

Deferred revenue represents amounts collected from or invoiced to customers in excess of revenue recognized. This results primarily from the billing of annual customer support agreements where the revenue is recognized over the term of the agreement. The value of deferred revenue will increase or decrease based on the timing of invoices and recognition of revenue.

Disaggregation of Revenue

The Company disaggregates its revenue from contracts with customers based on the nature of the products and services and the geographic regions in which each customer is domiciled. The Company's revenue for the three and nine months ended September 30, 2018 and 2017 was disaggregated as follows:

Three months ended September 30, 2018	Product revenue	Service revenue (maintenance)	Service revenue (professional services)	Total revenue
United States	$ 49,699	$ 34,065	$ 9,040	$ 92,804
Europe, Middle East and Africa	10,380	11,504	2,169	24,053
Japan	3,588	2,882	503	6,973
Other Asia Pacific	6,959	3,551	906	11,416
Other	6,657	8,154	2,411	17,222
	$ 77,283	$ 60,156	$ 15,029	$ 152,468

Three months ended September 30, 2017	Product revenue	Service revenue (maintenance)	Service revenue (professional services)	Total revenue
United States	$ 35,126	$ 16,745	$ 4,263	$ 56,134
Europe, Middle East and Africa	3,072	2,960	272	6,304
Japan	3,376	2,489	1,552	7,417
Other Asia Pacific	1,771	992	47	2,810
Other	775	1,070	119	1,964
	$ 44,120	$ 24,256	$ 6,253	$ 74,629

Nine months ended September 30, 2018	Product revenue	Service revenue (maintenance)	Service revenue (professional services)	Total revenue
United States	$ 109,977	$ 98,354	$ 25,535	$ 233,866
Europe, Middle East and Africa	29,807	35,550	8,157	73,514
Japan	16,128	8,431	2,296	26,855
Other Asia Pacific	21,970	8,905	3,185	34,060
Other	14,055	23,049	5,610	42,714
	$ 191,937	$ 174,289	$ 44,783	$ 411,009

Nine months ended September 30, 2017	Product revenue	Service revenue (maintenance)	Service revenue (professional services)	Total revenue
United States	$ 72,123	$ 48,502	$ 10,116	$ 130,741
Europe, Middle East and Africa	10,295	8,006	1,456	19,757
Japan	8,569	7,536	3,768	19,873
Other Asia Pacific	4,180	2,920	383	7,483
Other	3,138	2,234	504	5,876
	$ 98,305	$ 69,198	$ 16,227	$ 183,730

International revenue, both as a percentage of total revenue and absolute dollars, may vary from one period to the next, and accordingly, historical data may not be indicative of future periods.

The Company's product revenue from its direct sales program and from indirect sales through its channel partner program for the three and nine months ended September 30, 2018 and 2017 was as follows (in thousands):

	Three months ended		Nine months ended	
	September 30, 2018	September 30, 2017	September 30, 2018	September 30, 2017
Indirect sales through channel program	$ 26,309	$ 10,704	$ 42,151	$ 28,063
Direct sales	50,974	33,416	149,786	70,242
	$ 77,283	$ 44,120	$ 191,937	$ 98,305

The Company's product revenue from sales to enterprise customers and from sales to service provider customers for the three and nine months ended September 30, 2018 and 2017 was as follows (in thousands):

	Three months ended		Nine months ended	
	September 30, 2018	September 30, 2017	September 30, 2018	September 30, 2017
Sales to enterprise customers	$ 23,581	$ 9,602	$ 37,534	$ 23,903
Sales to service provider customers	53,702	34,518	154,403	74,402
	$ 77,283	$ 44,120	$ 191,937	$ 98,305

Revenue Contract Balances

The timing of revenue recognition, billings and cash collections results in billed accounts receivable, unbilled receivables (contract assets) and customer advances and deposits (contract liabilities) in the Company's condensed consolidated balance sheets. Amounts are billed as work progresses in accordance with agreed-upon contractual terms, either at periodic intervals or upon achievement of contractual milestones. Billing may occur subsequent to revenue recognition, resulting in contract assets. The Company may receive advances or deposits from its customers before revenue is recognized, resulting in contract liabilities which are classified as deferred revenue. These assets and liabilities are reported in the Company's condensed consolidated balance sheets on a contract-by-contract basis as of the end of each reporting period. Deposits are liquidated when revenue is recognized. Changes in the contract asset and liability balances during the nine-month period ended September 30, 2018 were not materially impacted by any other factors. Nearly all of the Company's deferred revenue balance is related to services revenue, primarily customer support contracts. Unbilled receivables stem primarily from engagements where services have been performed; however, billing cannot occur until services are completed.

In some arrangements, the Company allows customers to pay for term-based software licenses and products over the term of the software license. The Company also sells SaaS-based software under subscription arrangements, with payment terms over the term of the SaaS agreement. Amounts recognized as revenue in excess of amounts billed are recorded as unbilled receivables. Unbilled receivables that are anticipated to be invoiced in the next twelve months are included in Accounts receivable on the Company's condensed consolidated balance sheets. The changes in the Company's accounts receivable, unbilled receivables and deferred revenue balances for the nine months ended September 30, 2018 were as follows (in thousands):

	Accounts receivable	Unbilled accounts receivable	Deferred revenue (current)	Deferred revenue (long-term)
Balance at January 1, 2018	$ 149,122	$ 16,034	$ 100,571	$ 14,184
Increase (decrease), net	(13,317)	(1,162)	(18,082)	1,801
Balance at September 30, 2018	$ 135,805	$ 14,872	$ 82,489	$ 15,985

The decrease in accounts receivable was primarily the result of lower billings in the current year period compared with the Company's typically higher billings at year-end. The decrease in deferred revenue was primarily due to the ratable amortization of annual customer support renewals. The Company recognized $18.4 million and $79.1 million, respectively, of revenue in the three and nine months ended September 30, 2018 that was recorded as deferred revenue at December 31, 2017. Of the Company's deferred revenue reported as long-term in its condensed consolidated balance sheet at September 30, 2018, the Company expects that approximately $3 million will be recognized as revenue in 2019, approximately $9 million will be recognized as revenue in 2020 and approximately $4 million will be recognized as revenue in 2021 and beyond.

Deferred Commissions Cost

Sales commissions earned by the Company's employees are considered incremental and recoverable costs of obtaining a contract with a customer. Under ASC 605, the costs associated with obtaining a customer contract were expensed in the period the revenue was earned. Under ASC 606, these payments have been deferred on our condensed consolidated balance sheet and amortized over the expected life of the customer contract.

Adoption of ASC 606

Under the modified retrospective method, the Company applied ASC 606 to those contracts which were not completed as of January 1, 2018. Results for reporting periods beginning January 1, 2018 are presented under ASC 606, which prior period amounts have not been adjusted and will continue to be reported in accordance with the Company's historical accounting treatment under ASC 605, *Revenue Recognition* ("ASC 605").

The Company recorded a net reduction to Accumulated deficit of approximately $12 million at January 1, 2018 due to the cumulative impact of adopting ASC 606, primarily related to software orders with non-VSOE services revenue. Had the Company continued to recognize revenue under ASC 605, the Company would have recognized approximately $8 million and approximately $9 million less revenue in the three and nine months ended September 30, 2018, respectively. Incremental costs that would have been recognized had the Company continued to recognize revenue under ASC 605 would not have been material to the Company's consolidated results of operations.

The Company's typical performance obligations include the following:

Performance Obligation	When Performance Obligation is Typically Satisfied	When Payment is Typically Due
Software and Product Revenue		
Software licenses (perpetual or term)	Upon transfer of control; typically, when made available for download (point in time)	Within 30 days of invoicing except for term licenses which may be paid for over time
Software licenses (subscription)	Upon activation of hosted site (over time)	Within 30 days of invoicing
Hardware	When control of the appliances passes to the customer; typically, upon delivery (point in time)	Generally, within 30 days of invoicing
Software upgrades	Upon transfer of control; typically, when made available for download (point in time)	Generally, within 30 days of invoicing
Customer Support Revenue		
Customer support	Ratably over the course of the support contract (over time)	At the beginning of the contract period
Professional Services		
Other professional services (excluding education services)	As work is performed (over time)	Within 30 days of invoicing (upon completion of services)
Training	When the class is taught (point in time)	Within 30 days of services being performed

(11) STOCK-BASED COMPENSATION PLANS

Amended and Restated Stock Incentive Plan

The Company's Amended and Restated Stock Incentive Plan, as amended (the "Plan"), provides for the award of options to purchase the Company's common stock ("stock options"), stock appreciation rights ("SARs"), restricted common stock awards ("RSAs"), restricted common stock units ("RSUs"), performance-based stock awards ("PSAs"), performance-based stock units ("PSUs") and other stock-based awards to employees, officers, directors (including those directors who are not employees or officers of the Company), consultants and advisors of the Company and its subsidiaries.

2002 Stock Option Plan

In connection with the Edgewater Acquisition, the Company assumed Edgewater's Amended and Restated 2002 Stock Option Plan (the "Edgewater Plan") to the extent of the shares underlying the options outstanding under the Edgewater Plan as of the Edgewater Acquisition Date (the "Edgewater Options"). The Edgewater Options were converted to like Ribbon stock options (the "Ribbon Replacement Options") using a conversion factor of 0.17, which was calculated based on the acquisition consideration of $1.20 per share of Edgewater common stock divided by the weighted average of the closing price of Ribbon common stock for the ten consecutive days, ending with the trading day that preceded the Edgewater Acquisition Date. This conversion factor was also used to convert the exercise prices of Edgewater Options to Ribbon Replacement Option exercise prices. The Ribbon Replacement Options will vest under the same schedules as the respective Edgewater Options.

The fair values of the Edgewater Options assumed were estimated using a Black-Scholes option pricing model. The Company recorded $0.7 million as additional purchase consideration for the fair value of the assumed Edgewater Options. The fair value of the Ribbon Replacement Options attributable to future service totaled $1.0 million, which will be recognized over a weighted average period of approximately two years.

Executive Equity Arrangements - PSUs

In addition to granting RSAs and RSUs to its executives and certain of its employees, the Company also grants PSUs to certain of its executives.

In May 2018, the Company granted its President and Chief Executive Officer Franklin (Fritz) Hobbs ("Mr. Hobbs"), 195,000 PSUs with both performance and service conditions (the "Hobbs PSUs"). Of the 195,000 Hobbs PSUs, one-half will vest based on the achievement of two separate metrics related to the Company's 2018 financial performance (the "Hobbs Performance Conditions"). The Company's achievement of the Hobbs Performance Conditions (and the shares of Company common stock to vest as a result thereof) will be measured on a linear sliding scale in relation to specific threshold, target and stretch performance conditions. The number of shares of common stock to be received upon vesting of the Hobbs PSUs will in no event exceed 150% of the Hobbs PSUs. The Company is recording stock-based compensation expense for the Hobbs PSUs based on its assessment of the probability that each performance condition will be achieved and the level, if any, of such achievement. Upon the determination by the Compensation Committee of the Board of Directors (the "Compensation Committee") of the number of shares that will be received upon vesting of the Hobbs PSUs, such number of shares will become fixed and the unamortized expense recorded through the remainder of the service period that ends December 31, 2020. The Company recorded stock-based compensation expense approximating $154,000 in the three months ended September 30, 2018 and $194,000 in the nine months ended September 30, 2018 in connection with the Hobbs PSUs.

From 2015 through 2017, the Company granted PSUs with both market and service conditions to certain of its executives. The terms of each PSU grant are such that up to one-third of the shares subject to the respective PSU grant will vest, if at all, on each of the respective first, second and third anniversaries of the date of grant, depending on the Company's total shareholder return ("TSR") compared with the TSR of the companies included in the Nasdaq Telecommunications Index for the same fiscal year, measured by the Compensation Committee after each of the fiscal years as defined by each grant (each, a "Performance Period"). The shares determined to be earned will vest on the anniversary of the grant date following each Performance Period. Shares subject to the PSUs that fail to be earned will be forfeited.

The PSUs that included a market condition required the use of a Monte Carlo simulation approach to model future stock price movements based upon the risk-free rate of return, the date of return, the volatility of each entity and the pair-wise covariance between each entity. These results were then used to calculate the grant date fair values of the respective PSUs. The Company is required to record expense for the PSUs with market conditions through their respective final vesting dates, regardless of the number of shares that are ultimately earned.

On March 31, 2017, the Company granted an aggregate of 165,000 PSUs with both market and service conditions to five of its executives (the "2017 PSUs"). In March 2018, the Compensation Committee determined that the performance metrics for the 2017 PSUs for the 2017 Performance Period had been achieved at the 130% level and accordingly, 33,584 shares in the aggregate were released to the three executives holding such outstanding grants, comprised of 25,834 shares, representing the 100% achievement target, granted on March 31, 2017 and 7,750 shares, representing the 30% achievement over target, granted on March 31, 2018. The grant of the additional shares and the release of the earned shares, both of which occurred on March 31, 2018, are included in the PSU table below.

On April 1, 2016, the Company granted an aggregate of 131,250 PSUs with both market and service conditions to six of its executives (the "2016 PSUs"). In March 2018, the Compensation Committee determined that the performance metrics for the 2016 PSUs for the 2017 Performance Period had been achieved at the 130% level, and accordingly, 16,250 shares in the aggregate were released to the two executives holding such outstanding grants, comprised of 12,500 shares, representing the 100% achievement target, granted on April 1, 2016 and 3,750 shares, representing the 30% achievement over target, granted on April 1, 2018. The grant of the additional shares and the release of the earned shares, both of which occurred on April 1, 2018, are included in PSU table below.

On March 16, 2015, the Company granted an aggregate of 131,250 PSUs with both market and service conditions to eight of its executives (the "2015 PSUs"). In March 2018, the Compensation Committee determined that the performance metrics for the 2015 PSUs for the 2017 Performance Period had been achieved at the 112% level, and accordingly, 7,934 shares in the aggregate were released to the two executives holding such outstanding grants, comprised of 7,084 shares, representing the 100% achievement target, granted on March 16, 2015 and 850 shares, representing the 12% achievement over target, granted on March 16, 2018. The grant of the additional shares and the release of the earned shares, both of which occurred on March 16, 2018, are included in the PSU table below.

Stock Options

The activity related to the Company's outstanding stock options for the nine months ended September 30, 2018 was as follows:

	Number of Shares	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (years)	Aggregate Intrinsic Value (in thousands)
Outstanding at January 1, 2018	435,187	$ 14.71		
Granted	—	$ —		
Edgewater outstanding options converted to Ribbon options	312,452	$ 1.97		
Exercised	(8,653)	$ 4.97		
Forfeited	—	$ —		
Expired	(109,486)	$ 14.40		
Outstanding at September 30, 2018	629,500	$ 8.57	6.12	$ 1,538
Vested or expected to vest at September 30, 2018	589,719	$ 9.01	5.96	$ 1,352
Exercisable at September 30, 2018	344,653	$ 14.01	4.41	$ 161

The Company did not grant any stock options in the nine months ended September 30, 2018. Additional information regarding the Company's stock options for the three and nine months ended September 30, 2018 was as follows:

	Three months ended September 30, 2018	Nine months ended September 30, 2018
Total intrinsic value of stock options exercised (in thousands)	$ 13	$ 21
Cash received from the exercise of stock options (in thousands)	$ 33	$ 43

Restricted Stock Awards and Units

The activity related to the Company's RSAs for the nine months ended September 30, 2018 was as follows:

	Shares	Weighted Average Grant Date Fair Value
Unvested balance at January 1, 2018	1,696,582	$ 7.68
Granted	1,123,956	$ 6.90
Vested	(752,085)	$ 8.46
Forfeited	(270,075)	$ 7.36
Unvested balance at September 30, 2018	1,798,378	$ 6.91

The activity related to the Company's RSUs for the nine months ended September 30, 2018 was as follows:

	Shares	Weighted Average Grant Date Fair Value
Unvested balance at January 1, 2018	17,932	$ 6.99
Granted	899,500	$ 6.27
Vested	(17,110)	$ 7.00
Forfeited	(41,822)	$ 6.72
Unvested balance at September 30, 2018	858,500	$ 6.25

The total fair value of shares of restricted stock granted under RSAs and RSUs that vested during the nine months ended September 30, 2018 was $6.5 million.

Performance-Based Stock Units

The activity related to the Company's PSUs for the nine months ended September 30, 2018 was as follows:

	Shares	Weighted Average Grant Date Fair Value
Unvested balance at January 1, 2018	60,834	$ 9.65
Granted	207,350	$ 5.78
Vested	(57,768)	$ 9.90
Forfeited	—	$ —
Unvested at September 30, 2018	210,416	$ 5.77

The total fair value of shares of restricted stock granted under PSUs that vested during the nine months ended September 30, 2018 was $0.6 million.

Employee Stock Purchase Plan

The Company's Amended and Restated 2000 Employee Stock Purchase Plan ("ESPP") is designed to provide eligible employees of the Company and its participating subsidiaries an opportunity to purchase common stock of the Company through accumulated payroll deductions. The ESPP provides for six-month offering periods with the purchase price of the stock equal to 85% of the lesser of the market price on the first or last day of the offering period. The maximum number of shares of common stock an employee may purchase during each offering period is 500, subject to certain adjustments pursuant to the ESPP.

In May 2017, the Compensation Committee determined to suspend all offering periods under the ESPP effective September 1, 2017 and until such time after the closing of the then-pending merger with GENBAND as the Compensation Committee determines is best in its sole discretion. In September 2018, at the recommendation of the Compensation Committee, the Board determined to re-instate all offering periods under the ESPP, effective December 1, 2018.

Stock-Based Compensation

The condensed consolidated statements of operations include stock-based compensation for the three and nine months ended September 30, 2018 and 2017 as follows (in thousands):

	Three months ended		Nine months ended	
	September 30, 2018	September 30, 2017	September 30, 2018	September 30, 2017
Product cost of revenue	$ 21	$ 75	$ 91	$ 261
Service cost of revenue	65	199	264	777
Research and development	313	1,095	1,364	3,650
Sales and marketing	585	871	1,944	1,690
General and administrative	1,532	1,647	3,758	5,009
	$ 2,516	$ 3,887	$ 7,421	$ 11,387

There is no income tax benefit for employee stock-based compensation expense for the nine months ended September 30, 2018 or September 30, 2017 due to the valuation allowance recorded.

At September 30, 2018, there was $12.6 million, net of expected forfeitures, of unrecognized stock-based compensation expense related to unvested stock options, awards and units. This expense is expected to be recognized over a weighted average period of approximately two years.

(12) MAJOR CUSTOMERS

The following customers contributed 10% or more of the Company's revenue in the three and nine months ended September 30, 2018 and 2017:

	Three months ended		Nine months ended	
	September 30, 2018	September 30, 2017	September 30, 2018	September 30, 2017
Verizon Communications Inc.	13%	16%	15%	15%
AT&T Inc.	12%	11%	10%	10%

There were no other customers that contributed 10% or more of the Company's revenue in the three or nine months ended September 30, 2018 or 2017.

At September 30, 2018, two customers accounted for 10% or more of the Company's accounts receivable balance, representing approximately 25% in the aggregate of the Company's total accounts receivable. At December 31, 2017, two customers accounted for 10% or more of the Company's accounts receivable balance, representing approximately 31% in the aggregate of total accounts receivable. The Company performs ongoing credit evaluations of its customers and generally does not require collateral on accounts receivable. The Company maintains an allowance for doubtful accounts and such losses have been within management's expectations.

(13) RELATED PARTY TRANSACTIONS

As a portion of the consideration for the Merger, on October 27, 2017, the Company issued a Promissory Note for $22.5 million to certain of GENBAND's equity holders who, following the Merger, owned greater than five percent of the Company's outstanding shares. As described in Note 9 above, the Promissory Note does not amortize, and the principal thereon is payable in full on the third anniversary of its execution. Interest on the Promissory Note is payable quarterly in arrears and accrued at a rate of 7.5% per year for the first six months after issuance, and thereafter at a rate of 10% per year. Of the unpaid interest on the Promissory Note at September 30, 2018, $1.0 million was converted to principal and included as a component of Long-term debt, related party, and $0.4 million was included as a component of Accrued expenses and other in the Company's condensed consolidated balance sheets. The failure to make any payment under the Promissory Note when due and, with respect to payment of any interest, the continuation of such failure for a period of thirty days thereafter, constitutes an event of default under the Promissory Note. If an event of default occurs under the Promissory Note, the payees may declare the entire balance of the promissory note due and payable (including principal and accrued and unpaid interest) within five business days of the payees' notification to the Company of such acceleration.

(14) INCOME TAXES

The Company's income tax provisions for the nine months ended September 30, 2018 and 2017 reflect the Company's estimates of the effective rates expected to be applicable for the respective full years, adjusted for any discrete events, which are recorded in the period that they occur. These estimates are reevaluated each quarter based on the Company's estimated tax expense for the full year. The estimated effective rates for the nine months ended September 30, 2018 and 2017 do not include any benefit for the Company's domestic or Ireland losses, as the Company has concluded that a valuation allowance on any domestic or Ireland benefit is required.

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act makes broad and complex changes to the U.S. tax code, including, but not limited to: reducing the U.S. federal corporate tax rate from 35% to 21%; requiring companies to pay a one-time transition tax on certain unrepatriated earnings of foreign subsidiaries; generally eliminating U.S. federal income taxes on dividends from foreign subsidiaries; requiring a current inclusion in U.S. federal taxable income of certain earnings (the Global Intangible Low-taxed Income ("GILTI")) of controlled foreign corporations; eliminating the corporate alternative minimum tax ("AMT") and changing how existing AMT credits can be realized; creating the base erosion anti-abuse tax ("BEAT"); creating a new limitation on deductible interest expense; changing rules related to uses and limitations of net operating loss carryforwards created in tax years beginning after December 31, 2017; providing a tax deduction for foreign derived intangible income ("FDII"); and changing rules related to deductibility of compensation for certain officers.

The impact of certain effects of the Tax Act was provisionally recognized in the period in which the new legislation was enacted per guidance in Staff Accounting Bulletin 118, which allows for a measurement period to complete the accounting for certain elements of the tax reform. The Company has previously provided for a provisional impact related to remeasured deferred tax assets based on the new federal income tax rate of 21%. The Company has also previously provided for the provisional impact related to the Tax Act's change to the federal NOL and AMT carryovers. The total estimated impact of $4.8 million was reflected in the Company's net loss and increased the tax benefit for the year ended December 31, 2017. During the nine months ended September 30, 2018, the Company recorded an adjustment that reduced the benefit of the provisional impact relating to the change in its deferred tax assets by $0.2 million as a result of the new federal tax rate of 21%. The Company will continue to refine its calculations as additional analysis is completed and expects to complete the accounting for the impact of the Tax Act within the measurement period. The Company cannot currently predict with certainty how the Tax Act will affect its financial position or results of operations.

(15) COMMITMENTS AND CONTINGENCIES

The Company fully cooperated with an SEC inquiry regarding the development and issuance of Sonus’ first quarter 2015 revenue and earnings guidance. The Company and the SEC reached an agreement to resolve this matter and on August 7, 2018, the SEC issued a Cease and Desist Order (the "Order"). As part of the Order, the findings of which the Company neither admitted to nor denied, the Company agreed to pay a $1.9 million civil penalty and agreed not to violate the securities laws in the future. The Company recorded $1.9 million in the year ended December 31, 2017 for potential fines in connection with this investigation and has paid such amount to the SEC.

The Company is involved in five lawsuits with Metaswitch Networks Ltd., Metaswitch Networks Corp. and Metaswitch Inc. (collectively, “Metaswitch”). In all five of the lawsuits, the Company is the plaintiff and, in three of the lawsuits, the Company is also a counterclaim defendant. On January 21, 2014, GENBAND and the Company’s indirectly-owned subsidiary, GENBAND US LLC, filed a complaint in the Eastern District of Texas, Marshall Division, alleging that Metaswitch infringed certain patents owned by GENBAND. Following unsuccessful mediation, a trial took place and on January 15, 2016, and the jury awarded approximately $8.2 million in past royalty damages to GENBAND, which neither GENBAND nor the Company has recorded. On September 29, 2016, the district court confirmed the jury verdict following motions from both parties. On March 22, 2018, the district court entered final judgment awarding GENBAND $8.9 million in royalties for damages through January 15, 2016 at rates set by the district court, excluding pre and post-judgment interest and costs. On April 10, 2018, the clerk of the court set the awarded costs at $0.4 million. On April 19, 2018, Metaswitch filed a notice of appeal on the judgment with United States Court of Appeals for the Federal Circuit, and filed its appeal brief on July 6, 2018.

On April 18, 2018, Sonus filed a complaint in the Eastern District of Texas, Marshall Division, alleging that Metaswitch is continuing to infringe the patents from the first lawsuit above through sales of Metaswitch's allegedly "redesigned" products. This suit seeks a finding that Metaswitch's infringement is willful. This suit also alleges false advertising and seeks damages resulting from allegedly false and misleading statements Metaswitch made regarding the first lawsuit. The district court has set trial for September 9, 2019.

Through Sonus and GENBAND US LLC, the Company is involved as plaintiff and counterclaim defendant in a lawsuit with Metaswitch regarding claims that Metaswitch misappropriated trade secrets of GENBAND. This case is pending in state court in Dallas County, Texas, and stems from claims originally brought in a patent lawsuit between GENBAND and Metaswitch. The state court action was filed on March 28, 2017. Metaswitch filed its answer on April 21, 2017, in which it asserted counterclaims against GENBAND. On July 11, 2018, Metaswitch filed its fifth amended answer and counterclaims against GENBAND. The Texas state court has set a special setting for a trial for this case on April 22, 2019.

Through Sonus, the Company is also involved as plaintiff and counterclaim defendant in two patent infringement lawsuits with Metaswitch asserting the infringement of a total of ten patents that came into the Company from Sonus. Sonus filed these two lawsuits in the Eastern District of Texas, Marshall Division, on March 8, 2018. Metaswitch filed its answers on May 15, 2018, in which it asserted counterclaims against Sonus, including alleged infringement by the Company and Sonus of a total of ten patents. The district court has set trials for these cases to occur on February 18, 2020 and June 15, 2020.

At this time, it is not possible to predict the outcome of the litigation matters with Metaswitch, but the Company does not expect the results of any of these actions to have a material adverse effect on its business or consolidated financial statements.

In addition, the Company is often a party to disputes and legal proceedings that it considers routine and incidental to its business. Management does not expect the results of any of these actions to have a material effect on the Company's business or consolidated financial statements.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

The following discussion of the financial condition and results of operations of Ribbon Communications Inc. should be read in conjunction with the condensed consolidated financial statements and the related notes thereto included elsewhere in this Quarterly Report on Form 10-Q and the audited financial statements and notes thereto and Management's Discussion and Analysis of Financial Condition and Results of Operations included in our Annual Report on Form 10-K for the year ended December 31, 2017, which was filed with the U.S. Securities and Exchange Commission on March 8, 2018.

Overview

We are a leading provider of network communications solutions to telecommunications, wireless and cable service providers and enterprises across industry verticals. With over 1,000 customers around the globe, including some of the largest telecommunications service providers and enterprises in the world, we enable service providers and enterprises to modernize their communications networks and provide secure real-time communications ("RTC") solutions to their customers and employees. By securing and enabling reliable and scalable IP networks, we help service providers and enterprises adopt the next generation of software-based virtualized and cloud communications technologies to drive new, incremental revenue while protecting their existing revenue streams. Our solutions provide a secure way for our customers to connect and leverage multivendor, multiprotocol communications systems and applications across their networks and the cloud, around the world and in a rapidly changing ecosystem of Internet Protocol ("IP")-enabled devices such as smartphones and tablets. In addition, our solutions secure the evolution to cloud-based delivery of unified communications ("UC") solutions - both for service providers transforming to a cloud-based network and for enterprises using cloud-based UC. We go to market through both direct sales and indirect channels globally, leveraging the assistance of resellers, and we provide ongoing support to our customers through a global services team with experience in design, deployment and maintenance of some of the world's largest IP networks.

We completed our Merger with GENBAND in October 2017. As a result of the Merger, we believe we are better positioned to enable network transformations to IP and to cloud-based networks for service providers and enterprise customers worldwide, with a broader and deeper sales footprint, increased ability to invest in growth, more efficient and effective research and development, and a comprehensive RTC product offering.

Business Acquisitions

Edgewater Networks, Inc.

On August 3, 2018 (the "Edgewater Acquisition Date"), we completed our acquisition of Edgewater Networks, Inc. ("Edgewater"), a private company headquartered in San Jose, California (the "Edgewater Acquisition"). Edgewater is a market leader in Network Edge Orchestration for the small and medium enterprise ("SME") and UC market. We believe that the acquisition of Edgewater will allow us to offer our global customer base a complete core-to-edge product portfolio, end-to-end service assurance and analytics solutions, and a fully integrated software-defined wide-area network ("SD-WAN") service.

As consideration for the Edgewater Acquisition, we paid, in the aggregate, approximately $46 million of cash, net of cash acquired, and issued 4.2 million shares of Ribbon common stock to Edgewater's selling shareholders and holders of vested in-the-money options and warrants to acquire common stock of Edgewater (the "Edgewater Selling Stakeholders") on the Edgewater Acquisition Date. The cash payment was funded through our existing credit facility. We have agreed to pay the Edgewater Selling Stakeholders an additional $30 million of cash, $15 million of which is to be paid six months from the Edgewater Acquisition Date and the other $15 million of which is to be paid as early as nine months from the Edgewater Acquisition Date and no later than 18 months from the Edgewater Acquisition Date (the exact timing of which will depend on the amount of revenue generated from the sales of Edgewater products in 2018).

The Edgewater Acquisition has been accounted for as a business combination and the financial results of Edgewater have been included in our consolidated financial statements for the period subsequent to the Edgewater Acquisition Date.

GENBAND

On October 27, 2017 (the "Merger Date"), Sonus Networks, Inc. ("Sonus") consummated an acquisition as specified in an Agreement and Plan of Merger (the “Merger Agreement”) with Solstice Sapphire Investments, Inc. ("NewCo") and certain of its wholly-owned subsidiaries, GENBAND Holdings Company, GENBAND Inc. and GENBAND II, INC. (collectively, "GENBAND") such that, following a series of mergers (collectively, the "Merger"), Sonus and GENBAND each became a wholly-owned subsidiary of NewCo.

Pursuant to the Merger Agreement, NewCo issued 50.9 million shares to the GENBAND equity holders, with the number of shares issued in the aggregate to the GENBAND equity holders equal to the number of shares of Sonus common stock outstanding immediately prior to the closing date of the Merger, such that former stockholders of Sonus would own approximately 50%, and former shareholders of GENBAND and the two related holding companies would own approximately 50%, of the shares of NewCo common stock issued and outstanding immediately following the consummation of the Merger.

The Merger has been accounted for as a business combination and the financial results of GENBAND have been included in our consolidated financial statements beginning on the Merger Date. As a result, our 2018 financial results are not comparable to our 2017 financial results.

On November 28, 2017, the Company changed its name to "Ribbon Communications Inc."

Financial Overview

Financial Results

We reported a loss from operations of approximately $8 million for the three months ended September 30, 2018 and earnings from operations of approximately $4 million for the three months ended September 30, 2017. We reported losses from operations of approximately $67 million for the nine months ended September 30, 2018 and $20 million for the nine months ended September 30, 2017.

Our revenue was approximately $152 million in the three months ended September 30, 2018 and $75 million in the three months ended September 30, 2017. Our revenue was approximately $411 million in the nine months ended September 30, 2018 and $184 million in the nine months ended September 30, 2017.

Our gross profit was approximately $82 million in the three months ended September 30, 2018 and $55 million in the three months ended September 30, 2017. Our gross profit was approximately $213 million in the nine months ended September 30, 2018 and $125 million in the nine months ended September 30, 2017. Our gross profit as a percentage of revenue ("total gross margin") was approximately 54% in the three months ended September 30, 2018 and 73% in the three months ended September 30, 2017. Our total gross margin was approximately 52% in the nine months ended September 30, 2018 and 68% in the nine months ended September 30, 2017.

Our operating expenses were approximately $90 million in the three months ended September 30, 2018 and $51 million in the three months ended September 30, 2017. Our operating expenses were approximately $279 million in the nine months ended September 30, 2018 and $144 million in the nine months ended September 30, 2017. Operating expenses for the three months ended September 30, 2018 included approximately $6 million of acquisition- and integration-related expense and approximately $2 million of restructuring expense. Operating expenses for the nine months ended September 30, 2018 included approximately $14 million of acquisition- and integration related expense and $15 million of restructuring expense. Operating expenses for the three months ended September 30, 2017 included acquisition- and integration-related expense of less than $2 million. Operating expenses for the nine months ended September 30, 2017 included approximately $6 million of acquisition-related expense and $1 million of restructuring expense.

We recorded stock-based compensation expense of approximately $3 million in the three months ended September 30, 2018 and $4 million in the three months ended September 30, 2017. We recorded stock-based compensation expense of approximately $7 million in the nine months ended September 30, 2018 and $11 million in the nine months ended September 30, 2017. These amounts are included as components of both Cost of revenue and Operating expenses in our condensed consolidated statements of operations.

See "Results of Operations" in this Management's Discussion and Analysis of Financial Condition and Results of Operations ("MD&A") for a discussion of the changes in our revenue and expenses for the three and nine months ended September 30, 2018 and 2017.

Restructuring and Cost Reduction Initiatives

In connection with the Merger, we implemented a restructuring plan in the fourth quarter of 2017 to eliminate certain redundant positions and facilities within the combined companies (the "Merger Restructuring Initiative"). Accordingly, we recorded approximately $9 million of restructuring expense in the fourth quarter of 2017 related to the Merger Restructuring Initiative. We recorded approximately $14 million of restructuring expense in the nine months ended September 30, 2018, comprised of approximately $2 million in the three months ended September 30, 2018, $5 million in the three months ended June 30, 2018 and $7 million in the three months ended March 31, 2018. The amounts recorded in both the three and nine months ended September 30, 2018 were primarily for severance and related costs. We believe that the payments related to the amount accrued at September 30, 2018 will be completed in 2018. We anticipate that we will record approximately $1 million of restructuring expense in connection with the Merger Restructuring Initiative in the fourth quarter of 2018. We believe that the payments related to this expected additional future expense will be completed by early 2019.

We assumed GENBAND's restructuring liability aggregating approximately $4 million at the Merger Date (the "GENBAND Restructuring Initiative"), primarily related to headcount reductions. We recorded approximately $1 million of expense in both the three and nine months ended September 30, 2018 for changes in estimated costs previously accrued. These adjustments were equally related to personnel and facilities costs. We do not expect to record additional expense in connection with this initiative except for adjustments for changes in estimated costs. We expect that the payments related to this assumed liability will be completed by the end of 2018.

In connection with the 2016 acquisition of Taqua, LLC ("Taqua"), we implemented a restructuring plan in the third quarter of 2016 to eliminate certain redundant positions within the then-combined companies. On October 24, 2016, the Audit Committee of our Board (the "Audit Committee") approved a broader Taqua restructuring plan related to headcount and redundant facilities (collectively, the "Taqua Restructuring Initiative"). In connection with this initiative, we recorded approximately $2 million of restructuring expense in the aggregate, including nominal expense recorded in the three months ended June 30, 2018 and less than $1 million in the nine months ended September 30, 2017, for severance and related costs and estimated costs related to the elimination of redundant facilities, including adjustments recorded for changes in cost estimates for the planned restructuring activities. The actions under the Taqua Restructuring Initiative have been implemented and accordingly, we do not expect to record additional expense in connection with this initiative. The amounts accrued for severance and related costs were fully paid by the end of the third quarter of 2017. We expect that the amounts accrued for facilities costs will be paid by the end of 2018.

On July 25, 2016, we announced a program (the "2016 Restructuring Initiative") to further accelerate our investment in new technologies as the communications industry migrates to a cloud-based architecture and to pursue new strategic initiatives, such as new products and an expanded go-to-market footprint in selected geographies and discrete vertical markets. We have recorded an aggregate of approximately $2 million of restructuring expense in connection with this initiative, primarily for severance and related costs. The amounts accrued for severance and related costs were fully paid by the end of the third quarter of 2017. We expect that the amounts accrued for facilities will be paid by the end of October 2019.

Critical Accounting Policies and Estimates

Management's discussion and analysis of financial condition and results of operations is based upon our condensed consolidated financial statements, which have been prepared in accordance with accounting principles generally accepted in the United States of America ("GAAP"). The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses, and related disclosure of contingent assets and liabilities. We base our estimates and judgments on historical experience, knowledge of current conditions and beliefs of what could occur in the future given available information. We consider the following accounting policies to be both those most important to the portrayal of our financial condition and those that require the most subjective judgment. If actual results differ significantly from management's estimates and projections, there could be a material effect on our condensed consolidated financial statements. The significant accounting policies that we believe are the most critical include revenue recognition, valuation of inventory, loss contingencies and reserves, stock-based compensation, business combinations, goodwill and intangible assets, and accounting for income taxes.

Effective January 1, 2018, we adopted Accounting Standards Codification ("ASC") 606, *Revenue from Contracts with Customers* ("ASC 606" or the "New Revenue Standard"), the new standard on revenue from contracts with customers, which codified Accounting Standards Update ("ASU") 2014-09, Revenue from Contracts with Customers ("ASU 2014-09"). Accordingly, we have updated our significant accounting policy on revenue recognition as described below.

Revenue Recognition. We account for revenue in accordance with ASC 606, which we adopted on January 1, 2018 using the modified retrospective method.

We derive revenue from two primary sources: software and non-software products, and services. Software and non-software product revenue is generated from sales of our software with proprietary hardware that functions together to deliver the products' essential functionality. Software and hardware are also sold on a standalone basis. Services include customer support (software updates and technical support), consulting, design services, installation services and training. A typical contract includes both product and services. Generally, contracts with customers contain multiple performance obligations. For these contracts, we account for individual performance obligations separately if they are distinct. The transaction price is allocated to the separate performance obligations on a relative standalone selling price basis. Standalone selling prices ("SSP") are typically estimated based on observable transactions when these services are sold on a standalone basis.

The software licenses typically provide a perpetual right to use our software. We also sell term-based software licenses that expire and Software-as-as-Service ("SaaS")-based software which are referred to as subscription arrangements. We do not customize our software nor are installation services required, as the customer has a right to utilize internal resources or a third-party service company. The software and hardware are delivered before related services are provided and are functional without professional services or customer support. We have concluded that our software licenses are functional intellectual property that are distinct, as the user can benefit from the software on its own. The product revenue is typically recognized upon transfer of control or when the software is made available for download, as this is the point that the user of the software can direct the use of, and obtain substantially all of the remaining benefits from, the functional intellectual property. We do not recognize software revenue related to the renewal of subscription software licenses earlier than the beginning of the subscription period. Hardware product is generally sold with software to provide the customer solution.

Service revenue includes revenue from customer support and other professional services. We offer warranties on our products. Certain of our warranties are considered to be assurance-type in nature and do not cover anything beyond ensuring that the product is functioning as intended. Based on the guidance in ASC 606, assurance-type warranties do not represent separate performance obligations. We also sell separately-priced maintenance service contracts which qualify as service-type warranties and represent separate performance obligations. The Company does not allow and has no history of accepting product returns.

Customer support includes software updates on a when-and-if-available basis, telephone support, integrated web-based support and bug fixes or patches. We sell our customer support contracts at a percentage of list or net product price related to the support. Customer support revenue is recognized ratably over the term of the customer support agreement, which is typically one year.

Our professional services include consulting, technical support, resident engineer services, design services and installation services. Because control transfers over time, revenue is recognized based on progress toward completion of the performance obligation. The method to measure progress toward completion requires judgment and is based on the nature of the products or services to be provided. We generally use the input method to measure progress for our contracts because we believe it best depicts the transfer of assets to the customer which occurs as we incur costs for the contracts. Under the cost-to-cost measure of progress, the progress toward completion is measured based on the ratio of costs incurred to date to the total estimated costs at completion of the performance obligation. When the measure of progress is based upon expended labor, progress toward completion is measured as the ratio of labor time expended to date versus the total estimated labor time required to complete the performance obligation. Revenue is recorded proportionally as costs are incurred or as labor is expended. Costs to fulfill these obligations include internal labor as well as subcontractor costs.

We offer customer training courses, for which the related revenue is typically recognized as the training services are performed.

Our contracts with customers often include promises to transfer multiple products and services to the customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately versus together may require significant judgment.

Judgment is required to determine the SSP for each distinct performance obligation. In instances where SSP is not directly observable, such as when we do not sell the product or service separately, we determine the SSP using information that may include market conditions and other observable inputs. We typically have more than one SSP for individual products and services due to the stratification of those products and services by customers and circumstances. In these instances, the Company may use information such as the size of the customer and geographic region in determining the SSP.

Goodwill. Goodwill is not amortized, but instead is tested for impairment at least annually or if indicators of potential impairment exist. Our annual testing for impairment of goodwill is completed as of November 30. We operate as a single operating segment with one reporting unit and consequently evaluate goodwill for impairment based on an evaluation of the fair value of our company as a whole. We performed our step one assessments for 2017, 2016 and 2015 and determined that our market capitalization was significantly in excess of our carrying value. Subsequent to December 31, 2017, and as of March 31, 2018, our market capitalization had declined to a value less than our book value. However, as of the end of our second and third quarters of 2018, our market capitalization was in excess of our carrying value. We will continue to monitor our market capitalization and assess the recoverability of our goodwill as facts and circumstances warrant.

For a further discussion of our other critical accounting policies and estimates, please refer to our Annual Report on Form 10-K for the fiscal year ended December 31, 2017. With the exception of our revenue recognition policy and the discussion of goodwill, both above, there were no significant changes to our critical accounting policies from December 31, 2017 through September 30, 2018.

Results of Operations

Three and nine months ended September 30, 2018 and 2017

Revenue. Revenue for the three and nine months ended September 30, 2018 and 2017 was as follows (in millions, except percentages):

	Three months ended		Increase from prior year	
	September 30, 2018	September 30, 2017	$	%
Product	$ 77.3	$ 44.1	$ 33.2	75.2%
Service	75.2	30.5	44.7	146.4%
Total revenue	$ 152.5	$ 74.6	$ 77.9	104.3%

	Nine months ended		Increase from prior year	
	September 30, 2018	September 30, 2017	$	%
Product	$ 191.9	$ 98.3	$ 93.6	95.2%
Service	219.1	85.4	133.7	156.4%
Total revenue	$ 411.0	$ 183.7	$ 227.3	123.7%

Product revenue is comprised of sales of our network transformation, security and applications solutions.

The increase in product revenue in the three months ended September 30, 2018 compared with the three months ended September 30, 2017 was primarily the result of the inclusion of GENBAND's and Edgewater's product revenue in the three months ended September 30, 2018, coupled with approximately $5 million of higher revenue from sales of certain of our SBC/GSX 9000-related products and our SGX/Signaling products. These increases were partially offset by approximately $8 million of lower sales of certain of our SBC products, primarily our SBC 5000, SBC 7000 and SBC Swe products.

The increase in product revenue in the nine months ended September 30, 2018 compared with the nine months ended September 30, 2017 was primarily the result of the inclusion of GENBAND's and Edgewater's product revenue in the nine months ended September 30, 2018.

Approximately 34% of our product revenue in the three months ended September 30, 2018 was from indirect sales through our channel partner program, compared with approximately 24% in the three months ended September 30, 2017. Approximately 22% of our product revenue in the nine months ended September 30, 2018 was from indirect sales through our channel partner program, compared with approximately 29% in the nine months ended September 30, 2017. The increase in the percentage of product revenue from indirect sales through our channel partner program in the three months ended September 30, 2018 compared to the three months ended September 30, 2017 was primarily attributable to the inclusion of Edgewater's revenue in our results since the Edgewater Acquisition Date.

Our product revenue from sales to enterprise customers was approximately 31% of our product revenue in the three months ended September 30, 2018, compared with approximately 22% in the three months ended September 30, 2017. Our product revenue from sales to enterprise customers was approximately 20% of our product revenue in the nine months ended September 30, 2018, compared with approximately 24% in the nine months ended September 30, 2017. These sales were made both through our direct sales team and indirect sales channel partners. The increase in the percentage of product revenue from sales to enterprise customers in the three months ended September 30, 2018 compared to the three months ended September 30, 2017 was primarily attributable to the inclusion of Edgewater's revenue in our results since the Edgewater Acquisition Date, coupled with improved demand for our enterprise products.

The timing of the completion of customer projects, revenue recognition criteria satisfaction and customer payments may cause our product revenue to fluctuate from one period to the next.

Service revenue is primarily comprised of hardware and software maintenance and support ("maintenance revenue") and network design, installation and other professional services ("professional services revenue").

Service revenue for the three and nine months ended September 30, 2018 and 2017 was comprised of the following (in millions, except percentages):

	Three months ended		Increase from prior year	
	September 30, 2018	September 30, 2017	$	%
Maintenance	$ 60.2	$ 24.3	$ 35.9	148.0%
Professional services	15.0	6.2	8.8	140.3%
	$ 75.2	$ 30.5	$ 44.7	146.4%

	Nine months ended		Increase from prior year	
	September 30, 2018	September 30, 2017	$	%
Maintenance	$ 174.3	$ 69.2	$ 105.1	151.9%
Professional services	44.8	16.2	28.6	176.0%
	$ 219.1	$ 85.4	$ 133.7	156.4%

Our maintenance revenue increased in both the three and nine months ended September 30, 2018 compared with the three and nine months ended September 30, 2017, primarily due to the inclusion of GENBAND's maintenance revenue in the current year periods.

The increase in our professional services revenue in both the three and nine months ended September 30, 2018 compared with the three and nine months ended September 30, 2017 was primarily due to the inclusion of professional services revenue attributable to GENBAND in the current year periods.

The timing of the completion of customer projects, customer payments and maintenance contract renewals may cause our service revenue to fluctuate from one period to the next.

The following customers contributed 10% or more of our revenue in at least one of the three- or nine-month periods ended September 30, 2018 and 2017:

	Three months ended		Nine months ended	
Customer	September 30, 2018	September 30, 2017	September 30, 2018	September 30, 2017
Verizon Communications Inc.	13%	16%	15%	15%
AT&T Inc.	12%	11%	10%	10%

Revenue earned from customers domiciled outside the United States was approximately 39% of revenue in the three months ended September 30, 2018 and approximately 25% of revenue in the three months ended September 30, 2017. Revenue earned from customers domiciled outside the United States was approximately 43% of revenue in the nine months ended September 30, 2018 and approximately 29% of revenue in the nine months ended September 30, 2017. Due to the timing of project completions, we expect that the domestic and international components as a percentage of revenue may fluctuate from quarter to quarter and year to year and accordingly, historical data may not be indicative of future periods.

Our deferred product revenue was approximately $10 million at September 30, 2018 and $22 million at December 31, 2017. Our deferred service revenue was approximately $88 million at September 30, 2018 and $93 million at December 31, 2017. Our deferred revenue balance may fluctuate because of the timing of revenue recognition, customer payments, maintenance contract renewals, contractual billing rights and maintenance revenue deferrals included in multiple element arrangements.

We expect that our product revenue in 2018 will increase significantly compared with 2017 levels, primarily due to our acquisition of GENBAND.

We expect that our service revenue in 2018 will increase compared with 2017 levels due to the inclusion of GENBAND service revenue and the continued organic growth of our installed customer base. However, we expect to continue to encounter ongoing industry pricing pressure, third-party competition and legacy network product decommissioning.

Overall, we expect that total revenue in 2018 will be significantly higher than our 2017 total revenue due to the inclusion of GENBAND for a full year in 2018 and the inclusion of Edgewater beginning August 3, 2018.

In connection with the purchase price allocation to record our acquisition of GENBAND, we were required to record at fair value the assumed deferred revenue, resulting in a reduction of approximately $50 million to the assumed deferred revenue and future recognizable revenue. We recognized approximately $4 million less revenue in the three months ended September 30, 2018 and $19 million less revenue in the nine months ended September 30, 2018 than GENBAND would have recognized in the same periods had the Merger not occurred. We expect to recognize approximately $3 million less revenue in the fourth quarter of 2018 than GENBAND would have recognized in the same period had the Merger not occurred. We expect that these purchase accounting-related reductions to future revenue will continue through 2020, primarily impacting future service revenue.

In May 2014, the FASB issued ASU 2014-09, which, among other things, clarified the implementation of the new revenue guidance and delayed the adoption by one year, to January 1, 2018. Had we continued to recognize revenue under ASC 605, we would have recognized approximately $8 million less revenue in the three months ended September 30, 2018 and approximately $9 million less revenue in the nine months ended September 30, 2018.

Cost of Revenue/Gross Margin. Our cost of revenue consists primarily of amounts paid to third-party manufacturers for purchased materials and services, royalties, manufacturing and professional services personnel and related costs, and provision for inventory obsolescence. Our cost of revenue and gross margins for the three and nine months ended September 30, 2018 and 2017 were as follows (in millions, except percentages):

	Three months ended		Increase from prior year	
	September 30, 2018	**September 30, 2017**	**$**	**%**
Cost of revenue				
Product	$ 38.9	$ 9.7	$ 29.2	300.6%
Service	31.3	10.4	20.9	202.1%
Total cost of revenue	$ 70.2	$ 20.1	$ 50.1	249.7%
Gross margin				
Product	49.7%	78.0%		
Service	58.3%	66.0%		
Total gross margin	53.9%	73.1%		

	Nine months ended		Increase from prior year	
	September 30, 2018	**September 30, 2017**	**$**	**%**
Cost of revenue				
Product	$ 102.2	$ 28.7	$ 73.5	255.4%
Service	96.2	30.3	65.9	217.7%
Total cost of revenue	$ 198.4	$ 59.0	$ 139.4	236.1%
Gross margin				
Product	46.8%	70.8%		
Service	56.1%	64.5%		
Total gross margin	51.7%	67.9%		

The decrease in product gross margin in the three months ended September 30, 2018 compared with the three months ended September 30, 2017 was equally attributable to product and customer mix and the inclusion of both GENBAND's and Edgewater's costs in the current year quarter, including higher amortization expense for intangible assets arising from these acquisitions.

The decrease in product gross margin in the nine months ended September 30, 2018 compared with the nine months ended September 30, 2017 was primarily attributable to the inclusion of both GENBAND's and Edgewater's costs in the current year period coupled with higher amortization expense for intangible assets arising from these acquisitions, which decreased our product gross margin by approximately fourteen percentage points, and product and customer mix, which decreased our product gross margin by approximately ten percentage points.

The decrease in service gross margin in the three months ended September 30, 2018 compared with the three months ended September 30, 2017 was primarily due to the inclusion of GENBAND's expenses in the current year quarter, which decreased our service gross margin by approximately six percentage points, and higher costs in connection with supporting our supply depots, which decreased our service gross margin by approximately two percentage points.

The decrease in service gross margin in the nine months ended September 30, 2018 compared with the nine months ended September 30, 2017 was primarily due to the inclusion of GENBAND's expenses in the current year period, which decreased our service gross margin by approximately seven percentage points, and higher costs in connection with supporting our supply depots, which decreased our service gross margin by approximately two percentage points.

Our service cost of revenue is relatively fixed in advance of any particular quarter and therefore, changes in service revenue will typically have a significant impact on service gross margin.

We believe that our total gross margin will decrease in 2018 compared with 2017 due primarily to the inclusion of amortization expense for acquired intangible assets arising from the GENBAND acquisition.

Research and Development Expenses. Research and development expenses consist primarily of salaries and related personnel expenses and prototype costs for the design, development, testing and enhancement of our products. Research and development expenses for the three and nine months ended September 30, 2018 and 2017 were as follows (in millions, except percentages):

	September 30, 2018	September 30, 2017	Increase from prior year $	Increase from prior year %
Three months ended	$ 34.4	$ 20.8	$ 13.6	65.4%
Nine months ended	$ 109.1	$ 61.1	$ 48.0	78.6%

The increase in research and development expenses in the three months ended September 30, 2018 compared with the three months ended September 30, 2017 was attributable to approximately $6 million of higher employee-related expenses, approximately $3 million of higher infrastructure-related expenses (i.e., facilities and information technology services), approximately $1 million of higher product development expenses (i.e., third-party development, prototype and test equipment costs) and net increases in other research and development expenses aggregating approximately $4 million. These increases were primarily attributable to the inclusion of GENBAND's costs in the three months ended September 30, 2018.

The increase in research and development expense in the nine months ended September 30, 2018 compared with the nine months ended September 30, 2017 was attributable to approximately $23 million of higher employee-related expenses, approximately $11 million of higher product development expenses, approximately $11 million of higher infrastructure-related expenses and net increases in other research and development expenses aggregating approximately $3 million. These increases were primarily attributable to the inclusion of GENBAND's costs in the nine months ended September 30, 2018.

Some aspects of our research and development efforts require significant short-term expenditures, the timing of which may cause significant variability in our expenses. We believe that rapid technological innovation is critical to our long-term success, and we are tailoring our investments to meet the requirements of our customers and market. We believe that our research and development expenses will increase compared with 2017 levels due to the full year impact in 2018 of GENBAND's costs and to a lesser extent, the impact of Edgewater's costs for the period since the Edgewater Acquisition Date, partially offset by cost reductions resulting from our restructuring initiatives.

Sales and Marketing Expenses. Sales and marketing expenses primarily consist of salaries and related personnel costs, commissions, travel and entertainment expenses, promotions, customer trial and evaluations inventory and other marketing and sales support expenses. Sales and marketing expenses for the three and nine months ended September 30, 2018 and 2017 were as follows (in millions, except percentages):

	September 30, 2018		September 30, 2017		Increase from prior year $	%
Three months ended	$	31.5	$	17.5	$ 14.0	80.4%
Nine months ended	$	94.2	$	47.9	$ 46.3	96.8%

The increase in sales and marketing expenses in the three months ended September 30, 2018 compared with the three months ended September 30, 2017 was primarily attributable to approximately $10 million of higher employee-related expenses, approximately $2 million of higher infrastructure-related expenses and approximately $2 million of higher amortization expense in connection with our acquired intangible assets. These increases were primarily attributable to the inclusion of GENBAND's costs in the three months ended September 30, 2018.

The increase in sales and marketing expenses in the nine months ended September 30, 2018 compared with the nine months ended September 30, 2017 was primarily attributable to approximately $33 million of higher employee-related expenses, approximately $6 million of higher infrastructure-related expenses, approximately $6 million of higher amortization expense in connection with our acquired intangible assets and approximately $1 million of net increases in other sales and marketing expenses. These increases were primarily attributable to the inclusion of GENBAND's costs in the nine months ended September 30, 2018.

We believe that our sales and marketing expenses will increase in 2018 compared with 2017 levels due to the full year impact of the inclusion of GENBAND in 2018 and to a lesser extent, the impact of Edgewater's costs for the period since the Edgewater Acquisition Date, partially offset by reductions resulting from our recent restructuring initiatives.

General and Administrative Expenses. General and administrative expenses consist primarily of salaries and related personnel costs for executive and administrative personnel, recruiting expenses and audit, legal and other professional fees. General and administrative expenses for the three and nine months ended September 30, 2018 and 2017 were as follows (in millions, except percentages):

	September 30, 2018		September 30, 2017		Increase from prior year $	%
Three months ended	$	15.9	$	10.8	$ 5.1	47.2%
Nine months ended	$	46.6	$	28.0	$ 18.6	66.4%

The increase in general and administrative expenses in the three months ended September 30, 2018 compared with the three months ended September 30, 2017 was primarily attributable to approximately $5 million of higher professional fees (i.e., legal, audit and outside services), approximately $2 million of higher employee-related expenses and approximately $1 million of higher infrastructure-related expense. These increases were partially offset by the absence in the current year quarter of approximately $2 million of expense in the incurred three months ended September 30, 2017 for potential fines in connection with the then-ongoing SEC inquiry and approximately $1 million of net decreases in other general and administrative expenses. The increase in our professional fees included approximately $3 million of fees related to ongoing litigation with one of our competitors. These increases were primarily attributable to the inclusion of GENBAND's costs in the three months ended September 30, 2018.

The increase in general and administrative expenses in the nine months ended September 30, 2018 compared with the nine months ended September 30, 2017 was primarily attributable to approximately $10 million of higher professional fees, approximately $8 million of higher employee-related expenses and approximately $2 million of higher infrastructure-related expense. These increases were partially offset by net decreases in other general and administrative expenses aggregating approximately $1 million. The increase in our professional fees included approximately $6 million of fees related to ongoing litigation with one of our competitors. These increases were primarily attributable to the inclusion of GENBAND's costs in the nine months ended September 30, 2018.

We believe that our general and administrative expenses will increase in 2018 compared with 2017, primarily due to the full year impact of GENBAND's costs in 2018 and, to a lesser extent, the impact of Edgewater's costs for the period since the Edgewater Acquisition Date, partially offset by reductions in connection with our recent restructuring initiatives.

Acquisition- and Integration-Related Expenses. Acquisition- and integration-related expenses include expenses related to acquisitions that we would not have incurred otherwise. Acquisition-related expenses include professional and services fees, such as legal, audit, consulting, paying agent and other fees, and expenses related to cash payments to certain former executives of the acquired businesses in connection with their employment agreements. Integration-related expenses represent incremental costs related to combining companies, such as third-party consulting and other services needed to merge the separate companies' systems and processes. We recorded approximately $6 million of acquisition- and integration-related expenses in the three months ended September 30, 2018 and approximately $14 million in the nine months ended September 30, 2018 related to our acquisitions of GENBAND and Edgewater, as well as nominal amounts related to acquisitive activities. The amount recorded in the three months ended September 30, 2018 was comprised of approximately $3 million of acquisition-related expense primarily related to the Merger and the Edgewater Acquisition and approximately $3 million of integration-related expense related to the Merger. The amount recorded in the nine months ended September 30, 2018 was comprised of approximately $7 million of acquisition-related expense primarily related to the Merger and the Edgewater Acquisition and approximately $7 million of integration-related expense related to the Merger.

We recorded approximately $2 million of acquisition- and integration-related expense in the three months ended September 30, 2017 related to our then-pending merger with GENBAND, primarily comprised of legal, investment banking and accounting fees. We recorded approximately $6 million of acquisition- and integration-related expense in the nine months ended September 30, 2017, primarily related to our then-proposed merger with GENBAND for legal, investment, banking and accounting fees.

We estimate that we will incur additional acquisition- and integration-related expense of approximately $3 million in the fourth quarter of 2018. This estimate includes additional integration-related expense in connection with the Merger and acquisition-related expense in connection with the Edgewater Acquisition.

Restructuring Expense. We have been committed to streamlining operations and reducing operating costs by closing and consolidating certain facilities and reducing our worldwide workforce. Please see the additional discussion of our restructuring initiatives in the "Restructuring and Cost Reduction Initiatives" section of the Overview of this Management's Discussion and Analysis of Financial Condition and Results of Operations.

We recorded restructuring expense of approximately $2 million in the three months ended September 30, 2018 and approximately $15 million in the nine months ended September 30, 2018, primarily in connection with our Merger Restructuring Initiative for severance and related costs.

We recorded restructuring expense aggregating approximately $1 million related to our Taqua Restructuring Initiative and our 2016 Restructuring Initiative in the nine months ended September 30, 2017. The amount related to the Taqua Restructuring Initiative was primarily related to the abandonment of a portion of the former Taqua San Jose, California facility. The amount related to the 2016 Restructuring Initiative represented severance and related costs. We did not record restructuring expense in the three months ended September 30, 2017.

Although we have eliminated positions as part of our restructuring initiatives, we continue to hire in certain other areas that we believe are important to our future growth. Restructuring expense is reported separately in the condensed consolidated statements of operations.

Interest Income (Expense), Net. Interest income and interest expense for the three and nine months ended September 30, 2018 and 2017 were as follows (in millions, except percentages):

	Three months ended		**Increase (decrease) from prior year**	
	September 30, 2018	**September 30, 2017**	**$**	**%**
Interest income	$ 0.1	$ 0.3	$ (0.2)	(75.1)%
Interest expense	(1.5)	—	1.5	100.0 %
	$ (1.4)	$ 0.3	$ 1.7	646.2 %

	Nine months ended		Increase (decrease) from prior year	
	September 30, 2018	September 30, 2017	$	%
Interest income	$ 0.2	$ 0.8	$ (0.6)	(68.8)%
Interest expense	(3.0)	—	3.0	100.0 %
	$ (2.8)	$ 0.8	$ 3.6	456.7 %

Interest income for all periods consisted of interest earned on our cash equivalents, marketable securities and investments. Interest expense in the three and nine months ended September 30, 2018 was primarily comprised of interest on the outstanding revolving credit facility balance and our long-term debt payable to a related party, amortization of debt issuance costs in connection with our credit facility and interest on capital lease obligations. Interest expense in the three and nine months ended September 30, 2017 was comprised of expense related to the amortization of debt issuance costs in connection with our then-existing revolving credit facility and interest on capital lease obligations.

Income Taxes. We recorded provisions for income taxes of approximately $3 million in the nine months ended September 30, 2018 and approximately $1 million in the nine months ended September 30, 2017. These amounts reflect our estimates of the effective rates expected to be applicable for the respective full fiscal years, adjusted for any discrete events, which are recorded in the period that they occur. Our tax provision for the nine months ended September 30, 2018 includes approximately $600,000 of net benefit related to discrete items, primarily a benefit resulting from the release of approximately $800,000 of valuation allowance in connection with the acquisition of Edgewater. These estimates are reevaluated each quarter based on our estimated tax rate for the full fiscal year. The estimated amounts recorded do not include any benefit for our domestic or Ireland losses, as we have concluded that a valuation allowance on any domestic or Ireland benefit is required.

On December 22, 2017, the U.S. government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act"). The Tax Act makes broad and complex changes to the U.S. tax code, including, but not limited to: reducing the U.S. federal corporate tax rate from 35% to 21%; requiring companies to pay a one-time transition tax on certain unrepatriated earnings of foreign subsidiaries; generally eliminating U.S. federal income taxes on dividends from foreign subsidiaries; requiring a current inclusion in U.S. federal taxable income of certain earnings (the Global Intangible Low-taxed Income ("GILTI")) of controlled foreign corporations; eliminating the corporate alternative minimum tax ("AMT") and changing how existing AMT credits can be realized; creating the base erosion anti-abuse tax ("BEAT"); creating a new limitation on deductible interest expense; changing rules related to uses and limitations of net operating loss carryforwards created in tax years beginning after December 31, 2017; providing a tax deduction for foreign derived intangible income ("FDII"); and changing rules related to deductibility of compensation for certain officers.

The impact of certain effects of the Tax Act was provisionally recognized in the period in which the new legislation was enacted per guidance in Staff Accounting Bulletin 118, which allows for a measurement period to complete the accounting for certain elements of the tax reform. We had previously provided for a provisional impact related to remeasured deferred tax assets based on the new federal income tax rate of 21%. We had also previously provided for the provisional impact related to the Tax Act's change to the federal NOL and AMT carryovers. The total estimated impact of approximately $5 million was reflected in our net loss and increased the tax benefit for the year ended December 31, 2017. We recorded a nominal adjustment in the nine months ended September 30, 2018 to reduce the benefit of the provisional impact relating to the change in our deferred tax assets as a result of the new federal tax rate of 21%. We will continue to refine our calculations as additional analysis is completed and expect to complete the accounting for the impact of the Tax Act within the measurement period. We cannot currently predict with certainty how the Tax Act will affect our financial position or results of operations.

Off-Balance Sheet Arrangements

We have no off-balance sheet arrangements that have or are reasonably likely to have a current or future material effect on our financial position, changes in financial position, revenues or expenses, results of operations, liquidity, capital expenditures or capital resources.

Liquidity and Capital Resources

Our consolidated statements of cash flows are summarized as follows (in millions):

	Nine months ended		
	September 30, 2018	September 30, 2017	Change
Net loss	$ (75.0)	$ (19.5)	$ (55.5)
Adjustments to reconcile net loss to cash flows (used in) provided by operating activities	56.4	23.6	32.8
Changes in operating assets and liabilities	(5.0)	4.9	(9.9)
Net cash (used in) provided by operating activities	$ (23.6)	$ 9.0	$ (32.6)
Net cash (used in) provided by investing activities	$ (33.4)	$ 10.5	$ (43.9)
Net cash provided by (used in) financing activities	$ 36.2	$ (0.5)	$ 36.7

Our cash, cash equivalents, and short- and long-term investments totaled approximately $43 million at September 30, 2018 and $83 million at December 31, 2017. We had cash held by our non-U.S. subsidiaries aggregating approximately $7 million at September 30, 2018 and $14 million at December 31, 2017. If we elected to repatriate all of the funds held by our non-U.S. subsidiaries as of September 30, 2018, we do not believe that the amounts of potential withholding taxes that would arise from the repatriation would have a material effect on our liquidity.

On the Merger Date and in connection with the Merger, we assumed GENBAND's Senior Secured Credit Agreement with Silicon Valley Bank (the "Prior Credit Agreement"), which had outstanding borrowings and letters of credit totaling approximately $18 million and $3 million, respectively, and an average interest rate of 4.67%. GENBAND had entered into the Prior Credit Agreement with Silicon Valley Bank ("SVB") effective July 1, 2016. The Prior Credit Agreement had a maturity date of July 1, 2019 and provided for revolving loans, including letters of credit and swingline loans, not to exceed $50 million in total, with potential further increases of up to $75 million available for a total revolving line of credit of up to $125 million.

On December 21, 2017, we entered into a Senior Secured Credit Agreement (as amended, the “Credit Facility”) with Silicon Valley Bank, which refinanced the Prior Credit Agreement. The Credit Facility includes $100 million of commitments, the full amount of which is available for revolving loans, a $15 million sublimit that is available for letters of credit and a $15 million sublimit that is available for swingline loans. The Credit Facility is scheduled to mature in December 2021, subject to a springing maturity if, on or before July 14, 2020, the existing promissory note for approximately $23 million issued to certain of GENBAND's equity holders (the "Promissory Note") is not converted or extended to March 2022 or later. The Credit Facility includes procedures for additional financial institutions to become lenders, or for any existing lender to increase its commitment under the facility, subject to an available increase of $50 million for all incremental commitments under the Credit Facility without amendment. On June 24, 2018, we amended the Credit Facility to, among other things, permit the Edgewater Acquisition and related transactions.

The indebtedness and other obligations under the Credit Facility are unconditionally guaranteed on a senior secured basis by us and GENBAND US LLC, our wholly-owned domestic subsidiary (collectively, the “Guarantors”) and each of our other material U.S. domestic subsidiaries. The Credit Agreement is secured by first-priority liens on substantially all of our assets.

The Credit Facility requires periodic interest payments on outstanding borrowings under the facility until maturity. We may prepay all revolving loans under the Credit Facility at any time without premium or penalty (other than customary LIBOR breakage costs), subject to certain notice requirements.

Revolving loans under the Credit Facility bear interest at our option at either the Eurodollar (LIBOR) rate plus a margin ranging from 2.50% to 3.00% per year or the base rate (the highest of the Federal Funds rate plus 0.50%, or the prime rate announced from time to time in The Wall Street Journal) plus a margin ranging from 1.50% to 2.00% per year (such margins being referred to as the “Applicable Margin”). The Applicable Margin varies depending on our consolidated leverage ratio (as defined in the Credit Facility). The base rate and the LIBOR rate are each subject to a zero percent floor.

We are charged a commitment fee ranging from 0.25% to 0.40% per year on the daily amount of the unused portions of the commitments under the Credit Facility. Additionally, with respect to all letters of credit outstanding under the Credit Facility, we are charged a fronting fee of 0.125% per year and an outstanding letter of credit fee equal to the Applicable Margin for base rate loans ranging from 1.50% to 2.00% times the amount of the outstanding letters of credit.

The Credit Facility requires compliance with financial covenants of a minimum consolidated quick ratio, minimum consolidated interest coverage ratio and maximum consolidated leverage ratio, all of which are defined in the Credit Facility and tested on a quarterly basis. In addition, the Credit Facility contains various covenants that, among other restrictions, limit our and our subsidiaries' ability to enter into certain types of transactions, including, but not limited to: incurring or assuming indebtedness, making acquisitions or engaging in mergers, making investments, repurchasing equity and paying dividends, selling or otherwise transferring assets, changing the nature of our business and amending or making prepayments on certain junior debt. We were in compliance with all covenants of the Credit Facility at September 30, 2018 and December 31, 2017.

The Credit Facility contains events of default that are customary for a secured credit facility. If an event of default relating to bankruptcy or other insolvency events with respect to a borrower occurs, all obligations under the Credit Facility will immediately become due and payable. If any other event of default exists under the Credit Facility, the lenders may accelerate the maturity of the obligations outstanding under the Credit Facility and exercise other rights and remedies, including charging a default rate of interest equal to 2.00% per year above the rate that would otherwise be applicable. In addition, if any event of default exists under the Credit Facility, the lenders may commence foreclosure or other actions against the collateral.

If any default exists under the Credit Facility, or if the Borrower is unable to make any of the representations and warranties as stated in the Credit Facility at the applicable time, the Borrower will be unable to borrow funds or have letters of credit issued under the Credit Facility, which, depending on the circumstances prevailing at that time, could have a material adverse effect on the Borrower's liquidity and working capital.

On December 21, 2017, concurrently with the completion of the Credit Facility, we repaid in full all outstanding amounts under the Prior Credit Agreement and terminated the agreement. We did not incur any early termination penalties in connection with the termination of the Prior Credit Agreement.

At September 30, 2018, we had an outstanding debt balance of $58 million at an average interest rate of 5.26% and approximately $3 million of outstanding letters of credit at an average interest rate of 1.75% under the Credit Facility. At December 31, 2017, we had an outstanding debt balance of $20 million at an average interest rate of 4.51% and approximately $3 million of outstanding letters of credit at an average interest rate of 2.00% under the Credit Facility.

In connection with the Merger, on October 27, 2017, we issued the Promissory Note for approximately $23 million to certain of GENBAND's equity holders. The Promissory Note does not amortize, and the principal thereon is payable in full on the third anniversary of its execution. Interest on the promissory note is payable quarterly in arrears and accrues at a rate of 7.5% per year for the first six months after issuance, and thereafter at a rate of 10% per year. Interest that is not paid on the interest payment date will increase the principal amount of the Promissory Note. The failure to make any payment under the Promissory Note when due and, with respect to payment of any interest, the continuation of such failure for a period of thirty days thereafter, constitutes an event of default under the Promissory Note. If an event of default occurs under the Promissory Note, the payees may declare the entire balance of the Promissory Note due and payable (including principal and accrued and unpaid interest) within five business days of the payees' notification to the Company of such acceleration.

Our operating activities used approximately $24 million of cash in the nine months ended September 30, 2018 and provided approximately $9 million of cash in the nine months ended September 30, 2017.

Cash used in operating activities in the nine months ended September 30, 2018 was primarily the result of our net loss, lower accrued expenses and other long-term liabilities, accounts payable and deferred revenue. These amounts were partially offset by lower accounts receivable, other operating assets and inventory, coupled with our non-cash operating expenses. The decrease in accrued expenses and other long-term liabilities was primarily related to employee compensation and related costs, including payments in connection with our company-wide cash bonus program, and our previously recorded restructuring initiatives, coupled with lower accruals for professional fees and taxes. Our lower accounts receivable primarily reflected collections on sales made in the prior year and our focused collection efforts. Our net loss, adjusted for non-cash operating activities, used approximately $19 million of cash.

Cash provided by operating activities in the nine months ended September 30, 2017 was primarily the result of our non-cash operating expenses, lower accounts receivable and inventory, and higher deferred revenue. These amounts were partially offset by our net loss, lower accrued expenses and other long-term liabilities, and higher other operating assets. Our lower accounts receivable primarily reflected our focused collection efforts. The decrease in accrued expenses and other long-term liabilities was primarily related to employee compensation and related costs, including payments made in connection with our company-wide cash bonus program and sales commissions, as well as payments made in connection with our previously recorded restructuring initiatives. Our net loss, adjusted for non-cash items such as depreciation, amortization and stock-based compensation, provided approximately $4 million of cash.

Our investing activities used approximately $33 million of cash in the nine months ended September 30, 2018, comprised of approximately $46 million of cash, net of cash acquired, paid as purchase consideration to acquire Edgewater and approximately $6 million of investments in property and equipment. These amounts were partially offset by the sale and maturity of marketable securities aggregating approximately $19 million.

Our investing activities provided approximately $11 million of cash in the nine months ended September 30, 2017, primarily comprised of approximately $13 million of net maturities of marketable securities and less than $1 million of cash proceeds from the sale of intangible assets. These amounts were partially offset by approximately $3 million of investments in property and equipment.

Our financing activities provided approximately $36 million of cash in the nine months ended September 30, 2018. We borrowed approximately $143 million and repaid approximately $105 million under the Credit Facility in the nine months ended September 30, 2018. We used approximately $1 million in the aggregate for debt issuance costs and payments on our capital lease obligations and slightly less than $1 million to pay withholding obligations related to the net share settlement of restricted stock awards upon vesting.

Our financing activities used approximately $1 million of cash in the nine months ended September 30, 2017, primarily comprised of approximately $2 million used to pay withholding obligations related to the net share settlement of restricted stock awards upon vesting, partially offset by approximately $1 million in the aggregate of proceeds from the sale of our common stock in connection with our Amended and Restated 2000 Employee Stock Purchase Plan ("ESPP") and stock option exercises.

Based on our current expectations, we believe our current cash, cash equivalents, marketable debt securities, long-term investments and available borrowings under the Credit Facility will be sufficient to meet our anticipated cash needs for working capital and capital expenditures for at least twelve months, including future deferred consideration payments in connection with the Edgewater Acquisition. The rate at which we will produce or consume cash will be dependent on the cash needs of future operations, including changes in working capital, which will, in turn, be directly affected by the levels of demand for our products, the timing and rate of expansion of our business, the resources we devote to developing our products and any litigation settlements. We anticipate devoting substantial capital resources to continue our research and development efforts, to maintain our sales, support and marketing, to complete merger-related integration activities and for other general corporate activities. However, it is difficult to predict future liquidity requirements with certainty. See Note 15 to our condensed consolidated financial statements for a description of our other contingencies.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2014-09, its new standard on revenue from contracts with customers, along with additional ASUs which, among other things, clarified the implementation of the new revenue guidance and delayed the adoption by one year, to January 1, 2018. The New Revenue Standard outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most current revenue recognition guidance, including industry-specific guidance. The core principle of the revenue model is that an entity recognizes revenue to depict the transfer 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 applying the revenue model to contracts within its scope, an entity identifies the contract(s) with a customer, identifies the performance obligations in the contract, determines the transaction price, allocates the transaction price to the performance obligations in the contract and recognizes revenue when (or as) the entity satisfies a performance obligation. Effective January 1, 2018, we adopted the New Revenue Standard using the modified retrospective option and have identified the necessary changes to our policies, processes, systems and controls. Under the modified retrospective method, we are applying the New Revenue Standard to all contracts not yet completed as of January 1, 2018, recognizing in beginning Accumulated deficit an adjustment for the cumulative effect of the change and providing additional disclosures comparing results to those as if we were still following the previous accounting standards. Under Accounting Standards Codification ("ASC") 605, we concluded we did not have VSOE for certain elements in software bundled arrangements, which resulted in revenue being recognized ratably over the longest performance period. The majority of the transition adjustments related to these arrangements. In connection with the adoption of ASC 606, as of January 1, 2018, the Company recorded an adjustment to decrease Accumulated deficit by approximately $12 million and capitalized certain commission costs resulting directly from securing contracts which were previously expensed.

In February 2018, the FASB issued ASU 2018-02, *Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income* ("ASU 2018-02"), which amends ASC 220, *Income Statement - Reporting Comprehensive Income*, to allow a reclassification from accumulated other comprehensive income to retained earnings for stranded tax effects resulting from the Tax Cuts and Jobs Act and requires entities to provide certain disclosures regarding stranded tax effects. ASU 2018-02 is effective for us beginning January 1, 2019, with early adoption permitted. We are currently assessing the potential impact of the adoption of ASU 2018-02 on our consolidated financial statements.

In August 2018, the FASB issued ASU 2018-15, *Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* ("ASU 2018-15"), which provides guidance on implementation costs incurred in a cloud computing arrangement ("CCA") that is a service contract. ASU 2018-15 amends ASC 350, *Intangibles - Goodwill and Other* ("ASC 350") to include in its scope implementation costs of a CCA that is a service contract and clarifies that a customer should apply the guidance in ASC 350-40 to determine which implementation costs should be capitalized in such a CCA. ASU 2018-15 is effective for us beginning January 1, 2020. We are currently assessing the potential impact of the adoption of ASU 2018-15 on our consolidated financial statements.

In May 2017, the FASB issued Accounting Standards Update ("ASU") 2017-09, *Compensation - Stock Compensation (Topic 718): Scope of Modification Accounting* ("ASU 2017-09"), which amends the scope of modification accounting for share-based payment arrangements such that an entity would not apply modification accounting if the fair value, vesting conditions and classification of the awards are the same immediately before and after the modification. ASU 2017-09 became effective for us beginning January 1, 2018 for both interim and annual reporting periods. The adoption of ASU 2017-09 did not have a material impact on our condensed consolidated financial statements.

In March 2017, the FASB issued ASU 2017-07, *Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Post Retirement Benefit Cost* ("ASU 2017-07"). ASU 2017-07 amends the requirements in ASC 715 to require entities to disaggregate the current-service-cost component from the other components of net benefit cost (the "other components") and include it with other current compensation costs for related employees, present the other components elsewhere in the income statement and outside of income from operations if such a subtotal is presented and disclose the income statement lines that contain the other components if they are not presented on appropriately described separate lines. ASU 2017-07 became effective for us beginning January 1, 2018 for both interim and annual reporting periods. The adoption of ASU 2017-07 did not have a material impact on our condensed consolidated financial statements.

In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments* ("ASU 2016-15"), which 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. ASU 2016-15 became effective for us beginning January 1, 2018 for both interim and annual reporting periods. 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. The adoption of ASU 2016-15 did not have a material impact on our condensed consolidated financial statements.

In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842) Section A - Leases: Amendments to the FASB Accounting Standards Codification* ("ASU 2016-02"), its new standard on accounting for leases. ASU 2016-02 introduces a lessee model that brings most leases onto the balance sheet. ASU 2016-02 eliminates the current GAAP requirement for an entity to use bright-line tests in determining lease classification. ASU 2016-02 is effective for us for both interim and annual periods beginning January 1, 2019. Upon adoption of ASU 2016-02, we will recognize lease obligations for the right to use these assets in connection with our existing lease agreements. In July 2018, the FASB issued ASU 2018-11, *Leases (Topic 842): Targeted Improvements* ("ASU 2018-11") and ASU 2018-10, *Codification Improvements to Topic 842, Leases*, both of which provided improvements to certain aspects of the guidance in ASC 842, *Lease*s. In January 2018, the FASB issued ASU 2018-01, *Leases (Topic 842): Land*

Easement Practical Expedient for Transition to Topic 842, which provided additional clarification and implementation guidance. We have elected to use the alternative transition method as described in ASU 2018-11, which allows entities to initially apply ASU 2016-02 at the adoption date and recognize a cumulative-effect adjustment to the opening balance of retained earnings, with no subsequent adjustments to prior period lease costs for comparability. We have essentially completed the lease assessment phase of implementation and are currently reviewing the contracts within our lease portfolio in order to quantify the impact of adoption on our consolidated balance sheet as of January 1, 2019. We expect to quantify such amounts to be recognized on the balance sheet by the end of the fourth quarter of 2018. We are currently reviewing our leases to identify those that would be impacted by the adoption of ASU 2016-02 and related clarification guidance and determining the impact on our consolidated financial statements. Accordingly, such amounts to be recognized on the balance sheet have yet to be determined.

In addition, the FASB has issued the following accounting pronouncements, none of which we believe will have a material impact on our consolidated financial statements:

In August 2018, the FASB issued ASU 2018-14, *Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20): Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans* (“ASU 2018-14”), which amends ASC 715, *Compensation - Retirement Benefits* (“ASC 715”) to add, remove and clarify disclosure requirements related to defined benefit pension and other postretirement plans. ASU 2018-14 is effective for us beginning January 1, 2020.

In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement* (“ASU 2018-13”), which changes the fair value measurement requirements of ASC 820, *Fair Value Measurement* (“ASC 820”). ASU 2018-13 is effective for us beginning January 1, 2020 for both interim and annual reporting.

In July 2018, the FASB issued ASU 2018-09, *Codification Improvements* (“ASU 2018-09”), which contains amendments to clarify, correct errors in or make minor improvements to the Codification. ASU 2018-09 makes improvements to multiple topics, including but not limited to comprehensive income, debt, income taxes related to both stock-based compensation and business combinations, fair value measurement and defined contribution benefit plans. ASU 2018-09 is effective for us beginning January 1, 2019.

In June 2018, the FASB issued ASU 2018-07, *Compensation - Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting* ("ASU 2018-07"), which expands the scope of ASC 718, *Compensation - Stock Compensation* ("ASC 718"), to include all share-based payment arrangements related to the acquisition of goods and services from both nonemployees and employees. As a result, most of the guidance in ASC 718 associated with employee share-based payments, including most of its requirements related to classification and measurement, applies to nonemployee share-based payment arrangements. ASU 2018-07 is effective for us beginning January 1, 2019, although early adoption is permitted.

In October 2016, the FASB issued ASU 2016-16, *Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory* ("ASU 2016-16"), which removes the prohibition in ASC 740, *Income Taxes,* against the immediate recognition of the current and deferred income tax effects of intra-entity transfers of assets other than inventory. ASU 2016-16 is effective for us beginning January 1, 2019 for both interim and annual reporting periods.

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instrument*s ("ASU 2016-13"), which adds an impairment model that is based on expected losses rather than incurred losses. Under ASU 2016-13, an entity recognizes as an allowance its estimate of expected credit losses, which the FASB believes will result in more timely recognition of such losses. ASU 2016-13 is effective for us beginning January 1, 2020 for both interim and annual reporting periods, with early adoption permitted.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to a variety of market risks, including changes in interest rates affecting the return on our investments and foreign currency fluctuations. We do not believe that a hypothetical 10% adverse movement in interest rates and foreign currency exchange rates would have a materially different impact from what was disclosed in our Annual Report on Form 10-K for the year ended December 31, 2017.

Item 4. Controls and Procedures

Disclosure Controls and Procedures

Evaluation of Disclosure Controls and Procedures. Our management, with the participation of our principal executive officer and principal financial officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act")) as of the end of the period covered by this Quarterly Report on Form 10-Q. Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective as of September 30, 2018.

Changes in Internal Control over Financial Reporting. There have been no changes in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) during the fiscal quarter ended September 30, 2018 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II OTHER INFORMATION

Item 1. Legal Proceedings

We fully cooperated with an SEC inquiry regarding the development and issuance of Sonus' first quarter 2015 revenue and earnings guidance. We reached an agreement with the SEC to resolve this matter and on August 7, 2018, the SEC issued a Cease and Desist Order (the "Order"). As part of the Order, the findings of which we neither admitted or denied, we agreed to pay a $1.9 million civil penalty and agreed not to violate the securities laws in the future. We recorded $1.9 million in the year ended December 31, 2017, for potential fines in connection with this investigation and have paid such amount to the SEC.

We are involved in five lawsuits with Metaswitch Networks Ltd., Metaswitch Networks Corp. and Metaswitch Inc. (collectively, "Metaswitch"). In all five of the lawsuits, we are the plaintiff and, in three of the lawsuits, we are a counterclaim defendant. On January 21, 2014, GENBAND and our indirectly-owned subsidiary, GENBAND US LLC, filed a complaint in the Eastern District of Texas, Marshall Division, alleging that Metaswitch infringed certain patents owned by GENBAND. Following unsuccessful mediation, a trial took place and on January 15, 2016 the jury awarded $8.2 million in past royalty damages to GENBAND, which neither GENBAND nor the Company has recorded. On September 29, 2016, the district court confirmed the jury verdict following motions from both parties. On March 22, 2018, the district court entered final judgment awarding GENBAND $8.9 million in royalties for damages through January 15, 2016 at rates set by the district court, excluding pre- and post-judgment interest and costs. On April 10, 2018, the clerk of the district court set the awarded costs at $0.4 million. On April 19, 2018, Metaswitch filed a notice of appeal on the judgment with the United States Court of Appeals for the Federal Circuit, and Metaswitch filed its appeal brief on July 6, 2018.

On April 18, 2018, Sonus filed a complaint in the Eastern District of Texas, Marshall Division, alleging that Metaswitch is continuing to infringe the patents from the first lawsuit above through sales of Metaswitch's allegedly "redesigned" products. This suit seeks a finding that Metaswitch's infringement is willful. This suit also alleges false advertising and seeks damages resulting from allegedly false and misleading statements Metaswitch made regarding the first lawsuit. The district court has set trial for September 9, 2019.

Through Sonus and GENBAND US LLC, we are involved as plaintiff and counterclaim defendant in a lawsuit with Metaswitch regarding claims that Metaswitch misappropriated trade secrets of GENBAND. This case is pending in state court in Dallas County, Texas, and stems from claims originally brought in a patent lawsuit between GENBAND and Metaswitch. The state court action was filed on March 28, 2017. Metaswitch filed its answer on April 21, 2017, in which it asserted counterclaims against GENBAND. On July 11, 2018, Metaswitch filed its fifth amended answer and counterclaims against GENBAND. The Texas state court has set a special setting for a trial for this case on April 22, 2019.

Through Sonus, we are involved as plaintiff and counterclaim defendant in two patent infringement lawsuits with Metaswitch asserting a total of ten patents that came into the Company from Sonus. Sonus filed these two lawsuits in the Eastern District of Texas, Marshall Division on March 8, 2018. Metaswitch filed its answers on May 15, 2018, in which it asserted counterclaims against Sonus, including alleged infringement by the Company and Sonus of a total of ten patents. The district court has set trials for these two cases to occur on February 18, 2020 and June 15, 2020.

At this time, it is not possible to predict the outcome of the litigation matters with Metaswitch, but we do not expect the results of any of these actions to have a material adverse effect on our business or consolidated financial statements.

In addition, we are often a party to disputes and legal proceedings that we consider routine and incidental to our business. Management does not expect the results of any of these actions to have a material effect on our business or results of operations.

Item 1A. Risk Factors

Our business faces significant risks and uncertainties, which may have a material adverse effect on our business prospects, financial condition and results of operations, and you should carefully consider them. There have been no material changes in the nine months ended September 30, 2018 to the risk factors described in Part I, Item 1A. of our Annual Report on Form 10-K for the year ended December 31, 2017.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

(c) Issuer Purchases of Equity Securities

The following table provides information with respect to the shares of common stock repurchased by us for the periods indicated:

Period	Total Number of Shares Purchased (1)	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet be Purchased Under the Plans or Programs
July 1, 2018 to July 31, 2018	—	$ —	—	$ —
August 1, 2018 to August 31, 2018	925	$ 7.52	—	$ —
September 1, 2018 to September 30, 2018	15,832	$ 6.82	—	$ —
Total	16,757	$ 6.86	—	$ —

(1) Upon vesting of restricted stock awards, our employees are permitted to return to us a portion of the newly vested shares to satisfy the tax withholding obligations that arise in connection with such vesting. During the third quarter of 2018, 16,757 shares of restricted stock were returned to us by employees to satisfy tax withholding obligations arising in connection with vesting of restricted stock, which shares are included in this column.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibit No.	Description
10.1 *	Amended and Restated 2000 Employee Stock Purchase Plan.
10.2	Edgewater Networks, Inc. Amended and Restated 2002 Stock Option Plan, effective as of April 8, 2010 (incorporated by reference to Exhibit 99.1 to the Registrant's Registration Statement on Form S-8, filed August 6, 2018 with the SEC).
10.3	Amendment to the Edgewater Networks, Inc. Amended and Restated 2002 Stock Option Plan, dated December 7, 2016 (incorporated by reference to Exhibit 99.2 to the Registrant's Registration Statement on Form S-8, filed August 6, 2018 with the SEC).
31.1 *	Certificate of Ribbon Communications Inc. Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2 *	Certificate of Ribbon Communications Inc. Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1 #	Certificate of Ribbon Communications Inc. Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2 #	Certificate of Ribbon Communications Inc. Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
101.INS	XBRL Instance Document
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation Linkbase
101.DEF	XBRL Taxonomy Extension Definition Linkbase
101.LAB	XBRL Taxonomy Extension Label Linkbase
101.PRE	XBRL Taxonomy Extension Presentation Linkbase

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* Filed herewith.

\# Furnished herewith.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Date: October 31, 2018

RIBBON COMMUNICATIONS INC.

By: /s/ Daryl E. Raiford

Daryl E. Raiford
Executive Vice President and Chief Financial Officer (Principal Financial Officer)

RIBBON COMMUNICATIONS INC.
AMENDED AND RESTATED
2000 EMPLOYEE STOCK PURCHASE PLAN*

* As amended and restated on September 11, 2018

RIBBON COMMUNICATIONS INC.

AMENDED AND RESTATED
2000 EMPLOYEE STOCK PURCHASE PLAN

The following constitute the provisions of the Amended and Restated 2000 Employee Stock Purchase Plan of Ribbon Communications Inc., effective as of September 11, 2018.

1. Purpose

The purpose of the Plan is to provide employees of the Company and its Designated Subsidiaries with an opportunity to purchase Common Stock of the Company. It is the intention of the Company to have the Plan qualify as an "Employee Stock Purchase Plan" under Section 423 of the Code. The provisions of the Plan shall, accordingly, be construed so as to extend and limit participation in a manner consistent with the requirements of that section of the Code.

2. Definitions

2.1 Board means the Board of Directors of the Company.

2.2 Code means the Internal Revenue Code of 1986, as amended.

2.3 Common Stock means the Common Stock, par value $0.0001 per share, of the Company.

2.4 Company means Ribbon Communications Inc., a Delaware corporation.

2.5 Compensation means all regular straight time compensation including commissions but shall not include payments for overtime, shift premium, incentive compensation, incentive payments, bonuses and other irregular or infrequent compensation or benefits.

2.6 Continuous Status as an Employee means the absence of any interruption or termination of service as an Employee. Continuous Status as an Employee shall not be considered interrupted in the case of (i) sick leave; (ii) military leave; (iii) any other leave of absence approved by the Administrator, provided that such leave is for a period of not more than 90 days, unless reemployment upon the expiration of such leave is guaranteed by contract or statute, or unless provided otherwise pursuant to Company policy adopted from time to time; or (iv) transfers between locations of the Company or between the Company and its Designated Subsidiaries.

2.7 Contributions means all amounts credited to the account of a participant pursuant to the Plan.

2.8 Corporate Transaction means a merger or consolidation of the Company with and into another person or the sale, transfer, or other disposition of all or substantially all of the Company's assets to one or more persons (other than any wholly-owned subsidiary of the Company) in a single transaction or series of related transactions, unless securities possessing more than 50% of the total combined voting power of the survivor's or acquiror's outstanding securities, or the securities of any parent thereof, are held by a person or persons who held the voting securities of the Company immediately prior to such transaction.

2.9 Designated Subsidiaries means the Subsidiaries which have been designated by the Board from time to time in its sole discretion as eligible to participate in the Plan.

2.10 Employee means any person, including an Officer, who is customarily employed for at least twenty (20) hours per week and more than five (5) months in a calendar year by the Company or one of its Designated Subsidiaries.

2.11 Exchange Act means the Securities Exchange Act of 1934, as amended.

2.12 Offering Date means the first business day of each Offering Period of the Plan.

2.13 Offering Period means a period of six (6) months commencing on June 1 and December 1 of each year.

2.14 Officer means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

2.15 Plan means this Employee Stock Purchase Plan.

2.16 Purchase Date means the last day of each Offering Period of the Plan.

2.17 Purchase Price means with respect to an Offering Period an amount equal to the lesser of: (i) 85% of the Fair Market Value (as defined in Section 7.2 below) of a Share of Common Stock on the Offering Date or (ii) 85% of the Fair Market Value of a Share of Common Stock on the Purchase Date.

2.18 Share means a share of Common Stock, as adjusted in accordance with Section 19 of the Plan.

2.19 Subsidiary means a corporation, domestic or foreign, of which not less than 50% of the voting shares are held by the Company or a Subsidiary, whether or not such corporation now exists or is hereafter organized or acquired by the Company or a Subsidiary.

3. Eligibility

3.1 Any person who is an Employee as of the Offering Date of a given Offering Period shall be eligible to participate in such Offering Period under the Plan, subject to the requirements of Section 5.1 and the limitations imposed by Section 423(b) of the Code.

3.2 Any provisions of the Plan to the contrary notwithstanding, no Employee shall be granted an option under the Plan (i) if, immediately after the grant, such Employee (or any other person whose stock would be attributed to such Employee pursuant to Section 424(d) of the Code) would own capital stock of the Company and/or hold outstanding options to purchase stock possessing five percent (5%) or more of the total combined voting power or value of all classes of stock of the Company or of any subsidiary of the Company, or (ii) if such option would permit his or her rights to purchase stock under all employee stock purchase plans (described in Section 423 of the Code) of the Company and its Subsidiaries to accrue at a rate which exceeds Twenty-Five Thousand Dollars ($25,000) of the Fair Market Value (as defined in Section 7.2 below) of such stock (determined at the time such option is granted) for each calendar year in which such option is outstanding at any time.

4. Offering Periods

The Plan shall be generally implemented by a series of Offering Periods of six (6) months' duration, with new Offering Periods commencing on or about June 1 and December 1 of each year (or at such other time or times as may be determined by the Board of Directors). The Plan shall continue until terminated in accordance with Section 19 hereof. The Board of Directors of the Company shall have the power to change the duration and/or the frequency of Offering Periods with respect to future offerings without stockholder approval if such change is announced to Employees at least five (5) days prior to the scheduled beginning of the first Offering Period to be affected.

5. Participation

5.1 An eligible Employee may become a participant in the Plan by completing a subscription agreement on the form provided by the Company and filing it with the Company's stock admin department prior to the applicable Offering Date, unless a later time for filing the subscription agreement is set by the Board for all eligible Employees with respect to a given Offering Period. The subscription agreement shall set forth the percentage of the participant's Compensation (subject to Section 6.1 below) to be paid as Contributions pursuant to the Plan.

5.2 Payroll deductions shall commence on the first payroll following the Offering Date and shall end on the last payroll paid on or prior to the Purchase Date for such Offering Period to which the subscription agreement is applicable, unless sooner terminated by the participant as provided in Section 10.

6. Method of Payment of Contributions

6.1 A participant shall elect to have payroll deductions made on each payday during the Offering Period in an amount not less than one percent (1%) and not more than twenty percent

(20%) (or such other percentage as the Board may establish from time to time before an Offering Date) of such participant's Compensation on each payday during the Offering Period. All payroll deductions made by a participant shall be credited to his or her account under the Plan. A participant may not make any additional payments into such account.

6.2 A participant may discontinue his or her participation in the Plan as provided in Section 10. In addition, if Board of Directors of the Company has so announced to Employees at least five (5) days prior to the scheduled beginning of the next Offering Period to be affected, a participant may, on one occasion only during each Offering Period, change the rate of his or her Contributions with respect to the Offering Period by completing and filing with the Company a % change form authorizing a change in the payroll deduction rate. Any such change in rate shall be effective as of the beginning of the next Offering Period following the date of filing of the % change form.

6.3 Notwithstanding the foregoing, to the extent necessary to comply with Section 423(b)(8) of the Code and Section 3.2 herein, a participant's payroll deductions may be decreased during any Offering Period scheduled to end during the current calendar year to 0%. Payroll deductions shall re-commence automatically at the rate provided in such participant's subscription agreement at the beginning of the next Offering Period which is scheduled to end in the following calendar year, unless terminated by the participant as provided in Section 10.

7. Grant of Option

7.1 On the Offering Date of each Offering Period, each eligible Employee participating in such Offering Period shall be granted an option to purchase on each Purchase Date a number of Shares of the Company's Common Stock determined by dividing such Employee's Contributions accumulated prior to such Purchase Date and retained in the participant's account as of the Purchase Date by the applicable Purchase Price; provided however that the maximum number of Shares an Employee may purchase during each Offering Period shall be 500 Shares (subject to any adjustment pursuant to Section 18 below), and provided further that such purchase shall be subject to the limitations set forth in Sections 3.2 and 12.

7.2 The fair market value of the Company's Common Stock on a given date (the "Fair Market Value") shall be determined by the Board in its discretion based on the closing sales price of the Common Stock for such date (or, in the event that the Common Stock is not traded on such date, on the immediately preceding trading date), as reported by the National Association of Securities Dealers Automated Quotation ("Nasdaq") Global Select Market or, if such price is not reported, the mean of the bid and asked prices per share of the Common Stock as reported by Nasdaq or, in the event the Common Stock is listed on a stock exchange, the Fair Market value per share shall be the closing sales price on such exchange on such date (or, in the event that the Common Stock is not traded on such date, on the immediately preceding trading date), as reported in The Wall Street Journal.

8. Exercise of Option

Unless a participant withdraws from the Plan as provided in Section 10, his or her option for the purchase of Shares will be exercised automatically on the Purchase Date for each Offering Period, and the maximum number of full Shares subject to the option will be purchased at the applicable Purchase Price with the accumulated Contributions in his or her account. No fractional Shares shall be issued. The Shares purchased upon exercise of an option hereunder shall be deemed to be transferred to the participant on the Purchase Date. During his or her lifetime, a participant's option to purchase Shares hereunder is exercisable only by him or her.

9. Delivery

As promptly as practicable after each Purchase Date of each Offering Period, the Company shall arrange the delivery to each participant. These shares will be deposited into the participant's stock plan account. Any payroll contributions accumulated in a participant's account after a Purchase Date shall be returned to the participant.

10. Voluntary Withdrawal; Termination of Employment

10.1 A participant may withdraw all but not less than all of the Contributions credited to his or her account under the Plan at any time prior to each Purchase Date by giving written notice to the Company. All of the participant's Contributions credited to his or her account will be paid to him or her promptly after receipt of his or her notice of withdrawal and his or her option for the current period will be automatically terminated, and no further Contributions for the purchase of Shares will be made during the Offering Period.

10.2 Upon termination of the participant's Continuous Status as an Employee prior to the Purchase Date of an Offering Period for any reason, including retirement or death, the Contributions credited to his or her account will be returned to him or her or, in the case of his or her death, to the person or persons entitled thereto under Section 14, and his or her option will be automatically terminated.

10.3 In the event an Employee fails to remain in Continuous Status as an Employee of the Company for at least twenty (20) hours per week during the Offering Period in which the employee is a participant, he or she will be deemed to have elected to withdraw from the Plan and the Contributions credited to his or her account will be returned to him or her and his or her option terminated.

10.4 A participant's withdrawal from an offering will not have any effect upon his or her eligibility to participate in a succeeding offering or in any similar plan which may hereafter be adopted by the Company.

11. Interest

No interest shall accrue on the Contributions of a participant in the Plan.

12. Stock

12.1 Subject to adjustment as provided in Section 18, the maximum number of Shares which shall be made available for sale under the Plan shall be 240,000 Shares plus an automatic annual increase on January 1, 2001 and each January 1 thereafter equal to the lesser of (i) two percent (2%) of the Shares outstanding on the last day of the immediately preceding fiscal year, and (ii) such number as the Board may determine. Notwithstanding the foregoing, and subject to adjustment in accordance with Section 18 no more than an aggregate of 5,000,000 Shares may be issued pursuant to this Plan. If the Board determines that, on a given Purchase Date, the number of shares with respect to which options are to be exercised may exceed (i) the number of shares of Common Stock that were available for sale under the Plan on the Offering Date of the applicable Offering Period, or (ii) the number of shares available for sale under the Plan on such Purchase Date, the Board may in its sole discretion provide that the Company shall make a pro rata allocation of the Shares of Common Stock available for purchase on such Offering Date or Purchase Date, as applicable, in as uniform a manner as shall be practicable and as it shall determine in its sole discretion to be equitable among all participants exercising options to purchase Common Stock on such Purchase Date. The Company may make pro rata allocation of the Shares available on the Offering Date of any applicable Offering Period pursuant to the preceding sentence, notwithstanding any authorization of additional Shares for issuance under the Plan by the Company's stockholders subsequent to such Offering Date.

12.2 The participant shall have no interest or voting right in Shares covered by his or her option until such option has been exercised.

12.3 Shares to be delivered to a participant under the Plan will be registered in the name of the participant or pursuant to Section 14 below.

13. Administration

The Board, or a committee named by the Board, shall supervise and administer the Plan and shall have full power to adopt, amend and rescind any rules deemed desirable and appropriate for the administration of the Plan and not inconsistent with the Plan, to construe and interpret the Plan, and to make all other determinations necessary or advisable for the administration of the Plan. The Board's determinations made in good faith on matters referred to in this Plan shall be final, binding and conclusive on all persons having or claiming any interest under this Plan or an Award made pursuant hereto.

14. Designation of Beneficiary

14.1 A participant may file a written designation of a beneficiary who is to receive any Shares and cash, if any, from the participant's account under the Plan in the event of such participant's death subsequent to the end of an Offering Period but prior to delivery to him or her of such Shares and cash. In addition, a participant may file a written designation of a beneficiary who is to receive any cash from the participant's account under the Plan in the event of such participant's death prior to the Purchase Date of an Offering Period.

14.2 Such designation of beneficiary may be changed by the participant at any time by written notice. In the event of the death of a participant and in the absence of a beneficiary validly designated under the Plan who is living at the time of such participant's death, the Company shall deliver such Shares and/or cash to the executor or administrator of the estate of the participant, or if no such executor or administrator has been appointed (to the knowledge of the Company), the Company, in its discretion, may deliver such Shares and/or cash to the spouse or to any one or more dependents or relatives of the participant, or if no spouse, dependent or relative is known to the Company, then to such other person as the Company may designate.

15. Transferability

Neither Contributions credited to a participant's account nor any rights with regard to the exercise of an option or to receive Shares under the Plan may be assigned, transferred, pledged or otherwise disposed of in any way (other than by will, the laws of descent and distribution, or as provided in Section 14) by the participant. Any such attempt at assignment, transfer, pledge or other disposition shall be without effect, except that the Company may treat such act as an election to withdraw funds in accordance with Section 10.

16. Use of Funds

All Contributions received or held by the Company under the Plan may be used by the Company for any corporate purpose, and the Company shall not be obligated to segregate such Contributions.

17. Reports

Individual accounts will be maintained for each participant in the Plan.

18. Adjustments Upon Changes in Capitalization; Corporate Transactions

18.1 Adjustment. Subject to any required action by the stockholders of the Company, the number of shares covered by each option under the Plan which has not yet been exercised and the number of Shares which have been authorized for issuance under the Plan but have not yet been placed under option (collectively, the "Reserves"), as well as the maximum number of shares of Common Stock which may be purchased by a participant in an Offering Period, the number of shares of Common Stock set forth in Section 12.1 above, and the price per Share of Common Stock covered by each option under the Plan which has not yet been exercised, shall be proportionately adjusted for any increase or decrease in the number of issued Shares resulting from a stock split, reverse stock split, stock dividend, combination or reclassification of the Common Stock (including any such change in the number of Shares of Common Stock effected in connection with a change in domicile of the Company), or any other increase or decrease in the number of Shares effected without receipt of consideration by the Company; provided however that conversion of any convertible securities of the Company shall not be deemed to have been "effected without receipt of consideration." Such adjustment shall be made by the Board, whose determination in that respect shall be final, binding and conclusive.

18.2 Corporate Transactions. In the event of a dissolution or liquidation of the Company, any Offering Period then in progress will terminate immediately prior to the consummation of such action, unless otherwise provided by the Board. In the event of a Corporate Transaction, each option outstanding under the Plan shall be assumed or an equivalent option shall be substituted by the successor corporation or a parent or Subsidiary of such successor corporation. In the event that the successor corporation refuses to assume or substitute for outstanding options, each Offering Period then in progress shall be shortened and a new Purchase Date shall be set (the "New Purchase Date"), as of which date any Offering Period then in progress will terminate. The New Purchase Date shall be on or before the date of consummation of the transaction and the Board shall notify each participant in writing, at least ten (10) days prior to the New Purchase Date, that the Purchase Date for his or her option has been changed to the New Purchase Date and that his or her option will be exercised automatically on the New Purchase Date, unless prior to such date he or she has withdrawn from the Offering Period as provided in Section 10. For purposes of this Section 18, an option granted under the Plan shall be deemed to be assumed, without limitation, if, at the time of issuance of the stock or other consideration upon a Corporate Transaction, each holder of an option under the Plan would be entitled to receive upon exercise of the option the same number and kind of shares of stock or the same amount of property, cash or securities as such holder would have been entitled to receive upon the occurrence of the transaction if the holder had been, immediately prior to the transaction, the holder of the number of Shares of Common Stock covered by the option at such time (after giving effect to any adjustments in the number of Shares covered by the option as provided for in this Section 18); provided however that if the consideration received in the transaction is not solely common stock of the successor corporation or its parent (as defined in Section 424(e) of the Code), the Board may, with the consent of the successor corporation, provide for the consideration to be received upon exercise of the option to be solely common stock of the successor corporation or its parent equal in Fair Market Value to the per Share consideration received by holders of Common Stock in the transaction.

The Board may, if it so determines in the exercise of its sole discretion, also make provision for adjusting the Reserves, as well as the price per Share of Common Stock covered by each outstanding option, in the event that the Company effects one or more reorganizations, recapitalizations, rights offerings or other increases or reductions of Shares of its outstanding Common Stock, and in the event of the Company's being consolidated with or merged into any other corporation.

19. Amendment or Termination

19.1 The Board may at any time and for any reason terminate or amend the Plan. Except as provided in Section 18, no such termination of the Plan may affect options previously granted, provided that the Plan or an Offering Period may be terminated by the Board on a Purchase Date or by the Board's setting a new Purchase Date with respect to an Offering Period then in progress if the Board determines that termination of the Plan and/or the Offering Period is in the best interests of the Company and the stockholders or if continuation of the Plan and/or the Offering Period would cause the Company to incur adverse accounting charges as a result of the Plan. Except as provided in Section 18 and in this Section 19, no amendment to the Plan shall make any change in any option previously granted which adversely affects the rights of any participant.

19.2 Without stockholder consent and without regard to whether any participant rights may be considered to have been adversely affected, the Board (or its committee) shall be entitled to change the Offering Periods, limit the frequency and/or number of changes in the amount withheld during an Offering Period, establish the exchange ratio applicable to amounts withheld in a currency other than U.S. dollars, permit payroll withholding in excess of the amount designated by a participant in order to adjust for delays or mistakes in the Company's processing of properly completed withholding elections, establish reasonable waiting and adjustment periods and/or accounting and crediting procedures to ensure that amounts applied toward the purchase of Common Stock for each participant properly correspond with amounts withheld from the participant's Compensation, and establish such other limitations or procedures as the Board (or its committee) determines in its sole discretion advisable which are consistent with the Plan.

20. Notices

All notices or other communications by a participant to the Company under or in connection with the Plan shall be deemed to have been duly given when received in the form specified by the Company at the location, or by the person, designated by the Company for the receipt thereof.

21. Conditions Upon Issuance of Shares

Shares shall not be issued with respect to an option unless the exercise of such option and the issuance and delivery of such Shares pursuant thereto shall comply with all applicable provisions of law, domestic or foreign, including, without limitation, the Securities Act of 1933, as amended, the Exchange Act, the rules and regulations promulgated thereunder, applicable state securities laws and the requirements of any stock exchange upon which the Shares may then be listed, and shall be further subject to the approval of counsel for the Company with respect to such compliance.

As a condition to the exercise of an option, the Company may require the person exercising such option to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required by any of the aforementioned applicable provisions of law.

22. Term of Plan; Effective Date

The Plan shall become effective upon the effective date of the Registration Statement on Form S-1 for the initial public offering of the Company's Common Stock. It shall continue in effect for a term of twenty (20) years unless sooner terminated under Section 19.

EXHIBIT 31.1

CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Franklin W. Hobbs, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Ribbon Communications Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 31, 2018

/s/ Franklin W. Hobbs

Franklin W. Hobbs
President and Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 31.2

**CERTIFICATION PURSUANT TO
SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002**

I, Daryl E. Raiford, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Ribbon Communications Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: October 31, 2018

/s/ Daryl E. Raiford

Daryl E. Raiford
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)

EXHIBIT 32.1

CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

In connection with the Quarterly Report on Form 10-Q of Ribbon Communications Inc. (the "Company") for the period ended September 30, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Franklin W. Hobbs, President and Chief Executive Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to his knowledge:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: October 31, 2018

/s/ Franklin W. Hobbs

Franklin W. Hobbs
President and Chief Executive Officer
(Principal Executive Officer)

EXHIBIT 32.2

**CERTIFICATION PURSUANT TO 18 U.S.C. SECTION 1350,
AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Quarterly Report on Form 10-Q of Ribbon Communications Inc. (the "Company") for the period ended September 30, 2018 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned, Daryl E. Raiford, Executive Vice President and Chief Financial Officer of the Company, hereby certifies, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that to his knowledge:

(1) the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: October 31, 2018

/s/ Daryl E. Raiford

Daryl E. Raiford
Executive Vice President and Chief Financial Officer
(Principal Financial Officer)