VONAGE HOLDINGS CORP

FORM 10-Q
(Quarterly Report)

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Address	23 MAIN STREET HOLMDEL, NJ 07733
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Industry	Wireless Telecommunications Services
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UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form 10-Q

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

For the Quarterly Period Ended March 31, 2017

or

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

For the Transition Period From __________ to __________

Commission File Number 001-32887

VONAGE HOLDINGS CORP.
(Exact name of registrant as specified in its charter)

Delaware	**11-3547680**
(State or other jurisdiction of incorporation or organization)	(IRS Employer Identification No.)
23 Main Street, Holmdel, NJ	**07733**
(Address of principal executive offices)	(Zip Code)

Registrant's telephone number, including area code: (732) 528-2600
(Former name, former address and former fiscal year, if changed since last report): Not Applicable

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 and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a nonaccelerated 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	☐	(Do not check if a smaller reporting company)	
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 ☒

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Class	Outstanding at April 30, 2017
Common Stock, par value $0.001	222,038,983 shares

VONAGE HOLDINGS CORP.

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Financial Information Presentation

For the financial information discussed in this Quarterly Report on Form 10-Q, other than per share and per line amounts, dollar amounts are presented in thousands, except where noted.

Part I – Financial Information

Item 1. Financial Statements

VONAGE HOLDINGS CORP.
CONDENSED CONSOLIDATED BALANCE SHEETS
(In thousands, except par value)

Assets	March 31, 2017 (unaudited)	December 31, 2016 (revised) (1)
Assets		
Current assets:		
Cash and cash equivalents	$ 26,220	$ 29,078
Marketable securities	300	601
Accounts receivable, net of allowance of $2,446 and $2,093, respectively	32,108	36,688
Inventory, net of allowance of $61 and $117, respectively	3,644	4,116
Deferred customer acquisition costs, current	1,660	2,610
Prepaid expenses and other current assets	30,895	29,188
Total current assets	94,827	102,281
Property and equipment, net	45,722	48,415
Goodwill	362,424	360,363
Software, net	22,966	21,971
Deferred customer acquisition costs, non-current	524	526
Debt issuance costs, net	2,162	2,333
Restricted cash	1,799	1,851
Intangible assets, net	191,250	199,256
Deferred tax assets, non-current	198,502	184,210
Other assets	13,950	14,460
Total assets	$ 934,126	$ 935,666
Liabilities and Stockholders' Equity		
Liabilities		
Current liabilities:		
Accounts payable	$ 39,014	$ 30,751
Accrued expenses	82,713	109,195
Deferred revenue, current portion	31,172	32,442
Current maturities of capital lease obligations	2,184	3,288
Current portion of notes payable	18,750	18,750
Total current liabilities	173,833	194,426
Indebtedness under revolving credit facility	224,000	209,000
Notes payable, net of debt related costs and current portion	86,541	91,124
Deferred revenue, net of current portion	392	450
Capital lease obligations, net of current maturities	81	140
Other liabilities, net of current portion in accrued expenses	3,931	3,985
Total liabilities	488,778	499,125
Commitments and Contingencies		
Stockholders' Equity		
Common stock, par value $0.001 per share; 596,950 shares authorized at March 31, 2017 and December 31, 2016; 288,810 and 282,319 shares issued at March 31, 2017 and December 31, 2016, respectively; 221,783 and 219,001 shares outstanding at March 31, 2017 and December 31, 2016, respectively	289	282
Additional paid-in capital	1,331,062	1,310,847
Accumulated deficit	(632,715)	(641,869)
Treasury stock, at cost, 67,027 shares at March 31, 2017 and 63,318 shares at December 31, 2016	(242,762)	(219,125)
Accumulated other comprehensive loss	(10,526)	(13,594)

Total stockholders’ equity	445,348	436,541
Total liabilities and stockholders’ equity	$ 934,126	$ 935,666

(1) see Note 2 Correction of Prior Period Financial Statements.

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

VONAGE HOLDINGS CORP.
CONDENSED CONSOLIDATED STATEMENTS OF INCOME
(In thousands, except per share amounts)
(Unaudited)

	Three Months Ended March 31, 2017	Three Months Ended March 31, 2016
Total revenues	$ 243,347	$ 226,824
Operating Expenses:		
Cost of service (excluding depreciation and amortization of $6,782 and $6,833 respectively)	87,596	69,150
Cost of goods sold	7,293	9,066
Sales and marketing	81,931	79,601
Engineering and development	8,370	6,834
General and administrative	35,086	26,670
Depreciation and amortization	17,947	16,979
	238,223	208,300
Income from operations	5,124	18,524
Other Income (Expense):		
Interest income	5	21
Interest expense	(3,703)	(2,446)
Other income (expense), net	(220)	154
	(3,918)	(2,271)
Income before income tax expense	1,206	16,253
Income tax benefit (expense)	4,707	(8,322)
Net income	5,913	7,931
Net income per common share:		
Basic	$ 0.03	$ 0.04
Diluted	$ 0.02	$ 0.04
Weighted-average common shares outstanding:		
Basic	220,371	214,039
Diluted	239,486	224,225

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

VONAGE HOLDINGS CORP.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(In thousands)
(Unaudited)

	Three Months Ended March 31, 2017	Three Months Ended March 31, 2016
Net income	$ 5,913	$ 7,931
Other comprehensive income:		
Foreign currency translation adjustment	3,047	(22)
Unrealized gain on available-for-sale securities	21	22
Total other comprehensive income	3,068	—
Comprehensive income	8,981	7,931

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

VONAGE HOLDINGS CORP.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(In thousands)
(Unaudited)

	Three Months Ended March 31,	
	2017	**2016 (1)**
Cash flows from operating activities:		
Net income	$ 5,913	$ 7,931
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization and impairment charges	8,569	9,317
Amortization of intangibles	9,378	7,662
Deferred tax expense	(5,803)	7,439
Allowance for doubtful accounts	343	—
Allowance for obsolete inventory	138	—
Amortization of debt issuance costs	276	251
Loss on disposal of fixed assets	240	—
Share-based expense	11,106	6,303
Changes in operating assets and liabilities, net of acquisitions:		
Accounts receivable	4,425	(910)
Inventory	340	(25)
Prepaid expenses and other current assets	(1,672)	(3,079)
Deferred customer acquisition costs	956	1,084
Other assets	510	356
Accounts payable	8,189	4,122
Accrued expenses	(24,219)	(22,199)
Deferred revenue	(1,374)	(933)
Other liabilities	(54)	149
Net cash provided by operating activities	17,261	17,468
Cash flows from investing activities:		
Capital expenditures	(3,701)	(8,895)
Purchase of marketable securities	—	(3,618)
Maturities and sales of marketable securities	322	3,948
Acquisition and development of software assets	(3,380)	(2,312)
Net cash used in investing activities	(6,759)	(10,877)
Cash flows from financing activities:		
Principal payments on capital lease obligations and other financing obligations	(3,663)	(5,225)
Principal payments on notes and revolving credit facility	(4,688)	(13,750)
Proceeds received from draw down of revolving credit facility and issuance of notes payable	15,000	—
Common stock repurchases	(9,542)	(7,590)
Employee taxes paid on withholding shares	(14,095)	(2,896)
Proceeds from exercise of stock options	3,448	466
Net cash used in financing activities	(13,540)	(28,995)
Effect of exchange rate changes on cash	128	(160)
Net change in cash, cash equivalents, and restricted cash	(2,910)	(22,564)
Cash, cash equivalents, and restricted cash, beginning of period	30,929	60,313
Cash, cash equivalents, and restricted cash, end of period	$ 28,019	$ 37,749
Supplemental disclosures of cash flow information:		
Cash paid during the periods for:		
Interest	$ 3,210	$ 2,190
Income taxes	$ 740	$ 1,624
Non-cash transactions during the periods for:		
Common stock repurchases	$ —	$ 443

(1) See Note 1 Recent Accounting Pronouncements reclassification due to the adoptions of new Accounting Standard Updates.

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

VONAGE HOLDINGS CORP.
CONDENSED CONSOLIDATED STATEMENT OF STOCKHOLDERS' EQUITY
(In thousands)
(Unaudited)

	Shares	Common Stock	Additional Paid-in Capital	Accumulated Deficit	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Total
Balance at December 31, 2016 (Revised) (1)	219,001	$ 282	$ 1,310,847	$ (641,869)	$ (219,125)	$ (13,594)	$ 436,541
Cumulative effect adjustment upon the adoption of ASU 2016-09			5,668	3,241			8,909
Stock option exercises	6,491	7	3,441				3,448
Share-based expense			11,106				11,106
Employee taxes paid on withholding shares	(2,110)				(14,095)		(14,095)
Common stock repurchases	(1,599)				(9,542)		(9,542)
Foreign currency translation adjustment						3,047	3,047
Unrealized loss on available-for-sale securities						21	21
Net income				5,913			5,913
Balance at March 31, 2017	221,783	$ 289	$ 1,331,062	$ (632,715)	$ (242,762)	$ (10,526)	$ 445,348

(1) see Note 2 Correction of Prior Period Financial Statements.

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

VONAGE HOLDINGS CORP.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except per share amounts)
(Unaudited)

Note 1. Basis of Presentation and Significant Accounting Policies

Nature of Operations

Vonage Holdings Corp. (“Vonage”, “Company”, “we”, “our”, “us”) is incorporated as a Delaware corporation. We are a leading provider of cloud communications services for business. We transform the way people work and businesses operate through a portfolio of cloud-based communications solutions that enable internal collaboration among employees, while also keeping companies closely connected with their customers, across any mode of communication, on any device.

Through our Nexmo subsidiary which was acquired on June 3, 2016, we are a global leader in the Communications-Platform-as-a-Service ("CPaaS") segment of the cloud communications market, providing innovative communication application program interfaces ("APIs") for text messaging and voice communications, allowing developers and enterprises to embed contextual communications into mobile apps, websites and business workflows via text, social media, chat apps and voice. With just few lines of code, developers can send and receive text messages and build programmable voice applications. Nexmo, the Vonage API Platform can scale from one API call to billions. The platform makes it easy for any of our developers to access communication services via software and APIs. Through Nexmo we have a global network of interconnected carriers delivering our API-based communications platform, enabling businesses to communicate with their customers reliably and with ease, no matter where in the world they are located. The addition of our Nexmo products to our business offering allows our customers to address their full communications needs, from employee to employee communications through business to customer communications.

We also provide a robust suite of feature-rich residential communication solutions.

Customers in the United States represented 88% and 96% of our consolidated revenues at March 31, 2017 and 2016 , respectively, with the balance in Canada, the United Kingdom, and other countries. Nexmo Inc. ("Nexmo") has operations in the United States, United Kingdom, Hong Kong, and Singapore, and provides CPaaS solutions to our customers located in many countries around the world.

Unaudited Interim Financial Information

The accompanying unaudited interim condensed consolidated financial statements and information have been prepared in accordance with accounting principles generally accepted in the United States and in accordance with the instructions for Form 10-Q. Accordingly, they do not include all of the information and disclosures required by accounting principles generally accepted in the United States for complete financial statements. In the opinion of management, these financial statements contain all normal and recurring adjustments considered necessary to present fairly the financial position, results of operations, cash flows, and statement of stockholders’ equity for the periods presented. The results for the three months ended March 31, 2017 are not necessarily indicative of the results to be expected for the full year.

These unaudited interim condensed consolidated financial statements should be read in conjunction with the audited consolidated financial statements and related notes included in our Annual Report on Form 10-K for the year ended December 31, 2016 filed with the Securities and Exchange Commission on February 28, 2017 .

Significant Accounting Policies

Principles of Consolidation

The condensed consolidated financial statements include the accounts of Vonage and its wholly-owned subsidiaries. All intercompany balances and transactions have been eliminated in consolidation. We also consolidate a majority owned entity in Brazil where we have the ability to exercise controlling influence. The results of companies acquired or disposed of are included in the condensed consolidated financial statements from the effective date of the acquisition or up to the date of disposal.

Use of Estimates

Our condensed consolidated financial statements are prepared in conformity with accounting principles generally accepted in the United States, which require management to make estimates and assumptions that affect the amounts reported and disclosed in the condensed consolidated financial statements and the accompanying notes. Actual results could differ materially from these estimates.

On an ongoing basis, we evaluate our estimates, including the following:

- the useful lives of property and equipment, software costs, and intangible assets;
- assumptions used for the purpose of determining share-based compensation using the Black-Scholes option pricing model and Monte Carlo simulation model ("Models"), and various other assumptions that we believe to be reasonable; the key inputs for these Models include our stock price at valuation date, exercise price, the dividend yield, risk-free interest rate, life in years, and historical volatility of our common stock;
- assumptions used in determining the need for, and amount of, a valuation allowance on net deferred tax assets; and
- assumptions used in determining the contingent consideration in connection with the Nexmo acquisition.

We base our estimates on historical experience, available market information, appropriate valuation methodologies, and on various other assumptions that we believe to be reasonable, the results of which form the basis for making judgments about the carrying values of assets and liabilities.

Revenue Recognition

Operating revenues consist of services revenues and customer equipment (which enables our services) and shipping revenues. The point in time at which revenues are recognized is determined in accordance with Securities and Exchange Commission Staff Accounting Bulletin No. 104, Revenue Recognition, and Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") 605, *Revenue Recognition* .

At the time a customer signs up for our services, there are the following deliverables:

- Providing equipment, if any, to the customer that enables our services; and
- Providing services.

The equipment is generally provided free of charge to our customers and in most instances there are no fees collected at sign-up. We record the fees collected for shipping the equipment to the customer, if any, as shipping and handling revenue at the time of shipment.

Services Revenue

Substantially all of our revenues are services revenues, which are derived primarily from monthly subscription fees that customers are charged under our service plans. We also derive services revenues from per minute fees for international calls if not covered under a plan, including calls made via applications for mobile devices and other stand-alone products, and for any calling minutes in excess of a customer's monthly plan limits. Monthly subscription fees are automatically charged to customers' credit cards, debit cards or electronic check payments ("ECP"), in advance and are recognized over the following month when services are provided. Revenues generated from international calls and from customers exceeding allocated call minutes under limited minute plans are recognized as services are provided, that is, as minutes are used, and are billed to a customer's credit cards, debit cards or ECP in arrears. As a result of multiple billing cycles each month, we estimate the amount of revenues earned from international calls and from customers exceeding allocated call minutes under limited minute plans but not billed from the end of each billing cycle to the end of each reporting period and record these amounts as accounts receivable. These estimates are based primarily upon historical minutes and have been consistent with our actual results.

In the United States, we charge regulatory, compliance, E-911, and intellectual property-related fees on a monthly basis to defray costs, and to cover taxes that we are charged by the suppliers of telecommunications services. In addition, we charge customers Federal Universal Service Fund ("USF") fees. We recognize revenue on a gross basis for USF and related fees. We record these fees as revenue when billed. All other taxes are recorded on a net basis.

Our recently acquired subsidiary, Nexmo, provides CPaaS solutions to our customers. Through Nexmo, we provide innovative communication APIs for text messaging and voice communications, allowing developers and enterprises to embed contextual communications into mobile apps, websites and business workflows via text, social media, chat apps and voice. Nexmo has a global network of interconnected carriers delivering its API-based communications platform, enabling businesses to communicate with their customers reliably and with ease, no matter where in the world they are located.

Nexmo has two types of revenue activities:

Revenue is primarily derived from supplying messaging (SMS and Voice) services to customers. Revenue is recognized in the period when messages are sent by the customer. Revenue is recognized based on the price on the website pricing page or as otherwise agreed with the customer.

Our trading customers operate within the communications industry as service providers or bulk SMS aggregators. With our trading business, we sell to trading specialists who are delivering voice or SMS messages on behalf of their customers. Typically, trade is based on single supply route and margins, which are effectively fixed at a deal level, represent the value of the transaction to us. As such, for the trading business we record revenue on a net basis as service providers deliver messages.

Customer Equipment and Shipping Revenue

Customer equipment and shipping revenues consist of revenues from sales of customer equipment to wholesalers or directly to customers for replacement devices, or for upgrading their device at the time of customer sign-up for which we charge an additional fee. In addition, customer equipment and shipping revenues include revenues from the sale of VoIP telephones in order to access our small and medium business services. Customer equipment and shipping revenues also include the fees that customers are charged for shipping their customer equipment to them. Customer equipment and shipping revenues include sales to our retailers, who subsequently resell this customer equipment to customers. Revenues are reduced for payments to retailers and rebates to customers, who purchased their customer equipment through these retailers, to the extent of customer equipment and shipping revenues.

Cost of Service

Cost of service consists of costs that we pay to third parties in order to provide services. These costs include access and interconnection charges that we pay to other companies to terminate domestic and international phone calls on the public switched telephone network. In addition, these costs include the cost to lease phone numbers, to co-locate in other companies' facilities, to provide enhanced emergency dialing capabilities to transmit 911 calls, and to provide local number portability. These costs also include taxes that we pay on telecommunications services from our suppliers or are imposed by government agencies such as federal universal service fund ("USF") contributions and royalties for use of third parties' intellectual property. In addition, these costs include certain personnel and related costs for network operations and technical support that are attributable to revenue generating activities.

Cost of Goods Sold

Cost of goods sold consists primarily of costs that we incur when a customer signs up for our service. These costs include the cost of customer equipment for customers who subscribe through the direct sales channel in excess of activation fees. In addition, these costs include the amortization of deferred customer equipment, the cost of shipping and handling for customer equipment, the installation manual that accompanies the customer equipment, and the cost of certain promotions.

Sales and Marketing Expenses

Sales and marketing expenses consist primarily of personnel and related costs for employees and contractors directly associated with our sales and marketing activities, internet advertising fees, radio and billboard advertising, public relations, commissions paid to employees, resellers and other third parties, trade shows, marketing and promotional activities, customer support, credit card fees, collections, and systems and information technology support.

Engineering and Development Expenses

Engineering and development expenses primarily include personnel and related costs for developers responsible for new products, and software engineers maintaining and enhancing existing products. Research and development costs related to new product development included in engineering and development were $6,346 and $4,908 for the three months ended March 31, 2017 and 2016 , respectively.

Costs for research, including predevelopment efforts prior to establishing technological feasibility of software expected to be marketed, are expensed as incurred.

Development costs are capitalized when technological feasibility has been established and anticipated future revenues support the recoverability of the capitalized amounts. Capitalization stops when the product is available for general release to customers.

VONAGE HOLDINGS CORP.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except per share amounts)
(Unaudited)

Due to the short time period between achieving technological feasibility and product release and the insignificant amount of costs incurred during such periods, we have not capitalized any software development, and have expensed these costs as incurred.

General and Administrative Expenses

General and administrative expenses primarily relate to our executive, finance, human resources, legal, and information technology organizations. General and administrative expenses primarily consist of personnel costs, stock compensation, board of directors' costs, professional fees for legal, accounting, tax, compliance and information systems, travel, recruiting expense and, rent and related expenses.

Advertising Expenses

Advertising costs are expensed as incurred.

Segment Reporting

ASC 280 " *Segment Reporting* " establishes reporting standards for an enterprise's business segments and related disclosures about its products, services, geographic areas and major customers. Under ASC 280, the method for determining what information to report is based upon the way management organizes the operating segments within the Company for making operating decisions and assessing financial performance. Our chief operating decision-makers review revenue and gross margin information for each of our reportable segments, but do not review operating expenses on a segment by segment basis. In addition, with the exception of goodwill and intangible assets, we do not identify or allocate our assets by the reportable segments.

Cash, Cash Equivalents and Marketable Securities

We maintain cash with several investment grade financial institutions. Highly liquid investments, which are readily convertible into cash, with original maturities of three months or less, are recorded as cash equivalents.

Management determines the appropriate classification of our investments in debt and marketable equity securities at the time of purchase and reevaluates such designation at each balance sheet date. Our debt and marketable equity securities have been classified and accounted for as available for sale. We may or may not hold securities with stated maturities until maturity. In response to changes in the availability of and the yield on alternative investments as well as liquidity requirements, we may sell these securities prior to their stated maturities. These securities are carried at fair value, with the unrealized gains and losses reported as a component of other comprehensive income (loss). Any realized gains or losses on the sale of marketable securities are determined on a specific identification method, and such gains and losses are reflected as a component of other income or expense.

Certain Risks and Concentrations

Financial instruments that potentially subject us to concentrations of credit risk consist principally of cash equivalents, marketable securities, and accounts receivable. They are subject to fluctuations in both market value and yield based upon changes in market conditions, including interest rates, liquidity, general economic conditions, and conditions specific to the issuers. Accounts receivable are typically unsecured and are derived from revenues earned from customers primarily located in the United States. A portion of our accounts receivable represents the timing difference between when a customer's credit card is billed and the subsequent settlement of that transaction with our credit card processors. This timing difference is generally three days for substantially all of our credit card receivables. We have never experienced any accounts receivable write-offs due to this timing difference. In addition, we collect subscription fees in advance, minimizing our accounts receivable and bad debt exposure. If a customer's credit card, debit card or ECP is declined, we generally suspend international calling capabilities as well as their ability to incur domestic usage charges in excess of their plan minutes. Generally, if the customer's credit card, debit card or ECP could not be successfully processed during three billing cycles (i.e., the current and two subsequent monthly billing cycles), we terminate the account. In addition, we automatically charge any per minute fees to our customers' credit card, debit card or ECP monthly in arrears. To further mitigate our bad debt exposure, a customer's credit card, debit card or ECP will be charged in advance of their monthly billing if their international calling or overage charges exceed a certain dollar threshold.

Inventory

Inventory consists of the cost of customer equipment and is stated at the lower of cost or market, with cost determined using the average cost method. We provide an inventory allowance for customer equipment that has been returned by customers but may not be able to be reissued to new customers or returned to the manufacturer for credit.

VONAGE HOLDINGS CORP.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(In thousands, except per share amounts)
(Unaudited)

Property and Equipment

Property and equipment includes acquired assets and those accounted for under capital leases and consist principally of network equipment and computer hardware, software, furniture, and leasehold improvements. Company-owned equipment in use at customer premises is also included in property and equipment. In addition, the lease of our corporate headquarters has been accounted for as a capital lease and is included in property and equipment. Network equipment and computer hardware and furniture are stated at cost with depreciation provided using the straight-line method over the estimated useful lives of the related assets, which range from three to five years . Leasehold improvements are amortized over their estimated useful life of the related assets or the life of the lease, whichever is shorter. The cost of renewals and substantial improvements is capitalized while the cost of maintenance and repairs is charged to operating expenses as incurred. Company-owned customer premises equipment is depreciated on a straight-line basis over three years.

Our network equipment and computer hardware, which consists of routers, gateways, and servers that enable our telephony services, is subject to technological risks and rapid market changes due to new products and services and changing customer demand. These changes may result in future adjustments to the estimated useful lives or the carrying value of these assets, or both .

Software Costs

We capitalize certain costs, such as purchased software and internally developed software that we use for customer acquisition and customer care automation tools, in accordance with FASB ASC 350-40, *"Internal-Use Software"*. Computer software is stated at cost less accumulated amortization and the estimated useful life is two to five years .

Goodwill

Goodwill acquired in the acquisition of a business is accounted for based upon the excess fair value of consideration transferred over the fair value of net assets acquired in the business combination. Goodwill is tested for impairment on an annual basis on October 1st and, when specific circumstances dictate, between annual tests. When impaired, the carrying value of goodwill is written down to fair value. The goodwill impairment test involves evaluating qualitative information to determine if it is more than 50% likely that the fair value of a reporting unit is less than its carrying value. If such a determination is made, then the traditional two-step goodwill impairment test described below must be applied. The first step, identifying a potential impairment, compares the fair value of a reporting unit with its carrying amount, including goodwill. If the carrying value of the reporting unit exceeds its fair value, the second step would need to be conducted; otherwise, no further steps are necessary as no potential impairment exists. The second step, measuring the impairment loss, compares the implied fair value of the reporting unit goodwill with the carrying amount of that goodwill. Any excess of the reporting unit goodwill carrying value over the respective implied fair value is recognized as an impairment loss. There were no impairments of goodwill for the three months ended March 31, 2017 and 2016 , respectively.

Intangible Assets

Intangible assets acquired in the settlement of litigation or by direct purchase are accounted for based upon the fair value of assets received.

Purchased-intangible assets are accounted for based upon the fair value of assets received. Purchased-intangible assets are amortized on a straight-line or accelerated basis over the periods of benefit, ranging from two to ten years. We perform a review of purchased-intangible assets whenever events or changes in circumstances indicate that the useful life is shorter than we had originally estimated or that the carrying amount of assets may not be recoverable. If such facts and circumstances exist, we assess the recoverability of purchased-intangible assets by comparing the projected undiscounted net cash flows associated with the related asset or group of assets over their remaining lives against their respective carrying amounts. Impairments, if any, are based on the excess of the carrying amount over the fair value of those assets. If the useful life of the asset is shorter than originally estimated, we accelerate the rate of amortization and amortize the remaining carrying value over the new shorter useful life. There were no impairments of purchased-intangible assets identified for the three months ended March 31, 2017 and 2016 , respectively.

Patents and Patent Licenses

Patent rights acquired in the settlement of litigation or by direct purchase are accounted for based upon the fair value of assets received.

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Long-Lived Assets

We evaluate impairment losses on long-lived assets used in operations when events and changes in circumstances indicate that the assets might be impaired. If our review indicates that the carrying value of an asset will not be recoverable, based on a comparison of the carrying value of the asset to the undiscounted future cash flows, the impairment will be measured by comparing the carrying value of the asset to its fair value. Fair value will be determined based on quoted market values, discounted cash flows or appraisals. Impairments of property and equipment are recorded in the statement of income as part of depreciation expense.

Debt Issuance Costs

Costs incurred in raising debt are deferred and amortized as interest expense using the effective interest method over the life of the debt. A portion of these costs are netted against the underlying term note in accordance with ASU 2015-15, "Interest-Imputation of Interest". The remaining portion of the costs attributable to our revolving credit facility are recorded as an asset.

Derivatives

We do not hold or issue derivative instruments for trading purposes. However, in accordance with FASB ASC 815, *"Derivatives and Hedging"* ("FASB ASC 815"), we review our contractual obligations to determine whether there are terms that possess the characteristics of derivative financial instruments that must be accounted for separately from the financial instrument in which they are embedded. We recognize these features as liabilities in our condensed consolidated balance sheet at fair value each period and recognize any change in the fair value in our statement of operations in the period of change. We estimate the fair value of these liabilities using available market information and appropriate valuation methodologies.

Income Taxes

We recognize deferred tax assets and liabilities at enacted income tax rates for the temporary differences between the financial reporting bases and the tax bases of our assets and liabilities. Any effects of changes in income tax rates or tax laws are included in the provision for income taxes in the period of enactment. Our net deferred tax assets primarily consist of net operating loss carry forwards ("NOLs"). We are required to record a valuation allowance against our net deferred tax assets if we conclude that it is more likely than not that taxable income generated in the future will be insufficient to utilize the future income tax benefit from our net deferred tax assets (namely, the NOLs) prior to expiration. We periodically review this conclusion, which requires significant management judgment. If we are able to conclude in a future period that a future income tax benefit from our net deferred tax assets has a greater than 50 percent likelihood of being realized, we are required in that period to reduce the related valuation allowance with a corresponding decrease in income tax expense. This would result in a non-cash benefit to our net income in the period of the determination. We periodically review this conclusion, which requires significant management judgment. In the future, if available evidence changes our conclusion that it is more likely than not that we will utilize our net deferred tax assets prior to their expiration, we will make an adjustment to the related valuation allowance and income tax expense at that time. In subsequent periods, we would expect to recognize income tax expense equal to our pre-tax income multiplied by our effective income tax rate, an expense that was not recognized prior to the reduction of the valuation allowance. Our effective rate may differ from the federal statutory rate due, in part, to our foreign operations and certain discrete period items. The 2017 estimated annual effective tax rate is expected to approximate 43.5% , but may fluctuate due to the timing of other discrete period transactions.

We file income tax returns in the U.S. on a federal basis and in U.S. state and foreign jurisdictions. Our federal tax return remains subject to examination by the Internal Revenue Service from 2013 to present, our New Jersey tax returns remain open from 2012 to present, our Canada tax return remains open from 2014 to present, and other domestic and foreign tax returns remain open for all periods to which those filings relate. Our consolidated corporate income tax return for 2013 has been selected for examination by the Internal Revenue Service. Our Canadian corporate income tax returns for 2012 and 2013 have been selected for examination by the Canada Revenue Agency. The Canada Revenue Agency concluded their audit and there were no changes. We recognize the tax benefit from an uncertain tax position only if it is more likely than not that the tax position will be sustained on examination by the taxing authorities, based on the technical merits of the position. The tax benefits recognized in the financial statements from such a position are measured based on the largest benefit that has a greater than 50% likelihood of being realized upon ultimate resolution.

We have not had any unrecognized tax benefits. We recognize interest and penalties accrued related to unrecognized tax benefits as components of our income tax provision. We have not had any interest and penalties accrued related to unrecognized tax benefits.

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Business Combinations

We account for business combinations using the acquisition method of accounting. The acquisition method of accounting requires that the purchase price, including the fair value of contingent consideration, of the acquisition be allocated to the assets acquired and liabilities assumed using the fair values determined by management as of the acquisition date. Goodwill as of the acquisition date is measured as the excess of consideration transferred over the net of the acquisition date fair values of assets acquired and the liabilities assumed. While the Company uses its best estimates and assumptions as part of the purchase price allocation process to accurately value assets acquired and liabilities assumed at the acquisition date, the Company's estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, the Company records adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill to the extent the Company identifies adjustments to the preliminary purchase price allocation. Upon the conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded to the condensed consolidated statements of operations. We include the results of all acquisitions in our condensed consolidated financial statements from the date of acquisition.

Acquisition related transaction costs, such as banking, legal, accounting and other costs incurred in connection with an acquisition, are expensed as incurred in general and administrative expense.

Acquisition related integration costs include costs associated with exit or disposal activities, which do not meet the criteria of discontinued operations, including costs for employee, lease, and contract terminations, facility closing or other exit activities. Additionally, these costs include expenses directly related to integrating and reorganizing acquired businesses and include items such as employee retention costs, recruiting costs, certain moving costs, certain duplicative costs during integration and asset impairments. These costs are expensed as incurred in general and administrative expense.

Acquisition related consideration accounted for as compensation expense, such as restricted cash, restricted stock and option related costs incurred in connection with an acquisition are included in general and administrative expense.

Fair Value of Financial Instruments

Effective January 1, 2008, we adopted FASB ASC 820-10-25, "Fair Value Measurements and Disclosures". This standard establishes a framework for measuring fair value and expands disclosure about fair value measurements. We did not elect fair value accounting for any assets and liabilities allowed by FASB ASC 825, "Financial Instruments".

FASB ASC 820-10 defines fair value as the amount that would be received for an asset or paid to transfer a liability (i.e., an exit price) in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. FASB ASC 820-10 also establishes a fair value hierarchy that requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. FASB ASC 820-10 describes the following three levels of inputs that may be used:

- Level 1: Quoted prices (unadjusted) in active markets that are accessible at the measurement date for identical assets and liabilities. The fair value hierarchy gives the highest priority to Level 1 inputs.
- Level 2: Observable prices that are based on inputs not quoted on active markets but corroborated by market data.
- Level 3: Unobservable inputs when there is little or no market data available, thereby requiring an entity to develop its own assumptions. The fair value hierarchy gives the lowest priority to Level 3 inputs.

Although management believes its valuation methods were appropriate and consistent with other market participants, the use of different methodologies or assumptions to determine the fair value of certain financial instruments could have resulted in a different fair value measurement at the reporting date.

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The following table presents the assets and liabilities that are measured and recognized at fair value on a recurring basis classified under the appropriate level of the fair value hierarchy as of March 31, 2017 and December 31, 2016 :

	March 31, 2017	December 31, 2016
Level 1 Assets		
Money market fund (1)	$ 1	$ 300
Level 2 Assets		
Available-for-sale securities (2)	$ 300	$ 601

(1) Included in cash and cash equivalents on our condensed consolidated balance sheet.
(2) Included in marketable securities on our condensed consolidated balance sheet.

Fair Value of Other Financial Instruments

The carrying amounts of our financial instruments, including cash and cash equivalents, accounts receivable, and accounts payable, approximate fair value because of their short maturities. The carrying amounts of our capital leases approximate fair value of these obligations based upon management's best estimates of interest rates that would be available for similar debt obligations at March 31, 2017 and December 31, 2016 . We believe the fair value of our debt at March 31, 2017 was approximately the same as its carrying amount as market conditions, including available interest rates, credit spread relative to our credit rating, and illiquidity, remain relatively unchanged from the issuance date of our debt on June 3, 2016 for a similar debt instrument.

Foreign Currency

Generally, the functional currency of our non-United States subsidiaries is the local currency. However, the functional currency of Nexmo's United States's subsidiary is the euro. The financial statements of these subsidiaries are translated to United States dollars using month-end rates of exchange for assets and liabilities, and average rates of exchange for revenues, costs, and expenses. Translation gains and losses are deferred and recorded in accumulated other comprehensive income as a component of stockholders' equity.

Share-Based Compensation

In March 2016 Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") 2016-09 , "Improvements to Employee Share-Based Payment Accounting". This ASU is issued as part of its simplification initiative. The areas for simplification in this ASU involve several aspects of the accounting for share- based payment transactions, including the income tax consequences, recognition of share-based expense, classification of awards as either equity or liabilities, and classification on the statement of cash flows. We adopted this ASU in the first quarter of 2017. We elected to account for forfeitures when they occur versus our prior practice of estimating the number of awards that are expected to vest. The election of this new ASU resulted in a one-time adjustment in 2017 to accumulated deficit and to additional paid-in-capital of $5,668 and the corresponding benefit to our accumulated deficit and deferred tax asset of $2,285 related to the reversal of forfeiture rate as of December 31, 2016. In addition, a benefit to our accumulated deficit and deferred tax asset of $6,624 was recorded for excess tax benefits on equity compensation as of December 31, 2016. We also classified cash paid by us when directly withholding shares for tax-withholding purposes as a financing activity. As a result, $2,896 was reclassified from operating activity to financing activity for the three months ended March 31, 2016 . We account for share-based compensation in accordance with FASB ASC 718, " *Compensation-Stock Compensation* ". Under the fair value recognition provisions of this pronouncement, share-based compensation cost is measured at the grant date based on the fair value of the award, reduced as appropriate based on estimated forfeitures, and is recognized as expense over the applicable vesting period of the stock award using the accelerated method. The excess tax benefit associated with stock compensation deductions have not been recorded in additional paid-in capital. When evaluating whether an excess tax benefit has been realized, share based compensation deductions are not considered realized until NOLs are no longer sufficient to offset taxable income. Such excess tax benefits will be recorded when realized.

Earnings per Share

Net income per share has been computed according to FASB ASC 260, " *Earnings per Share"* , which requires a dual presentation of basic and diluted earnings per share ("EPS"). Basic EPS represents net income divided by the weighted average number of common shares outstanding during a reporting period. Diluted EPS reflects the potential dilution that could occur if securities or other contracts to issue common stock, including stock options and restricted stock units under our 2001 Stock Incentive Plan and 2006 Incentive Plan, were exercised or converted into common stock. The dilutive effect of outstanding stock options and restricted stock units is reflected in diluted earnings per share by application of the treasury stock method. In applying the treasury stock method for stock-based compensation arrangements, the assumed proceeds are computed as the sum of the amount the employee must pay upon exercise and the amounts of average unrecognized compensation cost attributed to future services.

(In thousands, except per share amounts)

The following table sets forth the computation for basic and diluted net income per share for the three months ended March 31, 2017 and 2016 :

	Three Months Ended March 31,	
	2017	2016
Numerator		
Net income	$ 5,913	$ 7,931
Denominator		
Basic weighted average common shares outstanding	220,371	214,039
Dilutive effect of stock options and restricted stock units	19,115	10,186
Diluted weighted average common shares outstanding	239,486	224,225
Basic net income per share		
Basic net income per share	$ 0.03	$ 0.04
Diluted net income per share		
Diluted net income per share	$ 0.02	$ 0.04

For the three months ended March 31, 2017 and 2016 , the following were excluded from the calculation of diluted earnings per common share because of their anti-dilutive effects:

	Three Months Ended March 31,	
	2017	2016
Restricted stock units	5,976	9,706
Stock options	6,802	13,300
	12,778	23,006

Comprehensive Income (Loss)

Comprehensive income consists of net income (loss) and other comprehensive items. Other comprehensive items include foreign currency translation adjustments and unrealized gains (losses) on available for sale securities.

Recent Accounting Pronouncements

In January 2017, FASB issued ASU 2017-04, "Intangibles - Goodwill and Other". The ASU simplifies the subsequent measurement of goodwill and eliminates Step 2 from the goodwill impairment test. This ASU is effective for an annual or any interim goodwill impairment tests in fiscal years beginning after December 15, 2019 on a prospective basis. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. We are currently evaluating the impact of adopting ASU 2017-04 on our condensed consolidated financial statements and related disclosures.

In May 2014, FASB issued ASU 2014-09, "Revenue from Contracts with Customers". In August 2015, FASB issued ASU 2015-14, "Deferral of the Effective Date". In March 2016, FASB issued ASU 2016-08, "Revenue from Contract with Customers - Principal versus Agent Considerations (Reporting Revenue Gross versus Net)". In April 2016, FASB issued ASU 2016-10, "Revenue from Contracts with Customers - Identifying Performance Obligations and Licensing". In May 2016, FASB issued ASU 2016-12, "Revenue from Contract with Customers - Narrow-Scope Improvements and Practical Expedients". In December

2016, FASB issued ASU 2016-20, "Revenue from Contract with Customers - Technical Corrections and Improvements to Topic 606". The core principle of these ASUs are that an entity should recognize 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. ASU 2014-09 is a comprehensive new revenue recognition model for revenue from contract with customers. ASU 2015-14 defers the effective date to annual and interim periods beginning on or after December 15, 2017, and early adoption will be permitted, but not earlier than the original effective date of annual and interim periods beginning on or after December 15, 2016, for public entities. The intention of the ASU 2016-08 is to improve the operability and understandability of the implementation guidance on principal versus agent considerations. ASU 2016-10 clarifies two aspects of the guidance: identifying performance obligations and the licensing implementation. The amendments in ASU 2016-12 affect only the narrow aspects of the guidance, such as assessing the collectibility criterion and accounting for contracts that do not meet the criterion, presentation of sales and other similar taxes collected from customers, non-cash consideration, and contract modifications at transition. We will adopt these ASUs when effective. We are currently evaluating the potential changes from adopting ASU 2014-09, ASU 2015-14, ASU 2016-08, ASU 2016-10, ASU 2016-12, and ASU2016-20 on our financial statements and disclosures. We are in the process of identifying appropriate changes to our business processes, systems, and controls to support revenue recognition and disclosures under the new standard. We will adopt the requirements of the new standard in the first quarter of 2018 and anticipate using the modified retrospective transition method. Under the new standard, we expect in some cases to recognize revenue earlier for subscription plans with free periods and products sold at discounts and are assessing the impact to revenue of this change. We will also be impacted by the deferral of sales commissions due to capitalization of certain sales commissions, which previously were expensed as incurred and by the incremental disclosure requirements. Under the new standard, certain commissions may need to be capitalized and amortized over the expected period of benefit.

In November 2016, FASB issued ASU 2016-18, "Statement of Cash Flows". This ASU requires that a statement of cash flows explains the change during the period in the total of cash, cash equivalents, and amounts generally described as restricted cash or restricted cash equivalents. As a result, amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown on the statement of cash flows. This ASU is effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted, including adoption in an interim period, any adjustments should be reflected as of the beginning of the fiscal year that includes that interim period. We adopted this ASU in the first quarter of 2017 and applied the retrospective transition method for each period presented. For the three months ended March 31, 2016 , $724 and $3 were reclassified from investing activity and effect of exchange rate changes on cash, respectively, and $2,587 and $1,860 were added to cash, cash equivalents, and restricted cash, Beginning of the period and end of the period balances, respectively.

In October 2016, FASB issued ASU 2016-16, "Income Taxes". This ASU improves the accounting for income tax consequences of intra-entity transfers of assets other than inventory. This ASU is effective for fiscal years beginning after December 15, 2017 on a modified retrospective basis through a cumulative-effect adjustment directly to retained earnings as of the beginning of the period of adoption. Early adoption is permitted as of the beginning of an annual reporting period for which financial statements have not been issued or made available for issuance. We are currently evaluating the impact of adopting ASU 2016-16 on our condensed consolidated financial statements and related disclosures.

In August 2016, FASB issued ASU 2016-15, "Statement of Cash Flows". This ASU addresses eight specific cash flow issues with the objective of reducing the existing diversity in practice. This ASU is effective for fiscal years beginning after December 15, 2017 on a retrospective basis. Early adoption is permitted, including adoption in an interim period. The adoption of ASU 2016-15 will not have a material impact on our condensed consolidated financial statements and related disclosures.

In March 2016, FASB issued ASU 2016-09, "Improvements to Employee Share-Based Payment Accounting". This ASU is issued as part of its Simplification Initiative. The areas for simplification in this ASU involve several aspects of the accounting for share- based payment transactions, including the income tax consequences, recognition of share-based expense, classification of awards as either equity or liabilities, and classification on the statement of cash flows. This ASU is effective for fiscal years beginning after December 15, 2016, including interim periods within those fiscal years. Early adoption is permitted for any entity in any interim or annual period. We adopted this ASU in the first quarter of 2017.

In February 2016, FASB issued ASU 2016-02, "Leases". This ASU increases transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. This ASU is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption is permitted for all entities. The adoption of this ASU will increase assets and liabilities for operating leases. We will adopt these ASUs when effective. We are currently evaluating the effect of adopting ASU 2016-02 on our condensed consolidated financial statements and related disclosures.

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In January 2016, FASB issued ASU 2016-01, "Recognition and Measurement of Financial Assets and Financial Liabilities". This ASU provide guidance concerning certain matters involving the recognition, measurement, and disclosure of financial assets and financial liabilities. The guidance does not alter the basic framework for classifying debt instruments held as financial assets. This ASU is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. Early adoption is not permitted, with some exceptions. The adoption of ASU 2016-01 will not have a material impact on our condensed consolidated financial statements and related disclosures.

In July 2015, FASB issued ASU 2015-11, "Simplifying the Measurement of Inventory". This ASU applies to inventory that is measured using first-in, first-out ("FIFO") or average cost. Under the updated guidance, an entity should measure inventory that is within scope at the lower of cost and net realizable value, which is the estimated selling prices in the ordinary course of business, less reasonably predicable costs of completion, disposal and transportation. Subsequent measurement is unchanged for inventory that is measured using last-in, first-out ("LIFO") or the retail inventory. This ASU is effective for annual and interim periods beginning after December 15, 2016, and should be applied prospectively with early adoption on permitted at the beginning of an interim and annual reporting period. We adopted ASU 2015-11 in the first quarter of 2017 and the adoption of this ASU did not have a material impact on our condensed consolidated financial statements and related disclosures.

Note 2: Correction of Prior Period Financial Statements

In connection with the preparation of our condensed consolidated financial statements for the quarter ended March 31, 2017, and our remediation efforts related to the material weakness in our internal control over financial reporting related to our controls over the preparation of the annual tax provision, we identified an error as of December 31, 2016 in our recognition of a deferred tax asset related to contingent consideration with vesting requirements paid in connection with the acquisition of Nexmo. Based in part upon the vesting requirements of contingent consideration, we recorded the consideration as compensation expense in general and administrative expense in our consolidated statements of operations. However, for tax purposes the contingent consideration should have been recorded as merger consideration and not deductible compensation. The correction of this error requires the reversal of the deferred tax asset on the consolidated balance sheets and related tax benefits of $4,756 as of December 31, 2016. In accordance with Staff Accounting Bulletin (“SAB”) No. 99, Materiality, and SAB No. 108, Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements, we evaluated the error and determined that the related impact was not material to our results of operations or financial position for any prior annual or interim period, but that correcting the $4,756 cumulative impact of the error would be material to our results of operations for the three months ended March 31, 2017. Accordingly, we have corrected the consolidated balance sheets as of December 31, 2016 and will correct this error in all prior periods presented by revising the appropriate condensed consolidated financial statements. This error had no impact on the three months ended March 31, 2016. The impact to the consolidated balance sheet as of December 31, 2016 and the consolidated statements of income for the three and six months ended June 30, 2016, the three and nine months ended September 30, 2016, and the three months and year ended December 31, 2016 is as follows:

Consolidated Balance Sheets

	As of December 31, 2016		
	As Reported	**Adjustment**	**As Revised**
Deferred tax assets, non-current	$ 188,966	$ 4,756	$ 184,210
Total assets	940,422	4,756	935,666
Accumulated deficit	(637,113)	4,756	(641,869)
Total stockholders' equity	441,297	4,756	436,541
Total liabilities and stockholders' equity	940,422	4,756	935,666

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Condensed Consolidated Statements of Income

	Three Months Ended June 30, 2016			Six Months Ended June 30, 2016		
	As Reported	Adjustment	As Revised	As Reported	Adjustment	As Revised
Income tax expense	$ (1,562)	$ 679	$ (2,241)	$ (9,884)	$ 679	$ (10,563)
Net income	897	679	218	8,828	679	8,149
Net income per common share:						
Basic	$ —	$ —	$ —	$ 0.04	$ —	$ 0.04
Diluted	$ —	$ —	$ —	$ 0.04	$ —	$ 0.04

	Three Months Ended September 30, 2016			Nine Months Ended September 30, 2016		
	As Reported	Adjustment	As Revised	As Reported	Adjustment	As Revised
Income tax expense	$ (1,501)	$ 2,038	$ (3,539)	$ (11,385)	$ 2,717	$ (14,102)
Net income	9,078	2,038	7,040	17,906	2,717	15,189
Net income per common share:						
Basic	$ 0.04	$ 0.01	$ 0.03	$ 0.08	$ 0.01	$ 0.07
Diluted	$ 0.04	$ 0.01	$ 0.03	$ 0.08	$ 0.01	$ 0.07

	Three Months Ended December 31, 2016			Year Ended December 31, 2016		
	As Reported	Adjustment	As Revised	As Reported	Adjustment	As Revised
Income tax expense	$ (1,553)	$ 2,039	$ (3,592)	$ (12,938)	$ 4,756	$ (17,694)
Net income	1	2,039	(2,038)	17,907	4,756	13,151
Net income per common share:						
Basic	$ —	$ 0.01	$ (0.01)	$ 0.08	$ 0.02	$ 0.06
Diluted	$ —	$ 0.01	$ (0.01)	$ 0.08	$ 0.02	$ 0.06

Note 3. Supplemental Balance Sheet Account Information

Cash, cash equivalents, and restricted cash

	March 31, 2017	December 31, 2016
Cash and cash equivalents	$ 26,220	$ 29,078
Cash collateralized letter of credit-lease deposits	$ 1,579	$ 1,578
Cash reserves	220	273
Restricted cash	$ 1,799	$ 1,851
Cash, cash equivalents, and restricted cash	$ 28,019	$ 30,929

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Prepaid expenses and other current assets

	March 31, 2017	December 31, 2016
Nontrade receivables	$ 1,974	$ 3,147
Services	11,701	10,854
Telecommunications	3,235	3,239
Insurance	427	935
Marketing	4,113	1,307
Prepaid hosting	7,978	8,453
Other prepaids	1,467	1,253
Prepaid expenses and other current assets	$ 30,895	$ 29,188

Property and equipment, net

	March 31, 2017	December 31, 2016
Building (under capital lease)	$ 25,709	$ 25,709
Network equipment and computer hardware	94,681	93,437
Leasehold improvements	45,064	44,293
Customer premise equipment	10,430	9,700
Furniture	4,300	4,239
Vehicles	203	203
	180,387	177,581
Less: accumulated depreciation and amortization	(134,665)	(129,166)
Property and equipment, net	$ 45,722	$ 48,415

Customer premise equipment, net

	March 31, 2017	December 31, 2016
Customer premise equipment	$ 10,430	$ 9,700
Less: accumulated depreciation	(4,824)	(4,248)
Customer premise equipment, net	$ 5,606	$ 5,452

Software, net

	March 31, 2017	December 31, 2016
Purchased	$ 76,854	$ 73,509
Internally developed	36,088	36,088
	112,942	109,597
Less: accumulated amortization	(89,976)	(87,626)
Software, net	$ 22,966	$ 21,971

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Debt issuance costs, net

	March 31, 2017	December 31, 2016
Debt related costs related to Revolving Credit Facility	$ 5,965	$ 5,965
Less: accumulated amortization	(3,803)	(3,632)
Debt related costs, net	$ 2,162	$ 2,333

Intangible assets, net

	March 31, 2017	December 31, 2016
Customer relationships	$ 174,400	$ 173,187
Developed technology	88,804	88,609
Patents and patent licenses	20,214	20,214
Trade names	1,836	1,820
Non-compete agreements	3,859	3,845
Intangible assets, gross	289,113	287,675
Customer relationships	(44,785)	(39,413)
Developed technology	(34,532)	(31,364)
Patents and patent licenses	(15,046)	(14,667)
Trade names	(983)	(787)
Non-compete agreements	(2,517)	(2,188)
Less: accumulated amortization	(97,863)	(88,419)
Customer relationships	129,615	133,774
Developed technology	54,272	57,245
Patents and patent licenses	5,168	5,547
Trade names	853	1,033
Non-compete agreements	1,342	1,657
Intangible assets, net	$ 191,250	$ 199,256

Other assets

	March 31, 2017	December 31, 2016
Deposits	1,749	1,329
Tax credits	6,623	6,623
Long-term prepaid hosting	4,132	5,244
Others	1,446	1,264
Other assets	$ 13,950	$ 14,460

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Accrued expenses

	March 31, 2017	December 31, 2016
Compensation and related taxes and temporary labor	$ 21,463	$ 35,308
Marketing	10,944	11,979
Taxes and fees	12,855	18,976
Acquisition related consideration accounted for as compensation	—	6,608
Telecommunications	16,665	14,724
Settlement	—	5,000
Other accruals	15,596	11,383
Customer credits	1,506	2,074
Professional fees	1,809	1,680
Accrued interest	157	66
Inventory	1,538	1,168
Credit card fees	180	229
Accrued expenses	$ 82,713	$ 109,195

Accumulated other comprehensive income (loss)

	March 31, 2017	December 31, 2016
Foreign currency translation adjustment	(10,526)	(13,593)
Unrealized gain (loss) on available-for sale securities	—	(1)
Accumulated other comprehensive income (loss)	$ (10,526)	$ (13,594)

Note 4. Supplemental Income Statement Account Information

Amounts included in revenues

	Three Months Ended March 31,	
	2017	2016
USF fees	$ 18,376	$ 19,520
Disconnect fees, net of credits and bad debt	$ 318	$ 214
Initial activation fees	$ 133	$ 368
Customer equipment rental	$ 1,540	$ 1,102
Customer equipment fees	$ 2,307	$ 2,081
Equipment recovery fees	$ 13	$ 18
Shipping and handling fees	$ 556	$ 608
Access revenues	$ 10,254	$ 9,667
Professional service fees	$ 433	$ 685

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Amount included in cost of services

	Three Months Ended March 31,	
	2017	2016
USF costs	$ 18,376	$ 19,520
Access costs	$ 7,609	$ 7,284
Professional services costs	$ 317	$ 413

Amount included in cost of goods sold

	Three Months Ended March 31,	
	2017	2016
Shipping and handling cost	$ 1,055	$ 1,462

Amount included in sales and marketing

	Three Months Ended March 31,	
	2017	2016
Advertising costs	$ 17,343	$ 16,879

Amounts included in general and administrative expense

	Three Months Ended March 31,	
	2017	2016
Acquisition related transaction costs	$ 139	$ 93
Acquisition related consideration accounted for as compensation	$ 6,763	$ —

(In thousands, except per share amounts)

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Depreciation and amortization expense

	Three Months Ended March 31, 2017	Three Months Ended March 31, 2016
Network equipment and computer hardware	$ 3,554	$ 3,833
Software	2,347	2,729
Capital leases	550	550
Other leasehold improvements	1,093	1,355
Customer premise equipment	742	629
Furniture	226	162
Vehicles	17	18
Patents	379	682
Trademarks	—	18
Customer relationships	5,334	3,849
Acquired technology	3,148	2,805
Trade names	191	54
Non-compete agreements	326	254
	17,907	16,938
Property and equipment impairments	—	41
Software impairments	40	—
Depreciation and amortization expense	$ 17,947	$ 16,979

Amount included in interest expense

	Three Months Ended March 31, 2017	Three Months Ended March 31, 2016
Debt related costs amortization	$ 276	$ 251

Amount included in other income (expense), net

	Three Months Ended March 31, 2017	Three Months Ended March 31, 2016
Net (loss) gain resulting from foreign exchange transactions	$ (216)	$ 156

(In thousands, except per share amounts)

Note 5. Long-Term Note and Revolving Credit Facility

A schedule of long-term note and revolving credit facility at March 31, 2017 and December 31, 2016 is as follows:

	March 31, 2017	December 31, 2016
2.50-3.25% Term note - due 2020, net of debt related costs	86,541	91,124
2.50-3.25% Revolving credit facility - due 2020	224,000	209,000
Total Long-term note and revolving credit facility	$ 310,541	$ 300,124

At March 31, 2017 , future payments under term note obligations over each of the next five years and thereafter were as follows:

	Term Note
2017	$ 14,062
2018	18,750
2019	18,750
2020	54,688
Minimum future payments of principal	106,250
Less: unamortized debt related costs	959
current portion	18,750
Long-term portion	$ 86,541

2016 Financing

On June 3, 2016, we entered into Amendment No. 1 to the Amended and Restated Credit Agreement (the “2016 Credit Facility”) consisting of a $125,000 term note and a $325,000 revolving credit facility. The co-borrowers under the 2016 Credit Facility are the Company and Vonage America Inc., the Company’s wholly owned subsidiary. Obligations under the 2016 Credit Facility are guaranteed, fully and unconditionally, by the Company’s other United States material subsidiaries and are secured by substantially all of the assets of each borrower and each guarantor. The lenders under the 2016 Credit Facility are JPMorgan Chase Bank, N.A., Citizens Bank, N.A., Fifth Third Bank, MUFG Union Bank, N.A., Silicon Valley Bank, SunTrust Bank, Keybank National Association, Santander Bank, N.A., Capital One National Association, and First Niagara Bank, N.A. J.P. Morgan Securities LLC and Citizens Bank, N.A. acted as joint lead bookrunners, and J.P. Morgan Securities LLC, Citizens Bank, N.A., Fifth Third Bank, MUFG Union Bank, N.A., Silicon Valley Bank, and SunTrust Robinson Humphrey Inc. acted as joint lead arrangers.

Use of Proceeds

We used $197,750 of the net available proceeds of the 2016 Credit Facility to retire all of the debt under our 2015 Credit Facility. We used $179,000 from our 2016 Credit Facility in connection with the acquisition of Nexmo on June 3, 2016. Remaining proceeds from the term note and the undrawn revolving credit facility under the 2016 Credit Facility will be used for general corporate purposes. We also incurred fees of $1,316 in connection with the 2016 Credit Facility, of which $395 was allocated to the term note and $921 was allocated to the revolving credit facility. The unamortized fees of $2,740 in connection with the 2015 Credit Facility were allocated as follows: $930 to the term note and $1,810 to the revolving credit facility. In adopting ASU 2015-03, fees allocated to the term note were reported in the balance sheet as a direct deduction from the face amount of the liability and in adopting ASU 2015-15, fees allocated to the revolving credit facility were reported in the balance sheet as an asset. These fees are amortized to interest expenses over the life of the debt using the effective interest method for the term note and straight line method for the revolving credit facility.

Repayments

We made mandatory repayments of $4,688 under the term note for the three months ended March 31, 2017 .

Borrowings

We borrowed $15,000 under the revolving credit facility for the three months ended March 31, 2017 .

2016 Credit Facility Terms

The following description summarizes the material terms of the 2016 Credit Facility:

The loans under the 2016 Credit Facility mature in June 2020. Principal amounts under the 2016 Credit Facility are repayable in quarterly installments of approximately $4,688 for the term note. The unused portion of our revolving credit facility incurs a 0.45% commitment fee. Such commitment fee will be reduced to 0.40% if our consolidated leverage ratio is greater than or equal to 1.50 to 1.00 and less than 2.50 to 1.00, 0.375% if our consolidated leverage ratio is greater than or equal to 0.75 to 1.00 and less than 1.50 to 1.00, and to 0.35% if our consolidated leverage ratio is less than 0.75 to 1.00.

Outstanding amounts under the 2016 Credit Facility, at our option, will bear interest at:

- LIBOR (applicable to one-, two-, three-, six-, or twelve-month periods) plus an applicable margin equal to 2.50% if our consolidated leverage ratio is less than 0.75 to 1.00, 2.75% if our consolidated leverage ratio is greater than or equal to 0.75 to 1.00 and less than 1.50 to 1.00, 3.00% if our consolidated leverage ratio is greater than or equal to 1.50 to 1.00 and less than 2.5 to 1.00, and 3.25% if our consolidated leverage ratio is greater than or equal to 2.50 to 1.00, payable on the last day of each relevant interest period or, if the interest period is longer than three months, each day that is three months after the first day of the interest period, or
- the base rate determined by reference to the highest of (a) the prime rate of JPMorgan Chase Bank, N.A., (b) the federal funds effective rate from time to time plus 0.50% , and (c) the adjusted LIBO rate applicable to one month interest periods plus 1.00% , plus an applicable margin equal to 1.50% if our consolidated leverage ratio is less than 0.75 to 1.00, 1.75% if our consolidated leverage ratio is greater than or equal to 0.75 to 1.00 and less than 1.50 to 1.00, 2.00% if our consolidated leverage ratio is greater than or equal to 1.50 to 1.00 and less than 2.50 to 1.00, and 2.25% if our consolidated leverage ratio is greater than or equal to 2.5 to 1.00, payable on the last business day of each March, June, September, and December and the maturity date of the 2016 Credit Facility.

The effective interest rate was 4% as of March 31, 2017 .

The 2016 Credit Facility provides greater flexibility to us in funding acquisitions and restricted payments, such as stock buybacks, than did the 2015 Credit Facility.

We may prepay the 2016 Credit Facility at our option at any time without premium or penalty. The 2016 Credit Facility is subject to mandatory prepayments in amounts equal to:

- 100% of the net cash proceeds from any non-ordinary course sale or other disposition of our property and assets for consideration in excess of a certain amount subject to customary reinvestment provisions and certain other exceptions and
- 100% of the net cash proceeds received in connection with other non-ordinary course transactions, including insurance proceeds not otherwise applied to the relevant insurance loss.

Subject to certain restrictions and exceptions, the 2016 Credit Facility permits us to obtain one or more incremental term notes and/or revolving credit facilities in an aggregate principal amount of up to $100,000 plus an amount equal to repayments of the term note upon providing documentation reasonably satisfactory to the administrative agent. The 2016 Credit Facility includes customary representations and warranties and affirmative covenants of the borrowers. In addition, the 2016 Credit Facility contains customary negative covenants, including, among other things, restrictions on the ability of us and our subsidiaries to consolidate or merge, create liens, incur additional indebtedness, dispose of assets, consummate acquisitions, make investments, and pay dividends and other distributions. We must also comply with the following financial covenants:

- a consolidated leverage ratio of no greater than 3.25 to 1.00 as of the end of the fiscal quarter ending June 30, 2016 and for each of the three consecutive fiscal quarters ending immediately thereafter; and a consolidated leverage ratio of no less than 2.75 to 1.00 as of the end of any fiscal quarter, commencing with the fiscal quarter ending June 30, 2017, with a limited step-up to 3.25 to 1.00 for a period of four consecutive quarters, in connection with an acquisition;
- a consolidated fixed coverage charge ratio of no less than 1.75 to 1.00 subject to adjustment to exclude up to $80,000 in specified restricted payments;
- minimum cash of $25,000 including the unused portion of the revolving credit facility; and
- maximum capital expenditures not to exceed $55,000 during any fiscal year, provided that the unused amount of any permitted capital expenditures in any fiscal year may be carried forward to the next following fiscal year.

In addition, annual excess cash flow increases permitted capital expenditures.

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As of March 31, 2017 , we were in compliance with all covenants, including financial covenants, for the 2016 Credit Facility.

The 2016 Credit Facility contains customary events of default that may permit acceleration of the debt. During the continuance of a payment default, interest will accrue on overdue amounts at a default interest rate of 2% above the interest rate which would otherwise be applicable, in the case of loans, and at a rate equal to the rate applicable to base rate loans plus 2% , in the case of all other amounts.

2015 Financing

On July 27, 2015, we entered into a credit agreement (the "2015 Credit Facility") consisting of a $100,000 term note and a $250,000 revolving credit facility. The co-borrowers under the 2015 Credit Facility were the Company and Vonage America Inc., the Company's wholly owned subsidiary. Obligations under the 2015 Credit Facility were guaranteed, fully and unconditionally, by the Company's other United States material subsidiaries and were secured by substantially all of the assets of each borrower and each guarantor. The lenders under the 2015 Credit Facility were JPMorgan Chase Bank, N.A., Citizens Bank, N.A., Fifth Third Bank, MUFG Union Bank, N.A., Silicon Valley Bank, SunTrust Bank, Keybank National Association, Santander Bank, N.A., Capital One National Association, and First Niagara Bank, N.A. JPMorgan Chase Bank, N.A. was a party to the agreement as administrative agent, Citizens Bank, N.A. as syndication agent, and Fifth Third Bank, MUFG Union Bank, N.A., Silicon Valley Bank, and SunTrust Bank as documentation agents. J.P. Morgan Securities LLC and Citizens Bank, N.A. acted as joint lead bookrunners, and J.P. Morgan Securities LLC, Citizens Bank, N.A., Fifth Third Bank, MUFG Union Bank, N.A., Silicon Valley Bank, and SunTrust Robinson Humphrey Inc. acted as joint lead arrangers.

Use of Proceeds

We used $167,000 of the net available proceeds of the 2015 Credit Facility to retire all of the debt under our 2014 Credit Facility. Remaining proceeds from the term note and the undrawn revolving credit facility under the 2015 Credit Facility were used for general corporate purposes. We also incurred fees of $2,007 in connection with the 2015 Credit Facility, of which $602 was allocated to the term note and $1,405 was allocated to the revolving credit facility. The unamortized fees of $1,628 in connection with the 2014 Credit Facility were allocated as follows: $733 to the term note and $895 to the revolving credit facility. In adopting ASU 2015-03, fees allocated to the term note were reported in the balance sheet as a direct deduction from the face amount of the liability and in adopting ASU ASU 2015-15, fees allocated to the revolving credit facility were reported in the balance sheet as as asset. These fees are amortized to interest expenses over the life of the debt using the effective interest method for the term note and straight line method for the revolving credit facility.

Repayments

We made mandatory repayments of $3,750 under the term note in 2016. In addition, we repaid the $10,000 outstanding under the revolving credit facility in 2016.

Borrowings

We borrowed $82,000 under the revolving credit facility in 2015.

Note 6. Common Stock

Net Operating Loss Rights Agreement

On June 7, 2012, we entered into a Tax Benefits Preservation Plan ("Preservation Plan") designed to preserve stockholder value and tax assets. Our ability to use our tax attributes to offset tax on U.S. taxable income would be substantially limited if there were an "ownership change" as defined under Section 382 of the U.S. Internal Revenue Code. In general, an ownership change would occur if one or more "5-percent shareholders," as defined under Section 382, collectively increase their ownership in us by more than 50 percent over a rolling three-year period.

In connection with the adoption of the Preservation Plan, our board of directors declared a dividend of one preferred share purchase right for each outstanding share of the Company's common stock. The preferred share purchase rights were distributed to stockholders of record as of June 18, 2012, as well as to holders of the Company's common stock issued after that date, but will only be activated if certain triggering events under the Preservation Plan occur.

Under the Preservation Plan, preferred share purchase rights will work to impose significant dilution upon any person or group which acquires beneficial ownership of 4.9% or more of the outstanding common stock, without the approval of our board of directors, from and after June 7, 2012. Stockholders that own 4.9% or more of the outstanding common stock as of the opening of business on June 7, 2012, will not trigger the preferred share purchase rights so long as they do not (i) acquire additional shares of common stock or (ii) fall under 4.9% ownership of common stock and then re-acquire shares that in the aggregate equal 4.9% or more of the common stock.

(In thousands, except per share amounts)

The Preservation Plan was set to expire no later than the close of business June 7, 2013, unless extended by our board of directors. On June 6, 2013, at the Vonage 2013 annual meeting of stockholders, stockholders ratified the extension of the Preservation Plan through June 7, 2015. On April 2, 2015, after consultation with our advisors, our board of directors determined to extend the Preservation Plan through June 30, 2017, subject to ratification of the extension by stockholders at our 2015 annual meeting of stockholders. On June 3, 2015, at the Vonage 2015 annual meeting of stockholders, stockholders ratified the extension of the Preservation Plan through June 30, 2018.

Common Stock Repurchases

On July 25, 2012, our board of directors authorized a program to repurchase up to $50,000 of Vonage common stock (the " $50,000 repurchase program") through December 31, 2013. On February 7, 2013, our board of directors discontinued the remainder of the $50,000 repurchase program effective at the close of business on February 12, 2013 with $16,682 of availability remaining, and authorized a new program to repurchase up to $100,000 of Vonage common stock (the "2012 $100,000 repurchase program") by December 31, 2014. As of December 31, 2014, approximately $219 remained of our 2012 $100,000 repurchase program. The repurchase program expired on December 31, 2014.

On December 9, 2014, Vonage's Board of Directors authorized a new program for the Company to repurchase up to $100,000 of its outstanding common stock (the "2014 $100,000 repurchase program"). Repurchases under the 2014 $100,000 repurchase program program are expected to be made over a four -year period ending on December 31, 2018.

Under the 2014 $100,000 repurchase program, the timing and amount of repurchases will be determined by management based on its evaluation of market conditions, the trading price of the stock and will vary based on available capital resources and other financial and operational performance, market conditions, securities law limitations, and other factors. Repurchases may be made in the open market or through private transactions from time to time. The repurchases will be made using available cash balances. In any period, under each repurchase program, cash used in financing activities related to common stock repurchases may differ from the comparable change in stockholders' equity, reflecting timing differences between the recognition of share repurchase transactions and their settlement for cash.

We repurchased the following shares of common stock with cash resources under the 2014 $100,000 repurchase program during the three and three months ended March 31, 2017 and 2016 :

	Three Months Ended March 31,	
	2017	2016 (1)
Shares of common stock repurchased	1,599	1,653
Value of common stock repurchased	$ 9,510	$ 8,008

(1) include 98 shares, or $441 , of common stock repurchases settled in April 2016; excluding commission of $2 .

As of March 31, 2017 , $42,533 remained of our 2014 $100,000 repurchase program. The repurchase program expires on December 31, 2018 but may be suspended or discontinued at any time without notice.

In any period under the 2014 $100,000 repurchase program, cash used in financing activities related to common stock repurchases may differ from the comparable change in stockholders' equity, reflecting timing differences between the recognition of share repurchase transactions and their settlement for cash.

Note 7. Commitments and Contingencies

Litigation

IP Matters

Bear Creek Technologies, Inc. On February 22, 2011, Bear Creek Technologies, Inc. ("Bear Creek") filed a lawsuit against Vonage Holdings Corp., Vonage America Inc., Vonage Marketing LLC, and Aptela Inc. (the latter two entities being former subsidiaries of Vonage Holdings Corp. now merged into Vonage America Inc. and Vonage Business Inc., respectively) in the United States District Court for the Eastern District of Virginia alleging that Vonage's and Aptela's products and services are covered by United States Patent No. 7,889,722, entitled "System for Interconnecting Standard Telephony Communications Equipment to

Internet Protocol Networks" (the "'722 Patent"). The suit also named numerous other defendants. On August 17, 2011, the Court dismissed Bear Creek's case against the Vonage entities and Aptela, and all but one of the other defendants. Later, on August 17, 2011, Bear Creek re-filed its complaint in the United States District Court for the District of Delaware against the same Vonage entities; and re-filed its complaint against Aptela in the United States District Court for the Eastern District of Virginia. On May 2, 2012, the litigations against Vonage and Aptela were consolidated for pretrial proceedings with twelve other actions in the District of Delaware. Vonage filed an answer to Bear Creek's complaint, including counterclaims of non-infringement and invalidity of the '722 patent. Aptela, which filed a motion to dismiss Bear Creek's complaint on September 27, 2011, has not yet answered, as its motion remains pending. On November 5, 2012, Bear Creek filed an answer to Vonage's counterclaims. On July 17, 2013, the Court stayed the case pending resolution of the reexamination of the '722 patent requested by Cisco Systems, Inc. ("Cisco"), described below. On May 5, 2015, the Court closed the case, with leave to reopen if further attention by the Court is required.

A request for reexamination of the validity of the '722 Patent was filed on September 12, 2012 by Cisco. Cisco's request was granted on November 28, 2012. On March 24, 2014, the United States Patent and Trademark Office issued an Action Closing Prosecution, confirming its rejection of all claims of the '722 patent. Bear Creek's November 14, 2014 appeal of that decision to the Patent Trial and Appeal Board ("PTAB") was denied on December 29, 2015; the Federal Circuit affirmed the PTAB's denial on March 15, 2017. Barring extraordinary circumstances, Bear Creek's ability to assert its patent has been nullified.

RPost Holdings, Inc. On August 24, 2012, RPost Holdings, Inc., RPost Communications Limited, and RMail Limited (collectively, "RPost") filed a lawsuit against StrongMail Systems, Inc. ("StrongMail") in the United States District Court for the Eastern District of Texas alleging that StrongMail's products and services, including its electronic mail marketing services, are covered by United States Patent Nos. 8,224,913, 8,209,389, 8,161,104, 7,966,372, and 6,182,219. On February 11, 2013, RPost filed an amended complaint, adding 27 new defendants, including Vonage America Inc. RPost's amended complaint alleges willful infringement of the RPost patents by Vonage and each of the other new defendants because they are customers of StrongMail. StrongMail has agreed to fully defend and indemnify Vonage in this lawsuit. Vonage answered the complaint on May 7, 2013. On September 17, 2015, the Court ordered the consolidation for pre-trial purposes of this case with other cases by RPost. The lead case has been administratively closed and stayed since January 30, 2014 due to multiple pending actions by third parties regarding ownership of the patents at issue. On March 1, 2017, the parties in the consolidated actions filed a joint notice regarding status of the co-pending actions. Plaintiffs requested that the stay be lifted, while defendants maintain that the stay should remain in place.

AIP Acquisition LLC . On January 3, 2014, AIP Acquisition LLC ("AIP"), filed a lawsuit against Vonage Holdings Corp., Vonage America, Inc., and Vonage Marketing LLC in the U.S. District Court for the District of Delaware alleging that Vonage's products and services are covered by United States Patent No. 7,269,247. Vonage filed an answer and counterclaims on February 25, 2014. AIP filed an amended complaint on March 18, 2014, which Vonage answered on April 4, 2014. On April 8, 2014, the Court stayed the case pending final resolution of non-party Level 3's inter partes review request of United States Patent No. 7,724,879, which is a continuation of the '247 patent. On October 8, 2014, the Patent Office issued a Final Written Decision, finding all challenged claims of the '879 patent to be invalid. On November 10, 2015, the Federal Circuit rejected AIP's appeal and affirmed the Patent Office's rejection of the '879 patent.

Cisco petitioned for inter partes review of the '247 patent on November 25, 2014, which was granted on May 20, 2015. On May 18, 2016, the Patent Office issued a Final Written Decision, finding all challenged claims of the '247 patent to be invalid. AIP appealed to the Federal Circuit, filing its opening brief on December 15, 2016. On December 20, 2016, the Patent Office filed a notice of intervention in the appellate proceedings. Briefing on the appeal is complete, with oral argument to be scheduled.

Commercial Litigation

Merkin & Smith, et al . On September 27, 2013, Arthur Merkin and James Smith filed a putative class action lawsuit against Vonage America, Inc. in the Superior Court of the State of California, County of Los Angeles, alleging that Vonage violated California's Unfair Competition Law by charging its customers fictitious 911 taxes and fees. On October 30, 2013, Vonage filed a notice removing the case to the United States District Court for the Central District of California. On November 26, 2013, Vonage filed its Answer to the Complaint. On December 4, 2013, Vonage filed a Motion to Compel Arbitration, which the Court denied on February 4, 2014. On March 5, 2014, Vonage appealed that decision to the United States Court of Appeals for the Ninth Circuit. On March 26, 2014, the district court proceedings were stayed pending the appeal. On February 29, 2016, the Ninth Circuit reversed the district court's ruling and remanded with instructions to grant the motion to compel arbitration. On March 22, 2016, Merkin and Smith filed a petition for rehearing. On May 4, 2016, the Ninth Circuit withdrew its February 29, 2016 decision and issued a new order reversing the district court's order and remanded with instructions to compel arbitration. The Ninth Circuit also declared as moot the petition for rehearing. On June 27, 2016, the lower court stayed the case pending arbitration. A joint status report was filed with the District Court on December 23, 2016. A second joint status report was filed with the District Court on March 23, 2017.

From time to time, in addition to those identified above, we are subject to legal proceedings, claims, investigations, and proceedings in the ordinary course of business, including claims of alleged infringement of third-party patents and other intellectual property rights, commercial, employment, and other matters. From time to time we receive letters or other communications from third parties inviting us to obtain patent licenses that might be relevant to our business or alleging that our services infringe upon third party patents or other intellectual property. In accordance with generally accepted accounting principles, we make a provision for a liability when it is both probable that a liability has been incurred and the amount of the loss or range of loss can be reasonably estimated. These provisions, if any, are reviewed at least quarterly and adjusted to reflect the impacts of negotiations, settlements, rulings, advice of legal counsel, and other information and events pertaining to a particular case. Litigation is inherently unpredictable. We believe that we have valid defenses with respect to the legal matters pending against us and are vigorously defending these matters. Given the uncertainty surrounding litigation and our inability to assess the likelihood of a favorable or unfavorable outcome in the above noted matters and our inability to reasonably estimate the amount of loss or range of loss, it is possible that the resolution of one or more of these matters could have a material adverse effect on our condensed consolidated financial position, cash flows or results of operations.

Regulation

Telephony services are subject to a broad spectrum of state and federal regulations. Because of the uncertainty over whether Voice over Internet Protocol ("VoIP") should be treated as a telecommunications or information service, we have been involved in a substantial amount of state and federal regulatory activity. Implementation and interpretation of the existing laws and regulations is ongoing and is subject to litigation by various federal and state agencies and courts. Due to the uncertainty over the regulatory classification of VoIP service, there can be no assurance that we will not be subject to new regulations or existing regulations under new interpretations, and that such change would not introduce material additional costs to our business.

Federal - Net Neutrality

Clear and enforceable net neutrality rules make it more difficult for broadband Internet service providers to block or discriminate against Vonage service. In addition, explicitly applying net neutrality rules to wireless broadband Internet service providers could create greater opportunities for VoIP applications that run on wireless broadband Internet service. In December 2010, the FCC adopted net neutrality rules that applied strong net neutrality rules to wired broadband Internet service providers and limited rules to wireless broadband Internet service providers. On January 14, 2014, the D.C. Circuit Court of Appeals vacated a significant portion of the 2010 rules. On May 15, 2014, the FCC issued a Notice of Proposed Rulemaking (NPRM) proposing new net neutrality rules. After public response to the NPRM, the FCC adopted new neutrality rules on February 26, 2015. These rules prohibit broadband Internet service providers from: (1) blocking or throttling lawful content applications, or services; (2) imposing paid prioritization arrangements; and (3) unreasonably interfering or unreasonably disadvantaging consumers or edge providers. In addition, broadband Internet service providers are required to make certain disclosures regarding their network management practices, network performance, and commercial terms. These net neutrality rules apply the same requirements to wired and wireless broadband Internet service providers. Several parties filed appeals which are pending at the D.C. Circuit Court of Appeals. Oral arguments at the D.C. Circuit Court of Appeals were held on December 4, 2015. On June 14, 2016, the D.C. Circuit of Appeals denied the appeals. Several parties filed a petition for rehearing en banc on July 29, 2016. The petition is pending.

Federal - Rural Call Completion Issues

On February 7, 2013, the FCC released a Notice of Proposed Rulemaking (NPRM) on rural call completion issues. The NPRM proposed new detailed reporting requirements to gauge rural call completion performance. Rural carriers have argued that VoIP provider call completion performance to rural areas is generally poor. On October 28, 2013, the FCC adopted an order on rural call completion imposing new reporting obligations and restricting certain call signaling practices. The call signaling rules went into effect on January 31, 2014. We filed for extensions of the rules, which the FCC granted, and as of April 17, 2014, we were compliant with the FCC call signaling rules. The effective date for the reporting requirements was April 1, 2015. We could be subject to an FCC enforcement action in the future in the event the FCC took the position that our rural call completion performance is inadequate or we were not compliant with the FCC's order.

Federal - Numbering Rights

On April 18, 2013, the FCC issued a Notice of Proposed Rulemaking (NPRM) that proposed to modify FCC rules to allow VoIP providers to directly access telephone numbers. In addition, the FCC granted a waiver from its existing rules to allow Vonage to conduct a trial of direct access to telephone numbers. The trial would allow the FCC to obtain real-world data on direct access to telephone numbers by VoIP providers to inform consideration of the NPRM. Direct access to telephone numbers would facilitate IP to IP interconnection, which may allow VoIP providers to provide higher quality, lower cost services, promote the deployment of innovative new voice services, and experience reductions in the cost of telephony services. Vonage successfully completed the trial in certain markets and filed the required reports on the trial with the FCC. On January 31, 2014, the FCC Wireline Competition Bureau issued a positive report on the trial, concluding that Vonage's successful trial confirmed the technical feasibility of interconnected VoIP providers obtaining telephone numbers directly from the numbering administrators. On June 18, 2015, the FCC adopted an order that modifies its rules to allow interconnected VoIP providers to directly access telephone numbers. Part of the order required approval from the Office of Management and Budget ("OMB") prior to the rule change becoming effective. On February 4, 2016, the FCC announced that OMB had approved the order and would begin accepting applications for authorization beginning on February 18, 2016. Vonage applied for authorization, and on March 31, 2016 received authorization. On December 23, 2015, the National Association of Regulatory Utility Commissioners filed an appeal of the June 18, 2015 FCC order at the D.C. Circuit Court of Appeals, which was denied on March 24, 2017.

Federal - Privacy Rules

On April 1, 2016, the FCC issued a Notice of Proposed Rulemaking (NPRM) that proposed the adoption of privacy rules for providers of broadband Internet access service and updating its rules for voice services to make them consistent with the proposed privacy rules for broadband Internet access services. In addition to regulating customer proprietary network information (CPNI), a category of information that the FCC has traditionally regulated for voice services, the FCC proposed to regulate use of customer personal information (PI), a broader set of information than CPNI, by broadband and voice service providers. Further, the NPRM would regulate voice and broadband provider privacy policies and data security practices, including imposing vicarious liability for vendors who handle PI and CPNI on behalf of a broadband or voice provider. Finally, the NPRM would impose another data breach reporting notification obligation on voice and broadband providers on top of existing state data breach notification requirements. The FCC adopted its new privacy rules at its October 27, 2016 open meeting. On April 3, 2017, President Trump signed a repeal of the new privacy rules.

State Telecommunications Regulation

In general, the focus of interconnected VoIP telecommunications regulation is at the federal level. On November 12, 2004, the FCC issued a declaratory ruling providing that our service is subject to federal regulation and preempted the Minnesota Public Utilities Commission (“MPUC”) from imposing certain of its regulations on us. The FCC's decision was based on its conclusion that our service is interstate in nature and cannot be separated into interstate and intrastate components. On March 21, 2007, the United States Court of Appeals for the 8th Circuit affirmed the FCC's declaratory ruling preempting state regulation of our service.

While this ruling does not exempt us from all state oversight of our service, it effectively prevents state telecommunications regulators from imposing certain burdensome and inconsistent market entry requirements and certain other state utility rules and regulations on our service. State regulators continue to probe the limits of federal preemption in their attempts to apply state telecommunications regulation to interconnected VoIP service. On July 16, 2009, the Nebraska Public Service Commission and the Kansas Corporation Commission filed a petition with the FCC seeking a declaratory ruling or, alternatively, adoption of a rule declaring that state authorities may apply universal service funding requirements to nomadic VoIP providers. We participated in the FCC proceedings on the petition. On November 5, 2010, the FCC issued a declaratory ruling that allowed states to assess state USF on nomadic VoIP providers on a going forward basis provided that the states comply with certain conditions to ensure that imposing state USF does not conflict with federal law or policy. More recently on July 28, 2015, the MPUC found that it has authority to regulate Charter’s fixed, interconnected VoIP service. Charter challenged the MPUC’s order at the U.S. District Court for Minnesota. This challenge is currently pending. We expect that state public utility commissions and state legislators will continue their attempts to apply state telecommunications regulations to nomadic VoIP service.

Stand-by Letters of Credit

We had stand-by letters of credit totaling $1,579 and $1,578 , as of March 31, 2017 and December 31, 2016 , respectively.

End-User Commitments

We are obligated to provide telephone services to our registered end-users. The costs related to the potential utilization of minutes sold are expensed as incurred. Our obligation to provide this service is dependent on the proper functioning of systems controlled by third-party service providers. We do not have a contractual service relationship with some of these providers.

Vendor Commitments

We have committed to purchase software maintenance from a vendor. We have committed to pay this vendor approximately $681 in 2017 and $908 in 2018 and 2019, and $152 in 2020, respectively.

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State and Municipal Taxes

In accordance with generally accepted accounting principles, we make a provision for a liability for taxes when it is both probable that a liability has been incurred and the amount of the liability or range of liability can be reasonably estimated. These provisions are reviewed at least quarterly and adjusted to reflect the impacts of negotiations, settlements, rulings, advice of legal counsel, and other information and events pertaining to a particular case. For a period of time, we did not collect or remit state or municipal taxes (such as sales, excise, utility, use, and ad valorem taxes), fees or surcharges ("Taxes") on the charges to our customers for our services, except that we historically complied with the New Jersey sales tax. We have received inquiries or demands from a number of state and municipal taxing and 911 agencies seeking payment of Taxes that are applied to or collected from customers of providers of traditional public switched telephone network services. Although we have consistently maintained that these Taxes do not apply to our service for a variety of reasons depending on the statute or rule that establishes such obligations, we are now collecting and remitting sales taxes in certain of those states including a number of states that have changed their statutes to expressly include VoIP. In addition, many states address how VoIP providers should contribute to support public safety agencies, and in those states we remit fees to the appropriate state agencies. We could also be contacted by state or municipal taxing and 911 agencies regarding Taxes that do explicitly apply to VoIP and these agencies could seek retroactive payment of Taxes. As such, we have reserves of $963 and $1,763 as of March 31, 2017 and December 31, 2016 , respectively, as our best estimate of the potential tax exposure for any retroactive assessment. We believe the maximum estimated exposures for retroactive assessments are approximately $1,800 and $2,600 as of March 31, 2017 and December 31, 2016 , respectively.

Note 8. Acquisition of Business

Acquisition of Nexmo

Nexmo is a global leader in the Communications-Platform-as-a-Service ("CPaaS") segment of the cloud communications market. Nexmo provides innovative communication application program interfaces ("APIs") for text messaging and voice communications, allowing developers and enterprises to embed contextual communications into mobile apps, websites and business workflows via text, social media, chat apps and voice.

Pursuant to the Agreement and Plan of Merger dated May 5, 2016, by and among the Company, Neptune Acquisition Corp., a Delaware corporation and newly formed indirect, wholly owned subsidiary of Vonage ("Merger Sub"), Nexmo, a Delaware corporation, and Shareholder Representative Services LLC, a Colorado limited liability company, as representative of the security holders of Nexmo, on June 3, 2016, Merger Sub, on the terms and subject to the conditions thereof, merged with and into Nexmo, and Nexmo became a wholly owned indirect subsidiary of Vonage .

On June 2, 2016, Vonage, Merger Sub, Nexmo and the Representative entered into Amendment No. 1 to the Merger Agreement (the " Amendment"). The Amendment amended the Merger Agreement to, among other things, (1) increase the purchase price payable to the Nexmo securityholders by the amount of unrestricted cash and cash equivalents of Nexmo in lieu of the declaration of a dividend or other distribution of such unrestricted cash and cash equivalents to the Nexmo securityholders, (2) clarify the treatment of enterprise management incentive options issued by Nexmo to certain of its employees located in the United Kingdom, and (3) add certain technical provisions with respect to deposits made to the escrow agent and the exchange agent in connection with the closing of the transactions contemplated by the Merger Agreement.

Under the agreement, Nexmo shareholders are receiving consideration of $231,122 , with an additional earn-out opportunity (the "contingent consideration") of up to $20,000 contingent upon Nexmo achieving certain performance targets. Of the consideration, $194,684 (net of cash acquired of $16,094) was paid at close, consisting of $163,093 of cash (net of $16,094 of cash acquired) and 6,823 in shares of Vonage common stock valued at $31,591 . The remaining $36,438 of the $231,122 purchase price is in the form of restricted cash, restricted stock and options held by Nexmo management and employees (the "Employee Payout Amount"), subject to vesting requirements over time and to be amortized to compensation expense quarterly until vested. We financed the transaction with $179,000 from our 2016 Credit Facility. The purchase price is subject to adjustments pursuant to the merger agreement for closing cash and working capital of Nexmo, reductions for indebtedness and transaction expenses of Nexmo that remained unpaid as of closing, and escrow fund deposits. The aggregate consideration will be allocated among Nexmo equityholders.

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The consideration was allocated to acquisition cost as follows:

Cash paid at closing (inclusive of cash acquired of $16,094)	$	179,186
Stock paid at closing		31,591
Contingent consideration (described below)		16,472
Employee Payout Amount (described below)		4,779
Acquisition Cost	$	232,028

In addition, Nexmo shareholders were eligible to earn a Variable Payout Amount of up to $20,000 , subject to the achievement of certain performance targets during the 12 month period following the closing of the transaction. The contingent consideration payable to the holders of Nexmo stock is determined based on (i) the achievement of certain revenue targets for the calendar year 2016, and (ii) Nexmo's revenues received from its top customers following the closing. The contingent consideration may be in the form of cash, a number of shares of Vonage common stock or a combination thereof, at our sole discretion. We estimated using probability weighting that the value of the contingent consideration is $17,840 at the acquisition date and included that amount in acquisition cost at the net present value amount of $16,472 . As of December 31, 2016, Nexmo did not achieve the performance targets necessary to earn the Variable Payout Amount but the parties agreed to a $5,000 settlement that the parties were paid in the first quarter of 2017. The $5,000 settlement has also been reflected in accrued expenses within the condensed consolidated balance sheets and in general and administrative expenses in the condensed consolidated statements of income.

In addition, Nexmo management and employees may earn an Employee Payout Amount of $36,438 attributable to restricted cash, restricted stock and assumed options, of which $4,779 is included in acquisition cost as service had been provided pre-acquisition and $31,659 will be recorded as post-acquisition expense assuming all amounts vest, of which $31,087 will be recorded as compensation expense and $572 will be recorded as interest expense as continued employment is a condition of receiving consideration.

The post-acquisition expense will be recorded as follows:

	Restricted Stock	Restricted Cash	Assumed Options	Interest Expense	Total
2016	$ 7,380	$ 6,353	$ 2,700	$ 255	$ 16,688
2017	6,197	5,383	1,293	271	13,144
2018	661	620	424	46	1,751
2019	—	—	76	—	76
Total	$ 14,238	$ 12,356	$ 4,493	$ 572	$ 31,659

Pursuant to the merger agreement, $20,372 of the cash consideration and $5,081 of the stock consideration were placed in escrow for unknown liabilities that may have existed as of the acquisition date.

For the three months ended ended March 31, 2017 and March 31, 2016 , we incurred approximately $24 and $10 , respectively, in acquisition related transaction costs, which were recorded in general and administrative expense in the accompanying condensed consolidated statements of income. For the full year 2016, we incurred approximately $5,500 acquisition related transaction costs.

The acquisition was accounted for using the acquisition method of accounting under which assets and liabilities of Nexmo were recorded at their respective fair values including an amount for goodwill representing the difference between the acquisition consideration and the fair value of the identifiable net assets. We do not expect any portion of this goodwill to be deductible for tax purposes. The goodwill attributable to the acquisition has been recorded as a non-current asset and is not amortized, but is subject to an annual review for impairment.

The acquisition price was allocated to the tangible and identified intangible assets acquired and liabilities assumed as of the closing date. The fair values assigned to identifiable intangible assets assumed were based on management's current estimates and assumptions and is considered preliminary. The estimated fair values of the identified current assets, property and equipment, software and other assets acquired and current liabilities assumed are also considered preliminary and are based on the most recent information available. We believe that the most recent information available provides a reasonable basis for assigning fair value, but we anticipate receiving additional information on income taxes, and, as such, the provisional measurements of fair value set forth below are subject to change. We expect to finalize the valuation on income taxes as soon as practicable, but not later than one year from the acquisition date.

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The table below summarizes the Nexmo assets acquired and liabilities assumed as of June 3, 2016:

	Estimated Fair Value
Assets	
Current assets:	
Cash and cash equivalents	$ 16,094
Accounts receivable	8,764
Prepaid expenses and other current assets	3,507
Total current assets	28,365
Property and equipment	757
Software, net	242
Intangible assets	101,770
Restricted cash	51
Total assets acquired	131,185
Liabilities	
Current liabilities:	
Accounts payable	1,841
Accrued expenses	9,299
Deferred revenue, current portion	1,735
Total current liabilities	12,875
Deferred tax liabilities, net, non-current	29,355
Total liabilities assumed	42,230
Net identifiable assets acquired	88,955
Goodwill	143,073
Total purchase price	$ 232,028

The intangible assets as of the closing date of the acquisition included:

	Amount
Customer relationships	$ 85,900
Developed technologies	13,768
Non-compete agreements	972
Trade names	1,130
	$ 101,770

Indications of fair value of the intangible assets acquired in connection with the acquisition were determined using either the income, market or replacement cost methodologies. The intangible assets are being amortized over periods which reflect the pattern in which economic benefits of the assets are expected to be realized. The customer relationships are being amortized on an accelerated basis over an estimated useful life of twelve years, the developed technologies are being amortized on an accelerated basis over an estimated useful life of eight years, the non-compete agreements are being amortized on a straight-line basis over three years, and trade names are being amortized on a straight-line basis over two years.

In addition, we recorded a deferred tax liability of $37,507 related to the $101,770 of identified intangible assets that will be amortized for financial reporting purposes but not for tax purposes and a deferred tax asset of $7,686 related to NOLs.

The excess of purchase price over the fair value amounts assigned to the assets acquired and liabilities assumed represents the amount of goodwill resulting from the acquisition. We do not expect any portion of this goodwill to be deductible for tax purposes. The goodwill attributable to the acquisition has been recorded as a non-current asset and is not amortized, but is subject to an annual review for impairment. We believe the factors that contributed to goodwill include synergies that are specific to our consolidated business, the acquisition of a talented workforce that provides us with expertise in the small and medium business market, as well as other intangible assets that do not qualify for separate recognition.

(In thousands, except per share amounts)

Goodwill

The following table provides a summary of the changes in the carrying amounts of goodwill which is attributable to our business segment:

Balance at December 31, 2016	$	360,363
Currency translation adjustments		2,061
Balance at March 31, 2017	$	362,424

Note 9. Industry Segment and Geographic Information

ASC 280 "Segment Reporting" establishes reporting standards for an enterprise's business segments and related disclosures about its products, services, geographic areas and major customers. Under ASC 280, the method for determining what information to report is based upon the way management organizes the operating segments within the Company for making operating decisions and assessing financial performance. Our chief operating decision-makers review revenue and gross margin information for each of our reportable segments, but do not review operating expenses on a segment by segment basis. In addition, with the exception of goodwill and intangible assets, we do not identify or allocate our assets by the reportable segments.

Historically, we have had two operating segments that we have aggregated for reporting purposes. In 2016, as a result of the acquisition of Nexmo, we no longer meet the aggregation criteria for operating segments and now have the following two reportable segments:

Business

For our Business customers, we provide innovative, cloud-based Unified Communications as a Service, or UCaaS, solutions, comprised of integrated voice, text, video, data, collaboration, and mobile applications over our flexible, scalable Session Initiation Protocol (SIP) based Voice over Internet Protocol, or VoIP, network. Through Nexmo, the Vonage API Platform, we also offer Communications Platform as a Service, or CPaaS, solutions designed to enhance the way businesses communicate with their customers embedding communications into apps, websites and business processes. Together we have a robust set of product families tailored to serve the full range of the business value chain, from the small and medium business, or SMB, market, through mid-market and enterprise markets. We provide customers with multiple deployment options, designed to provide the reliability and quality of service they demand. We provide customers the ability to integrate our cloud communications platform with many cloud-based productivity and CRM solutions, including Google's G Suite, Zendesk, Salesforce's Sales Cloud, Oracle, Clio, and other CRM solutions. In combination, our products and services permit our business customers to communicate with their customers and employees through any cloud-connected device, in any place, at any time without the often costly investment required with on-site equipment.

Consumer

For our Consumer customers, we enable users to access and utilize our UCaaS services and features, via a single "identity," either a number or user name, regardless of how they are connected to the Internet, including over 3G, LTE, Cable, or DSL broadband networks. This technology enables us to offer our Consumer customers attractively priced voice and messaging services and other features around the world on a variety of devices.

For our segments we categorize revenues as follows:

Services revenues . Services revenues consists primarily of revenue attributable to our communication services for Consumer and UCaaS and CPaaS services for Business,

Product revenues. Product revenues includes equipment sold to customers, shipping and handling, professional services, and broadband access.

USF revenues. USF revenues represent contributions to the Federal Universal Service Fund ("USF") and related fees.

For our segments we categorize cost of revenues as follows:

Services cost of revenues. Services cost of revenues consists of costs associated with network operations and technical support personnel, communication origination, and termination services provided by third party carriers and excludes depreciation and amortization.

(In thousands, except per share amounts)

Product cost of revenues . Product cost of revenues includes equipment sold to customers, shipping and handling, professional services, cost of certain products including equipment or services that we give customers as promotions, and broadband access.

USF cost of revenues. USF cost of revenues represent contributions to the Federal Universal Service Fund ("USF") and related fees.

Information about our segment results for the three months ended March 31, 2017 were as follows:

	Three Months Ended March 31, 2017		
	Business	**Consumer**	**Total**
Revenues			
Service revenues	$ 92,291	$ 119,117	$ 211,408
Product revenues (1)	13,360	203	13,563
Service and product revenues	105,651	119,320	224,971
USF revenues	6,151	12,225	18,376
Total revenues	111,802	131,545	243,347
Cost of revenues			
Service cost of revenues (2)	39,195	22,100	61,295
Product cost of revenues (1)	13,202	2,016	15,218
Service and product cost of revenues	52,397	24,116	76,513
USF cost of revenues	6,151	12,225	18,376
Total cost of revenues	58,548	36,341	94,889
Gross margin			
Service margin	53,096	97,017	150,113
Product margin	158	(1,813)	(1,655)
Gross margin ex-USF (Service and product margin)	53,254	95,204	148,458
USF margin	—	—	—
Gross margin	$ 53,254	$ 95,204	$ 148,458
Gross margin %			
Service margin %	57.5%	81.4%	71.0%
Gross margin ex-USF (Service and product margin %)	50.4%	79.8%	66.0%
Gross margin %	47.6%	72.4%	61.0%

(1) Includes customer premise equipment, access, professional services, and shipping and handling.
(2) Excludes depreciation and amortization of $4,875 and $1,907 , respectively.

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Information about our segment results for the three months ended March 31, 2016 were as follows:

	Three Months Ended March 31, 2016		
	Business	Consumer	Total
Revenues			
Service revenues	$ 56,473	$ 137,772	$ 194,245
Product revenues (1)	12,912	147	13,059
Service and product revenues	69,385	137,919	207,304
USF revenues	4,435	15,085	19,520
Total revenues	73,820	153,004	226,824
Cost of revenues			
Service cost of revenues (2)	15,403	26,520	41,923
Product cost of revenues (1)	12,462	4,301	16,763
Service and product cost of revenues	27,865	30,821	58,686
USF cost of revenues	4,445	15,085	19,530
Total cost of revenues	32,310	45,906	78,216
Gross margin			
Service margin	41,070	111,252	152,322
Product margin	450	(4,154)	(3,704)
Gross margin ex-USF (Service and product margin)	41,520	107,098	148,618
USF margin	(10)	—	(10)
Gross margin	$ 41,510	$ 107,098	$ 148,608
Gross margin %			
Service margin %	72.7%	80.8%	78.4%
Gross margin ex-USF (Service and product margin %)	59.8%	77.7%	71.7%
Gross margin %	56.2%	70.0%	65.5%

(1) Includes customer premise equipment, access, professional services, and shipping and handling.
(2) Excludes depreciation and amortization of $4,319 and $2,514 , respectively.

Information about our operations by geographic location is as follows:

	Three Months Ended March 31,	
	2017	2016
Revenues:		
United States	$ 213,324	$ 217,217
Canada	7,445	6,073
United Kingdom	5,345	3,534
Other Countries (1)	17,233	—
	$ 243,347	$ 226,824

(1) No individual other international country represented greater than 7% of total revenue during the periods presented.

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	March 31, 2017	December 31, 2016
Long-lived assets:		
United States	$ 621,651	$ 629,269
United Kingdom	425	450
Israel	286	286
	$ 622,362	$ 630,005

Note 10. Subsequent Events

Sale of Hosted Infrastructure Product Line

On May 4, 2017, we entered into a definitive agreement to sell our Hosted Infrastructure product line for up to $4,000 . We will receive $1,000 at closing which is expected to occur in the second quarter of 2017, $500 six months from closing, and up to $2,500 based on the achievement of financial objectives for net sales during the 18 months following closing. The results of our Hosted Infrastructure product line are reported within our business segment. This disposal does not represent a strategic shift in operations and, therefore, does not qualify for presentation as discontinued operations.

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

You should read the following discussion together with our condensed consolidated financial statements and the related notes included elsewhere in this Form 10-Q and our audited financial statements included in our Annual Report on Form 10-K. This discussion contains forward-looking statements. These forward-looking statements are based on information available at the time the statements are made and/or management’s belief as of that time with respect to future events and involve risks and uncertainties that could cause actual results and outcomes to be materially different. Important factors that could cause such differences include but are not limited to: the competition we face; the expansion of competition in the cloud communications market; our ability to adapt to rapid changes in the cloud communications market; the nascent state of the cloud communications for business market; our ability to retain customers and attract new customers; the risk associated with developing and maintaining effective internal sales teams and effective distribution channels; risks related to the acquisition or integration of businesses we have acquired; security breaches and other compromises of information security; risks associated with sales of our services to medium-sized and enterprise customers; our reliance on third party hardware and software; our dependence on third party facilities, equipment, systems and services; system disruptions or flaws in our technology and systems; our ability to scale our business and grow efficiently; our dependence on third party vendors; the impact of fluctuations in economic conditions, particularly on our small and medium business customers; our ability to comply with data privacy and related regulatory matters; our ability to obtain or maintain relevant intellectual property licenses; failure to protect our trademarks and internally developed software; fraudulent use of our name or services; intellectual property and other litigation that have been and may be brought against us; reliance on third parties for our 911 services; uncertainties relating to regulation of VoIP services; risks associated with legislative, regulatory or judicial actions regarding our CPaaS products; the impact of governmental export controls or sanctions on our CPaaS products; our ability to establish and expand strategic alliances; risks associated with operating abroad; risks associated with the taxation of our business; risks associated with a material weakness in our internal controls; our dependence upon key personnel; governmental regulation and taxes in our international operations; liability under anti-corruption laws; our dependence on our customers' existing broadband connections; differences between our services and traditional telephone service; restrictions in our debt agreements that may limit our operating flexibility; foreign currency exchange risk; the market for our stock; our ability to obtain additional financing if required; any reinstatement of holdbacks by our credit card processors; our history of net losses and ability to achieve consistent profitability in the future; and other factors that are set forth in the “Risk Factors” in our Annual Report on Form 10-K, in our Quarterly Reports on Form 10-Q and in our Current Reports on Form 8-K. While we may elect to update forward-looking statements at some point in the future, we specifically disclaim any obligation to do so, and therefore, you should not rely on these forward-looking statements as representing our views as of any date subsequent to the date this Form 10-Q is filed with the Securities and Exchange Commission.

Financial Information Presentation

For the financial information discussed in this Quarterly Report on Form 10-Q, other than per share, per line and per seat amounts, dollar amounts are presented in thousands, except where noted. All trademarks are the property of their owners.

Overview and Strategy

We are a leading provider of cloud communications services for businesses and consumers. Our business services transform the way people work and businesses operate through a portfolio of communications solutions that enable internal collaboration among employees, while also keeping companies closely connected with their customers, across any mode of communication, on any cloud-connected device. Vonage customers can choose among or combine two separate service delivery options to suit their specific cloud communication needs. They can buy Vonage Business as a subscription and they can buy our Vonage API Platform and consume our cloud communication as a service product as programmable modules, delivered via application program interfaces (“APIs”). We also provide a robust suite of feature-rich residential communication solutions.

Business

For our Business customers, we provide innovative, cloud-based Unified Communications as a Service, or UCaaS, solutions, comprised of integrated voice, text, video, data, collaboration, and mobile applications over our flexible, scalable Session Initiation Protocol (SIP) based Voice over Internet Protocol, or VoIP, network. Through our acquisition of Nexmo in 2016, we also offer Communications Platform as a Service, or CPaaS, solutions designed to enhance the way businesses communicate with their customers by embedding communications into apps, websites and business processes. In combination, our products and services permit our business customers to communicate with their customers and employees through any cloud-connected device, in any place, at any time without the often costly investment required with on-site equipment. We have a robust set of product families tailored to serve the full range of the business value chain, from the small and medium business, or SMB, market, through mid-market and enterprise markets. We provide customers with multiple deployment options, designed to provide the reliability and quality of service they demand. We provide customers the ability to integrate our cloud communications platform with many cloud-based productivity and CRM solutions, including Google’s G Suite, Zendesk, Salesforce’s Sales Cloud, Oracle, and Clio.

Our Business strategy is to support the full range of business customers, using two product families: Vonage Essentials, based on our proprietary call processing platform that is purpose-built for SMB and mid-market customers; and Vonage Premier, based on Broadsoft's call processing platform in combination with other Vonage cloud based solutions, which serves larger customers, from mid-market businesses through large enterprises. We also organized our salesforce to address the full business market. We believe operating two platforms at scale enables us to deliver the right products and solutions to address the needs of diverse customers while maximizing our subscriber economics, regardless of segment served. Revenues are generated primarily through the sale of subscriptions for our UCaaS services. Our revenue generation efforts are focused on customer acquisition and retention as well as providing additional services to existing customers as they grow and scale.

Our diverse customer base spans a wide variety of industries, including manufacturing, automotive, legal, information technology, financial services, construction, real estate, engineering, healthcare, and non-profit.

Vonage Essentials . Vonage Essentials customers subscribe to our cloud-based communication services, delivered through our proprietary platform that is purpose-built for SMB and mid-market customers. Essentials provides a cost-effective, scalable, feature-rich solution, delivered over-the-top of a customer's broadband, typically month-to-month without a commitment. Vonage Essentials is sold primarily through our direct telesales and online channels, and is increasingly sold through our channel partners and field sales teams. We believe the strength of the Vonage brand directly contributes to a lower-cost customer acquisition model and provides attractive subscriber economics.

Vonage Premier. Our Vonage Premier offerings are tailor-made for the large mid-market and enterprise segments. Vonage Premier is a feature-rich/fully managed solution that utilizes Broadsoft Inc.'s ("Broadsoft") enterprise-grade call processing platform, in combination with other cloud services like advanced contact center, video conferencing and speak2dial, and can be provided with high-level quality of service ("QoS"), which is generally delivered over our national MPLS network, with 21 network Points of Presence (POPs) across the country. Vonage can also provide QoS-level quality over-the-top of the customer's broadband through our Smart-WAN router solution. Customers value our proprietary provisioning and feature-management tool, named Zeus, which enables the rapid deployment of solutions directly by Vonage while giving full visibility to our channel partners and our customers. Further differentiating Vonage is our robust service delivery team comprised of team members specializing in project management, voice and data provisioning, and line number porting. This team is intensely focused on providing an outstanding customer experience, and is rapidly becoming a competitive differentiator.

Our Vonage Premier offering is sold primarily through our channel partners, and our field and enterprise sales teams, and generally requires a three-year contract. We are a preferred provider for many of the largest master agents in the country, harnessing a network of over 20,000 sub agents selling both Vonage Premier and Vonage Essentials. We believe we have one of the largest multi-channel distribution sales platforms in our industry to serve the full range of business customers. We plan to capitalize on the growing adoption of cloud-based communications and collaboration solutions by continuing to expand our salesforce, expand into new markets, and enhance our relationships with existing customers to provide additional functionality and overall business value that can be achieved with our UCaaS platform.

Nexmo, the Vonage API Platform . We are a global leader in the CPaaS segment of the cloud communications market, providing innovative communication APIs for text messaging and voice communications, allowing developers and enterprises to embed contextual communications into mobile apps, websites and business workflows via text, social media, chat apps and voice. With just few lines of code, developers can send and receive text messages and build programmable voice applications. Nexmo, the Vonage API Platform can scale from one API call to billions. The platform makes it easy for any of our over 200,000 developers to access communication services via software and APIs. Through Nexmo we have a global network of interconnected carriers delivering our API-based communications platform, enabling businesses to communicate with their customers reliably and with ease, no matter where in the world they are located. The addition of our Nexmo products to our Business offering allows our customers to address their full communications needs, from employee to employee communications through business to customer communications.

Consumer

For our Consumer customers, we enable users to access and utilize our services and features, via a single "identity," either a number or user name, regardless of how they are connected to the Internet, including over 3G, LTE, Cable, or DSL broadband networks. This technology enables us to offer our Consumer customers attractively priced voice and messaging services and other features around the world on a variety of devices.

Our Consumer strategy is focused on the continued penetration of our core North American markets, where we will continue to provide value in international long distance and target under-served ethnic segments. The markets for international long distance allow us to leverage our VoIP network by providing customers a low-cost and feature-rich alternative to services offered by telecom, cable, and international calling card providers.

We generate revenue through the acquisition and retention of Consumer customers. We are focused on optimizing the Consumer business for profitability to improve the strong cash flows of the business. During 2016, we continued our disciplined focus on marketing efficiency by shifting customer acquisition spend to our higher performing channels, improving the quality of customers we acquire and driving lower churn, all of which drive higher customer life-time value. This focus has led to a reallocation of marketing spend to our Business segment.

The result of these initiatives has been to create a strong cash flow business which provides financial stability, as well as cost synergies and structural advantages to our Business segment.

Services outside of the United States . We currently have UCaaS and consumer operations in the United States, United Kingdom, and Canada and believe that our low- cost Internet based communications platform enables us to cost effectively deliver voice and messaging services to other locations throughout the world. Through Nexmo, we have operations in the United States, United Kingdom, Hong Kong, and Singapore, and provide CPaaS solutions to our customers located in many countries around the world.

We had approximately 2.3 million combined consumer subscriber lines and business seats as of March 31, 2017 . Customers in the United States represented 88% of our consolidated revenues at March 31, 2017 , with the balance in Canada, the United Kingdom, and other countries. Nexmo has operations in the United States, United Kingdom, Hong Kong, and Singapore, and provides CPaaS solutions to our customers located in many countries around the world.

Trends in Our Industry

A number of trends in our industry have a significant effect on our results of operations and are important to an understanding of our financial statements.

Competitive landscape. We face intense competition from traditional telephone companies, wireless companies, cable companies, and alternative communication providers. Most traditional wireline and wireless telephone service providers and cable companies are substantially larger and better capitalized than we are and have the advantage of a large existing customer base. In addition, because our competitors provide other services, they often choose to offer VoIP services or other voice services as part of a bundle that includes other products, such as video, high speed Internet access, and wireless telephone service, which we do not offer. In addition, such competitors may in the future require new customers or existing customers making changes to their service to purchase voice services when purchasing high speed Internet access. Further, as wireless providers offer more minutes at lower prices, better coverage, and companion landline alternative services, their services have become more attractive to households as a replacement for wireline service. We also compete against alternative communication providers, such as Twilio, Ooma, magicJack, Skype, WhatsApp, and Google Voice. Some of these service providers have chosen to sacrifice telephony revenue in order to gain market share and have offered their services at low prices or for free. As we continue to introduce applications that integrate different forms of voice and messaging services over multiple devices, we are facing competition from emerging competitors focused on similar integration, as well as from alternative voice communication providers. In addition, our competitors have partnered and may in the future partner with other competitors to offer products and services, leveraging their collective competitive positions. We also are subject to the risk of future disruptive technologies. In connection with our emphasis on the international long distance market in the United States, we face competition from low-cost international calling cards and VoIP providers in addition to traditional telephone companies, cable companies, and wireless companies, each of which may implement promotional pricing targeting international long distance callers.

Regulation. Our business has developed in a relatively lightly regulated environment. The United States and other countries, however, are examining how VoIP services should be regulated. In particular, state telecommunications regulators continue to try to regulate VoIP service despite the FCC's 2004 Vonage Preemption Order that preempted state regulation. For example, on July 28, 2015, the Minnesota Public Utility Commission found that it has authority to regulate Charter's 'fixed' interconnected VoIP service. In addition to regulatory matters that directly address VoIP, a number of other regulatory initiatives could impact our business. One such regulatory initiative is net neutrality. On February 26, 2015, the FCC adopted strong net neutrality rules. Several parties filed appeals which are pending at the D.C. Circuit Court of Appeals. Oral arguments at the D.C. Circuit Court of Appeals were held on December 4, 2015. On June 14, 2016, the D.C. Circuit of Appeals denied the appeals. Several parties filed a petition for rehearing en banc on July 29, 2016. The petition is pending. See also the discussion under "Regulation" in Note 7 to our financial statements for a discussion of regulatory issues that impact us.

Key Operating Data

The table below includes key operating data that our management uses to measure the growth and operating performance of the business segment:

Business	**Three Months Ended March 31,**	
	2017	**2016**
Revenues (1)	$ 111,802	$ 73,820
Average monthly revenues per seat (2)	$ 43.98	$ 44.25
Seats (at period end) (2) (3)	658,792	570,358
Revenue churn (2)	1.4%	1.3%

(1) Includes revenue of $26,245 from CPaaS, which was acquired on June 3, 2016, for the three months ended March 31, 2017 .
(2) UCaaS only.
(3) Seats (at period end) included an adjustment of 6,212 for the three month ended March 31, 2016.

Revenues. Business revenues includes revenues from our business customers from acquired entities and excludes revenues from our legacy business customers.

Average monthly revenues per seat. Average monthly revenues per seat for a particular period is calculated by dividing our revenues for that period by the simple average number of seats for the period, and dividing the result by the number of months in the period. The simple average number of seats for the period is the number of seats on the first day of the period, plus the number of seats on the last day of the period, divided by two. Our average monthly revenues per seat decreased from $44.25 for the three months ended March 31, 2016 to $43.98 for the three months ended March 31, 2017 due to our successful acquisitions and subsequent organic growth in the mid-market and enterprise space.

Seats. S eats include, as of a particular date, all paid seats from which a customer can make an outbound telephone call on that date and virtual seats. Seats exclude electronic fax lines and toll free numbers, which do not allow outbound telephone calls by customers. Seats increased from 570,358 as of March 31, 2016 to 658,792 as of March 31, 2017 . This increase is due to continued growth in our business customers as we have increased marketing investment to attract these more profitable customers.

Revenue Churn. Revenue churn is calculated by dividing the monthly recurring revenue from customers that have terminated during a period by the simple average of the total monthly recurring revenue from all customers in a given period. The simple average of total monthly recurring revenue from all customers during the period is the total monthly recurring revenue on the first day of the period, plus the total monthly recurring revenue on the last day of the period, divided by two. Terminations, as used in the calculation of churn statistics, do not include customers terminated during the period if termination occurred within the first month after activation. Other companies may calculate revenue churn differently, and their revenue churn data may not be directly comparable to ours. Revenue churn was 1.4% for the three months ended March 31, 2017 and the three months ended December 31, 2016 , respectively, and 1.3% for the three months ended March 31, 2016 . Our revenue churn will fluctuate over time due to economic conditions, loss of customers who are acquired, and competitive pressures including promotional pricing. We are continuing to invest in our overall quality of service which includes customer care headcount and systems, billing systems, on-boarding processes and self-service options to ensure we scale our processes to our growth and continue to improve the overall customer experience.

The table below includes key operating data that our management uses to measure the growth and operating performance of the consumer segment:

Consumer	**Three Months Ended March 31,**	
	2017	**2016**
Revenues	$ 131,545	$ 153,004
Average monthly revenues per subscriber line	$ 26.10	$ 26.68
Subscriber lines (at period end)	1,648,927	1,881,826
Customer churn	2.2%	2.2%

Revenues. Consumer revenues represents revenue from our consumer customers including revenues from our legacy business customers using Vonage VoIP products.

Average monthly revenues per subscriber line. Average monthly revenues per subscriber line for a particular period is calculated by dividing our revenues for that period by the simple average number of subscriber lines for the period, and dividing the result by the number of months in the period. The simple average number of subscriber lines for the period is the number of subscriber lines on the first day of the period, plus the number of subscriber lines on the last day of the period, divided by two. Our average monthly revenues per subscriber line decreased from $26.68 for the three months ended March 31, 2016 to $26.10 for the three months ended March 31, 2017 due primarily to lower ILD pay-per-use revenue.

Subscriber lines. Our subscriber lines include, as of a particular date, all paid subscriber lines from which a customer can make an outbound telephone call on that date. Our subscriber lines include fax lines, including fax lines bundled with subscriber lines in our small office home office calling plans and soft phones, but do not include our virtual phone numbers and toll free numbers, which only allow inbound telephone calls to customers. Subscriber lines decreased from 1,881,826 as of March 31, 2016 to 1,648,927 as of March 31, 2017 , reflecting planned actions to enhance the profitability of the assisted sales channel by eliminating lower performing locations and restructuring the pricing offers, and to shift investment to our business market.

Customer churn. Customer churn is calculated by dividing the number of customers that have terminated during a period by the simple average of number of customers in a given period. The simple average number of customers during the period is the number of customers on the first day of the period, plus the number of customers on the last day of the period, divided by two. Terminations, as used in the calculation of churn statistics, do not include customers terminated during the period if termination occurred within the first month after activation. Other companies may calculate customer churn differently, and their customer churn data may not be directly comparable to ours. Customer churn was flat at 2.2% for the three months ended March 31, 2017 , the three months ended December 31, 2016 , and the three months ended March 31, 2016 . We monitor customer churn on a daily basis and use it as an indicator of the level of customer satisfaction. Customers who have been with us for a year or more tend to have a lower churn rate than customers who have not. In addition, our customers who are international callers generally churn at a lower rate than customers who are domestic callers. Our customer churn will fluctuate over time due to economic conditions, competitive pressures including promotional pricing targeting international long distance callers, marketplace perception of our services, and our ability to provide high quality customer care and network quality and add future innovative products and services. Customer churn differs from our previously reported average monthly customer churn in that our business customers are no longer included in this metric. See the discussion below for detail regarding churn impacting our business customers.

Revenues

Revenues consist of services revenue and customer equipment and shipping revenue. Substantially all of our revenues are services revenue. For consumer customers in the United States, we offer domestic and international rate plans, including a variety of residential plans and mobile plans. The “Vonage World” plan, available in the United States and Canada, offers unlimited calling across the United States and Puerto Rico, unlimited international calling to over 60 countries including India, Mexico, and China, subject to certain restrictions, and free voicemail to text messages with Vonage Visual Voicemail. Each of our unlimited plans other than Vonage World offers unlimited domestic calling as well as unlimited calling to Puerto Rico, Canada, and selected European countries, subject to certain restrictions. Each of our basic plans offers a limited number of domestic calling minutes per month. We offer similar plans in Canada. Under our basic plans, we charge on a per minute basis when the number of domestic calling minutes included in the plan is exceeded for a particular month. International calls (except for calls to Puerto Rico, Canada and certain European countries under our unlimited plans and a variety of countries under international calling plans and Vonage World) are charged on a per minute basis. These per minute fees are not included in our monthly subscription fees. Through our acquisitions of Vocalocity, Telesphere, Simple Signal, and iCore, we offer SMB, mid-market, and enterprise customers several service plans with different pricing structures and contractual requirements ranging in duration from month-to-month to three years. The service plans include an array of basic and enhanced features applicable to the needs of SMB and SOHO customers. In addition, we provide managed equipment to business customers for which the customers pay a monthly fee. Customers also have the opportunity to purchase premium features for additional fees. In addition, through our acquisition of Nexmo we derive revenue from usage-based fees earned from customers using our cloud-based software products. These usage-based software products include our messaging, voice, Verify and chat APIs. Usage-based fees include number of text messages sent or received using our messaging APIs, minutes of call duration activity for our voice APIs, and number of converted authentications for our Verify API.

We derive most of our services revenue from monthly subscription fees that we charge our customers under our service plans. We also offer residential fax service, virtual phone numbers, toll free numbers and other services, and charge an additional monthly fee for each service. We automatically charge these fees to our customers’ credit cards, debit cards, or electronic check payments (“ECP”), monthly in advance. We also automatically charge the per minute fees not included in our monthly subscription fees to our customers’ credit cards, debit cards or ECP monthly in arrears unless they exceed a certain dollar threshold, in which case they are charged immediately.

By collecting monthly subscription fees in advance and certain other charges immediately after they are incurred, we are able to reduce the amount of accounts receivable that we have outstanding, thus allowing us to have lower working capital requirements. Collecting in this manner also helps us mitigate bad debt losses, which are recorded as a reduction to revenue. If a customer's credit card, debit card or ECP is declined, we generally suspend international calling capabilities as well as the customer's ability to incur domestic usage charges in excess of their plan minutes. Historically, in most cases, we are able to correct the problem with the customer within the current monthly billing cycle. If the customer's credit card, debit card or ECP could not be successfully processed during three billing cycles (i.e., the current and two subsequent monthly billing cycles), we terminate the account.

In the United States, we charge regulatory, compliance, E-911, and intellectual property-related recovery fees on a monthly basis to defray costs, and to cover taxes that we are charged by the suppliers of telecommunications services. In addition, we recognize revenue on a gross basis for contributions to the Federal Universal Service Fund ("USF") and related fees. All other taxes are recorded on a net basis.

In addition, in certain instances, we charge disconnect fees which are recognized as revenue at the time the disconnect fees are collected from our customer.

Services revenue is offset by the cost of certain customer acquisition activities, such as rebates and promotions.

Customer equipment and shipping revenue consists of revenue from sales of customer equipment to our wholesalers or directly to customers and retailers. In addition, customer equipment and shipping revenues include revenues from the sale of VoIP telephones in order to access our small and medium business services. Customer equipment and shipping revenue also includes the fees, when collected, that we charge our customers for shipping any equipment to them.

Operating Expenses

Operating expenses consist of cost of service, cost of goods sold, sales and marketing expense, engineering and development expense, general and administrative expense, and depreciation and amortization.

Cost of service. *C* ost of service primarily consists of fees that we pay to third parties on an ongoing basis in order to provide our services. These fees include:

- Access charges that we pay to other companies to terminate domestic and international calls on the public switched telephone network, with a portion of these payments ultimately being made to incumbent telephone companies. When a Vonage subscriber calls another Vonage subscriber, we do not pay an access charge.
- The cost of leasing Internet transit services from multiple Internet service providers. This Internet connectivity is used to carry VoIP session initiation signaling and packetized audio media between our subscribers and our regional data centers.
- The cost of leasing from other companies the telephone numbers that we provide to our customers. We lease these telephone numbers on a monthly basis.
- The cost of co-locating our regional data connection point equipment in third- party facilities owned by other companies, Internet service providers or collocation facility providers .
- The cost of providing local number portability, which allows customers to move their existing telephone numbers from another provider to our service. Only regulated telecommunications providers have access to the centralized number databases that facilitate this process. Because we are not a regulated telecommunications provider, we must pay other telecommunications providers to process our local number portability requests.
- The cost of complying with FCC regulations regarding VoIP emergency services, which require us to provide enhanced emergency dialing capabilities to transmit 911 calls for our customers.
- Taxes that we pay on our purchase of telecommunications services from our suppliers or imposed by government agencies such as Federal USF and related fees.
- License fees for use of third party intellectual property.
- The personnel and related expenses of certain network operations and technical support employees and contractors.

Cost of goods sold. Cost of goods sold primarily consists of costs that we incur when a customer first subscribes to our service. These costs include:

- The cost of equipment sold to our customers or retailers.

- The cost of shipping and handling.
- The cost of certain products including equipment or services that we give customers as promotions.

Sales and marketing expense. Sales and marketing expense includes:

- Advertising costs, which comprise a majority of our sales and marketing expense and include online, television, direct mail, alternative media, promotions, sponsorships, and inbound and outbound telemarketing.
- Creative and production costs.
- The costs to serve and track our online advertising.
- Certain amounts we pay to retailers for activation commissions.
- The cost associated with our customer referral program.
- The personnel and related expenses of sales and marketing employees and contractors.
- Transaction fees paid to credit card, debit card, and ECP companies and other third party billers such as iTunes, which may include a per transaction charge in addition to a percent of billings charge.
- The cost of customer support and collections.
- Systems and information technology support.

Engineering and development expense. Engineering and development expense includes:

- The personnel and related expenses of developers responsible for new products and software engineers maintaining and enhancing existing products.

General and administrative expense. General and administrative expense includes:

- Personnel and related costs for executive, legal, finance, and human resources employees and contractors.
- Share-based expense related to share-based awards to employees, directors, and consultants.
- Rent and related expenses.
- Professional fees for legal, accounting, tax, public relations, lobbying, and development activities.
- Acquisition related transaction and integration costs.
- Litigation settlements.

Depreciation and amortization expenses. Depreciation and amortization expenses include:

- Depreciation of our network equipment, furniture and fixtures, and employee computer equipment.
- Depreciation of Company-owned equipment in use at customer premises.
- Amortization of leasehold improvements and purchased and developed software.
- Amortization of intangible assets (developed technology, customer relationships, non-compete agreements, patents, trademarks and trade names).
- Loss on disposal or impairment of property and equipment.

Other Income (Expense)

Other Income (Expense) includes:

- Interest income on cash and cash equivalents.
- Interest expense on notes payable, patent litigation judgments and settlements and capital leases.
- Amortization of debt related costs.
- Accretion of notes.
- Realized and unrealized gains (losses) on foreign currency.
- Gain (loss) on extinguishment of notes.
- Realized gains (losses) on sale of marketable securities.

Results of Operations

The following table sets forth, as a percentage of total revenues, our consolidated statement of operations for the periods indicated:

	Three Months Ended March 31,	
	2017	2016
Total revenues	100 %	100 %
Operating Expenses:		
Cost of service (excluding depreciation and amortization)	36	30
Cost of goods sold	3	4
Sales and marketing	34	35
Engineering and development	3	3
General and administrative	15	12
Depreciation and amortization	7	8
	98	92
Income from operations	2	8
Other Income (Expense):		
Interest income	—	—
Interest expense	(2)	(1)
Other income (expense), net	—	—
	(2)	(1)
Income before income tax expense	—	7
Income tax expense	2	(4)
Net income	2 %	3 %

Summary of Results for the Three Months Ended March 31, 2017 and March 31, 2016

Revenues, Cost of Service and Cost of Goods Sold

(in thousands, except percentages)	Three Months Ended March 31,			
	2017	2016	Dollar Change	Percent Change
Revenues	$ 243,347	$ 226,824	$ 16,523	7 %
Cost of service (1)	87,596	69,150	18,446	27 %
Cost of goods sold	7,293	9,066	(1,773)	(20)%
	148,458	148,608	(150)	— %

(1) Excludes depreciation and amortization of $6,782 and $6,833 , respectively.

Segments

Historically, we have had two operating segments that we have aggregated for reporting purposes. In 2016, as a result of the acquisition of Nexmo, we no longer meet the aggregation criteria for operating segments and now have the following two reportable segments:

Business

For our Business customers, we provide innovative, cloud-based Unified Communications as a Service, or UCaaS, solutions, comprised of integrated voice, text, video, data, collaboration, and mobile applications over our flexible, scalable Session Initiation Protocol (SIP) based Voice over Internet Protocol, or VoIP, network. Through Nexmo, the Vonage API Platform, we also offer Communications Platform as a Service, or CPaaS, solutions designed to enhance the way businesses communicate with their customers embedding communications into apps, websites and business processes. Together we have a robust set of product families tailored to serve the full range of the business value chain, from the small and medium business, or SMB, market, through mid-market and enterprise markets. We provide customers with multiple deployment options, designed to provide the reliability and quality of service they demand. We provide customers the ability to integrate our cloud communications platform with many cloud-based productivity and CRM solutions, including Google's G Suite, Zendesk, Salesforce's Sales Cloud, Oracle, Clio, and other CRM solutions. In combination, our products and services permit our business customers to communicate with their customers and employees through any cloud-connected device, in any place, at any time without the often costly investment required with on-site equipment.

Consumer

For our Consumer customers, we enable users to access and utilize our UCaaS services and features, via a single "identity," either a number or user name, regardless of how they are connected to the Internet, including over 3G, LTE, Cable, or DSL broadband networks. This technology enables us to offer our Consumer customers attractively priced voice and messaging services and other features around the world on a variety of devices.

For our segments we categorize revenues as follows:

Services revenues. Services revenues consists primarily of revenue attributable to our communication services for Consumer and UCaaS and CPaaS services for Business,

Product revenues . Product revenues includes equipment sold to customers, shipping and handling, professional services, and broadband access.

USF revenues. USF revenues represent contributions to the Federal Universal Service Fund ("USF") and related fees.

For our segments we categorize cost of revenues as follows:

Services cost of revenues. Services cost of revenues consists of costs associated with network operations and technical support personnel, communication origination, and termination services provided by third party carriers and excludes depreciation and amortization.

Product cost of revenues . Product cost of revenues includes equipment sold to customers, shipping and handling, professional services, cost of certain products including equipment or services that we give customers as promotions, and broadband access.

USF cost of revenues. USF cost of revenues represent contributions to the Federal Universal Service Fund ("USF") and related fees.

Business Revenues, Cost of Revenues and Gross Margin

	Three Months Ended March 31,			
(in thousands, except percentages)	**2017**	**2016**	**Dollar Change**	**Percent Change**
Revenues				
Service revenues	92,291	56,473	35,818	63%
Product revenues (1)	13,360	12,912	448	3%
Service and product revenues	105,651	69,385	36,266	52%
USF revenues	6,151	4,435	1,716	39%
Total revenues	111,802	73,820	37,982	51%
Cost of revenues				
Service cost of revenues (2)	39,195	15,403	23,792	154%
Product cost of revenues (1)	13,202	12,462	740	6%
Service and product cost of revenues	52,397	27,865	24,532	88%
USF cost of revenues	6,151	4,445	1,706	38%
Total cost of revenues	58,548	32,310	26,238	81%
Gross margin				
Service margin	53,096	41,070	12,026	29%
Gross margin ex-USF (Service and product margin)	53,254	41,520	11,734	28%
Gross margin	53,254	41,510	11,744	28%

Gross Margin %		
Service margin %	57.5%	72.7%
Gross margin ex-USF (Service and product margin) %	50.4%	59.8%
Gross margin %	47.6%	56.2%

(1) Includes customer premise equipment, access, professional services, and shipping and handling.
(2) Excludes depreciation and amortization of $4,875 and $4,319 , respectively.

Three Months Ended March 31, 2017 compared to Three Months Ended March 31, 2016

Service revenues. Service revenues increased by $35,818 , or 63% , due primarily to Nexmo which was acquired on June 3, 2016 and to the increase in the number of Business seats as we have shifted marketing investment from Consumer to attract more profitable business customers.

Product revenues. Product revenues increased by $448 , or 3% , due to the increase in customers' equipment and broadband access revenues as a result of higher new customer additions.

USF revenues. USF revenues increased by $1,716 , or 39% , due to synchronization of methodologies across Business segment and increase in the number of Business seats.

Service cost of revenues. Service cost of revenues increased by $23,792 , or 154% , due primarily to Nexmo which was acquired on June 3, 2016 and by higher technical care costs and network operations cost in support of growth in segment.

Product cost of revenues. Product (including access) cost of revenues increased by $740 , or 6% , due to the increase in customers' equipment and broadband access costs as a result of higher new customer additions and higher installation costs.

USF cost of revenues. USF cost of revenues increased by $1,706 , or 38% , due to synchronization of methodologies across Business segment and increase in the number of Business seats.

Consumer Revenues, Cost of Revenues and Gross Margin

(in thousands, except percentages)	Three Months Ended March 31, 2017	2016	Dollar Change	Percent Change
Revenues				
Service revenues	119,117	137,772	(18,655)	(14)%
Product revenues (1)	203	147	56	38 %
Service and product revenues	119,320	137,919	(18,599)	(13)%
USF revenues	12,225	15,085	(2,860)	(19)%
Total revenues	131,545	153,004	(21,459)	(14)%
Cost of revenues				
Service cost of revenues (2)	22,100	26,520	(4,420)	(17)%
Product cost of revenues (1)	2,016	4,301	(2,285)	(53)%
Service and product cost of revenues	24,116	30,821	(6,705)	(22)%
USF cost of revenues	12,225	15,085	(2,860)	(19)%
Total cost of revenues	36,341	45,906	(9,565)	(21)%
Gross margin				
Service margin	97,017	111,252	(14,235)	(13)%
Gross margin ex-USF (Service and product margin)	95,204	107,098	(11,894)	(11)%
Gross margin	95,204	107,098	(11,894)	(11)%

	2017	2016
Gross Margin %		
Service margin %	81.4%	80.8%
Gross margin ex-USF (Service and product margin) %	79.8%	77.7%
Gross margin %	72.4%	70.0%

(1) Includes customer premise equipment, professional services, and shipping and handling.
(2) Excludes depreciation and amortization of $1,907 and $2,514 , respectively.

Three Months Ended March 31, 2017 compared to Three Months Ended March 31, 2016

Service revenues . Service revenues decreased by $18,655 , or 14% , due to fewer subscriber lines reflecting planned actions to enhance profitability by modulating marketing spend, restructuring pricing offers, and targeting consumers with lower subscriber acquisition cost and churn profiles.

Product revenues . Product revenues increased by $56 , or 38% .

USF revenues . USF revenues decreased by $2,860 , or 19% , due to lower subscriber lines.

Service cost of revenues . Service cost of revenues decreased by $4,420 , or 17% due to fewer subscriber lines reflecting planned actions to enhance profitability by modulating marketing spend, restructuring pricing offers, and targeting consumers with lower subscriber acquisition cost and churn profiles.

Product cost of revenues . Product cost of revenues decreased by $2,285 , or 53% , due to the decrease in customers' equipment costs due to lower new customer additions and a decrease in reserve related to inventory.

USF cost of revenues . USF cost of revenues decreased by $2,860 , or 19% due to lower subscriber lines.

Sales and Marketing

(in thousands, except percentages)	Three Months Ended March 31,			
	2017	2016	Dollar Change	Percent Change
Sales and marketing	$ 81,931	$ 79,601	$ 2,330	3%

Three Months Ended March 31, 2017 compared to Three Months Ended March 31, 2016

Sales and marketing. Sales and marketing expense increased by $2,330 , or 3% , due to an increase in Business marketing as we have shifted marketing investment to attract these more profitable customers and an increase from Nexmo which was acquired in June 2016 which was offset by a reduction in Consumer marketing reflecting planned actions to enhance profitability by targeting consumers with lower subscriber acquisition cost and churn profiles.

Engineering and Development

(in thousands, except percentages)	Three Months Ended March 31,			
	2017	2016	Dollar Change	Percent Change
Engineering and development	$ 8,370	$ 6,834	$ 1,536	22%

Three Months Ended March 31, 2017 compared to Three Months Ended March 31, 2016

Engineering and development. Engineering and development expense increased by $1,536 , or 22% , due to incremental investment in new business products and services and the acquisition of Nexmo in June 2016.

General and Administrative

(in thousands, except percentages)	Three Months Ended March 31,			
	2017	2016	Dollar Change	Percent Change
General and administrative	$ 35,086	$ 26,670	$ 8,416	32%

Three Months Ended March 31, 2017 compared to Three Months Ended March 31, 2016

General and administrative. General and administrative expense increased by $8,416 , or 32% , primarily due to the addition of Nexmo and Nexmo acquisition related costs.

Depreciation and Amortization

(in thousands, except percentages)	Three Months Ended March 31,			
	2017	2016	Dollar Change	Percent Change
Depreciation and amortization	$ 17,947	$ 16,979	$ 968	6%

Three Months Ended March 31, 2017 compared to Three Months Ended March 31, 2016

Depreciation and amortization. The increase in depreciation and amortization of $968 , or 6% , was primarily due to the amortization of acquisition-related intangibles from the acquisition of Nexmo in June 2016.

Other Income (Expense)

(in thousands, except percentages)	Three Months Ended March 31,			
	2017	2016	Dollar Change	Percent Change
Interest income	$ 5	$ 21	$ (16)	(76)%
Interest expense	(3,703)	(2,446)	(1,257)	(51)%
Other income (expense), net	(220)	154	(374)	(243)%
	$ (3,918)	$ (2,271)	$ (1,647)	

Three Months Ended March 31, 2017 compared to Three Months Ended March 31, 2016

Interest expense. The increase in interest expense of $1,257 , or 51% , was due mainly to the funds we borrowed from the 2016 Credit Facility in June 2016 in connection with the acquisition of Nexmo and the additional funds we borrowed in the first quarter of 2017 to fund operations.

Other income (expense), net. The decrease in other income (expense), net of $374 , or (243)% , was due mainly to currency fluctuation.

Provision for Income Taxes

(in thousands, except percentages)	Three Months Ended March 31,			
	2017	2016	Dollar Change	Percent Change
Income tax benefit (expense)	$ 4,707	$ (8,322)	$ 13,029	157%
Effective tax rate	(390.3)%	51.2%		

We recognize income tax expense equal to pre-tax income multiplied by our effective income tax rate. In addition, adjustments are recorded for discrete period items and changes to our state effective tax rate which can cause the rate to fluctuate from quarter to quarter. In the first quarter of 2017 a discrete period tax benefit of $6,031 was recorded related excess tax benefits on equity compensation. In the first quarter of 2016 a discrete period tax expense of $1,220 was recorded related to expired stock options.

The provision also includes the federal alternative minimum tax and state and local income taxes.

The effective tax rate is calculated by dividing income tax expense by income before income tax expense. The 2017 estimated annual effective tax rate is expected to approximate 43.5% , but may fluctuate each quarter due to our foreign operations and certain discrete period transactions.

Liquidity and Capital Resources

Overview

The following table sets forth a summary of our cash flows for the periods indicated:

	Three Months Ended March 31,	
	2017	2016
	(in thousands)	
Net cash provided by operating activities	$ 17,261	$ 17,468
Net cash used in investing activities	(6,759)	(10,877)
Net cash used in financing activities	(13,540)	(28,995)

For the three months ended March 31, 2017 , we generated income from operations. We expect to continue to balance efforts to grow our revenue while consistently achieving operating profitability. To grow our revenue, we continue to make investments in growth initiatives, marketing, application development, network quality and expansion, and customer care. Although we believe we will achieve consistent profitability in the future, we ultimately may not be successful and we may not achieve consistent profitability. We believe that cash flow from operations and cash on hand will fund our operations for at least the next twelve months.

Acquisition of Nexmo

Nexmo was acquired on June 3, 2016. Nexmo shareholders are receiving consideration of $231,122. Of the consideration, $194,684 (net of cash acquired of $16,094) was paid at close, consisting of $163,093 of cash (net of $16,094 of cash acquired) and 6,823 in shares of Vonage common stock valued at $31,591. The remaining $36,438 of the $231,122 purchase price is in the form of restricted cash, restricted stock and options held by Nexmo management and employees, subject to vesting requirements over time. In addition there was an additional earn-out opportunity of up to $20,000 contingent upon Nexmo achieving certain performance targets. Nexmo did not achieve performance targets but the parties agreed to a $5,000 settlement that was paid in the first quarter of 2017. We financed the transaction with $179,000 from our 2016 Credit Facility.

2016 Financing

On June 3, 2016, we entered into Amendment No. 1 to the Amended and Restated Credit Agreement (the "2016 Credit Facility") consisting of a $125,000 term note and a $325,000 revolving credit facility. The co-borrowers under the 2016 Credit Facility are the Company and Vonage America Inc., the Company's wholly owned subsidiary. Obligations under the 2016 Credit Facility are guaranteed, fully and unconditionally, by the Company's other United States material subsidiaries and are secured by substantially all of the assets of each borrower and each guarantor. The lenders under the 2016 Credit Facility are JPMorgan Chase Bank, N.A., Citizens Bank, N.A., Fifth Third Bank, MUFG Union Bank, N.A., Silicon Valley Bank, SunTrust Bank, Keybank National Association, Santander Bank, N.A., Capital One National Association, and First Niagara Bank, N.A. J.P. Morgan Securities LLC and Citizens Bank, N.A. acted as joint lead bookrunners, and J.P. Morgan Securities LLC, Citizens Bank, N.A., Fifth Third Bank, MUFG Union Bank, N.A., Silicon Valley Bank, and SunTrust Robinson Humphrey Inc. acted as joint lead arrangers.

Use of Proceeds

We used $197,750 of the net available proceeds of the 2016 Credit Facility to retire all of the debt under our 2015 Credit Facility. We used $179,000 from our 2016 Credit Facility in connection with the acquisition of Nexmo on June 3, 2016. Remaining proceeds from the term note and the undrawn revolving credit facility under the 2016 Credit Facility will be used for general corporate purposes. We also incurred fees of $1,316 in connection with the 2016 Credit Facility, of which $395 was allocated to the term note and $921 was allocated to the revolving credit facility. The unamortized fees of $2,740 in connection with the 2015 Credit Facility were allocated as follows: $930 to the term note and $1,810 to the revolving credit facility. In adopting ASU 2015-03, fees allocated to the term note were reported in the balance sheet as a direct deduction from the face amount of the liability and in adopting ASU 2015-15, fees allocated to the revolving credit facility were reported in the balance sheet as an asset. These fees are amortized to interest expenses over the life of the debt using the effective interest method for the term note and straight line method for the revolving credit facility.

Repayments

We made mandatory repayments of $4,688 under the term note for the three months ended March 31, 2017 .

2016 Credit Facility Terms

The following description summarizes the material terms of the 2016 Credit Facility:

The loans under the 2016 Credit Facility mature in June 2020. Principal amounts under the 2016 Credit Facility are repayable in quarterly installments of approximately $4,688 for the term note. The unused portion of our revolving credit facility incurs a 0.45% commitment fee. Such commitment fee will be reduced to 0.40% if our consolidated leverage ratio is greater than or equal to 1.50 to 1.00 and less than 2.50 to 1.00, 0.375% if our consolidated leverage ratio is greater than or equal to 0.75 to 1.00 and less than 1.50 to 1.00, and to 0.35% if our consolidated leverage ratio is less than 0.75 to 1.00.

Outstanding amounts under the 2016 Credit Facility, at our option, will bear interest at:

- LIBOR (applicable to one-, two-, three-, six-, or twelve-month periods) plus an applicable margin equal to 2.50% if our consolidated leverage ratio is less than 0.75 to 1.00, 2.75% if our consolidated leverage ratio is greater than or equal to 0.75 to 1.00 and less than 1.50 to 1.00, 3.00% if our consolidated leverage ratio is greater than or equal to 1.50 to 1.00 and less than 2.5 to 1.00, and 3.25% if our consolidated leverage ratio is greater than or equal to 2.50 to 1.00, payable on the last day of each relevant interest period or, if the interest period is longer than three months, each day that is three months after the first day of the interest period, or
- the base rate determined by reference to the highest of (a) the prime rate of JPMorgan Chase Bank, N.A., (b) the federal funds effective rate from time to time plus 0.50% , and (c) the adjusted LIBO rate applicable to one month interest periods plus 1.00% , plus an applicable margin equal to 1.50% if our consolidated leverage ratio is less than 0.75 to 1.00, 1.75% if our consolidated leverage ratio is greater than or equal to 0.75 to 1.00 and less than 1.50 to 1.00, 2.00% if our consolidated leverage ratio is greater than or equal to 1.50 to 1.00 and less than 2.50 to 1.00, and

2.25% if our consolidated leverage ratio is greater than or equal to 2.5 to 1.00, payable on the last business day of each March, June, September, and December and the maturity date of the 2016 Credit Facility.

The 2016 Credit Facility provides greater flexibility to us in funding acquisitions and restricted payments, such as stock buybacks, than did the 2015 Credit Facility.

We may prepay the 2016 Credit Facility at our option at any time without premium or penalty. The 2016 Credit Facility is subject to mandatory prepayments in amounts equal to:

- 100% of the net cash proceeds from any non-ordinary course sale or other disposition of our property and assets for consideration in excess of a certain amount subject to customary reinvestment provisions and certain other exceptions and
- 100% of the net cash proceeds received in connection with other non-ordinary course transactions, including insurance proceeds not otherwise applied to the relevant insurance loss.

Subject to certain restrictions and exceptions, the 2016 Credit Facility permits us to obtain one or more incremental term notes and/or revolving credit facilities in an aggregate principal amount of up to $100,000 plus an amount equal to repayments of the term note upon providing documentation reasonably satisfactory to the administrative agent. The 2016 Credit Facility includes customary representations and warranties and affirmative covenants of the borrowers. In addition, the 2016 Credit Facility contains customary negative covenants, including, among other things, restrictions on the ability of us and our subsidiaries to consolidate or merge, create liens, incur additional indebtedness, dispose of assets, consummate acquisitions, make investments, and pay dividends and other distributions. We must also comply with the following financial covenants:

- a consolidated leverage ratio of no greater than 3.25 to 1.00 as of the end of the fiscal quarter ending June 30, 2016 and for each of the three consecutive fiscal quarters ending immediately thereafter; and a consolidated leverage ratio of no less than 2.75 to 1.00 as of the end of any fiscal quarter, commencing with the fiscal quarter ending June 30, 2017, with a limited step-up to 3.25 to 1.00 for a period of four consecutive quarters, in connection with an acquisition;
- a consolidated fixed coverage charge ratio of no less than 1.75 to 1.00 subject to adjustment to exclude up to $80,000 in specified restricted payments;
- minimum cash of $25,000 including the unused portion of the revolving credit facility; and
- maximum capital expenditures not to exceed $55,000 during any fiscal year, provided that the unused amount of any permitted capital expenditures in any fiscal year may be carried forward to the next following fiscal year.

In addition, annual excess cash flow increases permitted capital expenditures.

As of March 31, 2017 , we were in compliance with all covenants, including financial covenants, for the 2016 Credit Facility.

The 2016 Credit Facility contains customary events of default that may permit acceleration of the debt. During the continuance of a payment default, interest will accrue on overdue amounts at a default interest rate of 2% above the interest rate which would otherwise be applicable, in the case of loans, and at a rate equal to the rate applicable to base rate loans plus 2% , in the case of all other amounts.

2015 Financing

On July 27, 2015, we entered into a credit agreement (the "2015 Credit Facility") consisting of a $100,000 term note and a $250,000 revolving credit facility. The co-borrowers under the 2015 Credit Facility were the Company and Vonage America Inc., the Company's wholly owned subsidiary. Obligations under the 2015 Credit Facility were guaranteed, fully and unconditionally, by the Company's other United States material subsidiaries and were secured by substantially all of the assets of each borrower and each guarantor. The lenders under the 2015 Credit Facility were JPMorgan Chase Bank, N.A., Citizens Bank, N.A., Fifth Third Bank, MUFG Union Bank, N.A., Silicon Valley Bank, SunTrust Bank, Keybank National Association, Santander Bank, N.A., Capital One National Association, and First Niagara Bank, N.A. JPMorgan Chase Bank, N.A. was a party to the agreement as administrative agent, Citizens Bank, N.A. as syndication agent, and Fifth Third Bank, MUFG Union Bank, N.A., Silicon Valley Bank, and SunTrust Bank as documentation agents. J.P. Morgan Securities LLC and Citizens Bank, N.A. acted as joint lead bookrunners, and J.P. Morgan Securities LLC, Citizens Bank, N.A., Fifth Third Bank, MUFG Union Bank, N.A., Silicon Valley Bank, and SunTrust Robinson Humphrey Inc. acted as joint lead arrangers.

Use of Proceeds

We used $167,000 of the net available proceeds of the 2015 Credit Facility to retire all of the debt under our 2014 Credit Facility. Remaining proceeds from the term note and the undrawn revolving credit facility under the 2015 Credit Facility were used for general corporate purposes. We also incurred fees of $2,007 in connection with the 2015 Credit Facility, of which $602 was allocated to the term note and $1,405 was allocated to the revolving credit facility. The unamortized fees of $1,628 in connection with the 2014 Credit Facility were allocated as follows: $733 to the term note and $895 to the revolving credit facility. In adopting

ASU 2015-03, fees allocated to the term note were reported in the balance sheet as a direct deduction from the face amount of the liability and in adopting ASU ASU 2015-15, fees allocated to the revolving credit facility were reported in the balance sheet as as asset. These fees are amortized to interest expenses over the life of the debt using the effective interest method for the term note and straight line method for the revolving credit facility.

State and Local Sales Taxes

We also have contingent liabilities for state and local sales taxes. As of March 31, 2017 , we had a reserve of $963 . If our ultimate liability exceeds this amount, it could affect our liquidity unfavorably. However, we do not believe it will significantly impair our liquidity.

Capital Expenditures

For the three months ended March 31, 2017 , capital expenditures were primarily for the implementation of software solutions and purchase of network equipment as we continue to expand our network. Our capital expenditures for the three months ended March 31, 2017 were $7,081 , of which $3,380 was for software acquisition and development. The majority of these expenditures are comprised of investments in information technology and systems infrastructure, including an electronic data warehouse, online customer service, and customer management platforms. For 2017, we believe our capital and software expenditures will be approximately $38,000. This amount is net of Tenant Improvement capital dollars we are investing in our Holmdel, New Jersey headquarters which are being refunded by the building owner in connection with the long-term lease renewal we executed in the fourth quarter of 2015.

Operating Activities

Cash provided by operating activities decreased to $17,261 for the three months ended March 31, 2017 compared to $17,468 for the three months ended March 31, 2016 , primarily due to changes in working capital.

Changes in working capital requirements include changes in accounts receivable, inventory, prepaid and other assets, accounts payable, accrued and other liabilities, and deferred revenue and costs. Cash used for working capital requirements decreased by $8,536 during the three months ended March 31, 2017 compared to the prior year period.

Investing Activities

Cash used in investing activities for the three months ended March 31, 2017 of $6,759 was mainly attributable to the purchase of capital expenditures of $3,701 and development of software assets of $3,380 , offset by the sales of marketable securities, net of purchase of $322 .

Cash used in investing activities for the three months ended March 31, 2016 of $10,877 was mainly attributable to the purchase of capital expenditures of $8,895 and development of software assets of $2,312, offset by the sales of marketable securities, net of purchase of $330

Financing Activities

Cash used in financing activities for the three months ended March 31, 2017 of $13,540 was primarily attributable to $4,688 in 2016 term note principal payments, $2,500 in patent license payments, $1,163 in capital lease payments, $9,542 in common stock repurchases, and $14,095 in employee taxes paid on withholding shares, offset by $3,448 in proceeds received from the exercise of stock options and $15,000 in proceeds received from issuance of notes payable.

Cash used in financing activities for the three months ended March 31, 2016 of $28,995 was primarily attributable to $3,750 in 2015 term note principal payments, $10,000 in 2015 revolving credit facility principal payments, $4,250 in patent license payments, $975 in capital lease and patent payments, $7,590 in common stock repurchases, and $2,896 in employee taxes paid on withholding shares, offset by $466 in proceeds received from the exercise of stock options.

Common Stock Repurchases

On July 25, 2012, our board of directors authorized a program to repurchase up to $50,000 of Vonage common stock through December 31, 2013. On February 7, 2013, our board of directors discontinued the remainder of the $50,000 repurchase program effective at the close of business on February 12, 2013 with $16,682 of availability remaining, and authorized a new program to repurchase up to $100,000 of Vonage common stock by December 31, 2014 (the "2012 $100,000 repurchase program"). As of December 31, 2014, approximately $219 remained of our 2012 $100,000 repurchase program. The repurchase program expired on December 31, 2014.

On December 9, 2014, Vonage's Board of Directors authorized a new program for the Company to repurchase up to $100,000 of its outstanding common stock. Repurchases under the new program are expected to be made over a four-year period ending on December 31, 2018 (the "2014 $100,000 repurchase program").

Under the current program, the timing and amount of repurchases will be determined by management based on its evaluation of market conditions, the trading price of the stock and will vary based on available capital resources and other financial and operational performance, market conditions, securities law limitations, and other factors. Repurchases may be made in the open market or through private transactions from time to time. The repurchases will be made using available cash balances. In any period, under each repurchase program, cash used in financing activities related to common stock repurchases may differ from the comparable change in stockholders' equity, reflecting timing differences between the recognition of share repurchase transactions and their settlement for cash.

As of March 31, 2017 , approximately $42,533 remained of our 2014 $100,000 repurchase program. The repurchase program expires on December 31, 2018 but may be suspended or discontinued at any time without notice.

Off-Balance Sheet Arrangements

We do not have any off-balance sheet arrangements.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to financial market risks, including changes in currency exchange rates and interest rates.

Foreign Exchange Risk

We sell our products and services primarily in the United States, Canada, and the European Union. Changes in currency exchange rates affect the valuation in our financial statements of the assets and liabilities of these operations. We also have a portion of our sales denominated in Euros, the Canadian Dollar, and the British Pound, which are also affected by changes in currency exchange rates. Our financial results could be affected by changes in foreign currency exchange rates, although foreign exchange risks have not been material to our financial position or results of operations to date.

Interest Rate and Debt Risk

Our exposure to market risk for changes in interest rates primarily relates to our long-term debt.

Our 2016 Credit Facility consisting consisting of a $125,000 term note and a $325,000 revolving credit facility. We are exposed to interest rate risk since amounts payable under the 2016 Credit Facility, at our option, bore interest at:

- LIBOR (applicable to one-, two-, three-, six-, or twelve-month periods) plus an applicable margin equal to 2.50% if our consolidated leverage ratio is less than 0.75 to 1.00, 2.75% if our consolidated leverage ratio is greater than or equal to 0.75 to 1.00 and less than 1.50 to 1.00, 3.00% if our consolidated leverage ratio is greater than or equal to 1.50 to 1.00 and less than 2.5 to 1.00, and 3.25% if our consolidated leverage ratio is greater than or equal to 2.50 to 1.00, payable on the last day of each relevant interest period or, if the interest period is longer than three months, each day that is three months after the first day of the interest period, or
- the base rate determined by reference to the highest of (a) the prime rate of JPMorgan Chase Bank, N.A., (b) the federal funds effective rate from time to time plus 0.50% , and (c) the adjusted LIBO rate applicable to one month interest periods plus 1.00% , plus an applicable margin equal to 1.50% if our consolidated leverage ratio is less than 0.75 to 1.00, 1.75% if our consolidated leverage ratio is greater than or equal to 0.75 to 1.00 and less than 1.50 to 1.00, 2.00% if our consolidated leverage ratio is greater than or equal to 1.50 to 1.00 and less than 2.50 to 1.00, and 2.25% if our consolidated leverage ratio is greater than or equal to 2.5 to 1.00, payable on the last business day of each March, June, September, and December and the maturity date of the 2016 Credit Facility.

As of March 31, 2017 , if the interest rate on our variable rate debt changed by 1% on our 2016 term note, our annual debt service payment would change by approximately $1,100 . As of March 31, 2017 , if the interest rate on our variable rate debt changed by 1% on our 2016 revolving credit facility, our annual debt service payment would change by approximately $2,200 .

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures. Based on the evaluation of our disclosure controls and procedures (as defined in Securities Exchange Act of 1934 Rules 13a-15(e) and 15d-15(e)) required by Securities Exchange Act Rules 13a-15(b) or 15d-15(b), our Chief Executive Officer and our Chief Financial Officer have concluded that as of the end of the period covered by this report, our disclosure controls and procedures were not effective as of such date due to the material weakness in internal control over financial reporting that was disclosed in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016.

Material Weakness. As disclosed in Part II. Item 9A. *Controls and Procedures* in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, in connection with the preparation of our condensed consolidated financial statements as of and for the year ended December 31, 2016, we identified a material weakness in our internal control over financial reporting related to our controls over the preparation of the annual tax provision.

Changes in Internal Controls. There were no changes in our internal control over financial reporting that occurred during our most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting, except for changes in connection with the implementation of the remediation plan described below **.**

Remediation Plan . Management has begun implementing a remediation plan to address the control deficiency that led to the material weakness. The remediation plan includes (i) the implementation of additional review procedures designed to enhance our tax provision controls and (ii) strengthening our tax provision controls with improved documentation standards, oversight, and training. In the course of this remediation, we identified an additional error caused by the control deficiency identified at year-end, as described in more detail in *Note 2 Correction of Prior Period Financial Statements*. We are implementing enhanced review procedures and documentation standards and our plan is to remediate this material weakness by the end of 2017, subject to there being sufficient opportunities to conclude, through testing, that the enhanced control is operating effectively.

Part II—Other Information

Item 1. Legal Proceedings

We are subject to a number of lawsuits, government investigations and claims arising out of the conduct of our business. See a discussion of our litigation matters in Note 7 of Notes to our Condensed Consolidated Financial Statements, which is incorporated herein by reference.

Item 1A. Risk Factors

There have been no material changes from the risk factors previously disclosed in Item 1A of our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 .

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

Item 2(a) and (b) are not applicable.

(c) Common stock repurchases (in thousands, except per share value):

Period	(a) Total Number of Shares Purchased	(b) Average Price Paid per Share	(c) Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	(d) Approximate Dollar Value of Shares that May Yet be Purchased under the Plans or Program
January 1, 2017 - January 31, 2017	—	$ —	—	$ 52,043
February 1, 2017 - February 28, 2017	794	$ 5.99	794	$ 47,289
March 1, 2017 - March 31, 2017	805	$ 5.91	805	$ 42,533
	1,599		1,599	

On February 7, 2013, our board of directors discontinued the remainder of the $50,000 repurchase program effective at the close of business on February 12, 2013 with $16,682 of availability remaining, and authorized a new program to repurchase up to $100,000 of Vonage common stock by December 31, 2014. As of December 31, 2014, approximately $219 remained of our 2012 $100,000 repurchase program. This repurchase program expired on December 31, 2014.

On December 9, 2014, Vonage's Board of Directors authorized a new program for the Company to repurchase up to $100,000 of its outstanding common stock. Repurchases under the 2014 $100,000 repurchase program are expected to be made over a four-year period ending on December 31, 2018.

Under the new program, the timing and amount of repurchases will be determined by management based on its evaluation of market conditions, the trading price of the stock and will vary based on available capital resources and other financial and operational performance, market conditions, securities law limitations, and other factors. Repurchases may be made in the open market or through private transactions from time to time. The repurchases will be made using available cash balances. In any period, under each repurchase program, cash used in financing activities related to common stock repurchases may differ from the comparable change in stockholders' equity, reflecting timing differences between the recognition of share repurchase transactions and their settlement for cash.

During the three months ended March 31, 2017 , we repurchased 1,599 shares of Vonage Holdings Corp. common stock for $9,510 using cash resources pursuant to the 2014 $100,000 repurchase program. When executed, repurchases occur in the open market and pursuant to a trading plan under Rule 10b5-1 of the Securities Exchange Act of 1934. As of March 31, 2017 , approximately $ 42,533 remained of our 2014 $100,000 repurchase program.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

10.1	Letter Agreement, dated March 29, 2017, between Vonage Holdings Corp. and David Levi (1)*
10.2	Letter Agreement, dated January 11, 2017, between Vonage Holdings Corp. and Kenneth Wyatt (1)*
31.1	Certification of the Company's Chief Executive Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002(1)
31.2	Certification of the Company's Chief Financial Officer pursuant to Securities Exchange Act Rules 13a-14(a) and 15d-14(a), as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002(1)
32.1	Certification of the Company's Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002(1)
101	The following financial statements from Vonage Holdings Corp.'s Quarterly Report on Form 10-Q for the three months ended March 31, 2017, filed with the Securities and Exchange Commission on May 9, 2017, formatted in XBRL (eXtensible Business Reporting Language): (i) the Condensed Consolidated Balance Sheets; (ii) the Condensed Consolidated Statements of Operations; (iii) the Condensed Consolidated Statements of Comprehensive Income; (iv) the Condensed Consolidated Statements of Cash Flows; (v) the Condensed Consolidated Statements of Stockholders' Deficit; and (vi) the Notes to Condensed Consolidated Financial Statements.

(1) Filed herewith.
* Management contract or compensatory plan or arrangement.

SIGNATURE

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

VONAGE HOLDINGS CORP.

Dated:	May 9, 2017	By:	/s/ David T. Pearson
			David T. Pearson Chief Financial Officer and Treasurer (Principal Financial Officer and Duly Authorized Officer)

EXHIBIT INDEX

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(1) Filed herewith.
* Management contract or compensatory plan or arrangement.

Vonage

March 21, 2017

Dear David:

We are pleased to inform you that after careful consideration Vonage, its current and future subsidiaries, affiliates, successors and assigns, (collectively, “Vonage” or “Company”), has decided to extend this offer of employment to you, for VP, Controller Principal Accounting Officer. This letter sets forth the terms of the Company's offer, which if you accept, will pertain to your employment.

Key components of the offer include:

- Base Salary $295,000
- Target Bonus Opportunity of 50%
- New Hire Grant:
    - $250,000 Time-Based Restricted Stock Units
- Severance equal to four (4) months’ current base salary
- Tuition Reimbursement according to Vonage Policy

If you have any questions, please do not hesitate to call me directly at (732) 858-6703. I appreciate your consideration and look forward to you becoming part of our team.

Best regards,

Susan Quackenbush

March 21, 2017

David Levi
3 Sarah Court
Princeton Junction, NJ 08550

Dear David:

We are pleased to inform you that after careful consideration, Vonage Holdings Corp. LLC is extending an offer of employment, subject to the approval of the Board of Directors (the " Board ") of Vonage Holdings Corp. This offer letter (the " Offer Letter "), if accepted by you and approved by the Board, shall set forth the terms of your employment.

1. Employment

(a) You will be employed in the position of VP, Controller Principal Accounting Officer.

(b) You will report to the Chief Financial Officer, David Pearson.

(c) Your employment will commence on or before May 1, 2017 (the " Commencement Date ").

2. Location

Your office location will be at the Holmdel, NJ office.

3. Compensation

(a) The Company will pay you an annual base salary (" Base Salary ") of $295,000, less applicable withholding, payable in equal installments in accordance with the Company's regular payroll practices.

(b) In addition to the Base Salary, you will be eligible for a Target Bonus Opportunity ("TBO") of 50% of your Base Salary. TBO payouts are granted in the Company's sole discretion. Your actual bonus attainment will be based on performance objectives determined in accordance with the Company's customary practices. You must be employed on the payout date to receive any TBO payout.

4. Restricted Stock Units

(a) You will be granted Time-Based Restricted Stock Units ("Time-Based RSUs") under the Vonage Holdings Corp. 2015 Equity Incentive Plan (the "Incentive Plan") covering a number of shares of Vonage's common stock which have a value at the date of grant based on the closing price per share on such date equal to two hundred fifty thousand dollars

($250,000.00). The Time-Based RSUs will be granted on the first trading day of the calendar month that follows the Commencement Date (the “Grant Date”). The number of Time-Based RSUs to be granted shall be based on the closing price of the Company’s common stock on the Grant Date.

The Time-Based RSUs shall be issued on the form of RSU agreement (the “Time-Based RSU Agreement”) approved by the Company’s Board of Directors for such grants made under the Incentive Plan, with the number of shares being subject to adjustment based on subsequent stock splits, reverse stock splits, other adjustments, or recapitalizations, as provided in the Incentive Plan. Subject to your continued employment on each vesting date, the Time-Based RSUs will vest and become exercisable as to 1/3 of the shares on the first, second, and third anniversaries of the Grant Date. The Time-Based RSUs will be governed by and subject to the terms of the Incentive Plan and the Time-Based RSU Agreement, and in the event of a conflict between this paragraph and the Incentive Plan and Time-Based RSU Agreement, the terms of the Incentive Plan and Time-Based RSU Agreement shall control.

(c) Beginning in 2018, you will be eligible to participate in Vonage’s long-term incentive compensation program as may be in effect from time to time and receive annual incentive equity grants thereunder as determined by the Compensation Committee of the Board in its sole discretion.

5. Severance

In the event your employment is terminated by the Company without Cause or by you with Good Reason, each as defined below, you will be entitled to (i) severance pay equal to four (4) months of your then-current base salary, less applicable withholding, which will be paid by the Company in a lump sum payment. For the avoidance of doubt, any severance payments payable pursuant to this paragraph 5 shall be forfeited unless an effective Release has been received by the Company and has become irrevocable no later than sixty (60) days following your termination of employment. The Release shall not contain post-employment obligations more restrictive than those postemployment obligations set forth in the Non-Compete Agreement.

“Cause” means (i) material failure to perform your employment duties (not as consequence of any illness, accident or other disability), (ii) continued, willful failure to carry out any reasonable lawful direction of the Company , (iii) diverting or usurping a corporate opportunity of the Company, (iv) fraud, willful malfeasance, gross negligence or recklessness in the performance of employment duties, (v) willful failure to comply with any of the material terms of this Offer Letter, (vi) other serious, willful misconduct which causes material injury to the Company or its reputation, including, but not limited to, willful or gross misconduct toward any of the Company's other employees, (vii) conviction of, or plea of nolo contendre to, a felony or a crime involving moral turpitude, and (viii) violation of any written Company policies or procedures; provided, however. that no event or condition described in clauses (i), (ii) or (v) shall constitute Cause unless (x) the Company gives you written notice of its intention to terminate your employment for Cause and the grounds for such termination and (y) such grounds for termination (if susceptible to correction) are not corrected by you within 15 days of your receipt of such notice. If you do not correct the grounds for termination during such I 5-day cure period, your termination of employment for Cause shall become effective on the first business day following the end of the cure period. Unless otherwise advised by the Company, you will be expected to perform services for the Company during the cure period.

"Good Reason" means: (i) a decrease in your base salary; (ii) a material diminution of your authorities, duties or responsibilities; (iii) a failure of the Company to pay compensation due and payable to you in connection with your employment or (iv) relocation by the Company of your principal place of employment to a location that results in your commuting distance being at least 30 miles greater than your commuting distance on the date you commence employment; provided, however, that no event or condition described in clauses (i) through (iv) shall constitute Good Reason unless (x) you give the Company's most senior Human Resources employee written notice of your intention to terminate your employment for Good Reason and the grounds for such termination within 45 days after the occurrence of the event giving rise to the "Good Reason" termination and (y) such grounds for termination (if susceptible to correction) are not corrected by the Company within 30 days of its receipt of such notice (or, in the event that such grounds cannot be corrected within such 30-day period, the Company has not taken all reasonable steps within such 30 day period to correct such grounds as promptly as practicable thereafter). If the Company does not correct the grounds for termination during such 30-day cure period (or take all reasonable steps within such 30-day period to correct such grounds as promptly as practicable thereafter), your termination of employment for "Good Reason" shall become effective on the first business day following the end of the cure period. Unless otherwise advised by the Company, you will be expected to perform services for the Company during the cure period.

6. Benefits

(a) You shall be entitled to participate in all employee health and welfare plans, programs and arrangements of the Company, to the extent you are eligible to participate in such plans, in accordance with their respective terms, as may be amended from time to time and on the basis no less favorable than that made available to other senior executives of the Company.

(b) Participation in the health and dental plan of the Company begins on the first day of the month immediately after your Commencement Date in accordance with the terms of the plans.

(c) You are eligible to participate in the Company's 401(k) plan on the first day of the month immediately after your Commencement Date.

(d) If you choose to participate in these benefits, you will receive a Summary Plan Description for the health and dental insurance, as well as the 401(k), plans. A copy of the plan documents is available from the Plan Administrator (as defined in the Summary Plan Description).

7. Miscellaneous

(a) In connection with your employment you will be required to enter into the Company's Employee Covenants Agreement and acknowledge and consent to the Company's Incentive Compensation Recoupment Policy (copies of which are enclosed with this Offer Letter).

(b) You hereby represent to the Company that you are under no obligation or agreement that would prevent you from becoming an employee of the Company or adversely impact your ability to perform the expected responsibilities. By accepting this offer, you agree that no trade secret or proprietary information not belonging to you or the Company will be disclosed or used by you at the Company.

(c) This Offer Letter is not an employment contract and does not create an implied or express guarantee of continued employment. By accepting this offer, you are acknowledging that you are an employee at-will. This means that either you or the Company may terminate your employment at any time and for any reason or for no reason. This Offer Letter contains the entire agreement and understanding between you and the Company with respect to the terms of your employment and supersedes any prior or contemporaneous agreements, understandings, communications, offers, representations, warranties, or commitments by or on behalf of the Company, whether written or oral, with respect to the terms of your employment. Except for amendments to increase compensation payable to you, the terms of this Offer Letter may not be amended except pursuant to a written agreement between you and the Company.

(d) Section 409A

(i) The intent of the parties is that payments and benefits under this Offer Letter comply with or be exempt from Internal Revenue Code Section 409A and the regulations and guidance promulgated there under (collectively " Section 409A ") and, accordingly, to the maximum extent permitted, this Offer Letter shall be interpreted to be exempt from Section 409A or in compliance therewith, as applicable. If you notify the Company that you have received advice of tax counsel of national reputation with expertise in Section 409A that any provision of this Offer Letter (or of any award of compensation, including equity compensation or benefits) would cause you to incur any additional tax or interest under Section 409A (with specificity as to the reason thereof) or the Company independently makes such determination, the Company shall, after consulting with you, reform such provision to try to comply with Section 409A through good faith modifications to the minimum extent reasonably appropriate to conform with Section 409A. To the extent that any provision hereof is modified in order to comply with or be exempt from Section 409A, such modification shall be made in good faith and shall, to the maximum extent reasonably possible, maintain the original intent and economic benefit to you and the Company of the applicable provision without violating the provisions of Section 409A.

(ii) A termination of employment shall not be deemed to have occurred for purposes of any provision of this Offer Letter providing for the payment of any amounts or benefits that are considered nonqualified deferred compensation under Section 409A upon or following a termination of employment, unless such termination is also a "separation from service" within the meaning of Section 409A and the payment thereof prior to a "separation from service" would violate Section 409A. For purposes of any such provision of this Offer Letter relating to any such payments or benefits, references to a "termination," "termination of employment" or like terms shall mean "separation from service."

(iii) If, as of the date of your "separation from service" from the Company, you are a "specified employee" (within the meaning of that term under Section 409A(a)(2)(B)), then with regard to any payment or the provision of any benefit that is considered "nonqualified deferred compensation" under Section 409A (whether under this Offer Letter, any other plan, program, payroll practice or any equity grant) and is payable upon your separation from service, such payment or benefit shall not be made or provided until the date which is the earlier of (A) the expiration of the six (6) month-andone-day period measured from the date of your "separation from service," and (B) the date of your death (the "Delay Period") and this Offer Letter and each such plan, program, payroll practice or equity grant shall hereby be deemed amended accordingly. Upon the expiration of the Delay Period, all payments and benefits delayed pursuant to this paragraph (whether they would have otherwise been payable in a single sum or in installments in the absence of such delay) shall be paid or reimbursed to you in a lump sum with interest at the prime rate as published in the Wall Street Journal on the first business day of the Delay Period (provided that any payment measured by a change in value that continues during the Delay Period shall not be credited with interest for the Delay Period), and any remaining payments and benefits due under this Offer Letter shall be paid or provided in accordance with the regularly scheduled payment dates specified for them herein.

(iv) For purposes of Section 409A, your right to receive any installment payments pursuant to this Offer Letter shall be treated as a right to receive a series of separate and distinct payments. Whenever a payment under this Offer Letter specifies a payment period with reference to a number of days (e.g. , "payment shall be made within thirty (30) days following the date of termination") , the actual date of payment within the specified period shall be within the sole discretion of the Company.

(v) To the extent any reimbursement or in-kind payment provided pursuant to this Offer Letter is deemed nonqualified deferred compensation subject to Section 409A then (i) all such expenses or other reimbursements as provided herein shall be payable in accordance with the Company's policies in effect from time to time, but in any event shall be made on or prior to the last day of the taxable year following the taxable year in which such expenses were incurred by you; (ii) no such reimbursement or expenses eligible for reimbursement in any taxable year shall in any way affect the expenses eligible for reimbursement in any other taxable year; and (iii) the right to such reimbursement or in-kind benefits shall not be subject to liquidation or exchanged for another benefit.

(vi) No amounts payable to you by the Company or any of its subsidiaries or affiliates under this Agreement or any other agreement that constitute nonqualified deferred compensation subject to Section 409A shall be subject to offset by any other amount, except as permitted under Section 409A.

(e) Withholding. The Company may withhold any tax (or other governmental obligation) that may result from the payments made and benefits provided to you under this Offer Letter or require you to make other arrangements satisfactory to the Company to enable it to satisfy all such withholding requirements.

(f) Governing Law; Waiver of Jury Trial . All matters affecting this Offer Letter, including the validity thereof, are to be governed by, and interpreted and construed in accordance with, the laws of the State of New Jersey applicable to contracts executed in and to be performed in that State. YOU AND THE COMPANY HEREBY ACKNOWLEDGE AND AGREE THAT YOU AND THE COMPANY ARE HEREBY WAIVING ANY RIGHTS TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM BROUGHT BY EITHER YOU OR THE COMPANY AGAINST THE OTHER IN CONNECTION WITH ANY MATTER WHATSOEVER ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS OFFER LETTER. Disputes regarding your application for employment, employment, or termination of employment will be subject to the attached Arbitration Agreement.

(g) Remedies. In addition to all other legal and equitable remedies, the prevailing party in any dispute that in any way relates to this Offer Letter or your employment hereunder shall be entitled to recover his or its reasonable attorneys' fees and expenses incurred in connection with such dispute.

United States law requires all companies to verify an employee's authorization to work in the United States. If you accept this offer, you will need to bring certain documents with you on your Commencement Date which allow the Company to verify your work authorization. Enclosed is an Employment Eligibility Verification (form I-9). Please review the form and bring the appropriate documents required for employment verification on your Commencement Date. You will be asked to complete the form in the presence of a witness on your Commencement Date.

If these terms are agreeable to you, please sign and date the Offer Letter in the appropriate space at the bottom and return it to me by Friday March 31, 2017.

We are excited at the prospect of you joining the Company, and look forward to your future contributions.

Sincerely,

/s/ Susan Quackenbush

Susan Quackenbush
Chief Human Resources Officer

Agreed and Accepted:

Name: _____**/s/ David Levi**__________________________
David Levi

Date: ___**March 29, 2017**_______________

Vonage

December 20, 2016

Dear Kenneth:

We are pleased to inform you that after careful consideration Vonage, its current and future subsidiaries, affiliates, successors and assigns, (collectively, “Vonage” or “Company”), has decided to extend this offer of employment to you, for Chief Revenue Officer. This letter sets forth the terms of the Company's offer, which if you accept, will pertain to your employment.

Key components of the offer include:

- Base Salary $385,000
- Target Bonus Opportunity of 75%
- Sign-On Equity Grant:
    - $500,000 with One Year Vesting
- New Hire Grant:
    - $600,000 Time-Based Restricted Stock Units
    - $600,000 Performance-Based Restricted Stock Units
- Severance equal to twelve (12) months’ current base salary and pro rata bonus

If you have any questions, please do not hesitate to call me directly at (732) 858-6703. I appreciate your consideration and look forward to you becoming part of our team.

Best regards,

Susan Quackenbush

December 20, 2016

Kenneth D. Wyatt
6130 Missouri Peak Place
Castle Rock, CO 80108

Dear Kenneth:

We are pleased to inform you that after careful consideration, Vonage Holdings Corp. LLC is extending an offer of employment, subject to the approval of the Board of Directors (the " Board ") of Vonage Holdings Corp. This offer letter (the " Offer Letter "), if accepted by you and approved by the Board, shall set forth the terms of your employment.

1. Employment

(a) You will be employed in the position of Chief Revenue Officer.

(b) You will report to the Chief Operating Officer, Joe Redling.

(c) Your employment will commence on February 6, 2017 (the " Commencement Date ").

2. Location

Your office location will be at the Denver, CO office.

3. Compensation

(a) The Company will pay you an annual base salary (" Base Salary ") of $385,000, less applicable withholding, payable in equal installments in accordance with the Company's regular payroll practices.

(b) In addition to the Base Salary, you will be eligible for a Target Bonus Opportunity ("TBO") of 75% of your Base Salary. TBO payouts are granted in the Company's sole discretion. Your actual bonus attainment will be based on performance objectives determined in accordance with the Company's customary practices. You must be employed on the payout date to receive any TBO payout.

4. Sign On Equity Grant

(a) You will be granted Time-Based Restricted Stock Units ("Time-Based RSUs") under the Vonage Holdings Corp. 2015 Equity Incentive Plan (the "Incentive Plan") covering a number of shares of Vonage's common stock which have a value at the date of grant based on the closing price per share on such date equal to five hundred thousand dollars ($500,000.00). The Time-Based RSUs will be granted on the first trading day of the calendar month that follows the Commencement Date (the "Grant Date"). The number of Time-Based RSUs to be granted shall be based on the closing price of the Company's common stock on the Grant Date.

The Time-Based RSUs shall be issued on the form of RSU agreement (the "Time-Based RSU Agreement") approved by the Company's Board of Directors for such grants made under the Incentive Plan, with the number of shares being subject to adjustment based on subsequent stock splits, reverse stock splits, other adjustments, or recapitalizations, as provided in the Incentive Plan. Subject to your continued employment, the Time-Based RSUs will vest and become exercisable on the first anniversary of the Grant Date. The Time-Based RSUs will be governed by and subject to the terms of the Incentive Plan and the Time-Based RSU Agreement, and in the event of a conflict between this paragraph and the Incentive Plan and Time-Based RSU Agreement, the terms of the Incentive Plan and Time-Based RSU Agreement shall control.

5. Restricted Stock Units

(a) You will be granted Time-Based Restricted Stock Units ("Time-Based RSUs") under the Vonage Holdings Corp. 2015 Equity Incentive Plan (the "Incentive Plan") covering a number of shares of Vonage's common stock which have a value at the date of grant based on the closing price per share on such date equal to six hundred thousand dollars ($600,000.00). The Time-Based RSUs will be granted on the first trading day of the calendar month that follows the Commencement Date (the "Grant Date"). The number of Time-Based RSUs to be granted shall be based on the closing price of the Company's common stock on the Grant Date.

The Time-Based RSUs shall be issued on the form of RSU agreement (the "Time-Based RSU Agreement") approved by the Company's Board of Directors for such grants made under the Incentive Plan, with the number of shares being subject to adjustment based on subsequent stock splits, reverse stock splits, other adjustments, or recapitalizations, as provided in the Incentive Plan. Subject to your continued employment on each vesting date, the Time-Based RSUs will vest and become exercisable as to 1/3 of the shares on the first, second, and third anniversaries of the Grant Date. The Time-Based RSUs will be governed by and subject to the terms of the Incentive Plan and the Time-Based RSU Agreement, and in the event of a conflict between this paragraph and the Incentive Plan and Time-Based RSU Agreement, the terms of the Incentive Plan and Time-Based RSU Agreement shall control.

(b) You will also be granted Performance Restricted Stock Units ("Performance RSUs") under the Incentive Plan covering a number of shares of Vonage's common stock which have a value at the date of grant based on the closing price per share on such date equal to six hundred thousand dollars ($600,000.00). The Performance RSUs will be granted on the Grant Date. The number of

Performance RSUs to be granted shall be based on the closing price of the Company's common stock on the Grant Date.

The Performance RSUs shall be issued on the form of TSR performance unit agreement (the "Performance RSU Agreement") approved by the Company's Board of Directors for such grants made under the Incentive Plan, with the number of shares being subject to adjustment based on subsequent stock splits, reverse stock splits, other adjustments, or recapitalizations, as provided in the Incentive Plan. Subject to your continued employment on the last day of the performance period, the Performance RSUs may vest based upon the Company's total shareholder return as compared to a peer group in accordance with the table included in the Performance RSU Agreement. The Performance RSUs will be governed by and subject to the terms of the Incentive Plan and the Performance RSU Agreement, and in the event of a conflict between this paragraph and the Incentive Plan and Performance RSU Agreement, the terms of the Incentive Plan and Performance RSU Agreement shall control.

(b) Beginning in 2018, you will be eligible to participate in Vonage's long-term incentive compensation program as may be in effect from time to time and receive annual incentive equity grants thereunder as determined by the Compensation Committee of the Board in its sole discretion.

6. Severance

In the event your employment is terminated by the Company without Cause or by you with Good Reason, each as defined below, you will be entitled to (i) severance pay equal to twelve (12) months of your then-current base salary, less applicable withholding, which will be paid by the Company during its regular payroll cycle over the twelve (12) month period following the date of your employment termination; provided that the first payment shall be made on the sixtieth (60 th) day after your termination of employment, and such first payment shall include payment of any amounts that otherwise would be due prior thereto, (ii) if such termination of employment occurs, a pro-rata portion of your TBO for the year of termination based on the Company's actual performance for such year, less applicable withholding and payable in the year following the year in which your employment terminates at such time as annual bonuses in respect of such year are normally paid to other senior executives of the Company ; provided however, that the Company shall not be required to make the payments set forth in this section 6, unless you execute and deliver to the Company a Separation Agreement and General Release in a form reasonably acceptable to the Company in its sole discretion (the General Release Form), and such Release has become effective and irrevocable in its entirety within sixty (60) days of your termination of employment. The Release shall not contain post-employment obligations more restrictive than those postemployment obligations set forth in the Non-Compete Agreement. For the avoidance of doubt, any severance payments payable pursuant to this paragraph 5 shall be forfeited unless an effective Release has been received by the Company and has become irrevocable no later than sixty (60) days following your termination of employment. During the Severance period, you shall continue coverage in the Company's medical and dental health care plans at your active employee rate; provided that you are and remain eligible for continuation coverage under the Consolidated Omnibus Budget Reconciliation Act of 1985, as amended; provided further, that such continuation coverage shall immediately cease if you become eligible to receive group health coverage from another employer.

“Cause” means (i) material failure to perform your employment duties (not as consequence of any illness, accident or other disability), (ii) continued, willful failure to carry out any reasonable lawful direction of the Company , (iii) diverting or usurping a corporate opportunity of the Company, (iv) fraud, willful malfeasance, gross negligence or recklessness in the performance of employment duties, (v) willful failure to comply with any of the material terms of this Offer Letter, (vi) other serious, willful misconduct which causes material injury to the Company or its reputation, including, but not limited to, willful or gross misconduct toward any of the Company's other employees, (vii) conviction of, or plea of nolo contendre to, a felony or a crime involving moral turpitude, and (viii) violation of any written Company policies or procedures; provided, however. that no event or condition described in clauses (i), (ii) or (v) shall constitute Cause unless (x) the Company gives you written notice of its intention to terminate your employment for Cause and the grounds for such termination and (y) such grounds for termination (if susceptible to correction) are not corrected by you within 15 days of your receipt of such notice. If you do not correct the grounds for termination during such I 5-day cure period, your termination of employment for Cause shall become effective on the first business day following the end of the cure period. Unless otherwise advised by the Company, you will be expected to perform services for the Company during the cure period.

"Good Reason" means: (i) a decrease in your base salary; (ii) a material diminution of your authorities, duties or responsibilities; (iii) a failure of the Company to pay compensation due and payable to you in connection with your employment or (iv) relocation by the Company of your principal place of employment to a location that results in your commuting distance being at least 30 miles greater than your commuting distance on the date you commence employment; provided, however, that no event or condition described in clauses (i) through (iv) shall constitute Good Reason unless (x) you give the Company's most senior Human Resources employee written notice of your intention to terminate your employment for Good Reason and the grounds for such termination within 45 days after the occurrence of the event giving rise to the "Good Reason" termination and (y) such grounds for termination (if susceptible to correction) are not corrected by the Company within 30 days of its receipt of such notice (or, in the event that such grounds cannot be corrected within such 30-day period, the Company has not taken all reasonable steps within such 30 day period to correct such grounds as promptly as practicable thereafter). If the Company does not correct the grounds for termination during such 30-day cure period (or take all reasonable steps within such 30-day period to correct such grounds as promptly as practicable thereafter), your termination of employment for "Good Reason" shall become effective on the first business day following the end of the cure period. Unless otherwise advised by the Company, you will be expected to perform services for the Company during the cure period.

7. <u>Benefits</u>

(a) You shall be entitled to participate in all employee health and welfare plans, programs and arrangements of the Company, to the extent you are eligible to participate in such plans, in accordance with their respective terms, as may be amended from time to time and on the basis no less favorable than that made available to other senior executives of the Company.

(b) Participation in the health and dental plan of the Company begins on the first day of the month immediately after your Commencement Date in accordance with the terms of the plans.

(c) You are eligible to participate in the Company's 401(k) plan on the first day of the month immediately after your Commencement Date.

(d) If you choose to participate in these benefits, you will receive a Summary Plan Description for the health and dental insurance, as well as the 401(k), plans. A copy of the plan documents is available from the Plan Administrator (as defined in the Summary Plan Description).

8. Miscellaneous

(a) In connection with your employment you will be required to enter into the Company's Employee Covenants Agreement and acknowledge and consent to the Company's Incentive Compensation Recoupment Policy (copies of which are enclosed with this Offer Letter).

(b) You hereby represent to the Company that you are under no obligation or agreement that would prevent you from becoming an employee of the Company or adversely impact your ability to perform the expected responsibilities. By accepting this offer, you agree that no trade secret or proprietary information not belonging to you or the Company will be disclosed or used by you at the Company.

(c) This Offer Letter is not an employment contract and does not create an implied or express guarantee of continued employment. By accepting this offer, you are acknowledging that you are an employee at-will. This means that either you or the Company may terminate your employment at any time and for any reason or for no reason. This Offer Letter contains the entire agreement and understanding between you and the Company with respect to the terms of your employment and supersedes any prior or contemporaneous agreements, understandings, communications, offers, representations, warranties, or commitments by or on behalf of the Company, whether written or oral, with respect to the terms of your employment. Except for amendments to increase compensation payable to you, the terms of this Offer Letter may not be amended except pursuant to a written agreement between you and the Company.

(d) Section 409A

(i) The intent of the parties is that payments and benefits under this Offer Letter comply with or be exempt from Internal Revenue Code Section 409A and the regulations and guidance promulgated there under (collectively " Section 409A ") and, accordingly, to the maximum extent permitted, this Offer Letter shall be interpreted to be exempt from Section 409A or in compliance therewith, as applicable. If you notify the Company that you have received advice of tax counsel of national reputation with expertise in Section 409A that any provision of this Offer Letter (or of any award of compensation, including equity compensation or benefits) would cause you to incur any additional tax or interest under Section 409A (with specificity as to the reason thereof) or the Company independently makes such determination, the Company shall, after consulting with you, reform such provision to try to comply with Section 409A through good faith modifications to the minimum extent reasonably appropriate to conform with Section 409A. To the extent that any provision hereof is modified in order to comply with or be exempt from Section 409A, such modification shall be made in good faith and shall, to the maximum extent reasonably possible, maintain the original intent and economic benefit to you and the Company of the applicable provision without violating the provisions of Section 409A.

(ii) A termination of employment shall not be deemed to have occurred for purposes of any provision of this Offer Letter providing for the payment of any amounts or benefits that are considered nonqualified deferred compensation under Section 409A upon or following a termination of employment, unless such termination is also a "separation from service" within the meaning of Section 409A and the payment thereof prior to a "separation from service" would violate Section 409A. For purposes of any such provision of this Offer Letter relating to any such payments or benefits, references to a "termination," "termination of employment" or like terms shall mean "separation from service."

(iii) If, as of the date of your "separation from service" from the Company, you are a "specified employee" (within the meaning of that term under Section 409A(a)(2)(B)), then with regard to any payment or the provision of any benefit that is considered "nonqualified deferred compensation" under Section 409A (whether under this Offer Letter, any other plan, program, payroll practice or any equity grant) and is payable upon your separation from service, such payment or benefit shall not be made or provided until the date which is the earlier of (A) the expiration of the six (6) month-andone-day period measured from the date of your "separation from service," and (B) the date of your death (the "Delay Period") and this Offer Letter and each such plan, program, payroll practice or equity grant shall hereby be deemed amended accordingly. Upon the expiration of the Delay Period, all payments and benefits delayed pursuant to this paragraph (whether they would have otherwise been payable in a single sum or in installments in the absence of such delay) shall be paid or reimbursed to you in a lump sum with interest at the prime rate as published in the Wall Street Journal on the first business day of the Delay Period (provided that any payment measured by a change in value that continues during the Delay Period shall not be credited with interest for the Delay Period), and any remaining payments and benefits due under this Offer Letter shall be paid or provided in accordance with the regularly scheduled payment dates specified for them herein.

(iv) For purposes of Section 409A, your right to receive any installment payments pursuant to this Offer Letter shall be treated as a right to receive a series of separate and distinct payments. Whenever a payment under this Offer Letter specifies a payment period with reference to a number of days (e.g. , "payment shall be made within thirty (30) days following the date of termination") , the actual date of payment within the specified period shall be within the sole discretion of the Company.

(v) To the extent any reimbursement or in-kind payment provided pursuant to this Offer Letter is deemed nonqualified deferred compensation subject to Section 409A then (i) all such expenses or other reimbursements as provided herein shall be payable in accordance with the Company's policies in effect from time to time, but in any event shall be made on or prior to the last day of the taxable year following the taxable year in which such expenses were incurred by you; (ii) no such reimbursement or expenses eligible for reimbursement in any taxable year shall in any way affect the expenses eligible for reimbursement in any other taxable year; and (iii) the right to such reimbursement or in-kind benefits shall not be subject to liquidation or exchanged for another benefit.

(vi) No amounts payable to you by the Company or any of its subsidiaries or affiliates under this Agreement or any other agreement that constitute nonqualified deferred compensation subject to Section 409A shall be subject to offset by any other amount, except as permitted under Section 409A.

(e) Withholding. The Company may withhold any tax (or other governmental obligation) that may result from the payments made and benefits provided to you under this Offer Letter or require you to make other arrangements satisfactory to the Company to enable it to satisfy all such withholding requirements.

(f) Governing Law; Waiver of Jury Trial . All matters affecting this Offer Letter, including the validity thereof, are to be governed by, and interpreted and construed in accordance with, the laws of the State of New Jersey applicable to contracts executed in and to be performed in that State. YOU AND THE COMPANY HEREBY ACKNOWLEDGE AND AGREE THAT YOU AND THE COMPANY ARE HEREBY WAIVING ANY RIGHTS TO TRIAL BY JURY IN ANY ACTION, PROCEEDING OR COUNTERCLAIM BROUGHT BY EITHER YOU OR THE COMPANY AGAINST THE OTHER IN CONNECTION WITH ANY MATTER WHATSOEVER ARISING OUT OF OR IN ANY WAY CONNECTED WITH THIS OFFER LETTER. Disputes regarding your application for employment, employment, or termination of employment will be subject to the attached Arbitration Agreement.

(g) Remedies. In addition to all other legal and equitable remedies, the prevailing party in any dispute that in any way relates to this Offer Letter or your employment hereunder shall be entitled to recover his or its reasonable attorneys' fees and expenses incurred in connection with such dispute.

United States law requires all companies to verify an employee's authorization to work in the United States. If you accept this offer, you will need to bring certain documents with you on your Commencement Date which allow the Company to verify your work authorization. Enclosed is an Employment Eligibility Verification (form I-9). Please review the form and bring the appropriate documents required for employment verification on your Commencement Date. You will be asked to complete the form in the presence of a witness on your Commencement Date.

If these terms are agreeable to you, please sign and date the Offer Letter in the appropriate space at the bottom and return it to me by Friday January 6, 2017.

We are excited at the prospect of you joining the Company, and look forward to your future contributions.

Sincerely,

/s/ Susan Quackenbush

Susan Quackenbush
Chief Human Resources Officer

Agreed and Accepted:

Name: ______/s/ Kenneth Wyatt ____________
Kenneth Wyatt

Date: ____**January 10, 2017**___________

23 Main Street | Holmdel, NJ 07733 | 732.528.2600 | www.vonage.com

EXHIBIT 31.1

CERTIFICATION

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

I, Alan Masarek, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Vonage Holdings Corp.;

2. Based on my knowledge, this report does not contain any untrue statement of 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 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: May 9, 2017

/s/ Alan Masarek

Alan Masarek

Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION

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

I, David T. Pearson, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Vonage Holdings Corp.;

2. Based on my knowledge, this report does not contain any untrue statement of 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 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: May 9, 2017

/s/ David T. Pearson

David T. Pearson

Chief Financial Officer and Treasurer

EXHIBIT 32.1

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

I, Alan Masarek, certify to my knowledge pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of Vonage Holdings Corp. on Form 10-Q for the quarterly period ended March 31, 2017 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of Vonage Holdings Corp.

Date: May 9, 2017

/s/ Alan Masarek

Alan Masarek

Chief Executive Officer

I, David T. Pearson, certify to my knowledge pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that the Quarterly Report of Vonage Holdings Corp. on Form 10-Q for the quarterly period ended March 31, 2017 fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and that information contained in such Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of Vonage Holdings Corp.

Date: May 9, 2017

/s/ David T. Pearson

David T. Pearson

Chief Financial Officer and Treasurer